

A Grammar of Solon : a Northern Tungusic Language of Northeast China

Rigele Na

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A Grammar of Solon

A Northern Tungusic Language of Northeast China



Thèse de doctorat en Sciences du Langage
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Soutenue le 10 juin 2026

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Solon yurt, photo by Nargil 2023.

ABSTRACT

This dissertation provides a grammatical description of Solon from an areal and typological perspective. Solon is a Northern Tungusic language spoken in Hulunbuir, Inner Mongolia, China. With approximately 10,000 speakers remaining, the language is currently undergoing rapid language shift toward Mongolian and Mandarin Chinese and must therefore be considered endangered (Nargil 2025b).

Solon occupies a distinct typological position within the Tungusic language family, largely due to its unique sociolinguistic history and long-standing contact with neighboring languages. In particular, Solon has been subject to sustained influence from Mongolic languages. This contact began in the Amur and Zeya River basins through interaction with Dagur, a Mongolic language (Janhunen 1996). Following the migration of the Solon people from the Amur–Zeya region to the Nonni and Hui River basins in the seventeenth century together with the Dagurs, the language entered into intensified contact with Mongolian, which functioned as the regional lingua franca.

Three varieties of Solon are generally recognized: Hailar Solon, Nonni Solon, and the now-extinct Ongkor Solon. This dissertation focuses on Hailar Solon, the largest variety, spoken in the Hui and Imin River basins, particularly in the Ewenke Autonomous Banner.

The present grammar is based on first-hand field data collected during one remote fieldwork period and two in-person field trips conducted between 2022 and 2025. The corpus includes spontaneous texts such as personal life histories, fairy tales, and conversations, as well as stimulus-based data, elicited sentences, and grammaticality judgments.

The study provides a detailed account of several aspects of Solon grammar, including phonology, sociolinguistic profile, nominal morphology, verbal morphology, noun phrases, simple clause structure, and clause linkage. By describing these features from an areal and typological perspective, this dissertation aims to contribute to Tungusic studies, language contact field, and linguistic typology more broadly.

The Solon texts collected for this study are available on the Pangloss platform: https://pangloss.cnrs.fr/corpus/Solon

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List of abbreviations

1PL	first person plural
1SG	first person singular
2	second person
2PL	second personal plural
2SG	second person singular
3	third person
3PL	third person plural
3SG	third person singular
ABL	ablative
ACC	accusative
ACT	action
ADJZ	adjectivizer
ADV.ALL	adverbial allative
AL	alienable possession
ALL	allative
AM	associated motion
AOR	aorist
ASSERT	assertive
ATT	attenuative
AUX	auxiliary
CAUS	causative
CN	Chinese copy
COLL	collective
CONC	concessive
CONN	connective
COOR	coordinative
COP	copula
CVB	converb
DAT	dative
DECL	declarative

DEF	definite
DEST	destinative
DIS.CONN	discourse connector
DIST	distal
DIST.ADV	adverbial distal
DIST.QLT	distal quantifier
DIST.V	distal verb
DS	different subject
ELT	elative
EMP	emphatic
EP	epenthetic vowel
EXCL	exclusive
FUT	future
GEN	genitive
GN	geographic name
HAB	habitual
HES	hesitation
HORT	hortative
IDEO	ideophone
IM	imminent
IMM	immediative
INCEP	inceptive
INCH	inchoative
IND	indicative
INCL	inclusive
INS	instrumental
INT	interrogative
INTS	intensifier
INTERJ	interjection
IPFV	imperfective
ITER	iterative
JUSS	jussive

LOC	locative
MN	Mongolian copy
M.RED	M-reduplication
MIR	mirative
NEC	necessitive
NEG	negative
NFUT	non-future
OBL	oblique
ONOM	onomatopoeia
ORD	ordinal
PASS	passive
PFV	perfective
PH	place holder
PL	plural
PN	person name
PRES	presumptive
PROG	progressive
PROH	prohibitive
PROL	prolative
PROP	proprietive
PROX	proximal
PROX.ADV	adverbial proximal
PROX.QLT	proximal quantifier
PRUP	purpose
PST	past
PTCL	particle
PTV	partitive
Q	question
RECP	reciprocal
REFL	reflexive
REP	repetitive
REM	remote

RES	resultative
RSN	reason
SAY	grammaticalized use of ‘say’
SAY.CVB	say verb converb
SG	singular
SIM	simultaneous
SIMV	similative
SS	same subject
STAT	state
SBJV	subjunctive
TAG	tag
TERM	terminative
TOP	topic
VAG	vague expression
VBZ	verbalizer
VL	valency change
VOC	vocative
VS	variable subject

1 Introduction

1.1 The Solon language

1.1.1 Genetic classification

Solon belongs to the Tungusic language family. Tungusic languages are distributed across a vast area of Siberia, northeastern China, and Xinjiang (far west China). The family comprises approximately a dozen to twenty languages, depending on how individual varieties are classified by different scholars. Today, most Tungusic languages are endangered, and several have already become extinct (Grenoble 2024: 1223; Janhunen 2005).

Tungusic is commonly divided into four primary groups (Ikegami 1974; Georg 2004), referred to as Jurchenic, Nanaic, Udegheic, and Ewenic (Janhunen 2012b). These groups include the following languages:

Ewenic

Siberian Ewenic: Ewen (Even) proper, Arman, Ewenki (Evenki) proper, Neghidal (Negidal), Orochen (Oroqen), Khamigan Evenki (Urulga variety)

Manchurian Ewenic: Khamnigan Evenki (Mankovo variety), Nonni Solon, Hailar Solon, Ongkor Solon

Udegheic

Udeghe (Udihe) proper, Oroch

Nanaic

Nanai Proper, Kili, Kilen

Ulchaic: Ulcha proper, Orok (Uilta)

Jurchenic

Jurchen proper, Manchu, Sibe

Under this classification, Solon belongs to the Ewenic branch and is most closely related to Evenki and other Ewenic varieties.

An alternative classification has been proposed by Atknine (1997: 111), who divides Tungusic into three groups: Northern Tungusic (Evenki, Negidal, Oroqen, Even, and Solon), Manchu (Jurchen and Manchu), and Southern Tungusic (Nanai, Ulcha, Uilta, Udihe, and Oroch). In the present study, I adopt Atknine's three-way classification, as it highlights the close relationship among the northern varieties and facilitates comparison between Solon and its closest relatives. This grouping largely corresponds to the Ewenic branch in Janhunen's (2012) four-way classification.

In China, Solon is spoken by a subgroup of the officially recognized Ewenke ethnic minority (see §1.1.2), alongside Khamnigan Evenki and Aoluguya Evenki. Solon speakers constitute approximately 90 percent of the Ewenke population (Chaoke 1995: 3). For this reason, Solon is often administratively classified as a dialect of "Ewenke" and has been referred to in the literature as either the Hailar dialect (Hu & Chaoke 1986: 2) or the Solon dialect of Ewenke (Sirenbatu 2011: 14).

Solon comprises three recognized varieties: Hailar Solon, Nonni Solon, and the now-extinct Ongkor Solon. Hailar Solon, the largest variety, is spoken in the Hui and Imin River basins, particularly in the Ewenke Autonomous Banner, Nonni Solon is spoken in the Nonni River area, including Morin Dawa Dagur Autonomous Banner, Arong Banner, Oroqen Autonomous Banner, and Zhalantun City (Map 1-2). Ongkor Solon was formerly spoken in far west Xinjiang Province, where the last speaker reportedly passed away in the 1990s (Janhunen 1996; Janhunen 2005). The geographical distribution of three varieties of Solon is presented in §1.1.2.

1.1.2 Geography and demography

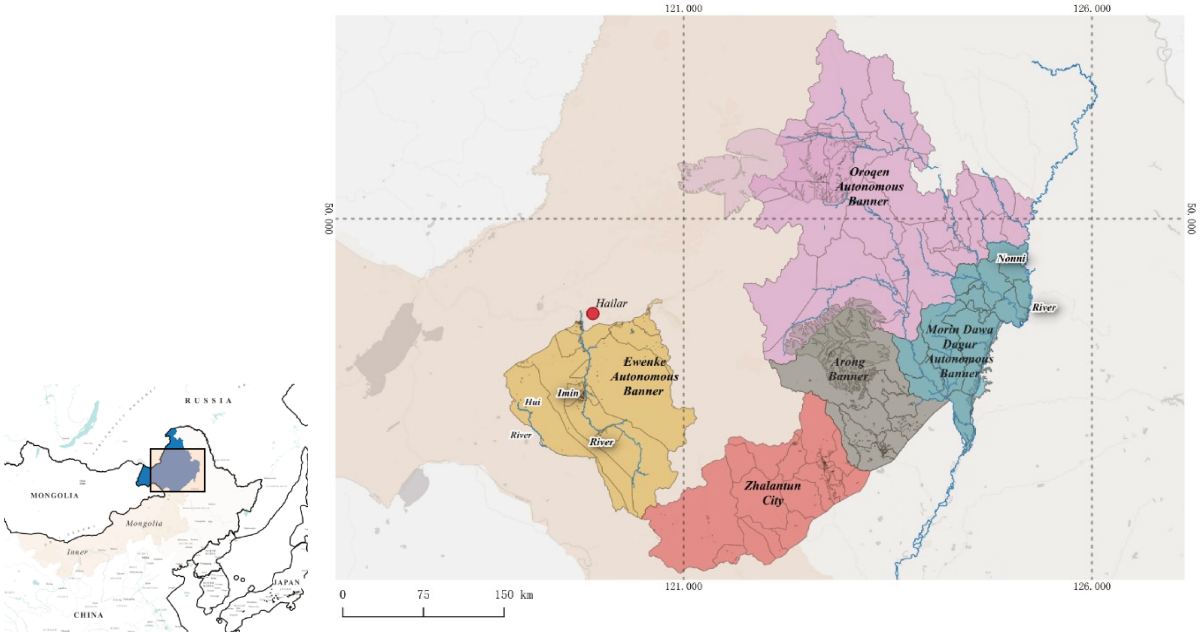
Solon is spoken in Hulunbuir, Inner Mongolia, China. Hulunbuir constitutes the western part of Manchuria (northeastern China). The other Tungusic languages spoken in this region - Oroqen, Khamnigan Evenki, Aoluguya Evenki, Hezhe and Manchu, all are severely endangered (Janhunen 2005: 44-45, Oskolskaya 2024b: 125, 127).

Hulunbuir covers a vast area of approximately 253,000 km² (People's Government of Hulunbuir City 2024). Solon is primarily spoken in the central and northeastern parts of this region. Based on the Chinese national census 2020 (National Bureau of Statistics of the PRC

2021) and the Atlas of the Chinese Languages (Chinese Academy of Social Sciences 2012; maps C1, C5), Solon is mainly concentrated in the following administrative areas, see Map 1-1:

- **Ewenke Autonomous Banner** (鄂温克族自治旗 *è'wēnkè zú zìzhìqí*): Solon population approximately 10,000
- **Morin Dawa Dagur Autonomous Banner** (莫力达瓦达斡尔族自治旗 *mòlìdáwǎ dáwò'ěr zú zìzhìqí*): Solon population approximately 4,900
- **Arong Banner** (阿荣旗 ā'róng qí): approximately 2,200 Solons
- **Oroqen Autonomous Banner** (鄂伦春自治旗 *è'lúnchūn zìzhìqí*): population approximately 2,200
- **Zhalantun City** (扎兰屯市 *zhālántún shì*): population approximately 1,200

Additionally, due to urbanization and increasing population mobility, Hailar City, Hulunbuir's political, economic, and transportation hub, has seen its Solon population grow to over 2,000 individuals.

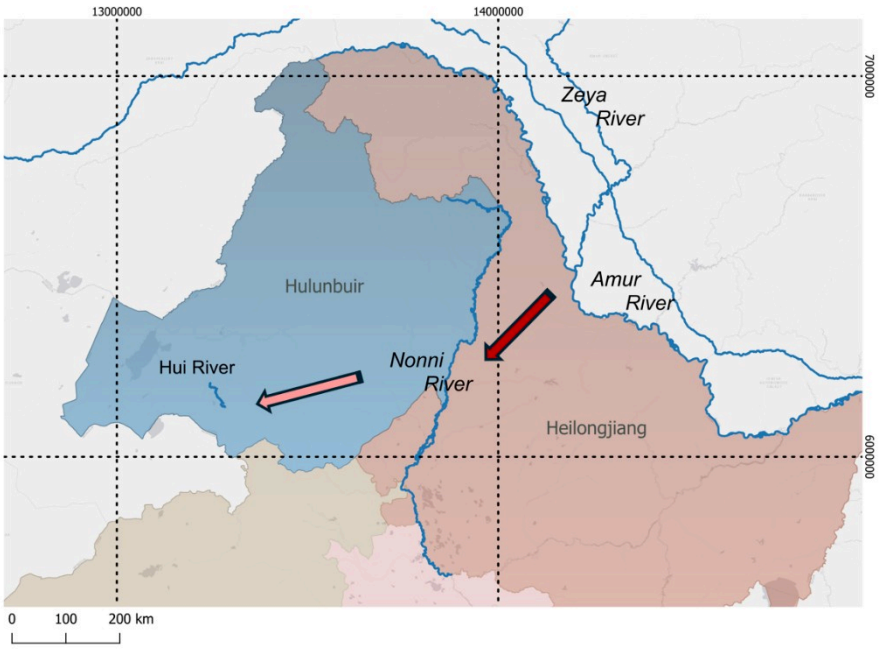


Map 1-1 The geography of the Solon-speaking area (adapted from Nargil 2025b:5)

1.1.3 Historical movement

The Solon people originally inhabited the Upper and Middle Amur basin in Northern Manchuria, particularly the Zeya River basin (Map1-2), until the 1650s (Janhunen 1996: 2). During this period, the Solons coexisted with the Mongolic Dagurs, with whom they maintained close economic and social ties, including intermarriage. As a result, Solon came under significant Dagur influence across various linguistic domains, evidenced by the presence of hundreds of Dagur loanwords in Solon (Khabtagaeva 2012: 335-346).

The Zeya basin later became a contested frontier between the Qing dynasty and Russia, leading to military conflicts. In response to these geopolitical tensions, the Manchu authorities undertook a large-scale relocation in the seventeenth century, resettling both Dagur and Solon populations from the Amur and Zeya regions to the Nonni River basin, located in the northern part of Central Manchuria. This area continues to be inhabited by the Solons (Janhunen 1996: 106-108). Subsequently, some Solon groups migrated further westward into Western Manchuria, settling along the Imin and Hui Rivers. In addition, a very small number of Solon individuals were relocated to Xinjiang (Western China) in the mid-eighteenth century.



Map 1-2: The historical movement of Solons from the Amur and Zeya River basins to the Nonni and Hui River basins

The different varieties of Solon correspond geographically to the Solon-speaking areas. Nonni Solon is spoken in the Nonni River basin, this variety reflects the speech of the Solon groups who first relocated from the Middle Amur and Zeya basins to the Nonni basin during the seventeenth century. Hailar Solon is spoken in the Ewenke Autonomous Banner. It represents the speech of the Solon groups who later moved from the Nonni basin into the Hui River basin. Ongkor Solon refers to the variety of the Solon communities who were relocated to Xinjiang Province during the mid-eighteenth century.

1.1.4 Number of speakers and endangerment

The number of Solon speakers was estimated at 20,000 by Urugshilt (2017: 192), a figure that appears to be substantially overestimated and likely influenced by Chaoke (1995: 1-5). Drawing on multiple sources, a more conservative and empirically grounded estimate can be proposed. These sources include the total ethnic Solon population of approximately 25,000 reported by the National Bureau of Statistics of the PRC (2021), the geographic distribution of Hailar and Nonni Solon speakers (§1.1.2), and detailed accounts of language proficiency by age group for both Hailar Solon (Nargil 2025b, also see §2.1.2.2.1) and Nonni Solon (Du 2012: 117; Najia 2017: 2-3; §2.1.2). Based on these data, the estimated number of fluent speakers by age group is approximately 387 individuals (12%) under the age of 13, 750 individuals (30%) aged 13–25, 3,475 individuals (48%) aged 25-40, 4,603 individuals (64%) aged 40–60, and 2,400 individuals (96%) aged 60 and above. This yields a total of roughly **11,917** fluent speakers. This estimate aligns closely with Salminen's (2007: 268) figures as well as the 2024 report of the China National Language Resource Monitoring & Research Centre, which indicates that 56.7% of ethnic Solons, approximately 12,600 individuals, are speakers of the language.

All Tungusic languages are currently endangered, yet Solon remains the most vigorous among them (Janhunen 2005: 37–54; Baek 2024: 206). Its relative vitality can be attributed primarily to the continued intergenerational transmission of the language as a first language in some communities. In contrast, most other Tungusic languages, particularly those spoken in Siberia, are either severely endangered or already extinct (Grenoble 2024: 1223). Among the Siberian Tungusic languages, Even is the most robust, with approximately 5,500 speakers,

followed by Evenki with around 3,000 speakers, but geographically fragmented, while all remaining languages in the group have fewer than 200 speakers (Grenoble 2024: 1223). A similar pattern of decline is observed among Tungusic languages spoken in Manchuria: Oroqen has fewer than 1,000 speakers (Cong 2018: 65), Aoluguya Evenki, Manchu, Hezhe have fewer than 20 speakers (Zhang 2013: 5-6, Joseph 2018: 5-6, Urugshilt 2017:2). Against this background, Solon clearly stands out as the most vigorous Tungusic language today.

Nevertheless, language shift is already underway and is progressing rapidly. Only children raised in rural areas by two Solon-speaking parents continue to acquire the language as a first language, and fewer than 30% of Solon youth aged under 25 is able to speak it. Urban migration for education and employment among younger Solons further accelerates this process of language shift. Despite its severity, language loss has received little attention at the local level, and no systematic or coordinated language preservation efforts are currently in place. The situation is particularly critical for Nonni Solon, which is no longer transmitted to children at all (Najia 2017: 2-3). Consequently, although Solon still has on the order of ten thousand speakers, it must be classified as an **endangered language** under UNESCO's Language Vitality and Endangerment framework (UNESCO 2003).

1.2 Previous research

Solon is a relatively under-described Northern Tungusic language, despite being better preserved than several of its sister languages. Most existing research on Solon has been published in Chinese, which has limited its accessibility to the wider linguistic community.

The earliest description of Solon is the sketch grammar by Hu and Chaoke (1986). This was followed by a series of more extensive descriptive works by Chaoke, a native speaker of Solon, including grammatical descriptions (Chaoke 1995, 2009a) as well as studies of nominal and verbal morphology (Chaoke 2017a, 2017b). While these works constitute the most substantial grammatical treatments of Solon to date, they are primarily focused on morphology; the description of syntactic structures is comparatively underdeveloped, and the analyses are non-typological. Additional sketch grammars have been produced by Hu (2007), Tsumagari (2009), and Baek (2023), all of which rely heavily on the foundational work of Hu and Chaoke (1986). Notably, all of these grammatical descriptions focus on the Hailar variety of Solon.

Studies on Nonni Solon are extremely limited, with only a single sketch grammar available, authored by Najia (2017).

The documentation of Solon is likewise limited. Two digital datasets currently exist: one is a small and restricted deposit within China's Language Resource Protection Project, consisting of one single speaker, which is not accessible to the public; the other is my open-access Solon corpus, hosted on the Pangloss Collection (https://pangloss.cnrs.fr/corpus/Solon) (Nargil 2025a). In addition, Kazama (2007, 2008) published two Solon text collections, but these are only available in Japan.

Despite the limited grammatical and documentary resources, Solon is comparatively well represented in lexicographic work. The earliest Solon texts, small size dictionary and grammar sketch were collected by Poppe (1931). Further lexical documentation was provided by Kałużyński (1970, 1971), Doerfer (1999) and Doerfer and Knüppel (2004). In China, Du compiled a Solon-Chinese dictionary and a Solon-Mongolian dictionary (Du 1998, 2014). Chaoke has also made substantial contributions to Solon lexicography, including basic lexical inventories of both Hailar Solon and Nonni Solon (Chaoke 2016), as well as a comparative lexicon of Solon, Khamnigan Evenki, and Aoluguya Evenki (Chaoke 2017c).

In addition to grammatical descriptions and lexicographic work, a number of studies have addressed specific aspects of Solon grammar. Most of these studies were conducted by Chaoke and published in Chinese, covering topics such as the case system (Chaoke 1985), postpositions (Chaoke 1986a), pronouns (Chaoke 1986b), phrase constructions (Chaoke 1991), the nominal number system (Chaoke 2009b), and verbal morphology (Chaoke 2021). Further contributions include studies on verbal agreement, structural features, and the case system of Nonni Solon by Jitgelt (1999), Kalina (2000), and Najia (2015).

1.3 Fieldwork and data

1.3.1 Fieldwork

The Solon data used in this study were collected entirely through my own fieldwork. Over the course of my PhD, I conducted three periods of fieldwork dedicated to the documentation and

grammatical description of Solon: a total of 3.5 months on-site plus one-year remote fieldwork, during which I collected 7 hours of Solon data, of which 6 hours are fully annotated.

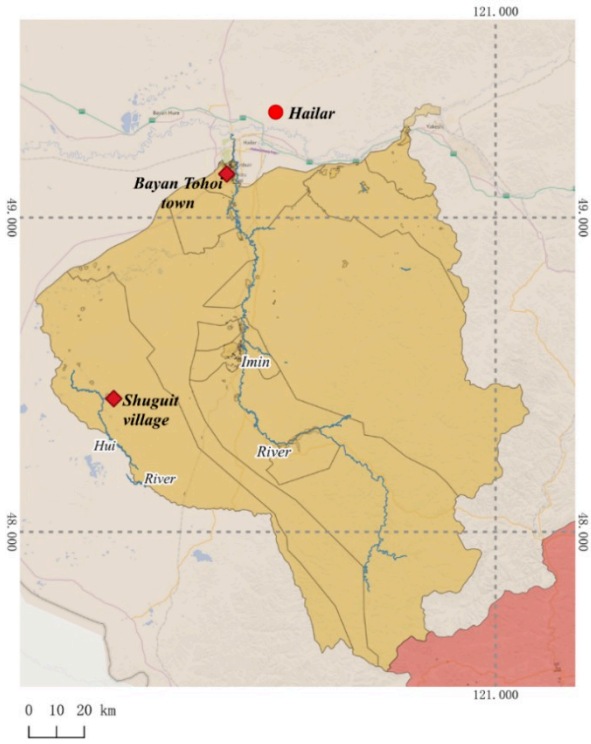
The primary working language during fieldwork was Mongolian. As a native speaker of Mongolian, I was able to communicate efficiently with most Hailar Solon speakers, who are typically bilingual in Mongolian. Chinese was also employed, particularly when working with younger speakers and during tasks involving grammaticality judgments or translation. Solon and Mongolian share a number of typological properties, including verb-final word order, agglutinative morphology, and inflectional systems, and Solon has been significantly influenced by Mongolian through long-term contact. While the use of Mongolian facilitated communication, it also posed a risk of priming speakers with Mongolian syntactic or lexical patterns during elicitation. To minimize such cross-linguistic influence, Chinese was occasionally preferred for metalinguistic tasks requiring explicit reflection on linguistic form.

The first period of fieldwork was conducted remotely from February 2022 to February 2023 due to travel restrictions associated with the COVID-19 pandemic. This phase was funded by LabEx ASLAN (Université de Lyon) under the project *The Syntax of Solon Evenki (Northern Tungusic) in Typological Perspective*[1], with a grant of €4,042. During this period, I collaborated closely with Mandarwa, a young Solon speaker and then a master's student in linguistics with training in transcription. Our workflow was divided into two complementary components: Mandarwa collected data locally in the Ewenke Autonomous Banner and provided initial transcriptions and translations, while I conducted weekly online meetings with one of my main consultants, Yonghong, to analyze the data provided by Mandarwa. As this was my first sustained engagement with Solon, I began with basic translation tasks, video-clip stimuli, and picture-based elicitation, before gradually moving on to the analysis of the transcribed narrative texts. The outcome of this phase is approximately 3 hours of Solon audio recordings, fully annotated with transcription, translation, and glossing.

The second period of fieldwork took place from March to May 2023, immediately after the remote fieldwork. It was also supported by the LabEx ASLAN, under the project *Solon (Northern Tungusic) Multilingualism – Sociolinguistics and Contact Effects*[2], with a grant of €4,800. During this fieldwork, I spent a month living with Yonghong, one of my consultants,

[1] URL: https://aslan.universite-lyon.fr/projet-synsolon-257907.kjsp
[2] URL: https://aslan.universite-lyon.fr/projet-multisolon-291009.kjsp

and her family in Shuguit Village (喜桂图嘎查 *Xǐguìtú Gāchá*), located in the Hui River basin. The village comprises approximately 80 households dispersed across a wide area due to the residents' stock-farming lifestyle. Its relative remoteness, limited transportation, and reduced exposure to dominant languages provided a favorable environment for observing more conservative language use. I then spent an additional month in Bayan Tohoi Town (巴彦托海镇 *Bāyàntuōhǎi Zhèn*), the administrative center of the Ewenke Autonomous Banner, with a population of around 25,000. Bayan Tohoi Town is more urbanized and ethnically diverse, hosting Han, Mongolian, Solon, Dagur, and Buryat communities, and is located approximately 20 minutes by bus from Hailar City (population ~350,000), see Map 1-3. During this second fieldwork period, I collected both sociolinguistic and linguistic data and expanded my group of language consultants to include Sarangerel and Oyungaowa. The outcomes of this phase include approximately 3 hours of Solon audio recordings, all fully annotated with transcription, translation, and glossing, as well as 324 completed sociolinguistic questionnaires.



Map 1-3 The fieldwork sites: Shuguit village and Bayan Tohoi town (Nargil 2025b:5)

The third fieldwork was conducted from December 2024 to January 2025 and was designed to supplement the existing corpus, clarify previously ambiguous grammatical phenomena, and elicit constructions that had not yet been attested in the available data. Owing to the short duration of the trip and severe winter conditions, I remained in Bayan Tohoi Town, where living conditions were more stable and access to the Solon community was facilitated by relationships established during the second fieldwork. This phase focused on targeted elicitation and clarification. The outcomes of this phase include targeted grammatical elicitations and approximately 1 hour of additional Solon audio recordings, which have been transcribed and translated.

Following this fieldwork, I continued to work with Mandarwa remotely from February to November 2025 when needed, in order to verify analyses and resolve outstanding questions.

1.3.2 Data

1.3.2.1 Speakers

The Solon corpus used in this study consists of contributions from 29 speakers, including 8 male and 21 female participants. The majority of speakers come from Hui village (辉苏木 *huī sūmù*). The Hui village is located in the Hui River basin, and the Shuguit hamlet is administratively under the Hui village.

The age distribution of speakers is summarized in Table 1-1 below. The speakers are skewed. First, it is gender-imbalanced, with a predominance of female speakers. Second, it is geographically concentrated in Hui Village. In terms of age distribution, younger generations, particularly children and teenagers are underrepresented. These limitations are acknowledged, and future fieldwork will aim to broaden the demographic and geographic coverage of the corpus.

Table 1-1: The distribution of age range of speakers consists of Solon corpus

Age range	Number of speakers
10-20	1
20-30	2
30-40	3
40-50	4
50-60	11
60+	6

1.3.2.2 Spontaneous data

The narrative component of the corpus comprises approximately six hours of recorded material, comprising **42** texts, **2,760** sentences, and **24,163** tokens. The data covers a range of genres: 22 fairy tales, 15 personal experiences, 3 conversations, and 2 interviews.

Among the fairy tales, five fairy tales were elicited using silent animated short films (2-5 minutes in length), which were shown to participants two or three times before they were asked to recount the story in Solon. The animated stimuli[3] included *A Bad Hunter*, *A Joy Story*, *Mice Take on an Overfriendly Cat*, *Head Up*, and *The Present*. In addition, one narrative text was elicited using the *Jackal and Crow* picture task (Carroll, Barbara & Gawne 2011), which is treated here as part of the narrative dataset.

Examples from narrative texts are cited as 'LT00-00'. 'LT' stands for 'long text', and the two '00s' indicate the text number and sentence number, respectively.

[3] Below is the URL of silent animated short films I used as stimulus, accessed on 27/12/2024
(1) A bad hunter: https://www.youtube.com/watch?v=ZoBvoRc8GN0
(2) A joy story: https://www.youtube.com/watch?v=ZQGuVKHtrxc
(3) Mice Take on an Overfriendly Cat: https://www.youtube.com/watch?v=sin9rdsBWHc&list=RDCMUCtSurE_l8HtG2aMFnU32Mug&index=3
(4) Head up: https://www.youtube.com/watch?v=dWDIoW7f6js
(5) The present: https://www.youtube.com/watch?v=WfxQuD9weWM

1.3.2.3 Elicitation and stimuli

The corpus includes approximately one hour of elicited data. A range of elicitation methods and stimuli were employed to supplement spontaneous speech and to target specific grammatical domains.

Picture- and video-based description tasks were used to elicit speech, in which speakers described visual scenes presented through standardized stimuli. All examples in this dissertation derived from these materials are cited using the code format EL00-00, where EL indicates elicitation and stimuli, the first number identifies the task, and the second number refers to the specific stimulus within that task. A list of the elicitation tasks employed in the present study is provided below.

Table 1-2: The list of elicitation and stimulus tasks in Solon corpus

	elicitation task	**source**
EL01	basic sentences, translation task	Abbi (2001)
EL02	picture stimulus for topological relations	Bowerman & Pederson (1992)
EL03	video clip stimulus for reciprocal constructions	Evans et al. (2004)
EL04	picture stimulus for static actions	Stimulus materials of "Comparative Population Linguistics" projects (led by Pakendorf) (2007-2011)
EL05	video clip stimulus for motion events	Stimulus materials of "Comparative Population Linguistics" projects (led by Pakendorf) (2007-2011)
EL06	story builder action cards	Sardinha (2011)
EL07	picture stimulus for prohibitive constructions	Los Peligros (2022, accessed 18 Sep.)
EL08	picture stimulus for spatial relations	Poziții spațiale (2011)

These tasks were used primarily during the early stages of fieldwork and proved particularly useful for probing morphosyntactic structures and lexical choices. In addition, grammaticality judgment and translation tasks were administered, asking participants to evaluate the naturalness or acceptability of Solon sentences. These judgments provided insight into speakers' intuitions regarding well-formedness and grammatical constraints. The examples of translation and judgement are cited as 'elicited'.

1.3.2.4 Reduced corpus for quantitative analysis

This study aims to provide a comprehensive and quantitatively grounded analysis of Solon, with a strong commitment to empirical data. To avoid over-reliance on intuition and to ensure systematic coverage, all occurrences of each grammatical category were examined wherever feasible.

For grammatical phenomena with very high token frequency, analyzing every instance in the full corpus would have been impractical. To address this, a reduced corpus was created from the full dataset. This reduced corpus consists of **30** narrative texts, representing all speakers, and contains **1,356** sentences and **12,844** tokens. It remains sufficiently representative to support reliable analysis of functional and distributional patterns.

The reduced corpus was used selectively and only for high-frequency phenomena. For grammatical categories with lower frequencies, such as negation, the analysis is based entirely on the full corpus. Even when working with the reduced corpus, the full corpus was regularly consulted to resolve uncertainties and to examine finer contextual distinctions. Throughout this dissertation, all frequency figures are explicitly identified as being drawn from either the full corpus or the reduced corpus.

1.3.2.5 Annotations

All language data are transcribed using the International Phonetic Alphabet (IPA), following the phonetic system described in Chapter 3. Because Solon phonology has diverged considerably from that of other Tungusic languages, a Proto-Tungusic-oriented transcription, following the system adopted by Janhunen (2023) and Baek (2023), is provided beneath the

IPA transcription to facilitate comparative and diachronic analysis. Glossings follow the Leipzig Glossing Rules. The original translations are available in both English and Chinese; however, only the English translations are included in this dissertation. Where necessary, a literal translation is provided in addition to the free translation. References to the data source are given at the end of each example. An illustrative example is provided in (1.1). This annotation format is used throughout the dissertation, except in Chapter 3, where examples are presented only in IPA because the analyses focus on the phonological system.

(1.1)	**IPA TX**:	*nisxuŋ-tʰixi-ʃi*	*ə-ttu*	*pi-sə-mun*	*puː*
	Tungusic TX:	*nisxuŋ-tixi-si*	*e-ddu*	*bi-se-mun*	*buu*
	glossing:	small-ABL-2SG	PROX-DAT	COP-PST-1PL.EXCL	1PL.EXCL

free TS: ‘Ever since you were little, we have been here.’ (**literal TS**: lit. Since you were little, we were here, we.) (**reference**: LT32-01)

(TX: transcription; TS: translation)

2 Sociolinguistic Profile

This chapter primarily presents the outcomes from my sociolinguistic study of Solon. The data and analysis presented herein are drawn from my 2025 article, entitled "*The Language Ecology and Endangerment of Solon, a Tungusic Language Spoken in China*" (Nargil 2025b). For a detailed account of the language ecology and sociolinguistic dynamics of Hailar Solon, readers are referred to that publication.

This chapter is biased towards the language ecology of Hailar Solon. It should be noted that, due to a lack of personal fieldwork on Nonni Solon, the language contexts presented herein are based on the findings of earlier studies. Furthermore, Ongkor Solon is now extinct and thus will not be discussed here.

2.1 Hailar Solon

The sociolinguistic profile of Hailar Solon is based on my personal field observations, interviews, and, most importantly, the results of a sociolinguistic questionnaire that I distributed among Solon community members of different age groups in the Ewenke Autonomous Banner.

2.1.1 Language ecology

Hailar Solons are predominantly located within the Ewenke Autonomous Banner. Established in 1958 on the basis of the former Solon Banner, this administrative unit is officially recognized as an autonomous region for the Ewenke minority (National Ethnic Affairs Commission of the People's Republic of China 2023). Such institutional recognition has enhanced the symbolic presence of Solon, locally referred to as "Ewenke" within the broader sociopolitical landscape of China.

Among those officially categorized as Ewenke in China, Solon constitutes the largest subgroup. Consequently, the label "Ewenke" is most commonly interpreted as referring specifically to Solon, despite the inclusion of other Northern Tungusic groups under the same official designation, such as the Tungus Ewenke (Khamnigan Evenki) and the Yakut Ewenke

(Aoluguya Evenki). Fieldwork interviews confirm that local Solon speakers typically equate "Ewenke" with Solon; the other groups are generally identified through additional qualifiers, particularly in linguistic discussions. In practical usage within China, the expression "Ewenke language" therefore usually denotes Solon unless otherwise specified.

Notwithstanding this degree of symbolic recognition, the vitality of Solon remains under considerable pressure. Within the Ewenke Autonomous Banner, both Mongolian and Mandarin Chinese exert strong sociolinguistic dominance. Owing to large-scale in-migration, Solons now account for only 7% of the region's population, compared with 60% Han Chinese and 22% Mongolians (National Bureau of Statistics of PRC 2021). This demographic configuration is especially pronounced in urban centers, where Solon speakers form a small minority and everyday interaction predominantly occurs in Mandarin and Mongolian.

The lack of a standardized and widely accepted writing system further constrains the functional domains of Solon. Educational attainment necessarily takes place through either Mongolian or Mandarin, thereby reinforcing the central role of these languages in the daily lives of Solon speakers. As a result, bilingualism is virtually universal among Solons, typically involving Solon in combination with Mongolian or Mandarin, while many younger individuals command all three languages.

In rural areas, where Solon communities remain more concentrated due to their traditional stock-farming practices, linguistic maintenance is comparatively stronger. Relative geographic isolation has facilitated sustained heritage language use across a broad range of social contexts. Solon continues to function as the principal medium of communication in routine activities, including workplace interactions, community gatherings, local events, markets, and, crucially, within the family domain. Intergenerational exchanges among parents, siblings, spouses, and children are still largely conducted in Solon. Notably, even some Mongolian and Han Chinese residents who have settled in predominantly Solon villages have acquired basic communicative competence in the language. This relatively robust transmission ensures that rural children generally attain fluency in Solon. Nevertheless, linguistic data from younger speakers reveal discernible lexical and structural innovations in comparison with older generations, suggesting that internal change is underway.

Despite this localized vitality, processes of urbanization are intensifying pressures on Solon language maintenance. Access to formal education, employment opportunities, and upward mobility, together with a prevailing perception of urban superiority, has prompted

substantial migration from rural settlements to urban areas. In these new environments, Solon occupies a marginal position and finds limited space in either public or domestic domains.

Intermarriage represents a particularly significant driver of language shift in urban contexts. As exogamous unions, especially with Mongolian or Han Chinese partners become more frequent, intergenerational transmission of Solon is often disrupted. While some children in such families initially acquire Solon, consistent exposure is frequently lacking, resulting in early attrition. During fieldwork, for example, one Solon woman described her efforts to transmit the language to her children following her marriage to a Mongolian spouse; however, by approximately five years of age, the children had ceased using Solon altogether.

Families formed through intermarriage now constitute an increasingly visible segment of the population, yet their linguistic experiences remain insufficiently addressed within broader community discourse. Their trajectories underscore the complex sociolinguistic realities shaping contemporary Solon society. Urbanization, shifting value orientations, and exogamy collectively weaken intergenerational transmission. In urban settings, the dominance of Mandarin and Mongolian in public institutions and media, along with their associated prestige, further restricts the functional range of Solon. Consequently, the continuity of language transmission across generations is progressively eroding.

In response to these developments, local authorities within the Ewenke Autonomous Banner have introduced initiatives aimed at safeguarding Solon language and culture. Large-scale cultural festivals, including the Oboo Festival and the Sebin Festival (Solon: *səpiːn pajar* or *səptʃəːniː pajar*), draw approximately a thousand participants and feature activities such as singing, dancing, horse racing, chess, and wrestling. At a smaller scale, schools and village administrations organize events such as the Solon Storytelling Contest hosted by Huihe Central Primary School in Hui village, as well as youth sports competitions. Language protection policies have also been formulated to promote Solon vitality (Yilina 2012: 54–55).

Nevertheless, current preservation strategies tend to prioritize cultural display over systematic language revitalization. The Ewenke Study Association in Bayan Tohoi town, for instance, sponsors numerous cultural programs but devotes comparatively limited attention to linguistic development. Furthermore, within the Solon community itself, the extent of ongoing language shift has not yet been fully acknowledged, and its long-term implications remain underestimated. More focused and proactive interventions are therefore urgently required. The

strong sense of ethnic identity among Solons may provide an essential foundation for mobilizing effective revitalization measures before irreversible language loss occurs.

2.1.2 Sociolinguistic survey

During fieldwork in the Solon community within the Ewenke Autonomous Banner, I conducted a sociolinguistic survey among individuals who self-identify as members of the Solon ethnic group. The questionnaire was designed to assess key sociolinguistic variables, including language proficiency, patterns of language use, and language attitudes. Additionally, it explored intermarriage trends and identity choices made by Solon individuals under the sociopolitical and cultural influence of dominant ethnic groups.

The questionnaire consisted of 44 questions, featuring both single-choice and multiple-choice questions, and covered the following domains:

1. Basic demographic information (e.g., gender, age, occupation, education level, and administrative area of residence).
2. Language use in both familial and societal contexts.
3. Self-assessed language abilities in Solon, Mongolian, Mandarin, Dagur, Oroqen, Khamnigan Evenki, and select foreign languages (English, Japanese, Russian).
4. Ethnic background of family members.
5. Language attitudes.

A total of 324 questionnaires were collected. After excluding responses from individuals not belonging to the Solon community (64), as well as those with contradictory (15), inconclusive (8), or duplicate (1) responses, 236 valid responses remained for analysis. Notably, twice as many female respondents participated as male. Respondents were categorized into four age groups (13–25, 26–40, 41–60, and 60+), with each of the first three groups representing roughly 30% of the sample; individuals over 60 were comparatively fewer.

In the following sections, I present a general overview of the findings regarding multilingualism, language proficiency, language use and language attitudes within the Solon community. For the full dataset and in-depth analysis, see Nargil (2025b).

2.1.2.1 Multilingualism

Multilingualism constitutes a defining characteristic of the Solon speech community. The core linguistic repertoire typically comprises Solon, Mongolian, and Mandarin (Figure 2-1). Solon functions as the ancestral heritage language, whereas Mongolian and Mandarin hold socially and institutionally dominant positions within the Ewenke Autonomous Banner, particularly in educational settings, administrative domains, and urban contexts.

Beyond these three principal languages, Dagur also plays a role in the linguistic ecology of the community. More than half of respondents in the 41–60 and 60+ groups report competence in Dagur, a pattern that likely reflects earlier periods of sustained contact and widespread bilingualism. This tendency, however, is not maintained among younger generations. Among individuals under the age of 40, Dagur proficiency declines sharply, with only approximately 20% indicating knowledge of the language.

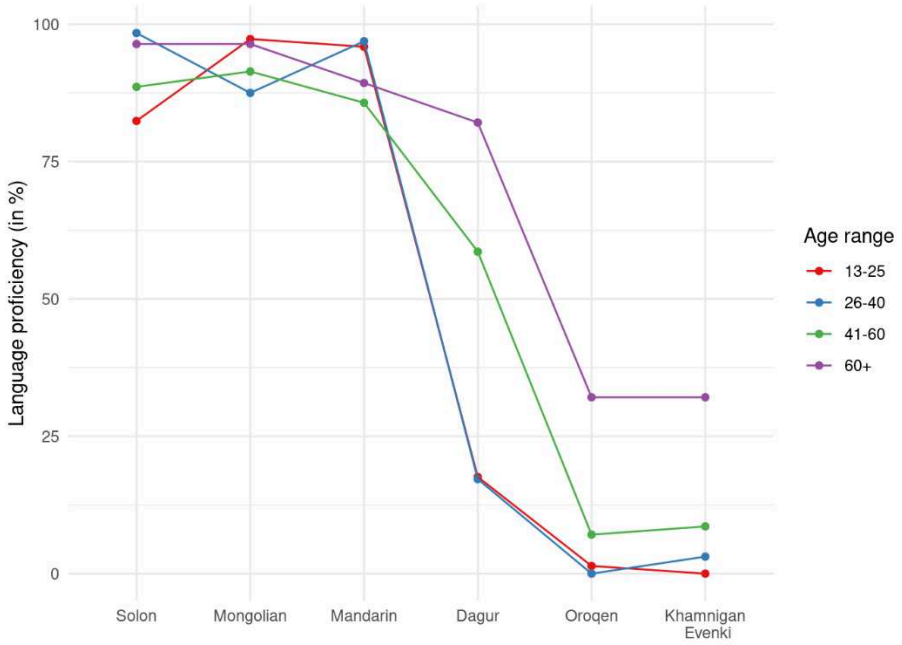


Figure 2-1 Language proficiency of the Solon community by age groups (Nargil 2025b: 15)

A contrasting age-related pattern is observed for Oroqen and Khamnigan Evenki. In this case, language competence decreases steadily among younger speakers, corresponding to the broader regional decline and endangered status of both languages (Cong 2018: 70; Du 2012: 118).

Figure 2-2 presents age-stratified patterns of multilingual competence among Solon individuals. For analytical clarity, the label “Mongolic” is used to encompass both Mongolian and Dagur, while “Tungusic” includes Oroqen and Khamnigan Evenki. Foreign languages such as English, Japanese, and Russian are excluded from the figure, as these are generally acquired through formal schooling and have minimal relevance to everyday community interaction.

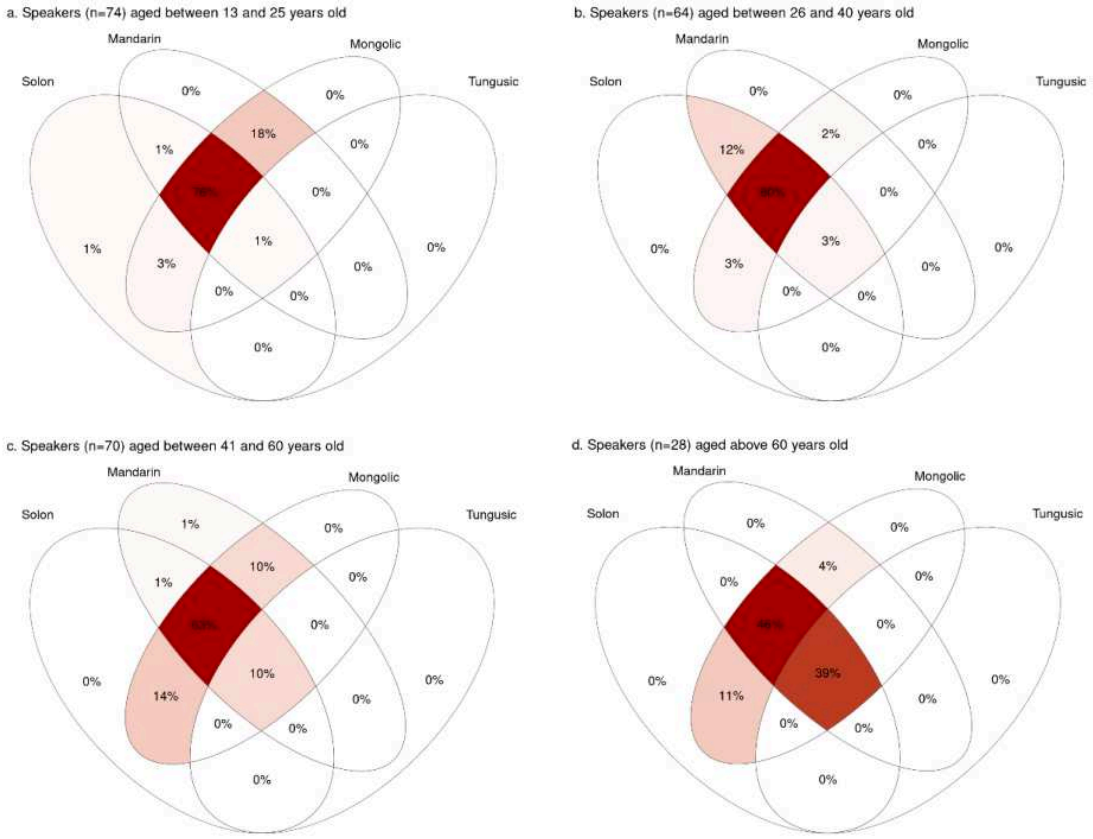


Figure 2-2 Multilingualism of the Solon community by age groups (Nargil 2025b: 19)

Monolingualism is virtually absent across all age groups, underscoring the deeply multilingual character of the community. The most prevalent linguistic profile is Solon–Mandarin–Mongolic trilingualism, particularly dominant among respondents aged 13–25 and 26–40, where it accounts for 76% and 80% of individuals, respectively.

The 41–60 group displays greater heterogeneity in linguistic repertoires. Within this group, 14% are bilingual in Solon and Mongolic, while 10% report bilingual competence in Mandarin and Mongolic but no longer speak Solon. In addition, 10% of respondents in this age

group demonstrate quadrilingual proficiency, combining Solon, Mongolic, Mandarin, and Tungusic languages.

Among participants aged 60 and above, Solon competence is nearly universal. Furthermore, 39% report speaking between four and six languages, reflecting the fact that both the Mongolic and Tungusic categories each comprise two distinct languages. This high degree of multilingualism mirrors earlier historical patterns of interethnic contact and stronger maintenance of minority languages among older generations.

Taken together, the data reveal a clear generational trajectory: as age decreases, the average number of languages spoken also declines. This shift indicates a gradual retreat from smaller minority languages and an increasing consolidation of Mandarin and Mongolian as dominant linguistic resources, particularly among younger speakers.

2.1.2.2 Language proficiency

In order to evaluate levels of Solon proficiency, the sociolinguistic questionnaire included a self-assessment item asking respondents to report their abilities in the language. Five response categories were provided:

(1) Understand well, speak well
(2) Understand well, speak a little
(3) Understand well, cannot speak
(4) Understand a little, cannot speak
(5) Can neither speak nor understand

Participants were asked to select the option that most accurately represented their own competence. A review of the responses revealed that Option (3), “understand well but cannot speak,” was selected by only a very small proportion of respondents. Given that strong receptive competence generally presupposes at least limited productive ability, it is plausible that respondents choosing Options (2) and (3) do not differ substantially in their actual functional proficiency. The apparent distinction between these two categories is therefore likely attributable to variation in self-perception rather than to a clear-cut linguistic boundary. For analytical purposes, Options (2) and (3) were consequently combined, yielding four

consolidated proficiency levels. This adjustment allows for a more coherent categorization of speaker competence.

The resulting four-level scale facilitates the identification of different speaker types frequently observed in endangered language settings. In this respect, the classification aligns with the typology proposed by Grinevald and Bert (2011: 58) (Table 2-1). Employing this framework enables a more fine-grained representation of the distribution of linguistic competence within the Solon-speaking community.

Table 2-1: Different options concerning language proficiency correspond to different types of speakers

(1) Understand and speak fluently	**Fluent speakers**, who commonly had and continue to have language conversation partners.
(2) Understand well, speak a little	**Semi-speakers**, possessing varying levels of fluency, who predominantly navigate their sociolinguistic experiences within the dominant language.
(3) Understand a little, cannot speak	**Terminal speakers** are individuals with a basic grasp of the language's passive aspects but extremely limited skills in active expression.
(4) Can neither speak nor understand	**Not a speaker**, since they don't master the language.

2.1.2.2.1 Language proficiency in Solon

Figure 2-3 presents the distribution of self-reported Solon proficiency across age groups. In general, competence in ancestral language remains relatively high within the community. The oldest group (60+) demonstrates the strongest retention, with 96.4% reporting fluent speaking ability. Similarly, the 41–60 and 26–40 age groups show substantial levels of proficiency, as roughly 80% of respondents in each group indicate that they speak Solon well.

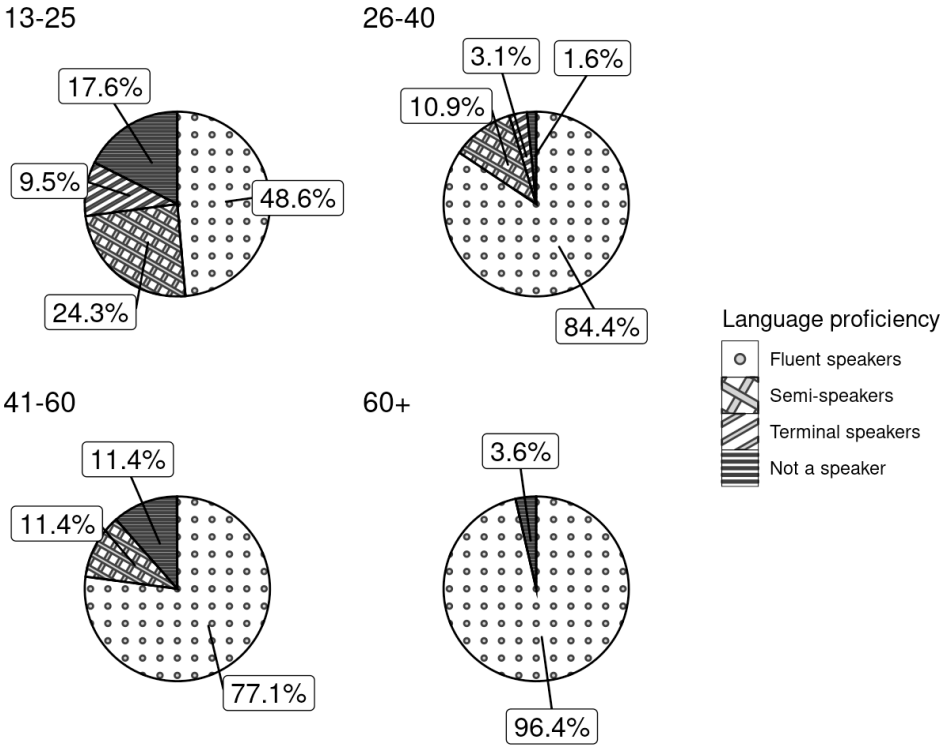


Figure 2-3 Language proficiency in Solon by age groups (Nargil 2025b: 14)

Despite these broadly comparable percentages, a striking contrast emerges between the two middle-aged groups. In the 26–40 group, only 1.6% report an inability to speak Solon, whereas the corresponding figure in the 41–60 group rises to 11.4%. Although the precise cause of this discrepancy is not immediately transparent, it may be linked to historically entrenched sociocultural ideologies surrounding language and education in China. For several decades, Han culture has frequently been positioned as the most advanced or "civilized," and social mobility has often been associated with linguistic assimilation, particularly through mastery of Mandarin as a notion encapsulated in the expression "raising one's cultural level" (提高文化水平). Such ideologies have been widely internalized among minority communities (Poa and LaPolla 2007: 341). Within the 41-60 group, patterns of interrupted transmission become apparent. Some individuals in this age range either did not pass Solon on to their children or were themselves raised primarily in Mandarin. One elderly participant, for example, explained that although both she and her husband are fluent in Solon (as well as proficient in Mandarin and Mongolian), they deliberately chose to raise their children, now aged 42 and 39 exclusively in Mandarin. Consequently, the children possess only limited receptive knowledge of Solon today.

The comparatively higher level of proficiency observed in the 26–40 group may reflect shifts in educational policy and evolving identity orientations. Following the introduction of the Nine-Year Compulsory Education system in 1986 (National People's Congress 1986), access to schooling expanded significantly in many ethnic minority regions. In the Ewenke Autonomous Banner, where Solon communities share pastoralist traditions with Mongolic populations, the development of Mongolian-medium education has also been noteworthy. Beyond providing formal instruction, such institutions may reinforce ethnic consciousness and contribute indirectly to a renewed engagement with heritage languages, including Solon.

In contrast, the youngest group (13–25) exhibits a marked decline in fluency. Only 48.6% report that they speak Solon well, and 17.6% indicate that they are unable to speak the language at all. These figures point to a weakening of intergenerational transmission and signal an accelerating process of language shift. Urbanization, the expanding dominance of Mandarin, and broader forces associated with globalization have reshaped the linguistic ecology of the Ewenke Autonomous Banner. The reduced competence observed among younger speakers thus reflects not merely individual attrition, but a wider reconfiguration of the social and cultural position of Solon within contemporary community life.

2.1.2.2.2 Language proficiency in Mongolian

Figure 2-4 displays the distribution of Mongolian proficiency among Solon respondents across age groups. A substantial majority ranging from approximately 80% to over 90% report fluent command of Mongolian, which constitutes one of the two socially dominant languages in the Ewenke Autonomous Banner. Such consistently high competence reflects the historically close and sustained interaction between Solon and Mongolian communities. This long-standing relationship is rooted in shared patterns of rural livelihood, particularly pastoralism and stock herding, which have facilitated extensive social contact and linguistic convergence. As discussed previously, these connections have also influenced educational choices: many rural Solon families have opted to enroll their children in Mongolian-medium schools, thereby reinforcing bilingual competence across generations.

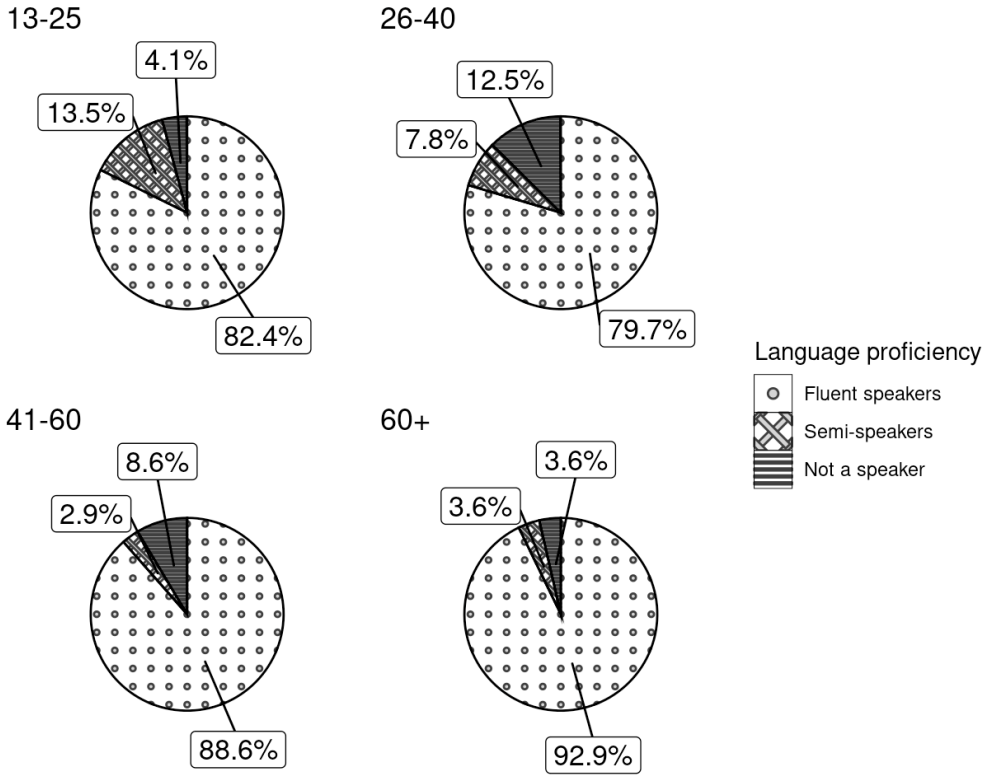


Figure 2-4 Language proficiency in Mongolian by age groups (Nargil 2025b: 17)

Consequently, Solon–Mongolian bilingualism has long represented a normative linguistic profile within the community. In recent decades, however, demographic restructuring has reshaped the regional linguistic ecology. With the Han population now constituting the majority in the Ewenke Autonomous Banner, the functional necessity of Mongolian as a lingua franca in interethnic communication has diminished for many Solon speakers.

Generational patterns of proficiency appear to reflect this broader shift. Among respondents aged 13–25 and 26–40, roughly 80% report fluent Mongolian, whereas the corresponding figure rises to around 90% in the 41–60 and 60+ groups. Although the difference is relatively modest, it suggests a gradual reduction in the centrality of Mongolian among younger Solon speakers. This tendency may be associated with the increasing dominance of Mandarin and evolving patterns of social interaction in the region.

2.1.2.2.3 Language proficiency in Mandarin Chinese

Figure 2-5 demonstrates a pronounced generational shift in Mandarin Chinese proficiency within the Solon community. The data indicates a steady expansion of fluent Mandarin speakers across younger groups. Among respondents aged 41–60 and 60+, approximately 50–60% report fluency. At the same time, 16% of individuals in the 41–60 group and 11% of those aged 60 and above identify themselves as non-speakers of Mandarin. The slightly lower proportion of non-speakers in the oldest group compared to the 41–60 group appears counterintuitive. A plausible explanation lies in sampling distribution: a considerable number of respondents aged over 60 were interviewed in urban settings, where sustained exposure to Mandarin through schooling, media access, and public life is more likely.

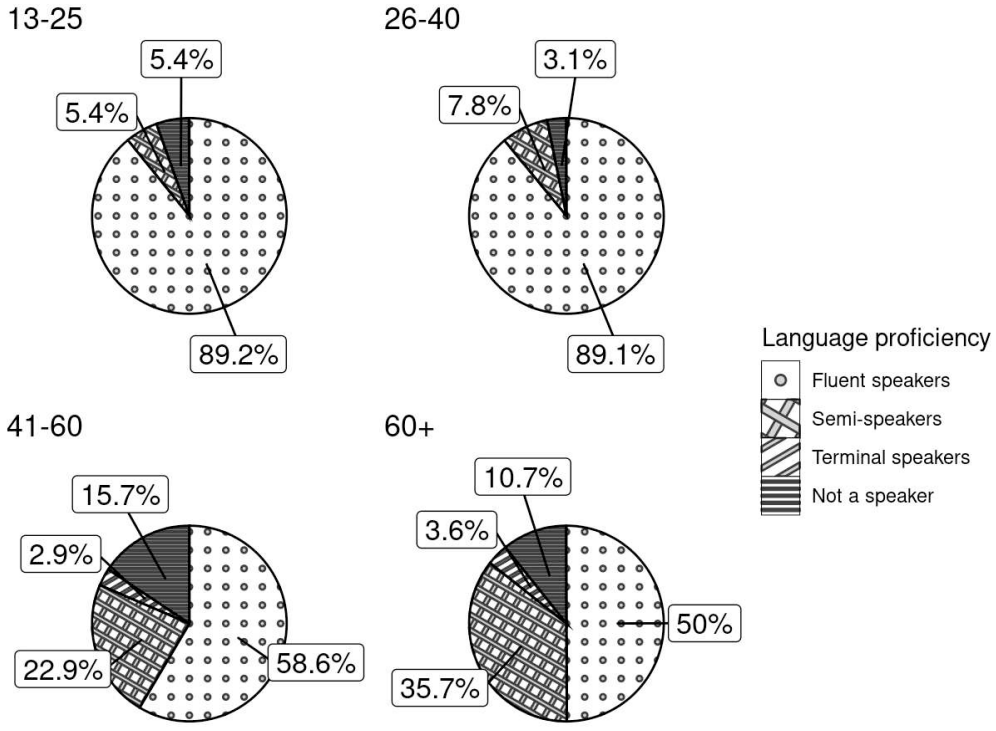


Figure 2-5 Language proficiency in Mandarin Chinese by age groups (Nargil 2025b: 18)

A markedly different pattern emerges among younger generations. In both the 13–25 and 26–40 groups, approximately 89% report fluent command of Mandarin. Only 3% of respondents aged 26–40 and 5% of those aged 13–25 indicate that they are unable to speak the

language. The contrast between older and younger age groups clearly illustrates the growing centrality of Mandarin within the linguistic ecology of the Ewenke Autonomous Banner.

Mandarin has become indispensable for effective participation in contemporary Chinese society. Beyond its role in everyday communication, proficiency is crucial for educational attainment and access to employment. Institutions of higher education operate primarily in Mandarin, making linguistic competence a prerequisite for academic advancement. Similarly, many occupations, especially those involving interregional interaction requires functional proficiency in Mandarin. As the language associated with national integration, socioeconomic mobility, and institutional authority, Mandarin exerts considerable assimilatory influence. This expanding dominance has reshaped language attitudes and patterns of use within the Solon community, reinforcing ongoing processes of linguistic shift.

2.1.2.3 Language use

Patterns of language use constitute a crucial indicator of linguistic vitality and provide essential guidance for efforts aimed at mitigating or reversing language endangerment (Bromham et al. 2020: 76). In order to evaluate the current status of Solon, the questionnaire examines language practices at two principal levels: intra-family communication and broader societal interaction.

2.1.2.3.1 Language use within the family

Within certain Solon households, the heritage language continues to function as the sole medium of communication between parents and children (Figure 2-6). For all age groups except the youngest (13–25), more than 60% report exclusive use of Solon with their parents. Among respondents aged 60 and above, this proportion reaches 85.7%. In contrast, only 45.9% of individuals in the 13–25 group indicate that they use Solon exclusively with their parents, suggesting an increased presence of additional languages in family interaction among younger speakers.

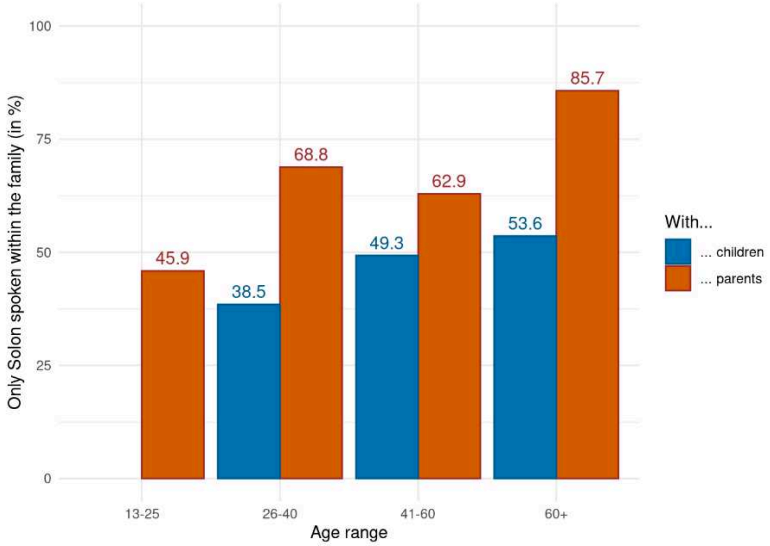


Figure 2-6 Only Solon spoken within the family by age groups (in %) (Nargil 2025b: 20)

When examining language practices directed toward children, a different pattern emerges. Across the 26–40, 41–60, and 60+ groups, the proportion of respondents who use only Solon with their children is consistently lower than the proportion who used only Solon with their own parents. For example, within the 26–40 group, just 38.5% report exclusive Solon use with their children. (The 13–25 group is excluded from this comparison, as most individuals in this group are not yet parents.) This contrast points to a gradual reduction in exclusive Solon transmission within the domestic domain, reflecting a weakening of the language's intergenerational continuity.

Figures 2-7 and 2-8 further illustrate multilingual practices within Solon families. Figure 2-7 presents the languages respondents use with their parents, while Figure 2-8 displays those used with their children. Because multiple languages may be employed within a single household, the percentages exceed 100%. For instance, in Figure 2-7, the cumulative total for the youngest group reaches 160.9%, reflecting frequent multilingual interaction.

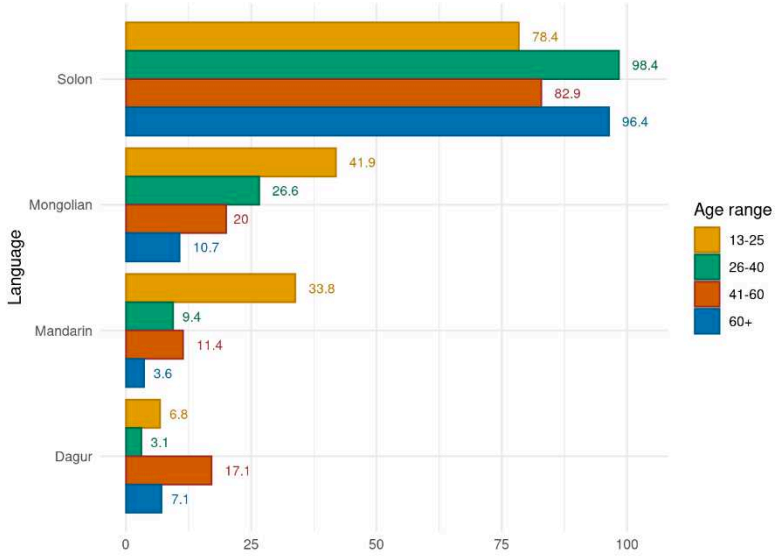


Figure 2-7: Languages used within the family with parents by age groups (in %) (Nargil 2025b: 21)

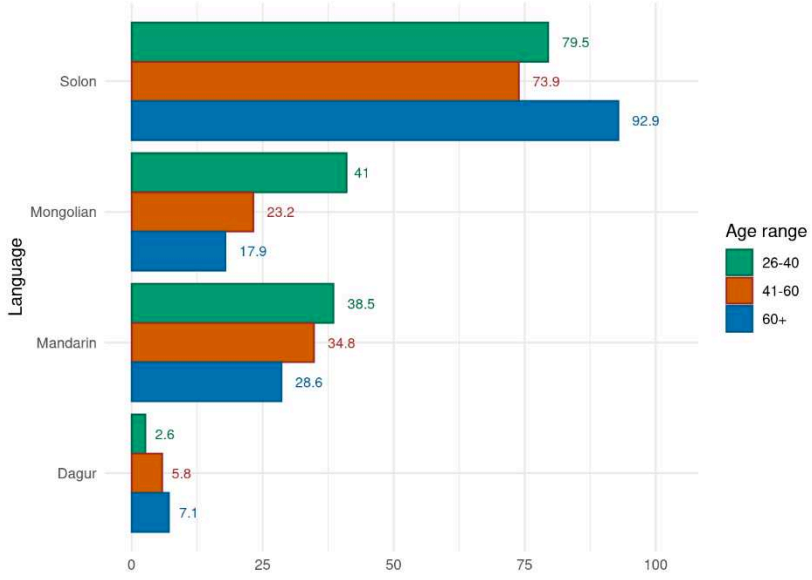


Figure 2-8: Languages used within the family with children by age groups (in %) (Nargil 2025b: 21)

Despite signs of decline, Solon retains considerable presence within the family sphere. A large majority of respondents across age groups report using Solon with both parents and children, which constitutes an encouraging indicator for language maintenance in an endangered context. Particularly notable are the 26–40 and 60+ groups, in which 98.4% and 96.4%, respectively, report using Solon as one of the languages of communication with their parents.

At the same time, generational differences are evident. The youngest group (13–25) engages in more multilingual interaction with parents, reflecting the increasing prominence of Mongolian and Mandarin Chinese in family life. Moreover, even within the 26–40 group—where Solon use with parents remains high—communication with children becomes markedly more diversified: 41% report using Mongolian and 38.5% Mandarin in parent–child interaction. These figures suggest that dominant regional languages are progressively penetrating the domestic sphere.

Such developments indicate that broader language-ecological pressures have extended into the home environment. As Mongolian and Mandarin gain functional space within family interaction, processes of code-mixing and gradual language shift may emerge at the individual and household levels, thereby weakening the stability of Solon transmission across generations.

2.1.2.3.2 Language use in society

Language practices in the public sphere were examined through a range of routine interactional contexts, including conversations with friends and colleagues, communication with strangers, language choice on social media platforms, television viewing habits, and engagement with short-form online videos. The principal languages surveyed were Solon, Mongolian, Mandarin Chinese, and Dagur. An additional category labeled "Other" encompassed less frequently used languages, such as Oroqen, Khamnigan Evenki, and various foreign languages.

Figure 2-9 reveals a highly multilingual pattern of language use across these domains. Despite this diversity, Mandarin Chinese occupies a clearly dominant position. In most interactional contexts, close to 90% of respondents report using Mandarin. The only partial exception occurs in conversations with friends and colleagues, where reported use declines slightly to 80.5%, though Mandarin remains the most widely employed language overall.

By comparison, the functional range of Solon varies considerably across domains. Its strongest presence is found in informal peer interaction, with 71.2% reporting use in conversations with friends or colleagues. However, this proportion decreases substantially in communication with strangers, where only 41.5% indicate using Solon. In digital contexts, 50% report employing Solon on social media, though primarily in oral modalities such as voice messages or audio/video calls. This restricted usage reflects structural constraints, notably the absence of a standardized writing system. Solon's presence declines even further in mass media

consumption: only 28.4% report watching television content in Solon, and 25.8% report viewing short online videos in the language. The limited availability of Solon-language media, together with its comparatively weak institutional support and reduced public visibility, likely accounts for this pattern.

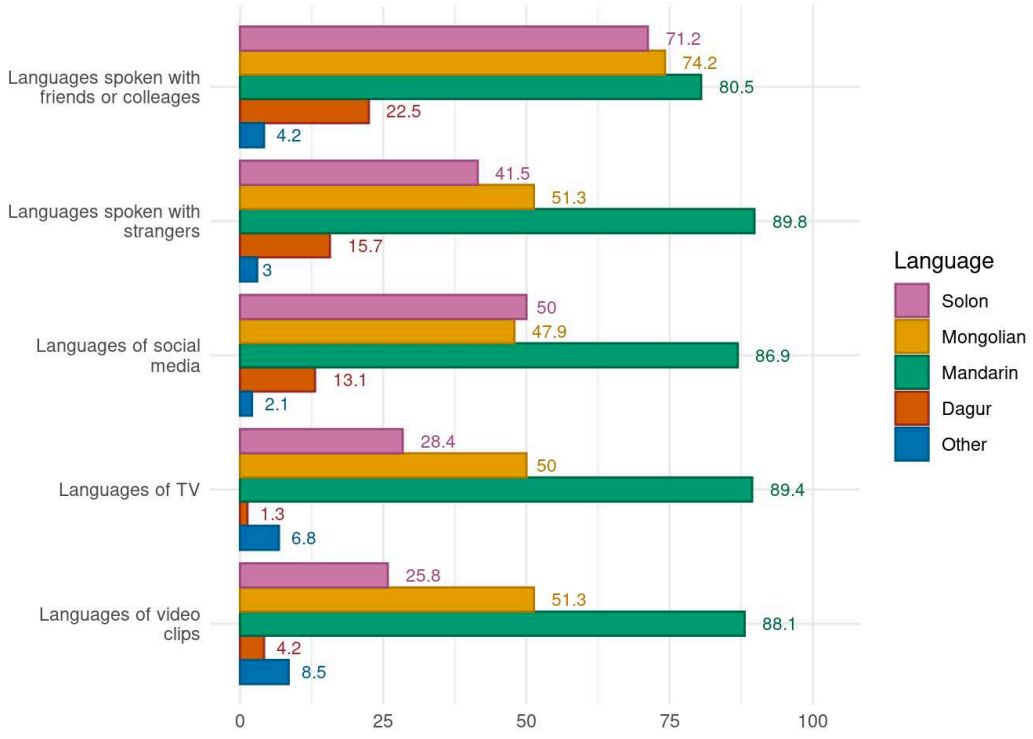


Figure 2-9: Language use of the Solon community in society (Nargil 2025b: 23)

Mongolian occupies an intermediate position within the societal domain. Although historically significant and still widely used, it does not match the dominance of Mandarin. Its strongest presence appears in peer interaction, where 74.2% report using it with friends or colleagues. In other contexts, such as communication with strangers, social media engagement, television viewing, and short video consumption approximately half of respondents report Mongolian use. These figures suggest that while Mongolian remains socially relevant, it no longer functions as a primary or indispensable medium in broader public life.

Taken together, the data illustrate a clear functional hierarchy in the societal domain: Mandarin Chinese operates as the unmarked and dominant language across most contexts; Mongolian maintains a secondary yet stable role; and Solon is largely confined to informal or culturally intimate settings, with limited presence in institutional or mediated environments.

This distribution reflects broader processes of language shift and domain contraction affecting Solon in contemporary society.

2.1.2.4 Language attitudes

In order to explore the Solon community's perceptions of linguistic identity, language rights, and responses to ongoing language shift, the questionnaire included four items targeting language attitudes:

Q41. The rank of the languages according to their economic importance.

Q42. The rank of the languages according to your personal feelings.

Q43. If you live away from the Solon area, how willing are you to attend a Solon gathering/party?

Q44. If you don't have the opportunity to communicate in Solon, will you purposefully speak/listen to Solon?

Upon analysis, it became evident that Q41 and Q42 posed interpretive difficulties for many respondents. The notions of "economic importance" and "personal feelings" proved overly abstract, leading to inconsistent or unclear responses. This outcome underscores the methodological importance of formulating survey questions in accessible and concrete terms, particularly in multilingual and cross-cultural settings. By contrast, Q43 and Q44 generated clearer and more reliable responses. Both questions frame attitudes in concrete behavioral scenarios, allowing for a more direct assessment of identity orientation and language commitment.

Question 43 was designed to assess the strength of identification with Solon ethnic identity. The hypothetical condition of "living away from the Solon area" was introduced to capture the possibility that identity awareness may intensify when individuals find themselves in a minority position.

The results (Figure 2-10) indicate generally positive identity recognition across the community. The strongest attitudinal commitment is observed among respondents aged 41–60 and 60+, with approximately 70% stating that they would attend a Solon gathering regardless of competing obligations and considering such events highly important.

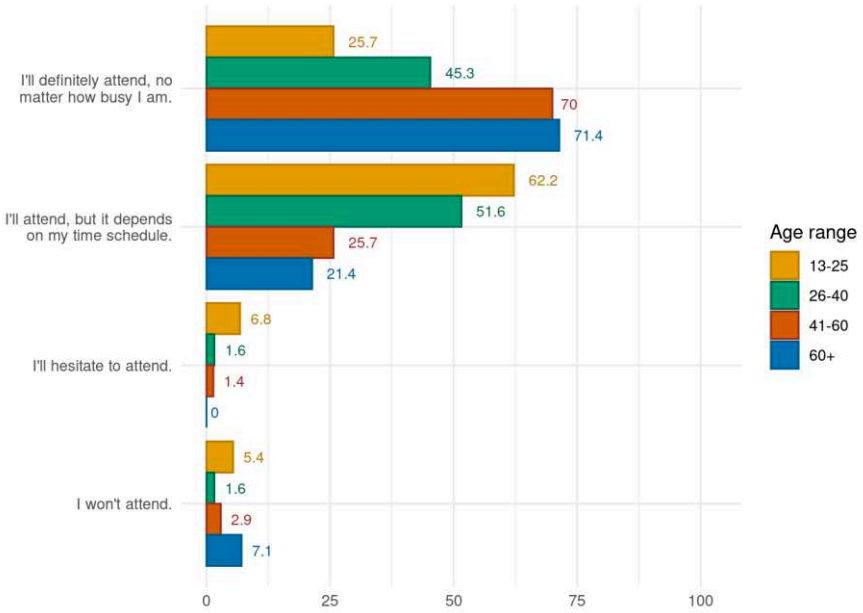


Figure 2-10: Responses to the question on language attitude by age groups Q43 If you live away from the Solon area, how willing are you to attend a Solon gathering/party? (Nargil 2025b: 31)

The 26–40 group also demonstrates substantial engagement: 45.3% report that they would definitely attend, and an additional 51.6% indicate that they would try to participate. Given that individuals in this age range typically manage significant professional and familial responsibilities, this high level of expressed willingness suggests a strong sense of ethnic attachment.

In contrast, the youngest group (13–25) exhibits comparatively weaker commitment. Only 25.7% consider participation in Solon gatherings highly important, though 62.2% indicate that attendance would depend on scheduling circumstances. Several factors may contribute to this pattern. First, the pervasive influence of dominant ethnic and linguistic groups may attenuate identity salience among younger individuals. Second, many in this group have not yet experienced extended residence outside the Solon area and therefore may find it difficult to imagine a context in which Solon language and identity are not part of daily life. This experiential difference shapes their responses.

Question 44 shifts the focus from identity affiliation to proactive language maintenance behavior, asking whether respondents would deliberately seek opportunities to speak or listen to Solon in the absence of regular communicative contexts.

As shown in Figure 2-11, the 41–60 group again stands out. Among this group, 61.3% express the strongest willingness to intentionally use Solon, while only 16.1% display indifference toward such efforts. The 60+ group also demonstrates substantial awareness of language endangerment, with 55.6% indicating that they would purposefully engage with the language.

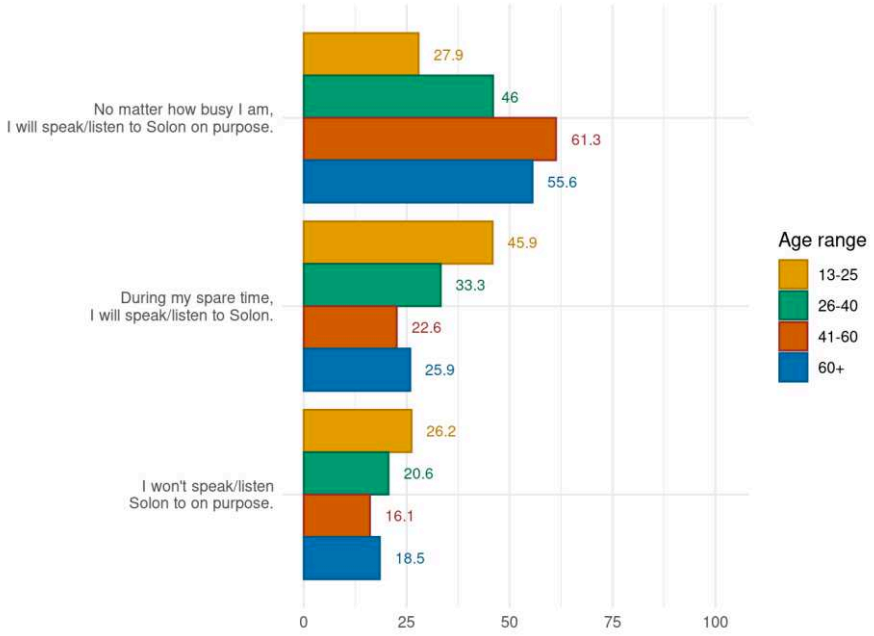


Figure 2-11: Responses to the question on language attitude by age groups Q44 If you don't have the opportunity to communicate in Solon, will you purposefully (Nargil 2025b: 32)

Within the oldest group, however, 18.5% report that they would not intentionally practice Solon. Interviews suggest that this response does not necessarily reflect apathy; rather, many consider themselves already fully proficient and therefore perceive no need for deliberate practice.

The 26–40 group shows moderate commitment: 46.0% would intentionally practice Solon, and 33.3% state that they would likely do so during their free time. The youngest group again exhibits comparatively weaker engagement. Only 27.9% report that they would allocate

dedicated time to Solon, and 26.2% express indifference, the highest proportion among all age groups.

It is important to recognize that these responses capture attitudinal intention rather than observable behavior. Expressed willingness, such as selecting "I will attend no matter how busy I am" may not always translate into action when competing obligations arise. Questions Q43 and Q44 therefore provide insight into ideological orientation and perceived commitment, rather than directly measuring actual language practices.

2.2 Nonni Solon

The Nonni Solon variety, spoken in Morin Dawa Dagur Autonomous Banner, Arong Banner, Oroqen Autonomous Banner, and Zhalantun City, constitutes an important repository of traditional Evenki hunting culture. In recent decades, however, profound social transformations, including ethnic integration, population mobility, and sustained immigration, have drastically reshaped the region's ethnolinguistic landscape. Areas that were once inhabited predominantly by a small number of ethnic groups have developed into highly multiethnic communities. These demographic changes have had a direct and sustained impact on local linguistic ecologies, contributing to the rapid decline of the Evenki language in the region.

A particularly striking illustration of this process is found in Chabaqi Village (查巴奇乡, *Chábāqí Xiāng*) in Arong Banner. In the 1960s, Solon speakers constituted approximately 66% of the local population; by 2009, this proportion had fallen dramatically to 6%, while Han Chinese accounted for 83% of the population (Namin 2009: 487). This demographic shift has led to the overwhelming dominance of Mandarin Chinese, with Solon relegated to a peripheral role in everyday communication. As a result, Mandarin has effectively replaced Nonni Solon as the primary language of daily interaction. According to Du (2012: 117) and Najia (2017: 2–3), intergenerational transmission of Nonni Solon has ceased: very few individuals under the age of 45 are able to speak the language; speakers aged 45-60 are typically semi-speakers who are more fluent in Chinese or Dagur; and fluent speakers are now largely confined to those over 60 years of age.

3 Phonology

The phonological analysis presented in this chapter is based on Urugshilt's (2020) doctoral dissertation, which offers a comparative phonetic study of Solon, Khamnigan Evenki, and Aoluguya Evenki. The phonological system of Solon proposed in this work serves as the foundation for the present study. Minor adaptations have been made where necessary, mainly for the sake of consistency and convenience in transcribing the data collected during my own fieldwork. In addition, a comparative list of simplified vowel and consonant inventory in Roman letters, as used in Baek (2023), is included in the tables for reference, particularly in relation to Proto-Tungusic phonology.

Urugshilt (2020) conducted his phonetic analyses using PRAAT software. His data are drawn from the Acoustic Parameter Database of the Solon Dialect (索伦方言语音声学参数), which consists of 1,852 lexical items recorded under controlled conditions. Detailed analyses of individual vowels and consonants, as well as statistical measurements and PRAAT-based acoustic representations, follow Urugshilt's original descriptions closely (Urugshilt 2020).

This chapter is organized as follows. §3.1 introduces the vowel inventory of Solon, including short vowels, long vowels, and diphthongs. Section §3.2 outlines the consonant inventory. §3.3 discusses major phonetic processes observed in the language, including vowel devoicing, vowel nasalization, and consonant gemination. §3.4 describes the syllable structure, and §3.5 and §3.6 address stress and vowel harmony, respectively.

3.1 Vowels

3.1.1 Short vowels

Solon has a vowel inventory consisting of eight short vowels:/ɑ(ɐ), ə, i, ɪ, ɔ, o, ʊ, u/[4], as shown in Table 3-1. In the present study, I adopt a slightly modified transcription system based on Urugshilt (2020: 17). Specifically, I replace /ɐ/ with /ɑ/ for simplicity. Despite these minor

[4] The vowels in the brackets are from the original inventory of Urugshilt (2020).

adjustments, the vowel system remains fully contrastive and sufficient for distinguishing lexical meanings.

Technically, the vowel /ɪ/ patterns with the back (velar) vowels (§3.6). In actual usage, however, /ɪ/ is realized distinctly only in word-initial position. In non-initial syllables, it is replaced by /i/, which functions as a neutral vowel in the harmony system. In addition, /ɪ/ exhibits free variation with /e/.

Although the vowel /o/ is relatively infrequent in the corpus, it cannot be merged with either /ə/ or /u/, as it has clear phonemic status. Minimal contrasts illustrating this distinction are provided in (3.1).

Table 3-1: Solon Vowel Phonemes (Summary of Urugshilt 2020: 14-17, with the vowels in brackets being the inventory used in Baek 2024:208)

	Front	**Central**	**Back**
High	*i (i)*		*u (u)*
	ɪ (ɪ)	*ə (e)*	*o (ɵ)*
		ʊ (ʊ)	
Mid			
		ɔ (o)	
Low		*a (a)*	

(3.1) Urgugshilt (2020:51, translation adapted)

axin	‘elder brother’	*əxin*	‘elder sister’
irə-	‘become.ripe’	*ɪra-*	‘drag’
ələːxə-	‘cook’	*oloːxo-*	‘lie’
ʊta-	‘to.stop’	*utə-*	‘sew’
pɔtɔ-	‘think’	*pʊta-*	‘paint.color’

Urugshilt (2020: 17) observes that short vowels exhibit positional variation in articulation, with vowels in non-initial syllables showing a reduced vowel space. This reduction is particularly evident for the rounded vowels /ɔ, ʊ, o, u/ and for the central vowel /a/, which tend to undergo centralization outside of word-initial position.

3.1.2 Long vowels

Solon has a full set of long vowels that correspond to its short vowel inventory: /ɑː (ɐː), əː, iː, ɪː, ɔː, ʊː, oː, uː/. Examples illustrating minimal pairs for vowel length contrast are provided in (3.2).

(3.2) Urugshilt (2020:51, translation adapted)

axin	'elder brogher'	***aːxin***	'liver'
əri	'this'	***əːri-***	'miss'
xir	'stain'	***xiːr***	'moment'
ɪlan	'three'	***ɪːlan-***	'be.upset'
ɔttʰɔ	'dynamite'	***ɔːttʰɔ***	'dry manure'
ʊkʊ-	'ride'	*ʊk**ʊ**ːnta-*	'saw'
pu-	'die'	*p**u**ː-*	'give'
əːttʰlə	'rib'	***oːttʰə***	'lung'

Phonetically, long vowels are approximately twice as long as short vowels in word-initial syllables. The mean length of short vowels in this position ranges from about 60 to 80ms, whereas long vowels typically range from 140 to 160ms. In addition to the length, long vowels differ articulatorily from their short counterparts. As shown by Urugshilt (2020: 31-32), long vowels are produced with more peripheral tongue positions: front vowels are articulated with greater advancement, back vowels with greater retraction, high vowels with increased height, and low vowels with increased lowering. Consequently, long vowels occupy a larger articulatory space and are produced with greater articulatory precision.

3.1.3 Diphthongs

Solon has 4 diphthongs, comprising /ɑi/, /ei/, /ʊe/, and /ui/ (3.3). The use of diphthongs is very restricted.

(3.3) Urugshilt (2020:33, translation adapted)

aitt^hi*:tʊ*	'before'	*tʃiltʃx**ai***	'piglet'
ei$kə$*:suŋ*	'owl'	*t**ei***$kk^huŋ$	'soft'
*ʃirk**ʊe***	'sand'	*sʊ**e***t^ha*:ŋ*	'school'
*s**ui**təŋ*	'matches'	*k**ui**lə:s*	'apricot'

3.2 The consonants

Solon has 17 consonant phonemes, see Table 3-2 below (Urugshilt 2020: 39-50, 52-53).

Table 3-2: Solon Consonant Phonemes (Summary of Urugshilt 2020: 39-53, with the consonants in brackets being the inventory used in Baek 2024:209)

	bilabial	velar	alveolar	postalveolar	palatal
unaspirated voiceless stop	*p (b)*	*k (g)*	*t (d)*		
aspirated voiceless stop	p^h *(p)*	k^h *(k)*	t^h *(t)*		
unaspirated voiceless affricate				*tʃ (j)*	
aspirated voiceless affricate				$tʃ^h$ *(c)*	
fricative		*x (x)*	*s (s)*	*ʃ (ʃ)*	
trill			*r (r)*		
nasal	*m (m)*	*ŋ (ŋ)*	*n (n)*		
lateral			*l (l)*		
glide					*j (y)*

Many consonants in Solon exhibit either conditioned or free allophonic variation. In this study, however, allophonic distinctions are not represented in the transcription unless they are phonemically contrastive. The following overview summarizes the major allophonic patterns observed in the language.

- The velar unaspirated voiceless stop /k/ has two free allophones: [x] and [ɣ], with [ɣ] being more frequently observed in spontaneous speech (3.4).

(3.4) Urugshilt (2020: 46, translation adapted)

peːɣa	'moon'	(my transcription *peːka*)
pɔːŋɣɔ	'hale'	(my transcription *pɔːŋkɔ*)
xintʃʰiχla	'pinch'	(my transcription *xintʃʰikla)*

- The bilabial unaspirated voiceless stop /p/ and /pʰ/ may also be realized as [ɸ], although this fricative variant occurs very rarely and appears without a clear conditioning environment and has only occurred in Mongolian loanwords (3.5).

(3.5) Urugshilt (2020: 45, translation adapted)

debter (Mongolian)	~	*təɸtʰər*	'book, booklet'	(my transcription *təptʰər*)
toboruu (Mongolian)	~	*tʰɔɸrʊ*	'knot'	(my transcription *tʰɔprʊ*)

- The lateral /l/ has free allophone: velarized [ɬ]. The velarized [ɬ] mainly occurs before aspirated stop and voiceless fricatives within words (3.6).

(3.6) Urugshilt (2020: 48, translation adapted)

ɬaxa	'bed'	(my transcription *laxa*)
ʃikkʰuɬ	'ghost'	(my transcription *ʃikkʰul*)
xʊɬtʃˈʰin	'reeds'	(my transcription *xʊltʃˈʰin*)

- The trill /r/ has two free allophones: the voiced fricative [ʒ], which is more common, and the voiceless alveolar approximant [ɻ̊], which is much rarer. The distribution of these allophones is not restricted by any specific phonological context (3.7).

(3.7) Urugshilt (2020: 49 -50, translation adapted)

ʃeːʒan	'rainbow'	(my transcription *ʃeːrɐn)*
xɐleːʒ	'wild leek'	(my transcription *xaleːr)*

ʃiɻtʰaːŋ	‘soil’	(my transcription *ʃirtʰaːŋ)*
tʰaŋkɻʊ	‘bowl’	(my transcription *tʰaŋkrʊ)*

- The palatal affricate /tʃ/ has the rare free variant [tɕ]. The /tʃʰ/ has the free variant /tsʰ/. Both are infrequent. There are no examples found in Urugshilt (2020).

3.3 Phonetic change

Solon has phonetic change in connected speech mainly including vowel devoicing, vowel nasalization, and consonant gemination.

3.3.1 Vowel devoicing

Vowels may become devoiced due to the influence of adjacent fricatives and aspirated stops, as shown in Figure 3-1. The spectrogram of a devoiced vowel shows no traces of vocal fold vibration; formant bars are only observable in the low-frequency region, while aperiodic noise appears in the high-frequency region (Urugshilt 2020:53).

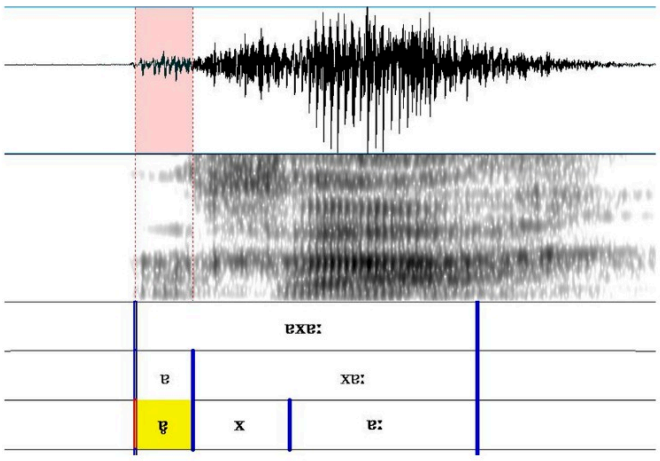


Figure 3-1: Vowel devoicing in Solon (Figure from Urugshilt 2020: 53)

In Solon, a total of 181/1,852 devoiced vowels were found: 29 occurred in word-initial position, 63 in word-medial position, 89 in word-final position. In word-final position, vowels

are mostly devoiced after fricatives and aspirated stops. Additionally, devoicing occasionally occurs after sonorants such as /l m n/, possibly due to weak airflow and energy reduction in word-final positions (Urugshilt 2020:53).

3.3.2 Vowel nasalization

In Solon, vowels may become nasalized when they appear before word-final nasal consonants such as /n/ and /ŋ/, as shown in Figure 3-2. As the vowel becomes nasalized, the final nasal consonant disappears. However, not all vowels that occur before the word-final nasals /n/ or /ŋ/undergo nasalization (Urugshilt 2020:53). The vowel nasalization is not marked in the transcription in this dissertation.

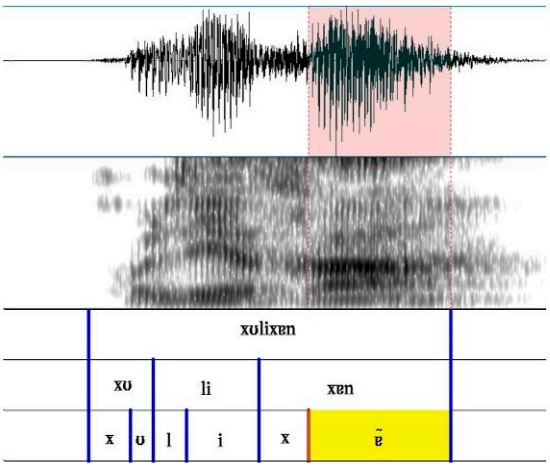


Figure 3-2: Vowel nasalization in Solon (Urugshilt 2020: 54)

3.3.3 Consonant gemination

Solon exhibits distinct consonant gemination (Urugshilt 2020:54). In specific phonological environments, the voiceless stops /p, t, k/ and their aspirated counterparts /pʰ, tʰ, kʰ/ are realized as the allophones [p̄], [t̄], and [k̄]. These variants occur exclusively as the pre-geminate component within words. For instance, a geminate is formed when the first segment lacks an audible release: /p/ or /pʰ/ surfaces as [p̄pʰ], /t/ or /tʰ/ as [t̄tʰ], and /k/ or /kʰ/ as [k̄kʰ]. Additionally,

[t͡] appears before the affricates /tʃ/ and /tʃʰ/, yielding sequences such as [t͡tʃʰ]. For the sake of orthographic economy and ease of representation, this study transcribes these forms more simply as [ppʰ], [ttʰ], [kkʰ], and [ttʃʰ], respectively.

(3.8) Urugshilt (2020: 40-41, translation adapted)

*kə**p͡p**i*	'name'	(my transcription: *kəppi*)
*ka**p͡p**ʰa-*	'shoot'	(my transcription *kappʰa-*)
*ə**t͡t**ə*	'morning	(my transcription *əttə*)
*ɔrɔː**t͡t**ʰɔ*	'grass'	(my transcription *ɔrɔːttʰɔ*)
*tʰə**k͡k**uː*	'road'	(my transcription *tʰəkku*)
*u**k͡k**ʰə*	'door'	(my transcription *ukkʰə*)
*tʰə**t͡tʃ**ʰi*	'cloud'	(my transcription *tʰəttʃʰi*)
*iː**t͡tʃ**a*	'valləy'	(my transcription *iːttʃa*)

The nasals can form geminate consonants, Geminate nasals are more than twice as long as single nasals (Urugshilt 2021:54), see (3.9):

(3.9) Urugshilt (2020: 47-48, translation adapted)

*i**mm**ə*	'needle'
*a**mm**a*	'mouth'
*sa**ŋŋ**aŋ*	'tabaco'
*sa**ŋŋ**aːl*	'hole'

3.4 Syllable structure

In Solon, the basic syllable structure follows the pattern (C)V(C), which allows for the following ten attested syllable types: V, VV, VC, VVC, VCC, CV, CVV, CVC, CVVC, and CVCC. The proportions and distribution of these syllable types are presented in Table 3-3. Among them, the CV and CVC structures are the most frequent and productive, appearing freely in all word positions. In contrast, syllables that begin with a vowel, namely V, VV, VC,

VVC, and VCC are restricted to word-initial position. Within this group, V and VC types are the most observed.

Syllable-final consonant clusters (i.e., VCC, CVCC) are rare in Solon: only 19 instances were identified across the entire phonological corpus. This indicates a strong tendency in the language toward open syllables or those with simple codas.

Table 3-3: Solon syllabe structure (Urugshilt 2020 :63, translation adapted)

	V	VV	VC	VVC	VCC	CV	CVV	CVC	CVVC	CVCC
word initial	336	6	225	2	6	715	19	538	6	9
word middle						863	1	240		1
word final						877	5	901		3

3.5 Stress

Hu and Chaoke (1986:10-11) consider that the first syllable of a word is pronounced clearly and more forcefully than other syllables. The final syllable is pronounced lightly, but its pitch is higher than that of the first syllable, with the tone of the whole syllable falling from high to low. Chaoke (1995:22) further noted that in general, regardless of its position in the word, a long vowel naturally attracts word stress.

Urugshilt and Huhe (2018: 384, my translation) consider that "[*the word stress in Solon belongs to free stress, not fixed stress. However, it is not entirely free either; its position is closely related to the distribution of long and short vowels in the word*." Then Urugshilt (2020: 54-63) conducted acoustic analysis on sound intensity distribution patterns in the Solon and reached the following conclusions:

First, vowel length and pitch prominence show a strong correlation: syllables containing long vowels are consistently realized as stressed. Second, in words whose syllables contain vowels of equal length, stress tends to fall on the final syllable and is best characterized as pitch-accented rather than purely intensity-based. Finally, in word-final CV syllables with short vowels, vowel weakening frequently occurs. In such cases, the peaks of intensity and pitch shift

to the preceding syllable, accompanied by a reduction in duration, resulting in a perceptual retraction of stress.

3.6 Vowel harmony

Solon exhibits root-controlled vowel harmony, with vowels categorized into two sets of harmonizers. Set 1 consists of vowels /*a* ʊ ɔ ɪ/ with retracted tongue root (RTR). Set 2 comprises the vowels /ə o u/ with advanced tongue root (ATR). In addition to these, there is a neutral vowel /i/, which can co-occur with vowels from either set without violating harmony constraints, see Table 3-4 below.

Table 3-4: Vowel harmony sets in Solon (Urugshilt 2020:68, translation adapted, with the vowels in brackets being the inventory used in Baek 2024:208)

	Solon
set 1	ɪ(ɪ) ɑ(ɑ) ʊ(ʊ) ɔ(o)
set 2	ə(e) u(u) o(ɵ)
neutral	i(i)

Urugshilt (2020: 64-67) provides a detailed account of vowel harmony in Solon based on acoustic analysis, summarizing harmonic compatibility patterns in Table 3-5, where '+' indicates permissible co-occurrence of vowels within a word and '–' indicates incompatibility. Vowel /ɪ/ is extremely rare in his dataset, occurring only 40 times in a corpus of 1,856 words, compared to approximately 700 occurrences of /i/. Moreover, while /i/ freely co-occurs with vowels from both harmonic sets, /ɪ/ is restricted to co-occurrence with /a/ and /ʊ/. Considering the occurrences of /ɪ/ is limited, in my Solon corpus, /i/ and /ɪ/ are treated as a single phoneme /i/. This simplification does not affect the overall harmony system described above, as /i/ functions as a neutral vowel with respect to harmony.

Table 3-5 Harmonic combinations of vowels in Solon (Urugshilt 2020:68, translation adapted, with the vowels in brackets being the inventory used in Baek 2024:208)

non-initial / word inital	ɑ(ɑ)	ʊ(ʊ)	ɪ(ɪ)	i(i)	ə(e)	u(u)	ɔ(o)	o(ɵ)
ɑ(ɑ)	+	+	+	+	–	–	–	–
ʊ(ʊ)	+	+	+	+	–	–	–	–
ɪ(ɪ)	+	+	+	–	–	–	–	–
i(i)	+	+	–	+	+	+	+	–
ə(e)	–	–	–	+	+	+	–	+
u(u)	–	–	–	+	+	+	–	–
ɔ(o)	–	+	–	+	–	–	+	–
o(ɵ)	–	–	–	–	+	–	–	+

Based on this table, several generalizations can be drawn:

- /ɑ/ and /ʊ/ form a harmonic group and can co-occur within a word. When either /ɑ/ or /ʊ/ appears in the first syllable, only the vowels /ɑ/, /ʊ/, /i/ are found in subsequent syllables. No other vowels appear in these positions.

(3.10) *saŋŋaːl* ‘hole’
taxiː ‘again’
aːwɔn ‘hat’
ʊtʊn ‘rain’
mʊrin ‘horse’

- /ə/ and /u/ form another harmonic group. When either /ə/ or /u/ occurs in the first syllable, only /ə/, /u/, and /i/ appear in the following syllables.

(3.11) *xəːxəː* ‘cat’
əkki-ləː ‘bottom-LOC’
unəkəŋ ‘cow’

- /i/ functions as a neutral vowel and may occur with any other vowel (except /o/) within the same word.

(3.12) *tʰimaːʃin* ‘tomorrow’
tʰinukə ‘yesterday’
ikkə ‘tail’
iŋŋiː ‘tounge’
miːsaːn ‘gun’

- /o/ is rare and shows highly limited distribution. When it appears, it only co-occurs with /ə/ and not with any other vowels.

(3.13) *oːttʰə* ‘lung’
pokkə ‘fat’
moːkə ‘mushroom’

- When /ɔ/ occurs in the first syllable, the subsequent syllables may contain only /ɔ/, /ʊ/, and /i/, indicating that /ɔ/ forms its own limited harmony pattern.

(3.14) *sɔlɔːn* ‘Solon’
ʧɔlɔ ‘stone’
tʰɔrixi ‘wild boar’
ɔːntiː ‘what’
nɔmʊːkʰi ‘honest’

When the nominal and verbal suffixes are used on a word, they also respect the harmonic combination rule. That is, they have different variations based on vowel harmony. See for example:

(3.15) the dative case *-tU* follows different set of nouns:

*xaːltʰa-**tʊ***	‘gate-**DAT**’
*ʧuː-**tu***	‘house-**DAT**’
*tɔː-**tɔ***	‘river-**DAT**’
*pɔkɔ-**tʊ***	‘place-**DAT**’

(3.16) the non-past suffix *-rA* attached to different set of verbs:

*akkʰi-**ra**-ŋ*	‘stab-**AOR**-3’
*nʊːtaː-**ra**-ŋ*	‘throw-**AOR**-3’
*iŋŋiː-**rə**-ŋ*	‘carry.on.back-**AOR**-3’
*uːriː-**rə**-ŋ*	‘raise-**AOR**-3’

4 Nouns, numerals and adjectives

This chapter discusses three lexical classes: nouns (and pronouns), numerals, and adjectives. Although these classes differ in their semantic properties and discourse functions, they share several morphosyntactic features, which they are discussed within a single chapter. Morphologically, all three can inflect for case and possessive marking. Nouns typically function as references, while numerals and adjectives can also serve as references when the head noun is omitted (§4.1.1). In addition, adjectives and numerals commonly modify nouns, and nouns in Solon can also modify other nouns without any overt syntactic marking (§5.2.1.2.2). The §4.1 describes nouns and their inflectional categories, including number, case, and possession. Case and possessive morphology can also attach to other nominal word classes, such as pronouns. §4.2 examines the pronoun system, including personal, reflexive, demonstrative, interrogative, and indefinite pronouns. §4.3 discusses numerals and related categories such as collective, distributive, iterative, and approximative forms. §4.4 focuses on adjectives, which in Solon share many morphological and syntactic properties with nouns. §4.5 addresses the derivational suffixes to nouns and adjectives.

A closely related grammatical categories that can also occupy argument positions are noun phrases and participle marked complement clauses, which will be described separately in the following chapter 4 for noun phrase and §10.4 for complement clauses.

4.1 Nouns

As the core nominal category, nouns in Solon serve as the basis for a range of inflectional processes. This section examines their main inflectional categories: number §4.1.1, case §4.1.2, and possession §4.1.3, which also extend to other nominal word classes such as pronouns.

4.1.1 Number

Number is a robust morphological and morphosyntactic category in some languages, such as Arabic (Semitic), Kiowa (Kiowa-Tanoan), Nganasan (Uralic), and Slovenian (Slavic). In

contrast, other languages express number-related information only in specific lexical categories, most typically pronouns, and adhere to the Animacy Hierarchy. Such systems are found in Gooniyandi (Bunuban), Indonesian (Austronesian, Malayo-Polynesian branch), and Japonic languages (Acquaviva & Daniel 2022: 834). Solon belongs to the latter group: its number system depends on lexical category rather than being a pervasive morphological feature.

This section describes the details of the number system in Solon. §4.1.1.1 discusses the marking of singular, plural, and general number, §4.1.1.2 examines the distribution of plural marking in relation to the Animacy Hierarchy.

Before turning to specifics, the morphological marking of number in Solon is summarized in Table 4-1.

Table 4-1: The number marking in Solon

number	**animacy hierarchy**	**morphological marking**
general	-	unmarked
singular		
plural	human noun	marked
	non-human noun	unmarked

4.1.1.1 Singular, plural and general number

Solon distinguishes three categories: singular, plural, and general. The general number refers to a system in which a noun can be used without explicit reference to number (Corbett 2000: 9–10).

Both singular and general numbers are unmarked, see (4.1-4.2) for singular and (4.3-4.4) for general number.

(4.1)

[...]	*əjjə*	***ʧalɔ***	*pa*	*sɔnin*	*ʧɔ:kɔ-ʧʰi*	*ə:kʰə:-sə*
[...]	*eyye*	***jalɔ***	*ba*	*sɔnin*	*joogo-ci*	*eekee-se*
	PROX	**young.man**	also	weird	grieve-COOR.CVB	start-PST

'This **young man** also started grieving.' (LT19-20)

(4.2) ***sʊːpal***-*wə* *iŋki-ra-ŋ*
sʊʊbal-*we* *iŋgi-ra-ŋ*
backpack-DEF.ACC carry.on.back-AOR-3
'(He) carries the **backpack**.' (LT23-25)

(4.3) *atʃil-tʃʰi* ***pəjə*** *pikkʰi* *aːlxat* *irəːtui* *pi-ʃi-r* *tʃaxa* *[...]*
ajil-ci ***beye*** *bikki* *aalxad* *ireedui* *bi-si-r* *jaxa* *[...]*
work-PROP **person** TOP forever future COP-AOR-IPFV.PTCP RSN
'Because hard-working **people** always have a future.' (LT32-13)

(4.4) *namiːnxutʰul-ni* *ikki-tʰixi-ni* *tʰa-laːxi* ***mʊrin*** *tʰiːnəː-sə*
namiinxutul-ni *iggi-tixi-ni* *ta-laaxi* ***mʊrin*** *tiinee-se*
GN-GEN tail-ABL-3 DIST-DLT **horse** release-PST
People released **horses** from Naminhutul's back' (lit. Naminhutul's tail). (LT09-22)

In Solon, only plural numbers are overtly marked. The plural system includes several markers with different distributions. The suffix *-sal* is the default and productive plural marker (4.5). The form *-ttʃʰil* is restricted to demonstratives and conveys meanings such as 'these people' or 'those people' (4.6). The suffix *-nar* is a borrowing from Mongolian (4.7). Finally, the forms *-ʃin* and *-iːl* are limited to kinship terms and occur only rarely (4.8–4.9).

(4.5) *tʰari* *əmun* *ʊtʃʰir-tʊ* *aja-tʰi* *ʊlʊr* *aja-tʰi=l* *satti-**sal***
tari *emun* *ʊcir-dʊ* *aya-ti* *ʊlʊr* *aya-ti=l* *saddi-**sal***
DIST one affair-DAT old.time-ADJZ people old.time-ADJZ=PTCL old.lady-**PL**

əʃi *pɔtɔ-kʰi* *xaʃi* *manti* *pi-sə*
esi *bodo-ki* *xasi* *mandi* *bi-se*
now think-COND.CVB really tough COP-PST
'If now (people) think about that affair, the people and the **old ladies** in the past were really tough.' (LT25-30)

(4.6) *ʃiwuŋ_ʊnaːtʃi* *tʰa-**ttʃʰil**-tʰxi* *nəttʰə-m* *intʃʰiːr* *pʊka-tʊ* *na*
siwuŋ_ʊnaaji *ta-**ccil**-txi* *nette-m* *inciir* *bʊga-dʊ* *na*
sun.girl DIST-**PL**-ALL smile-CONN.CVB other place-DAT also

attʰita *pi-tʃi-rə-ŋ* *kʰuŋ* *[...]* *kunə-mi* *[...]*
attida *bi-ji-re-ŋ* *kuŋ* *[...]* *gune-mi* *[...]*
dark COP-PROG-AOR-3 MIR say- CONN.CVB
'The sun girl smiled to **them** and said, 'another place is also dark…'…' (LT38-22)

(4.7) *pairiːn* *pakʃi-**nar*** *pasa* *karik-tʊː=l* *əmkiː-m*
bairiin *bagsi-**nar*** *basa* *garig-dʊʊ=l* *emgii-m*
dormitory teacher-**PL** also weekend-DAT=PTCL come.back-CONN.CVB

ətʰə-rə-ŋ *pa* *tʰɔː-kʰi*
ete-re-ŋ *ba* *too-ki*
finish-AOR-3 TAG DIST.V-COND.CVB
'The dormitory **teachers** also can come home during the weekend, right?' (LT11-73)

(4.8) *kə* *paraːŋ-pal* *mun-iː* *əmmə-**ʃin*** *ukʰ-kʰəʃi* *pi-sə*
ge *baraaŋ-bal* *mun-ii* *emme-**sin*** *uk-kesi* *bi-se*
PTCL many-REFL.PL 1PL.EXCL-GEN mother-**PL** go-HAB COP-PST
'Many of them, our **mothers** used to go (there).' (LT34-37)

(4.9) *[...]* *məːŋkʰəːŋ* *nəxun-**iːl**-tu-wi* *ɔː-m* *puː-mi*
[...] *meeŋkeeŋ* *nexun-**iil**-du-wi* *oo-m* *buu-mi*
REFL younger.brother-**PL**-DAT-REFL.SG make-CONN.CVB give-1SG
'I made (clothes) for my **younger brothers**.' (LT39-08)

4.1.1.2 Animacy Hierarchy

Although a marker for plural number exists in Solon, its distribution follows the Animacy Hierarchy: nouns higher in animacy are more likely to show number distinctions than those lower in animacy, see (4.10-4.11) and examples (4.5-4.9) above.

(4.10) *pair-tʊ* *tʰəkə-tʃi-r* *sʊrʊktʃʰi-**sal*** *xamkiːn* *niʃxuŋ-ni*
bair-dʊ *tege-ji-r* *sʊrʊgci-**sal*** *xamgiin* *nisxuŋ-ni*
dormitory-DAT stay-PROG-IPFV.PTCP student-**PL** most small-3

ati *paːr-tʃʰi*
adi *baar-ci*
how.many age-PROP

'The **students** who are staying at the dormitory, how old is the smallest one?' (LT11-39)

(4.11) *[...]* *nʊnʊm* *tʰəkkətʃʰi-jə* *aːʃin* *tʃalʊː-**sal*** *aːʃin* *[...]*
[...] *nʊnʊm* *teggeci-ye* *aasin* *jalʊʊ-**sal*** *aasin* *[...]*
long cloth-PTV NEG.EXIS young.person-**PL** NEG.EXIS

'There are no **young people** who don't have a traditional long robe (lit. long clothes)' (LT22-49)

The nouns lower in animacy extremely rarely take a plural marker, even though the context is plural (4.12). In the Solon corpus, only one instance of an inanimate noun with a plural marker is attested (4.13); all other occurrences of plural marking involve human nouns (and occasionally animals in fairytales).

(4.12) *ɔri* *tʰaŋiː=l* *xɔkkʰɔ* ***pəltiːr*** ***məltiːr**-wəl* *ʃikkʰa-ra-ŋ*
ori *taŋii=l* *xokko* ***beldiir*** ***meldiir**-wel* *sikka-ra-ŋ*
evening every=PTCL all **foot** **M.RED**-REFL.PL wash-AOR-3

'(The students) wash their **feet** every evening.' (LT11-84)

(4.13) *[...]* *ur_xataːr-**sal*** *nʊkkʊ-tʰxiː=tʰ* *nisxuŋ* *ʃirtʰə-tʰxiː=tʰ* *narikkʰʊŋ*
[...] *ur_xadaar-**sal*** *nʊggʊ-txii=t* *nisxuŋ* *sirte-txii=t* *narikkʊŋ*
mountain-**PL** fist-ABL=PTCL small thread-ABL=PTCL thin

pi-sə *kunəŋ*
bi-se *guneŋ*
COP-PST hearsay

'The **mountains** were smaller than the fist, thinner than the thread.' (LT42-02)

Notably, high-animacy nouns do not take a plural marker when the plurality is not specified, that is, when it is a general number. Plural marking appears only when plurality must be explicitly specified. For example, in (4.14) the 'student' is used in a general sense and remains unmarked, while in (4.10) above the 'student' plurality is specified by the modifier 'those who are staying at the dormitory', triggering the plural marker.

(4.14) *mɔŋkɔl* ***sʊrʊktʃʰi*** *pi-ʃi-n* *nixaŋ* ***sʊrʊktʃʰi*** *na* *pi-ʃi-n*
moŋgol ***sʊrʊgci*** *bi-si-n* *nixaŋ* ***sʊrʊgci*** *na* *bi-si-n*
Mongolian **student** COP-AOR-3 Han **student** also COP-AOR-3
'There are Mongolian **students**, there are also Han **students**.' (LT11-100)

Personal pronouns in Solon clearly distinguish between singular and plural (see Table 4-7 in §4.2.1). The third-person pronouns, expressed by the distal demonstrative *tʰari* and the proximal demonstrative *əri*, take the plural suffix *-ttʃʰil* when referring to humans, see (4.6) above. When the demonstratives refer to inanimate entities, however, plurality remains unmarked, see (4.15).

(4.15) *taxin* *sampar-tʊ* *tʃʊra-mi* *pʊː-ra-ŋ* ***tʰajja****-wə-ni*
daxin *sambar-dʊ* *jʊra-mi* *bʊʊ-ra-ŋ* ***tayya****-we-ni*
again blackboard-DAT write-CONN.CVB give-AOR-3 **DIST**-DEF.ACC-3

puː *xʊːla-tʃʰi* *kata-mʊn*
buu *xʊʊla-ci* *gada-mʊn*
1PL.EXCL copy.write-COOR.CVB take-1PL.EXCL
'Then (the teacher) wrote (the recipes) on the teaching board (for us), and we wrote **them** down.' (LT23-20)

When a noun is modified by a numeral, the plural marker is optional. Due to the limited size of the Solon corpus, it is not yet possible to determine which construction is preferred. Potentially, definiteness-referentiality is a parameter. Refer to the following examples (4.16) and (4.17). In (4.16), the 'two old ladies' are indefinite and unmarked plural, while in (4.17), the 'ninety-nine girls' are definite because they are modified by a demonstrative, and the plurality is marked.

(4.16) *kə* *nɔːɣʊ* *əmun* ***ʧuːr*** ***satti*** *pi-sə* *kunəŋ* *[...]*
ge *nooɣʊ* *emun* ***juur*** ***saddi*** *bi-se* *guneŋ* *[...]*
PTCL old.time one **two** **old.lady** COP-PST hearsay
'It is said that once upon a time, there were **two old ladies**' (LT02-03)

(4.17) *tʰajja* *jərəŋ* *jəjin* *ʊni-**sal*** *xɔkkʰɔ* *kɔjɔ* *ʧalʊ-wə*
tayya *yereŋ* *yeyin* *ʊni-**sal*** *xokko* *goyo* *jalʊ-we*
DIST ninety nine girl-**PL** all beautiful young.man-DEF.ACC

aiŋ-ʧʰi *ul-ʧʰə*
aiŋ-ci *ul-ce*
follow-COOR.CVB go-PST
'Those **ninety-nine girls** all followed the beautiful young man and went away.' (LT28-126)

However, the earlier descriptions (Hu & Chaoke 1986: 18-22; Chaoke 1995: 49-51) noted that inanimate nouns could take plural marking. Hu's Solon data were collected in 1962 (Hu & Chaoke 1986: 191), and Chaoke's data between 1982-1994. These differences may reflect diachronic change, or the plural marked inanimate nouns in previous studies may be elicited. This phenomenon is extremely rare in the Solon data I collected.

(4.18) Hu & Chaoke (1986:19, translation and glossing adapted)
mɔjɔ-ʃɔl monkey-**PL** **'monkeys'**
owo(n)-ʃol biscuit-**PL** **'biscuits'**

(4.19) Chaoke (1995: 50, translation and glossing adapted)
*əmgəl-**səl*** *xaʃi* *dʒuː* *dɔː-lɔ* *bi-ʃi-ŋ*
saddle-**PL** warehouse house inside-LOC COP-AOR-3
'The **saddles** are in the warehouse.'

4.1.2 Case

This section describes the case system of Solon, focusing on the forms of each case and their frequent argument-coding roles. Solon has 11 cases, illustrated in Table 4-2 below, with

dedicated morphological forms. Some case forms show allomorphic variation when following nouns ending in nasal consonants and demonstrative pronouns. The nominative case is zero-marked. In Solon, objects are marked by the accusative case for definite objects and the partitive case (or indefinite accusative) for indefinite objects. Solon possesses a rich set of spatial cases, including dative, locative, allative, ablative, elative, and prolative.

Table 4-2: Solon case system

	non-nasal consonantal stems	nasal consonant-final stems	demonstrative (distal *tʰa-* as example)
nominative	*Ø*		
accusative	*-wA/-wAj*	*-pA/-pAj*	*tʰari-pa~tʰa-ppa*
partitive	*-jA*	*-jA*	-
genitive	*-ni*	*-i*	*tʰari-ni*
instrumental	*-tʃi̇*		*tʰari-tʃi̇*
dative	*-tU*		*tʰa-tʊ~ tʰa-ttʊ*
locative	*-lA*	*-tUlA*	*tʰa-la*
allative	*-tʰ(A)xi*		*tʰa-tʰxi*
ablative	*-tʰ(i)xi~-(tU)xi*		*tʰa-tʊxi~ tʰa-ttʊxi*
elative	*-ki:tʃi̇ (restricted to relation nouns)*		-
prolative	*-li*	*-t(U)li*	*tʰa-li*

Previous descriptions of Solon (Tsumagari 2009: 5; Hu & Chaoke 1995: 22–29) also mention a delative case, which denotes ‘from the area or side of something’. In the present study, I treat the so-called delative as a lexicalized variant of the locative and ablative case (see details in §4.1.2.6.3 locative case).

The proprietive suffix *-ʃi/-tʃʰi* has been described as a case marker in some earlier studies (Chaoke 1995: 61). In the present analysis, however, the proprietive is not treated as a case but as a derivational morpheme and used in the formation of possessive predicative constructions (§8.6.2.2.1).

The ablative and allative sometimes share identical surface forms (*-tʰxi*), though they represent distinct cases, as the ablative also occurs in the alternate form *-(tU)xi*.

Solon lacks a dedicated comitative case, which earlier studies (Tsumagari 2009: 4; Baek 2024: 214) report as *-gili: (-gilii)*. This is not found in the Solon corpus, neither were the speakers able to recognize it. Instead, comitative meaning is expressed by the instrumental case.

4.1.2.1 Nominative

The nominative case marks the subject within a clause, appearing with both intransitive and transitive predicates. The nominative form is identical to the bare nominal stem and is zero-marked; therefore, it is not indicated in glosses (4.20-4.21). The nominative can also mark the semantic patient in passive constructions (4.22) (see passive constructions in §8.5.3).

(4.20) ***pɔr*** *mʊrin-paj* *xutʰlə:-sə*
bor *mʊrin-bay* *xutlee-se*
PN horse-DEF.ACC.1SG hold.by.a.tether-PST
'**Bor** held my horse.' (LT09-09)

(4.21) ***mʊrin*** *kʰatʰ* *nilə:n* *ul-tʃi-rə-ŋ* *ta* *nɔ*
mʊrin *kat* *nileen* *ul-ji-re-ŋ* *da* *no*
horse PTCL rather go-PROG-AOR-3 PTCL also
'**The horses** also ran rather well.' (LT09-31)

(4.22) *tʰɔ:tʃʰi* *əjjə* ***atʰa:-ʃi*** ***satti*** *əjjə* *mɔkɔi-tʊ* *akkʰi-wʊ-sa*
tooci *eyye* ***ataa-si*** ***saddi*** *eyye* *mogoi-dʊ* *akki-wʊ-sa*
DIS.CONN PROX **jealousy-PROP** **old.lady** PROX snake-DAT stab-PASS-PST

kunəŋ
guneŋ
hearsay
'It is said that **the jealous lady** was stabbed by the poisonous snake.' (LT02-33)

4.1.2.2 Accusative

The accusative is marked by *-wA/-pA* and typically marks definite direct objects (4.23). The form *-pA* occurs after nasal-final stems (4.24), and when following the demonstrative root *tʰa-*, it surfaces as *-ppa* (4.25). A special variant *-wAj/-pAj* marks first-person singular possessed definite direct objects (4.26).

(4.23) *[...] əwəːr mʊxʊr_ʃiltʰ-i tʃitʃʰ-tʃʰi=l satti:-tʊ*
[...] eweer mʊxʊr_silt-i jic-ci=l saddii-dʊ
badger name.of.sausage-REFL.SG eat-COOR.CVB=PTCL old.lady-DAT

*pas pʊka-**wa**-ni ə-ʃi-n tʃintʃi-m pʊː-ra*
*bas bʊga-**wa**-ni e-si-n jinji-m bʊʊ-ra*
again place-**DEF.ACC**-3 NEG-AOR-3 tell-CONN.CVB give-CONNEG

'The badger ate his muhur sausage and again he didn't talk about **the place (which he promised)** to the old lady' (LT04-15)

(4.24) *taxi ʊxʊn ɔː-sʊ ʃiːn-**pa** naŋ innə-tʃi-me*
*daxi ʊxʊn oo-sʊ siin-**ba** naŋ inne-ji-me*
again what do-PST.1SG ear-**DEF.ACC** also pierce-PROG-1SG

'Then I had done what... I am piercing **the** (sheeps') **ears**.' (LT27-05)

(4.25) *tʰɔːkʰi tʃəŋxɔw inəŋ tʊlin ɔː-tʃʰi tʰʊː-tʃʰi*
tooki jeŋxow ineŋ dʊlin oo-ci tʊʊ-ci
DIS.CONN exact.duration day half become-COOR.CVB be.cool-COOR.CVB

*nəː-rə-ŋ tʰa-**ppa**=l ima-ra-ŋ*
*nee-re-ŋ **ta-bba**=l ima-ra-ŋ*
put-AOR-3 DIST-**DEF.ACC**=PTCL drink-AOR-3

'It is just about noon, and (the water) will have cooled off, (the students) drink **that**.' (LT11-30)

(4.26) *sun-ni* *xəːxəː-sun* *min-iː* *attʃʰaːn-**paj*** *ə-tʃikə*
sun-ni *xeexee-sun* *min-iː* *accaan-**bay*** *e-jige*
2PL.OBL-GEN cat-2PL 1SG.OBL-GEN mouse-**DEF.ACC.1SG** NEG-FUT

tʃawa-tʃʰi *tʃitʰ-tʰə* *pa*
jawa-ci *jit-te* *ba*
catch-COOR.CVB eat-CONNEG TAG
'Your cat won't catch and eat **my mouse**, right?' (LT35-07)

4.1.2.3 Partitive

The partitive is marked by *-jA* and is used for indefinite direct objects (4.27-4.28) or for objects whose definiteness is not specified (4.29). Both definite and partitive cases can mark the causee in causative constructions (§8.5.2.2.1).

(4.27) *[...]* *pi* *ʃin-tu* *kɔjɔ* *pʊka-**ja*** *tʃintʃi-m*
[...] *bi* *sin-du* *goyo* *bʊga-**ya*** *jinji-m*
1SG 2SG.OBL-DAT beautiful place-**PTV** tell-CONN.CVB

pʊː-ktʰa=l *[...]*
bʊʊ-gta=l *[...]*
give-HORT=PTCL
'Let me tell you about **a beautiful place**!' (LT04-14)

(4.28) *əmun* *tʃuːr* *astʃʰaːn* *mɛnpɔː* *tʃitʰə-mi* *kun-kʰəŋ* *tʃuːr-eː*
emun *juur* *ascaan* *mɛnboo* *jite-mi* *gun-keŋ* *juur-ee*
one two mouse bread eat-1SG SAY-SAY.CVB two-COLL

*akka-**ja*** *pɔtɔ-sɔː*
*agga-**ya*** *bodo-soo*
method-**PTV** think-PST
'The two mice thought about **a solution** in order to eat the bread.' (LT16-01)

(4.29) *tʰari=ʃi* *pəjə* *məːn-ʧi-ni* *naːla-ʧi-wi* *tʰɔkɔ-**jɔ*** *ila-ra-ŋ*
tari=si *beye* *meen-ji-ni* *naala-ji-wi* *togo-**yo*** *ila-ra-ŋ*
DIST=2SG person REFL-INS-GEN hand-INS-REFL.SG pot-**PTV** burn-AOR-3

tɔlpɔn-kʊ *ila-ra-ŋ*
dolbon-gʊ *ila-ra-ŋ*
night-ADVZ burn-AOR-3

'That was people heating **(the) pots** with their own hands and heating them all night long.' (LT18-21)

4.1.2.4 Genitive

The genitive case in Solon is marked by *-ni* ~ *-i*. Not all Tungusic languages have a genitive case, but all Manchurian Tungusic languages do. These forms are cognate and traceable to the same proto-form *-ni* ~ *-i*. These include:

- Solon: *-ni*
- Oroqen: *-ŋi* (Cong 2019: 180-182)
- Khamnigan Evenki: *-ni* (Mandarwa 2023: 13-18)
- Kilen: *-i/ji* (Zhang 2013: 79-81)
- Manchu: *-i/-ni* (Gorelova 2002: 175-182)
- Sibe (spoken Manchu): *-i* (Zikmundová 2013: 48)

In contrast, most non-Manchurian Tungusic languages lack a genitive case, including Northern Tungusic Evenki (I. Nedjalkov 1997: 142), Even and Negidal (Pakendorf & Aralova 2020: 292), and Southern Tungusic languages such as Oroch (Kazama 2024b: 302), Udihe (Nikolaeva & Tolskaya 2001: 106), Kili (Kazama 2024a: 373), Ulcha (Kazama 20244c: 413–414), and Uilta (Tsumagari 2009: 4–5). Although I. Nedjalkov (1997: 158) mentions that the genitive suffix *-ŋi* was still preferred in Evenki about fifty years prior to his study (4.30), it has now fallen out of use.

(4.30) Evenki (I. Nedjalkov 1997: 158, glossing adapted)
*atyrkan-**ngi*** *gebi-ni*
old.woman-**GEN** name-3SG

In Solon, the primary function of the genitive case is to mark the possessor in possessive noun phrases, indicating the possessive relationship between two nominals (4.31-4.33) (§5.2.1). An extended function of the genitive is to mark the subject of subordinate clauses in complex sentences (§10.3.1).

(4.31) *[...] min-**ni** mʊrin-pi xɔjɔr iː-sə*
*[...] min-**ni** mʊrin-bi xoyor ii-se*
1SG.OBL-**GEN** horse-1SG two enter-PST
'**My horse** arrived in second place (lit. my horse entered the two).' (LT09-37)

(4.32) *tʰɔːtʃʰi=l kəntʰxəːŋ əmun inək tʰənək ukkʰəːxəŋ-**ni** əməktʰiː-ni tʃintʃi-sa*
*tooci=l gentxeeŋ emun ineg teneg ukkeexeŋ-**ni** emegtii-ni jinji-sa*
DIS.CONN=PTCL suddenly one day silly boy-**GEN** woman-3 tell-PST
'Then one day, the **silly boy's wife** suddenly said.' (LT08-10)

(4.33) *pi ɔri ɔri ɔː-kʰɔː=l əjjə tɔː-**ni** xuwəː-tə*
*bi ori ori oo-koo=l eyye doo-**ni** xuwee-de*
1SG evening evening become-COND.CVB=PTCL PROX river-**GEN** side-DAT

əmə-tʃʰi aːsan-tʃʰi [...]
eme-ci aasan-ci [...]
come-COOR.CVB sleep-COOR.CVB
'Every evening, I come to the **river's side** and sleep.' (LT06-06)

4.1.2.5 Instrumental

4.1.2.5.1 Instrumental functions

The instrumental case in Solon is marked by the suffix *-tʃi* and expresses a range of core and extended functions. Its primary uses include marking the instrument of an action (4.34), material (4.35), manner (4.36).

(4.34) *minɔːtʰa* *saka-ja* *ə-ʃi-n* *na* *tʰɔːxɔ-r* *ɔriːl*
minɔɔta *saga-ya* *e-si-n* *na* *tooxo-r* *ɔriil*
minute hour-PTV NEG-AOR-3 also miss-CONNEG constantly

*naːl-**tʃi**-wi* *tʃukkʰu-rə-ŋ*
*naal-**ji**-wi* *jukku-re-ŋ*
hand-**INS**-REFL.SG to.burn-NSPT-3

'(People) don't miss a second and constantly burn (the bricks) **by their own hands**.' (LT18-23)

(4.35) *tʰɔːtʃʰi* *ətʰxəːŋ-ni* *[...]* *ukkʰə-wi* *əxutʃʰi-**tʃi*** *utə-tʃʰi*
tooci *etxeeŋ-ni* *[...]* *ukke-wi* *exuci-**ji*** *ude-ci*
DIS.CONN old.man-3 door-REFL.SG cow.leather-**INS** sew-COOR.CVB

satti-wi *ə-mi* *iː-kuː-r* *[...]*
saddi-wi *e-mi* *ii-guu-r* *[...]*
old.lady-REFL.SG NEG-CONN.CVB enter-VL-CONNEG

'Then, the old man... sewed shut his door **with cow leather** and didn't let his old lady enter.' (LT04-06)

(4.36) *tʰɔːtʃʰi=l* *əjjə* *ukkʰəːxəŋ* *əməktiː-ni* *ukə-**tʃi**-ni*
tooci=l *eyye* *ukkeexeŋ* *emegdii-ni* *uge-**ji**-ni*
DIS.CONN=PTCL PROX boy wife-GEN word-**INS**-3

axin-talaː-wi *nin-tʃʰi=l* *tʃintʃi-sa* *kunəŋ* *[...]*
axin-dalaa-wi *nin-ci=l* *jinji-sa* *guneŋ* *[...]*
elder.brother-LOC-REFL.SG go-COOR.CVB=PTCL say-PST hearsay

'It is said that then the boy went to his elder brother's place **as his wife had suggested (lit. by his wife's word)'** (LT08-13)

The instrumental case also encodes the language of using (4.37), price (4.38), and means of transport (4.39). Beyond its core instrumental meanings, the instrumental *-tʃi* function extends to complex clause: when forms a quasi-converb (i.e., case-marked participles), it can indicate manner clauses (see §10.6.3.1).

(4.37) *xɔkkʰɔ* *əwəŋkʰi-**ʧi*** *xəːrəː-ltiː-mun* *əwəŋkʰi* *tɔː-lɔː-n*
xokko *eweŋki-**ji*** *xeeree-ldii-mun* *eweŋki* *doo-loo-n*
all Solon.Evenki-**INS** chat-RECP-1PL.EXCL Solon.Evenki inside-LOC-3

pi-kkʰi
bi-kki
COP-COND.CVB

'We all chat **in Solon (Evenki)**, if it is between the Solon (Evenki) people.' (LT11-65)

(4.38) *natan* *tʰumən* *ulxə-**ʧi*** *tʰajja* *xʊnin-pə* *ka-saːː-mun(e)*
nadan *tumen* *ulxe-**ji*** *tayya* *xʊnin-be* *ga-saa-mun(e)*
seven ten.thousand over-**INS** DIST sheep-DEF.ACC take-PST-1PL.EXCL
'We bought those sheep **for over seventy thousand** (Chinese yuan).' (LT30-14)

(4.39) *xɔttʃʰɔː-tʊ* *ɔːnti* *əxur* *tʰəkkəːn-**ʧi*** *ukʰ-kʰiʃi* *pi-səː-mun=tʃə*
xoccoo-dʊ *oondi* *exur* *teggeen-**ji*** *uk-kisi* *bi-see-mun=je*
grocery-DAT what cow cart-**INS** go-HAB COP-PST-1PL.EXCL=PTCL
'We used to go to the grocery (market) **by cow cart**.' (LT20-151)

4.1.2.5.2 Comitative functions

Cross-linguistically, it is well attested that the instrumental case often exhibits polysemy with comitative functions (Narrog 2010: 8-12). Within the Tungusic family, similar patterns are observed; for example, the Negidal instrumental *-ɟi* (Oskolskaya 2024a: 244; Pakendorf & Aralova 2020: 292) and the Oroqen instrumental *-tʃɪ* (Cong 2019: 182-185) are also used to express comitative relations.

In Solon, the instrumental suffix *-ʧi* likewise extends to comitative use. It can mark both joint subjects (co-subjects) (4.40) and adjunct subjects (4.41) of a predicate. When marking the joint subject, a summary conjunction is used to sum up the conjuncts involved by a collective numeral (4.40), see § 5.3.3 for more information on summary conjunctions.

(4.40) *kə* *pi* *apaː**-ʧi**-wi* *ilan* *nəxun**-ʧi**-wi* ***tʰʊŋ-iː***
ge *bi* *abaa**-ji**-wi* *ilan* *nexun**-ji**-wi* ***tʊŋ-ii***
PTCL 1SG father-**INS**-REFL.SG three younger.brother-**INS**-REFL.SG **five-COLL**

*tʊtʰ-saː**-mʊn***
*dʊt-saa**-mʊn***
be.left-PST-**1PL.EXCL**
'Me **with** my father **and** three brothers, **the five of us** stayed behind **together**.' (LT39-61)

(4.41) *pi* *niʃxuŋ* *pi-ʃi-(r)-t-i* *naːtʃil* *jəjə**-ʧi***
bi *nisxuŋ* *bi-si-(r)-d-i* *naajil* *yeye**-ji***
1SG small COP-AOR-IPFV.PTCP-DAT-REFL.SG maternal grandfather-**INS**

paraːŋ *pi**-su***
baraaŋ *bi**-su***
many COP-**PST.1SG**
'When I was small, I stayed **with** my maternal grandfather a lot.' (LT25-02)

Based on elicited data, the joint subjects can only be a human noun. When it is a non-human noun, the sentence is not accepted. As seen in (4.42), the comitative subject is the non-human noun *nɛːnixan* 'dog', the final verb takes 1PL agreement indicating the non-human noun *nɛːnixan* 'dog' as a joint subject. But this sentence is not accepted by the speakers,

(4.42) ***pi** *uri-ni* *ɔrɔːn-tʊ* *nɛːnixan**-ʧi**-wi* *ul-ʧi**-mun***
bi *uri-ni* *oroon-dʊ* *nɛːnixan**-ji**-wi* *ul-ji**-mun***
1SG mountain-GEN above-DAT dog-**INS** -REFL.SG go-PROG-**1PL.EXCL**
'*Me with my dog, **we** are walking on the mountain.' (elicited)

4.1.2.6 Dative, Locative and Allative

4.1.2.6.1 The relation of locative, dative and allative

The Northern Tungusic languages exhibit a variety of cognate forms for the locative, dative, and allative cases, although their functions frequently overlap. For instance, both the locative

and dative cases in Solon, Even, Negidal, and Oroqen can mark location arguments, while in Solon and Negidal, both the dative and allative cases may encode addressee arguments (Pakendorf 2007a: 125-130; Georg 2024: 820-821; Cong et al. 2024).

The choice of spatial case for encoding a given argument varies across Northern Tungusic languages. For example, in encoding the goal argument, Solon and Taimyr Evenki predominantly use the dative(-essive), whereas Bystraja Even, Negidal, and Sym Evenki prefer the allative, and Lamunkhin Even, Oroqen, Ilimpi Evenki, Yerbogachen Evenki, and Barhahan Evenki favor the locative (Cong et al. 2024).

In Solon, however, the dative case is overwhelmingly dominant across all spatial and recipient-related functions (goal, location, recipient, and addressee). Frequency data from the Solon corpus show that the dative accounts for over 90% of all spatial case occurrences (Table 4-3), highlighting its extensive use. In contrast, the locative suffix *-(tU)lA* is undergoing functional reduction (see §4.1.2.6.3), and the allative *-tʰ(i)xi* no longer encodes goal (see §4.1.2.6.4).

Table 4-3: The form and frequency of DAT-LOC-ALL in the Solon corpus

	LOC	**DAT**	**ALL**
Solon	*-(tU)lA*	*-tU*	*-tʰ(A)xi*
	5.89% (64)	**91.20%** (998)	2.21% (24)

This functional convergence appears to be contact-induced, reflecting influence from Mongolian, which has a locative-dative syncretic suffix *-t/d ~ -du* and lacks an allative case, instead using the postposition *ɵrɵː* for allative meaning (Creissels 2009: 622; Chinggeltei 1991: 158-163; Janhunen 2012a: 106-108). In Solon, the predominance of the dative case (91.20%) indicates an ongoing reduction of spatial case distinctions, with the dative expanding at the expense of the locative and allative cases.

4.1.2.6.2 Dative

The dative case marks recipient (4.43), location (4.44-4.45), goal (4.46-4.47) and addressee (4.48). The dative-essive form *-tU*, with a spoken variant *-tA* (4.44). After demonstrative roots (proximal *ə-* and distal *tʰa-*), the dative appears as geminated *-ttU* (4.47).

(4.43) *su* *tʃittʰ-ə-mi* *kuŋ-kʰiː-wəl* *kʰi* ***mun-tu*** *mukun*
su *jitt-e-mi* *guŋ-kii-wel* *ki* ***mun-du*** *mugun*
2PL eat-EP-1SG SAY-COND.CVB-REFL.PL TOP 1PL.OBL-**DAT** money

puː-tʃʰun *kʰuŋ*
buu-cun *kuŋ*
give-2PL MIR
'If you want to eat, you'll **give us** money.' (LT08-40)

(4.44) *[...]* *ɔːxi* *ani* *kə* *axin-niː-nin* *xʊrkaːn-**ta***
[...] *ooxi* *ani* *ge* *axin-nii-nin* *xʊrgaan-**da***
how.many year PTCL elder.brother-GEN-3 enclosure-**DAT**

ikk-uː-sə *atsʊŋ* *[...]*
igg-uu-se *adsʊŋ* *[...]*
grow-PASS-PFV.PTCP livestock
'The stock which are grown **in the elder brother's enclosure** for so many years.' (LT08-24)

(4.45) *əmun* *tʰukə-ku* *tʰari* *uri-**tu*** *pi-sə* *muːn-i* *əri* *ʊlʊr*
emun *tuge-gu* *tari* *uri-**du*** *bi-se* *muun-i* *eri* *ʊlʊr*
one winter-ADVZ DIST mountain-**DAT** COP-PST 1PL.EXCL-GEN PROX people
'(They) were **on the mountain** for a whole winter, our people (lit. our these people).' (LT34-44)

(4.46) *talaŋ-**tʊ*** *nin-kʰiʃi* *pi-səː-mun* *tʰari* *ərin-tu* *kʰi* *talaŋ* *kun-kʰiʃi*
*dalaŋ-**dʊ*** *nin-kisi* *bi-see-mun* *tari* *erin-du* *ki* *dalaŋ* *gun-kisi*
GN-**DAT** go-HAB COP-PST-1PL.EXCL DIST time-DAT TOP GN SAY-HAB

pi-sə *[...]*
bi-se
COP-PST
'We used to go **to Dalang**, at that time there was a place called Dalang.' (LT20-161)

(4.47) *[...] pi pikkʰi əmmə appa-ni-wi tʃupʃərəl-tʃi-ni* ***ə-ttu***
[...] bi bikki emme abba-ni-wi jubserel-ji-ni ***e-ddu***
1SG TOP mother father-GEN-REFL.SG approval-INS-3 **PROX-DAT**

əm-su
em-su
come-PST.1SG
'I came **here** with my mother and father's permission.' (LT28-87)

When followed by the reflexive singular possessive suffix *-wi*, the two merge into *-ti*; in this study, they are glossed separately for clarity (4.48).

(4.48) *tʰɔːtʃʰi=l əjjə ʊʃir-wi nənuː-tʃʰi=l*
tooci=l eyye ʊsir-wi nenuu-ci=l
DIS.CONN=PTCL PROX affair-REFL.SG go.back-COOR.CVB=PTCL

*əməktʰiː-**t**-i tʃintʃi-sa kunən*
*emegtii-**d**-i jinji-sa gunen*
wife-**DAT**-REFL.SG tell-PST hearsay
'It is said that (the silly boy) **told his wife** about this affair as soon as he went back.' (LT08-55)

Beyond its core argument-marking functions, the dative also serves a wide range of syntactic and semantic extensions. It marks beneficiaries (§8.2.5), agents in passive constructions (§8.5.3), causees in causative constructions (§8.4.2.2.2), and possessors in possessed-exist constructions (§8.5.2.3.2). It is further used in non-finite forms, such as quasi-converbs (dative-marked participles) and, more rarely, as a converb marker attaching directly to the verb root (§10.6.1.1.2).

4.1.2.6.3 Locative

The locative case in Solon is marked by the suffix *-(tU)lA*. While its prototypical function is to mark location arguments, this function has largely been supplanted by the dative. Nowadays in Solon, the locative case is mostly limited to three lexical domains: demonstratives (4.49),

relational nouns (4.50), and human nouns (4.51). When following human nouns, it no longer denotes physical location but rather conveys the meaning of 'someone's house'.

(4.49) *[...] ilan ani tʰukə-ʃiː-tʃʰ xʊltʃʰin-ni tʰalpai-ja*
[...] ilan ani tuge-sii-c xʊlcin-ni talbai-ya
three year winter-VBZ-COOR.CVB reed-GEN field-PTV

*saxi-mi tʰa-**la** pi-sə ʊlʊr*
*saxi-mi ta-**la** bi-se ʊlʊr*
guard-CONN.CVB DIST-**LOC** COP-PFV.PTCP people

'It was people who stayed **there**, spent three years of winter, guarding reed's field.' (LT17-09)

(4.50) *taxi əmun tʃuː-xi ataː-waja pikkʰi pəjə atʃil-wi*
daxi emun juu-xi adaa-waya bikki beye ajil-wi
also one two-ORD elder.sister-DEF.1SG TOP person work-REFL.SG

*ɔː-rɔ-ŋ tʰul-**lə** unkəŋ-pi saka-ra-ŋ*
*oo-ro-ŋ tul-**le** ungeŋ-bi saga-ra-ŋ*
do-AOR-3 out-**LOC** cow-REFL.SG milk-AOR-3

'Also, my second sister does her work **outside**, milking the cows.' (LT39-12)

(4.51) *[...] mun-**tuːlə** aːŋa-tʃʰi ukʰ-kʰə [...]*
*[...] mun-**duule** aaŋa-ci uk-ke [...]*
1PL.EXCL-LOC sleep-COOR.CVB go-IMP

'Sleep over **at our house** and leave!' (LT35-06)

Due to its restricted usage, the locative appears to be partially lexicalized. This can be observed when other spatial cases, especially the ablative (4.52) and dative-essive (4.53), and more rarely the prolative (4.54), are attached directly after locative-marked nouns. In such cases, the original locative meaning is lost, and only the secondary spatial meaning is retained.

(4.52) *jouʃi* *ukiː-tʃʰi* *tʰəx-ʃiː-tu-ni* *əmmə-ni* *tʰul-**lə-xi***
yəusi *ugii-ci* *tex-sii-du-ni* *emme-ni* *tul-**le-xi***
game play-COOR.CVB sit-STAT-DAT-3 mother-3 out-**LOC-ABL**

saːsan *tətʰxi-tu* *xasxaŋ* *tʰou-tʃʰi* *əm-mi* *puː-səː*
saasan *detxi-du* *xasxaŋ* *təu-ci* *em-mi* *buu-see*
paper box-DAT puppy load-COOR.CVB come-CONN.CVB give-PST

'When the boy is sitting playing a game, his mother comes **from outside** with a cardboard box holding a puppy.' (LT13-02)

(4.53) *əkkiː-**ləː-t**-i* *ilan* *nəxu-ʃi* *[...]*
*eggii-**lee-d**-i* *ilan* *nexu-si* *[...]*
bottom-**LOC-DAT**-REFL.SG three younger.brother-PROP
'I have three younger brothers **below** me.' (LT39-03)

(4.54) *[...]* *aŋ* *kurəː* *ɔː-tʃʰi* *tʃəmuːn-tʃʰi* *aŋkʰa-tʃʰi*
[...] *aŋ* *guree* *oo-ci* *jemuun-ci* *aŋka-ci*
hunting hunting do-COOR.CVB be.hungry-COOR.CVB be.thirsty-COOR.CVB

*ə-**ləː-liː*** *iː-m* *əm-sə* *ʃitʰə* *[...]*
*e-**lee-lii*** *ii-m* *em-se* *site* *[...]*
PROX-**LOC-PROL** enter-CONN.CVB come-PST DECL.PTCL
'(He) did hunting, and was being hungry and thirsty, and came **along here**.' (LT28-78)

The so-called delative case *-lAːxi* is not an independent case but a lexicalized combination of a locative-marked noun and the ablative suffix *-tʰ(A)xi ~ -xi*. In the Solon corpus, this form occurs only with human nouns (4.55), and relational nouns (4.52). Therefore, I argue that Solon does not possess a distinct delative case; instead, *-lAːxi* represents a frozen compound of locative and ablative morphology.

(4.55) *tʰɔːtʃʰi* *pa* *əjjə* *aŋtʃʰin* *pa* *tʰajja* *paltʃʰaː**-laː-xi*** *kə*
tooci *ba* *eyye* *aŋcin* *ba* *tayya* *balcaa**-laa-xi*** *ge*
DIS.CONN PTCL PROX hunter PTCL DIST relatives-**LOC-ABL** PTCL

ul-tʃʰi *pa* *tʃuː-tu-wi* *nənuː-sə* *pi-sə*
ul-ci *ba* *juu-du-wi* *nenuu-se* *bi-se*
go-COOR.CVB PTCL house-DAT-REFL.SG go.back-PFV.PTCP COP-PST
'Then, this hunter left from **his relatives' house**, and went back to his home.' (LT19-16)

4.1.2.6.4 Allative

The allative case in Solon is marked by the suffix *-tʰ(A)xi*. The Solon allative no longer encodes the goal argument. Instead, it marks the addressee in direct speech (4.56) and indicates the direction of motion of action, typically when the host noun is a relational noun or a demonstrative pronoun (4.57).

(4.56) *tʰɔːtʃʰi* *saːtʃikiː**-tʰixi*** *saːtʃike* *ʃi* *iːmaːn=kʰəːŋ* *sɔŋ-tʃi-nte* *kun-tʃʰə*
tooci *saajigii**-tixi*** *saajige* *si* *iimaan=keeŋ* *soŋ-ji-nde* *gun-ce*
DIS.CONN magpie-**ALL** magpie 2SG why-PTCL cry-PROG-2SG say-PST
'Then (the quail) said **to magpie**, "Magpie, why are you crying?"' (LT01-22)

(4.57) *tʰɔːtʃʰi* *satiː-ni* *[...]* *tʰattʰʊ* *ɔltɔːn**-tʰɔxi*** *mənti-rə-ŋ* *tʃəːn**-tʰəxi***
tooci *saddii-ni* *[...]* *tattʊ* *oldoon**-toxi*** *mendi-re-ŋ* *jeen**-texi***
DIS.CONN old.lady-3 DIST.ADV side-**ALL** look-AOR-3 left-**ALL**

mənti-rə-ŋ *parʊːn**-tʰaxi*** *mənti-rə-ŋ* *itti* *jəːmə* *ə-ʃi-n*
mendi-re-ŋ *barʊʊn**-taxi*** *mendi-re-ŋ* *iddi* *yeeme* *e-si-n*
look-AOR-3 right-**ALL** look-AOR-3 normally thing NEG-AOR-3

iʃ-uː-r
is-uu-r
see-PASS-CONNEG
'Then the old lady **looked toward the side, looked toward the left and right**, nothing is to be seen.' (LT07-15)

A conventionalized idiomatic use involves the juxtaposition of an interrogative pronoun and a distal demonstrative, as in *iː-tʰxi tʰa-tʰxiː* 'INT-ALL DIST-ALL', which expresses the meaning 'moving here and there' or 'wandering around' (4.58).

(4.58) *tʰɔːtʃʰi tʃuːr kaːlaːsʊn **i-tʰxi** **tʰa-tʰxiː**=l uli-rə-ŋ [...]*
*tooci juur gaalaasʊn **i-txi** **ta-txii**=l uli-re-ŋ [...]*
DIS.CONN two swallow **INT-ALL** **DIST-ALL**=PTCL go-AOR-3
'Then the two swallows fly around (lit. **go here and there**).' (LT02-05)

4.1.2.7 Ablative and elative

4.1.2.7.1 Ablative

The ablative case in Solon is marked by the suffix *-tʰ(i)xi ~ -(tU)xi*. It is described in Hu & Chaoke (1995: 22-28) and Tsumagari (2009: 5) as *-dixi*, with an unaspirated voiced stop /d/ instead of the aspirated voiceless stop /tʰ/. However, in the Solon data I collected, the ablative is consistently realized with aspirated /tʰ/.

The shortened form *-xi* occurs when following the lexicalized locative case (the so-called *delative case*), as shown in examples (4.52) and (4.55) above. The proximal and distal demonstratives take a distinct allomorphic form, *-tUxi* (4.60) sometimes appearing in geminated form as *-ttUxi* (4.61).

Functionally, the ablative case serves as a grammatical marker of source or point of departure (4.59-4.60), marks temporal adjuncts, conveying meanings such as 'since when' or 'from when' (4.61), and expresses the standard of comparison in comparative constructions (4.62). Additionally, in speech contexts, it marks the addressee of inquiry or interrogative discourse (4.63). The temporal usage extends further to mark temporal adverbial clauses when attached to a participle-marked subordinate clause (see §10.6.1.3).

(4.59) *əjjə ʊːkantaː-tʰxi-ni xʊlʊː-**tʰxi**-ni pexal altʰan mukun juː-sə kunəŋ*
*eyye ʊʊgandaa-txi-ni xʊlʊʊ-**txi**-ni bexal altan mugun yuu-se guneŋ*
PROX saw-TEM-3 gourd-**ABL**-3 many gold silver go.out-PST hearsay
'It is said that when (the old lady) sawed (the gourd), much gold and silver came out **from the gourd**.' (LT02-17)

(4.60) *sun-i* ***ə-tuxi*** *uli-r-tə* *kʰi* *itti* *əpxəi* *əpxəi*
sun-i ***e-duxi*** *uli-r-de* *ki* *iddi* *ebxei* *ebxei*
2PL.OBL-GEN PROX-**ABL** go-IPFV.PTCP-DAT TOP normally terrible terrible
'When you went **from here**, normally that was (a) very terrible (trip).' (LT20-152)

(4.61) *tʰɔːtʃʰi* ***ə-ttuxi*** *ama-sxi* *ətʰxəŋ* *satti* *ɔnatʃi-tʃɔl*
tooci ***e-dduxi*** *ama-sxi* *etxeŋ* *saddi* *ɔnaji-jɔl*
DIS.CONN PROX-**ABL** back-ADV.ALL old.man old.lady daughter-COLL

paraːŋ-tʃɔl *aja* *nantaːxaŋ* *emtar-sa* *kunəŋ*
baraaŋ-jɔl *aya* *nandaaxaŋ* *emdar-sa* *guneŋ*
many-COLL good beautiful live-PST hearsay
'It is said that, **since then**, the old man and old lady lived happily together with their daughter.' (LT29-156)

(4.62) *[...]* *ur_xataːr-sal* *nɔkkɔ-****tʰxi****=tʰ* *nisxuŋ* *ʃirtʰə-****tʰxi****=tʰ* *narikkʰɔŋ*
[...] *ur_xadaar-sal* *nɔggɔ-****txi****=t* *nisxuŋ* *sirte-****txi****=t* *narikkɔŋ*
mountain-PL **fist-ABL**=PTCL small **thread-ABL**=PTCL thin

pi-sə *kunəŋ*
bi-se *guneŋ*
COP-PST hearsay
'It is said that the mountains were **smaller than** the fist, **thinner than** the thread.' (LT42-02)

(4.63) *tʰɔːtʃʰi* *pa* *ʃi* *aːl* *min-tʃi* *xɔtaːʃ-ja* *ɔː-nti*
tooci *ba* *si* *aal* *min-ji* *xɔdaa-ya* *oo-ndi*
DIS.CONN PTCL 2SG when 1SG.OBL-INS wedding-PTV make-2SG

kuŋ-kʰəŋ *tʰajja* *ɔnaːtʃi-****tʰxi*** *aŋɔː-tli* *[...]*
guŋ-keŋ *tayya* *ɔnaaji-****txi*** *aŋɔɔ-dli* *[...]*
SAY-SAY.CVB DIST girl-**ABL** ask-SIM.CVB
'When (the hunter) asked **the girl**, "then when will you marry me?"…' (LT19-38)

4.1.2.7.2 Elative

According to Tsumagari (2009: 5), the elative case expresses the meaning *'from the direction of something'*. In the Solon corpus, the suffix *-kiːtʃi*, previously identified as the elative case, occurs 28 times and is exclusively attached to relational nouns (see Table 4-4).

The function of *-kiːtʃi* is to indicate the source or point of departure, overlapping semantically with the ablative case. Because it only attaches to relational nouns, its contribution is largely lexical, reinforcing the inherent spatial meaning of the host noun rather than introducing an independent grammatical contrast.

Therefore, I propose that *-kiːtʃi* be classified as a source-related case, parallel to the ablative but with a more restricted distribution. Specifically, it functions as a lexicalized or relational variant of the ablative, limited to relational noun stems. The regular ablative case *-tʰ(i)xi ~-(tU)xi* rarely attaches to relational nouns, only 3 occurrences are attested in my corpus, indicating that for relational nouns, the elative case is the predominant source-marking strategy.

Table 4-4: The host nouns of *-kiːtʃi* is restricted to relational nouns

host nouns of *-kiːtʃi* form	occurrence
ami-kːitʃi 'from the back'	6
akkʰaŋ-kiːtʃi 'from the back'	3
ukiː-kiːtʃi 'from above'	3
ɔrɔːn-kiːtʃi 'from above'	1
tʰullə-kiːtʃi 'from outside'	3
tʃultə-kiːtʃi 'from the front'	2
tʰala-kiːtʃi 'from the side'	4
kɔrɔ-kiːtʃi 'from afar'	6

(4.64) *pətən-ni* ***amiː-kiːtʃi****-ni* *ul-tʃʰə* *kunəŋ* *sʊlxi*
beden-ni ***amii-giiji****-ni* *ul-ce* *guneŋ* *sʊlxi*
quail-GEN **back-ELT**-3 go-PST hearsay fox
'It is said the the fox went from **behind** the quail (lit. from quail's back).' (LT01-52)

(4.65) ***ʧuliː-kiːʧi**-ni* *əmun* *əməktʰi* *pəjə* *əm-sə* *kunəŋ.*
***julii-giiji**-ni* *emun* *emegti* *beye* *em-se* *guneŋ.*
front-ELT-3 one woman people come-PST hearsay
'A woman came **from in front of** (Meenkeng).' (LT40-11)

(4.66) *tʰari* *ʊnaːʧi-ni-wi* *ʧaːntaː-saː-wa-ni* ***kɔrɔ-kiːʧi***
tari *ʊnaaji-ni-wi* *jaandaa-saa-wa-ni* ***goro-giiji***
DIST daughter-GEN-REFL.SG sing-PFV.PTCP-DEF.ACC-3 **far-ELT**

tɔːltiː-m *paxa-mi* *[...]*
hear-CONN.CVB get-CONN.CVB
'He heard his daughter's singing **from afar**.' (LT38-37)

4.1.2.8 Prolative

The prolative case in Solon, marked by *-(tU)li*, belongs to the spatial case system and denotes movement or action along a path (4.67) or across/through a location (4.68). It can also convey a distributive spatial meaning, expressing the sense of 'by/through each location or goal' (4.69).

(4.67) *tʰɔːʧʰi* *əjjə* *uri-**li*** *ati* *ani* *tʰən-səː-ʃe* *[...]*
tooci *eyye* *uri-**li*** *adi* *ani* *ten-see-se* *[...]*
DIS.CONN PROX mountain-**PROL** how.many year loiter-PST-2SG
'Then how many years have you been loitering **along this mountain**?' (LT40-19)

(4.68) *[...]* *unəxun-ni* *pas* *ʧɔl-**li*** *tʰʊttʃʰaːn-mi* *ə-mi*
[...] *unexun-ni* *bas* *jol-**li*** *tʊccaan-mi* *e-mi*
son-3 again stone-**PROL** jump-CONN.CVB NEG-CONN.CVB

əthə-r *tʰixə-səː*
ete-r *tixe-see*
can-CONNEG fall-PST
'The son (goat lamb) was not able to jump **over the stone** and fell'. (LT15-05)

(4.69) *tʰa-tʊːxi* *ama-sxi* *tʰɔːl* *taxi* *tɔː-ni* *xuwəː-ni* *ɔltɔːn**-tɔli***
ta-dʊʊxi *ama-sxi* *tool* *daxi* *doo-ni* *xuwee-ni* *oldoon**-doli***
DIST-ABL back-ADV.ALL rabbit again river-GEN edge-GEN side-**PROL**

ulə-(r)-pi *ʊti-tʃʰi* *[...]*
ule-(r)-bi *ʊdi-ci* *[...]*
go-IPFV.PTCP-REFL.SG be.no.more-COOR.CVB
'After that the rabbit no longer went **along the river's side**' (LT06-12)

Similar to other spatial cases, the prolative extends to temporal domains, marking the meaning of 'during a time period' (§8.2.11). The prolative case also participates in verbal morphology, functioning as a converbal suffix. When attached directly to the bare verb root, it developed to a subordinate converb expressing simultaneous action (see §6.5.2.5).

4.1.3 Possession

In Solon, the possessive marker is attached to the possessed noun. The function of the possessive marker is to indicate the state of possession and provide information about the possessor by indexing their person and number. Solon has two types of possessive markers: personal possessive (§4.1.3.1) and reflexive possessive (§4.1.3.2). The position of the possessive suffix is after all the plural marker and case suffixes.

In complex clause constructions the possessive suffixes can cross reference to the subordinate clause (§10.3.2). Furthermore, the reflexive possessive can be used to mark the direct object by itself (§4.1.3.2).

The alienable possessive marker is a proto-Tungusic suffix that occurs in the majority of Tungusic languages. However, Solon has lost this marker, which will be introduced in detail in the (§4.1.3.3).

Personal possessives suffixes have non-possessive uses, such as marking identifiability, definiteness, contrast/emphasis (Nikolaeva and Tolskaya 2001: 135-141, Nikolaeva 2003, Pakendorf 2007b, Aralova & Pakendorf 2023, Mikhailov 2024). This phenomenon is commonly attested in some Tungusic, Uralic, Mongolic and Turkic languages. However, the non-possessive use of possessive suffixes will not be the focus of this section. In this

dissertation, due to the pragmatic nature of non-possessive uses of the possessive suffixes, I am unable to describe them in detail. The sole function that I investigated is the mirative use of the second person singular possessive was the sole subject of investigation, as outlined in §11.2.2.

4.1.3.1 Personal possession

The personal possessive suffixes index the person and number of the possessor. The Table 4-5 below shows the possessive suffixes in Solon. In Table 4-5, a separate column about the nominative personal pronouns is provided for comparison with the personal possessive suffixes.

Table 4-5: Personal possessive suffixes in Solon

	personal possessive	nouns ending with vowels and oral consonants	nouns ending with nasal consonants	nominative personal pronouns
1SG	*-wi~-pi*	*ʃirəː-wi* 'my desk'	*awʊŋ-pi* 'my hat'	*pi*
2SG	*-ʃi*	*ʃirəː-ʃi* 'your desk'	*awʊŋ-ʃi* 'your hat'	*ʃi*
3SG	*-ni~nin*	*ʃirəː-ni* 'his desk'	*awʊŋ-ni* 'his hat'	demonstratives
1PL.EXCL	*-mun*	*ʃirəː-mun* 'our desk'	*awʊŋ-mun* 'our hat'	*puː*
1PL.INCL	*-tʰi*	*ʃirəː-tʰi* 'our desk'	*awʊŋ-tʰi* 'our hat'	*mitʰi*
2PL	*-sun~ʃun*	*ʃirəː-sun* 'your desk'	*awʊŋ-sun* 'your hat'	*sun*
3PL	*-ni~-nin*	*ʃirəː-ni* 'their desk'	*awʊŋ-ni* 'their hat'	demonstratives

In Solon, the first-person plural exhibits a distinction between inclusive and exclusive, which indicates whether the hearer is included or excluded, respectively. The majority of the personal possessive suffixes cognate with the nominative form of personal pronouns, with the exception of the first person plural exclusive and inclusive forms and the third person form. The first-person plural exclusive possessive suffix is identical to the oblique form of the pronoun *mun-*. The third person possessive suffix is *-ni~-nin*, while the nominative form of the third person pronoun is expressed by demonstrative pronouns. Below are examples of personal possession in Solon.

(4.70) *[...]* ***mʊrin-pi*** *xɔjɔr* *iː-sə* *pi* *xətʰ* *tɔːlɔː-wi* *sʊnin*
[...] ***mʊrin-bi*** *xoyor* *ii-se* *bi* *xet* *dooloo-wi* *sʊnin*
horse-**1SG** two enter-PST 1SG PTCL inside-REFL.SG very

atta-sʊ
adda-sʊ
be.happy-PST.1SG
'**My horse** arrived (lit. enter) the second and I was happy inside.' (LT09-40)

(4.71) *pəltiːr-**ʃi*** *pəkiː-tʃi-rə-ŋ* *inəkət* *manti*
*beldiir-**si*** *begii-ji-re-ŋ* *ineged* *mandi*
feet-**2SG** be.cold-PROG-AOR-3 cold terrible
'**Your feet** are freezing, the cold is terrible.' (LT20-212)

(4.72) *tʰəjjə* *utʰə-səl-**ni*** *tʊr-ʃi-tʃi* *tʃitʃʰ-tʃʰə*
teyye *ute-sel-**ni*** *dʊr-si-ji* *jic-ce*
DIST baby-PL-**3** favor-PROP-INS eat-PST
'Those **babies of her** ate happily (lit. with favor).' (LT05-19)

(4.73) *mun-i* *ʊniː-sal-**mʊn*** *ɔːnti* *sʊliː-ʃi* *ɔː-sɔ* *ki?*
mun-i *ʊnii-sal-**mʊn*** *oondi* *sʊlii-si* *oo-so* *gi?*
1PL.EXCL daughter-PL-**1PL.EXCL** what insane-PROP become-PST Q
'Did **our daughters** become insane?' (LT35-41)

(4.74) *[...]* *axa* *[...]* *əʃi* *mitʰi-ni* *əmmə* *apaː-**tʰi*** *naŋ* *aːʃin*
[...] *axa* *[...]* *esi* *miti-ni* *emme* *abaa-**ti*** *naŋ* *aasin*
elder.brother now 1PL.INCL-GEN mother father-**1PL.INCL** also NEG
ɔː-sɔ
oo-so
become-PST
'Brother, now **our parents** also passed away.' (LT08-13)

(4.75) *[...]* *əri* *nantaːxaŋ* *aja* *ʃimaː-wə* *kʰi* *amar* *əmmə-tə-**ʃun***
[...] *eri* *nandaaxaŋ* *aya* *simee-we* *ki* *amar* *emme-de-**sun***
PROX beautiful good news-DEF.ACC TOP quickly mother-DAT-**2PL**

tʃintʃi-m *puː-ktʰe* *[...]*
jinji-m *buu-gte* *[...]*
tell-CONN.CVB give-HORT
'Let me tell this good news to **your mother** quickly!' (LT28-152)

(4.76) *ənnəkəːŋ* *paraːn* *nisxuŋ* *ʃikkʰul-tʃʰil* *pi-tʃi-tu* *pɔtɔ-kʰi*
ennegeeŋ *baraan* *nisxuŋ* *sikkul-cil* *bi-ji-du* *bodo-ki*
PROX.QLT many small ghost-PL COP-PROG-DAT think-COND.CVB

ə-tu *law* *urə-ni* *ukeː-**nin*** *pi-ʃi-n* *pa* *[...]*
e-du *law* *ure-ni* *ugee-**nin*** *bi-si-n* *ba* *[...]*
PROX-DAT must mountain-GEN nest-**3** COP-AOR-3 TAG
'Thinking about there are such many small ghosts, **their mountain nest** must be here, right?' (LT40-51)

4.1.3.2 Reflexive possession

The possessed nouns marked by reflexive possession indicate that the possessor is co-referential with the subject of the clause. The reflexive possessive does not distinguish between persons; rather, it indicates the singularity and plurality of the possessor. The singular reflexive marker is represented by the suffixes *-wi~-pi*. The plural reflexive marker is indicated by the suffixes *-wAl~-pAl*, as demonstrated in Table 4-6 and the accompanying examples.

Table 4-6: Reflexive possessive suffixes in Solon

	forms	nouns ending with vowels and oral consonants	nouns ending with nasal consonants
REFL.SG	*-wi/-pi*	*ʃirəː-wi* 'one's own desk'	*awʊŋ-pi* 'one's own hat'
REFL.PL	*-wAl/-pAl*	*ʃirəː-wəl* 'their own desk'	*awʊŋ-pal* 'their own hat'

(4.77) *əmun aŋtʃʰin aŋ aŋ-na-sa, [...] nɛːnixin**-pi** ai-xaːn-tʃʰa*
*emun aŋcin aŋ aŋ-na-sa, [...] nɛːnixin**-bi** ai-xaan-ca*
one hunter hunting hunting-VBZ-PST dog-**REFL.SG** follow-CAUS-PST
'A hunter went hunting … and brought **his dog** (lit. let his dog follow him).' (LT12-01)

(4.78) *tʃuː-riː alaːr pʊxa**-wal** im-ʊ-naː-mi kun-kʰəŋ ul-tʃʰə [...]*
*juu-rii alaar bʊxa**-wal** im-ʊ-naa-mi gun-keŋ ul-ce [...]*
two-COLL spotty bull-**REFL.PL** drink-CAUS-AM-1SG SAY-SAY.CVB go-PST
'They two went in order to make **their spotty bull** drink water.' (LT04-03)

When the singular reflexive possessive follows the dative case, they are inflected in the following pattern: 'noun-*tu-wi* (noun-DAT-REFL.SG) → noun-*ti*'. In order to give the clarity of the glossing systems, the declension form *-ti* (-DAT.REFL.SG) is glossed separately as '*-t-i*: -DAT-REFL.SG'.

(4.79) *ʃikkʰul iː-tʃʰi əmə-tʃʰi=l ɔrɔ**-t-i** xulaː-sə [...]*
*sikkul ii-ci eme-ci=l oro**-d-i** xulee-se [...]*
ghost enter-COOR.CVB come-COOR.CVB=PTCL bed-**DAT-REFL.SG** lie-PST
'As soon as the ghost entered (the room), the ghost lay down **on his (own) bed**.' (LT04-36)

4.1.3.3 Alienability

A distinction between inalienable and alienable possession is considered to be cross-linguistically common (Nichols 1988). The Proto-Tungusic language featured an alienable suffix (Nichols 1988: 591-592, and see the list of languages below), typically the cognate form *-ŋ(i)*, to contrast inherently possessed body parts with body parts belonging to a non-inherent possessor; this is used to mark inalienable possessed nouns, typically kinship and body part terms. Examples include Evenki *-ŋi* (I. Nedjalkov 1997:124-125), Negidal *-ŋ(i),* Even *-ŋ(i)* (Novikova 1960: 147-150, cited from Aralova & Pakendorf 2023), Udihe *-ŋi* (Nikolaeva and Tolskaya 2001: 135-141). Oroqen *-ŋi/-ŋɪ* (Cong 2019: 200-201), and Nanai *-ŋgo/-ŋgu* (Avrorin

1959: 160-161, cited from Aralova & Pakendorf 2023). However, Solon has lost the alienable possessive marker.

The following sentences illustrate examples from Evenki and Solon with the same possessed body part noun ‘meat’, which is an inalienable noun. In Evenki, the body part term ‘meat’ is marked by the alienable possessive marker *ng (-ŋ)*, to indicate that the ‘meat’ here is the elk’s meat, not their own meat (4.80). In Solon there is no alienable possessive suffix, although the ‘meat’ is not as a body part of ‘you’ (4.81).

(4.80) **Evenki** (I. Nedjalkov 1997:125, glossing is adapted)

moty	*ulle-ve-n*	*silachi-l-cha-l*	*d’evu-l-le-0*	***ulle-ng**-mer*
elk	meat-ACC-3SG	fry-INCH-PTCP-PL	eat-INCH-NFUT-3PL	**meat-POSS**-REFL

‘They began to fry the meat of the elk, (and) they began to eat **their meat** (which they had fried = the meat of the elk).’

(4.81) **Solon**

əjjə	*sun-i*	***ultə-sun***	*ənt^{h}ə*	*xuŋ*
eyye	*sun-i*	***ulde-sun***	*ente*	*xuŋ*
PROX	2PL.OBL-GEN	**meat-2PL**	NEG	MIR

‘This is not **your meat** (which is the meat of a calf, hanging on the tree)!’

(The context of the sentence: the boy killed his calf and hung its meat on a tree. The magpies saw it, and they were pecking at the meat. Then the boy said this sentence to the magpies) (LT08-37)

4.2 Pronouns

This section provides an overview of pronouns in Solon, including personal pronouns, reflexive pronouns, demonstrative pronouns, interrogative pronouns, and indefinite pronouns.

The following section (§4.2.1) introduces the personal pronouns and their inflectional paradigms, §4.2.2 discusses the intensive-reflexive pronouns, including their use in subject, object, and attributive functions, as well as their reciprocal extensions, §4.2.3 describes the demonstrative pronouns, focusing on their forms, syntactic functions, and derivations, §4.2.4 presents the interrogative pronouns, emphasizing their morphological forms (for their use in

content questions, see §9.2.4). Finally, §4.2.5 analyses the indefinite pronouns, including their interaction with negation.

4.2.1 Personal pronouns

Personal pronouns in Solon replace nominal arguments referring to persons. They inflect for case and number and syntactically occupy argument positions within the clause. In Solon, the personal pronouns are *pi* (1SG), *ʃi* (2SG), *puː* (1PL.EXCL), *mitʰi* (1PL.INCL), and *suː* (2PL). Solon lacks dedicated third-person pronouns. Instead, the distal demonstratives *tʰari*/*tʰajja* and the proximal demonstratives *əri*/*əjjə* function as third-person referential forms, referring to both animate and inanimate entities (see §4.2.3 below).

The oblique stems are required when the personal pronouns are inflected into case. Except for 1PL.INCL *mitʰi*, the oblique forms differ from the nominative forms: they exhibit n-final stems. The case inflection pattern of n-final pronouns parallels that of n-final nouns, which insert an epenthetic vowel when marked with the accusative case. Additionally, in the oblique forms of *pi* (1SG) and *puː* (1PL.EXCL), the initial consonant /p/ changes to /m/, a regular morphophonological alternation in the paradigm.

The personal pronouns and their case inflections in Solon are presented in Table 4-7, followed by examples.

Table 4-7: The personal pronouns and the case inflections in Solon (the forms marked with * are elicited)

	1SG	**2SG**	**1PL.EXCL**	**1PL.INCL**	**2PL**
nominative form	*pi*	*ʃiː*	*puː*	*mitʰi*	*suː*
oblique form	*min-*	*ʃin-*	*mun-*	*mitʰi-*	*sun-*
DEF.ACC	*min-u-wə*	*ʃin-u-wə*	*mun-u-wə*	*mitʰi-wə*	*sun-u-wə*
GEN	*min-iː*	*ʃin-iː*	*mun-iː*	*mitʰi-ni*	*sun-iː*
INS	*min-tʃi*	*ʃin-tʃi*	*mun-tʃi**	*mitʰi-tʃi**	*sun-tʃi**
DAT	*min-tu*	*ʃin-tu*	*mun-tu*	*mitʰi-tu**	*sun-tu*
LOC	*min-tulə*	*ʃin-tulə*	*mun-tulə*	*mitʰi-ləː**	*sun-tulə*
ALL	*min-tʰixi*	*ʃin-tʰixi*	*mun-tʰixi*	*mitʰi-tʰixi**	*sun-tʰixi*
ABL	*min-tuxi*	*ʃin-tuxi*	*mun-tuxi*	*mitʰi-xi**	*sun-tuxi*

(4.82) *[...]* ***pi*** *sʊwilaktʃʰi* *pi-su*
[...] ***bi*** *sʊwilagci* *bi-su*
1SG nurse COP-PST.1SG
'**I** was a nurse.' (LT39-75)

(4.83) *[...]* *ətʰxəŋ* ***min****-u-wə* *ə-ʃi-n* *iː-wuː-r* *[...]*
[...] *etxeŋ* ***min****-u-we* *e-si-n* *ii-wuu-r* *[...]*
old.man **1SG.OBL**-EP-DEF.ACC NEG-AOR-3 enter-CAUS-CONNEG
'My husband doesn't let **me** enter.' (LT33-23)

(4.84) *[...]* ***ʃi*** *ə-tʃi* *ulə-r* ***mun****-tʃi* *təkkə* *pi-xə*
[...] ***si*** *e-ji* *ule-r* ***mun****-ji* *degge* *bi-xe*
2SG NEG-PROH go-CONNEG **1PL.EXCL.OBL**-INS together COP-IMP
'Don't **you** go, stay together with **us**!' (LT19-23)

(4.85) *kə* *əʃi=xuŋ* ***pi*** ***ʃin****-ə-wə* *tʃittʰə-me* *[...]*
ge *esi=xuŋ* ***bi*** ***sin****-e-we* *jitte-me* *[...]*
PTCL now=PTCL **1SG** **2SG.OBL**-EP-DEF.ACC eat-1SG
'Now **I** will eat **you**!' (direct speech from a wolf in a fairytale) (LT10-05)

(4.86) ***puː*** *nataŋ* *axʊːnar* *pi-səː-muŋ*
buu *nadaŋ* *axʊʊnar* *bi-see-muŋ*
1PL.EXCL seven brother.PL COP-PST-1PL.EXCL
'**We** were seven brothers.' (1PL.EXCL: The speaker was talking about his family to the young people.) (LT20-246)

(4.87) *nɔːkʊ* *kʰi* ***mitʰi*** *tʰari* *mɔkɔ-mi* *ul-tʃʰəː-tʰi* *kʰi* *unəŋ*
noogʊ *ki* ***miti*** *tari* *mogo-mi* *ul-cee-ti* *ki* *uneŋ*
old.time TOP **1PL.INCL** DIST suffer-CONN.CVB go-PST-1PL.INCL TOP true
'In the past, **we** were suffering, it was truly…' (1PL.INCL: The speaker is talking about his past life with his friend who went through the same period.) (LT20-125)

(4.88) ***mitʰi**-ni* *tɔː-lɔ* *law* *əmun* *pəjə* *əjjə* *par-wa*
***miti**-ni* *doo-lo* *law* *emun* *beye* *eyye* *bar-wa*
1PL.INCL.OBL-GEN inside-LOC must one human PROX tiger-DEF.ACC

aliː-xaːn-tʃʰa
alii-xaan-ca
be.angry-CAUS-PST
'One of **us** must have made this tiger angry.' (LT41-14)

(4.89) *[...]* ***suː*** *xɔkkʰɔ-tʃi-wal* *sʊnin* *aja* *[...]*
[...] ***suu*** *xokko-ji-wal* *sʊnin* *aya* *[...]*
2PL all-INS-REFL.PL very good
'**You** are all very good.' (LT19-11)

(4.90) *tʰɔːtʃʰi* ***sun**-tu* *saliŋ* *puː-rə-ŋ* *ki*
tooci ***sun**-du* *saliŋ* *buu-re-ŋ* *gi*
DIS.CONN **2PL.OBL**-DAT salary give-AOR-3 Q
'Then do (they) pay **you** a salary?' (LT17-47)

4.2.2 Intensive-reflexive pronouns

The basic form of the intensive-reflexive pronoun in Solon is *məːn*, it shows no number distinction. The function of intensive-reflexive pronouns is to suggest the pronoun alone, not with others, or to emphasize the pronoun.

4.2.2.1 Subject function

When the intensive-reflexive pronoun functions as a subject, it takes the form *məːnkʰəŋ*. This form conveys a meaning of alone, equivalent to 'by oneself', emphasizing autonomous or self-initiated action, that the agent acts independently, without external influence.

(4.91) *xɔkkʰɔ-wə-ni* ***məːnkʰəŋ*** *tʃit-tʃi-tʃʰun* *ki?*
xokko-we-ni ***meenkeŋ*** *jid-ji-cun* *gi?*
all-DEF.ACC-3 **REFL** eat-PROG-2PL Q
'Are **you** eating all (the vegetables) **by yourselves**?' (lit. Are yourselves eating (all the vegetables)?' (LT27-53)

(4.92) *ə-ʃi-n* *ətʰə-r-wə-ni* *kə* *pakʃi-tʰxiː-wal* ***məːŋkʰəːŋ***
e-si-n *ete-r-we-ni* *ge* *bagsi-txii-wal* ***meeŋkeeŋ***
NEG-AOR-3 finish-IPFV.PTCP-DEF.ACC-3 PTCL teacher-ABL-REFL.PL **REFL**
aŋʊː-ra-ŋ
aŋʊʊ-ra-ŋ
ask-AOR-3
'(The students) **themselves** ask their teachers what they can't work out, (instead of the dormitory teachers tell them how to do.)' (LT11-39)

4.2.2.2 Object function

The intensive-reflexive pronoun can also occupy the object position. In typical use, the subject and object refer to the same participant, and the direct object relation is marked by intensive-reflexive possessive suffix (4.93).

(4.93) ***məːn-pi*** *əppuːtʰə-m* *ə-ʃi-n* *ətʰə-r*
meen-bi *ebbuute-m* *e-si-n* *ete-r*
REFL-REFL.SG take.care-CONN.CVB NEG-AOR-3 finish-CONNEG
'(The students) cannot take care of **themselves**.' (LT11-44)

In rare cases, the subject and object refer to different participants, consequently the intensive-reflexive pronoun is not reflexive at all. Such constructions are typically narrative or perspectival, occurring when a speaker adopts the viewpoint of the main character, and the direct object is marked by accusative case. For instance, in example (4.94) the grammatical subject is 'tiger', while the object refers to the protagonist 'boy', reflecting a shift in narrative perspective rather than ungrammaticality. In this context, using the intensive-reflexive pronoun instead of the 3rd person pronoun 'him' is to express the emphases on the direct object.

(4.94) *maːsaːn* *par* ***məːn-pə-ni*** *ʧikkʰ-u-neːː-m* *əmə-ʧi-rə-ŋ*
maasaan *bar* ***meen-be-ni*** *jikk-u-nee-m* *eme-ji-re-ŋ*
soon tiger **REFL-DEF.ACC**-3 ea-EP-AM-CONN.CVB come-PROG-AOR-3
'Soon the tiger is coming to eat **him**.' (LT41-38)

4.2.2.3 Attributive function

In attributive use, the intensive-reflexive pronoun expresses possessive emphasis, corresponding to the meaning 'one's own X'.

(4.95) *jak* *ʃʊkʊitʰʊ-ni* *pəjə* ***məːn-i*** *parikaːta-tʊ-wal*
yag *sʊgʊitʊ-ni* *beye* ***meen-i*** *barigaada-dʊ-wal*
exact.duration GN-GEN human **REFL-GEN** hamlet-DAT-REFL.PL

tʰirə-səː-sun *pa*
tire-see-sun *ba*
press-PST-2PL TAG

'It was exactly (you), the residents of Shuguit, who pressed the bricks for your own hamlet, right?' (LT18-13)

(4.96) *xɔkkʰɔ=l* *naːl-ʧi-wi* *ɔː-ʧi-nti,* *pəjə* ***məːn-i***
xokko=l *naal-ji-wi* *oo-ji-ndi,* *beye* ***meen-i***
all=PTCL hand-INS-REFL.SG make-PROG-2SG person **REFL-GEN**

xusəŋ-ʧi *ɔː-ʧi-nti*
xuseŋ-ji *oo-ji-ndi*
strength-INS make-PROG-2SG[5]

'People are all working with their hands, with **their own** strength (not by any automatic machines).' (LT21-29)

[5] Here the 2SG has a generic meaning, however there is a mismatch in subject agreement, the subject 'person' should take 3rd person subject agreement *-n*, while in the given sentence it was 2SG *-nti*.)

4.2.2.4 Emphasis on the reflexive

When the antecedent is animate, the intensive-reflexive pronoun often combines with the noun *pəjə* 'person, body', forming the construction *məːn-i pəjə* 'REFL-GEN body', literally meaning 'one's own body'. This emphatic form can function as subject (4.97) or object (4.98), but not in attributive position.

(4.97) *əri-wə* *kʰi* *pi* *nan* ***məːn-i*** ***pəjə-ʧi-wi***
eri-we *ki* *bi* *nan* ***meen-i*** ***beye-ji-wi***
PROX-DEF.ACC TOP 1SG also **REFL-GEN** **body-INS-REFL.SG**

ɔː-sɔ [...]
oo-so [...]
make-PST.1SG
'I did this **by myself**.' (lit. I did this by my own body…) (LT39-31)

(4.98) *satti:-ni* *tʰattʰʊ* *pasa* ***məːn-i*** ***pəjə-wi*** *ə-ʧi-rə-ŋ*
saddii-ni *tattʊ* *basa* ***meen-i*** ***beye-wi*** *e-ji-re-ŋ*
old.lady-3 DIST.ADV also **REFL-GEN** **body-REFL.SG** NEG-PROG-AOR-3

itʰxə-r
itxe-r
believe-CONNEG
'The old lady also doesn't believe **herself**.' (lit. The old lady also doesn't believe her own body.) (LT07-15)

4.2.2.5 Reciprocal function

Reciprocal meaning is expressed through reduplication of the intensive-reflexive pronoun, yielding the meaning 'each other'. The case marker follows the reflexive base, and the plural reflexive possessive suffix attaches at the end.

The specific case marking on the reflexive depends on the argument structure of the verb. For example, in (4.99), the verb 'like' selects a dative object; hence, the reflexive pronoun appears in the dative. In (4.100), the reflexive pronoun serves as a direct object and remains

unmarked. In (4.101), the reflexive takes the genitive case, as in the phrase ‘the four people hit each other’s knees’.

(4.99) *tʰɔːtʃʰi* *tʃuːr* *tʃalʊː-sal* ***məːn*** ***məːn-tu-wəl*** *mənəːŋ*
tooci *juur* *jalʊʊ-sal* ***meen*** ***meen-du-wel*** *meneeŋ*
DIS.CONN two young.people-PL **REFL** **REFL-DAT-REFL.PL** very

ajaːwʊ-tʃʰi *ʊnaːtʃi* *pasa* *sʊnin* *altʃi-tʃi-ra-ŋ* *kunəŋ*
ayaawʊ-ci *ʊnaaji* *basa* *sʊnin* *alji-ji-ra-ŋ* *guneŋ*
like-COOR.CVB girl also very be.shy-PROG-AOR-3 hearsay
‘It is said that then the two young people liked **each other** very much, the girl is also very shy.’ (LT35-38)

(4.100) *əjjə* *tikiːŋ* *pəjə* ***məːn*** ***məːn-pəl*** *xumli-lti-səː*
eyye *digiiŋ* *beye* ***meen*** ***meen-bel*** *xumli-ldi-see*
PROX four human **REFL** **REFL-REFL.PL** hug-RECP-PST
‘These four people hug **each other**.’ (EL02-18)

(4.101) *tʰəjjə* *tikiːŋ* *tʃalʊː-sʊl* ***məːn*** ***məː-niː-wil*** *əŋnən-pəl*
teyye *digiiŋ* *jalʊʊ-sʊl* ***meen*** ***mee-nii-wil*** *eŋnen-bel*
DIST four young.man-PL **REFL** **REFL-GEN-REFL.PL** knee-REFL.PL

tʃɔtɔlɔ-mɔ-sɔː
jodolo-mo-soo
hit-RECP-PST
‘Those four young men hit **each other’s knees**.’ (EL03-28)

4.2.3 Demonstrative pronouns

4.2.3.1 Functions

In Solon, demonstrative pronouns function either as attributive modifiers (adnominal) or as independent arguments (pronominal). Semantically, Solon distinguishes two basic demonstratives: proximal (‘this, here’) and distal (‘that, there’). The basic stems are *ə-*

(proximal) and *tʰa-* (distal), both of which allow inflection and derivation, see Table 4-8. Demonstratives inflect for case, and for some cases they take a different allomorph than that found with nouns. For details of the case inflection of demonstratives see §4.1.2.

Table 4-8: The inflection and derivation of demonstrative pronouns

	proximal	**distal**
basic forms	*ə-*	*tʰa-*
pronominal: this/that	*əri, əjjə*	*tʰari, tʰajja*
adnominal: this/that	*əri, əjjə*	*tʰari, tʰajja*
attributive qualitative demonstrative: like this/ like that	*ə-nnəkəːŋ ~ ə-nnəːŋ*	*tʰa-nnakaːŋ ~ tʰa-nnaːŋ*
adverbial qualitative demonstrative: (do) like this/ (do) like that	*ə-ttʰu*	*tʰa-ttʰʊ*

The demonstrative system includes two pairs: *əri*, *tʰari* and *əjjə*, *tʰajja*. Both pairs may function adnominally, modifying nouns, or pronominally, filling argument positions. No clear semantic or functional difference is observed between the two pairs. The examples (4.102-4.103) and (4.104-4.105) illustrate demonstratives modifying nominal heads (for pronominal examples see 4.106-4.107 further below).

(4.102) *kə* ***əri*** ***ʊnatʃi****-ni* *jəːjəː-nin* *kʰi* *awʊ* *kun-kʰəŋ* *pi-sə* *ta*
ge ***eri*** ***ʊnaji****-ni* *yeeyee-nin* *ki* *awʊ* *gun-keŋ* *bi-se* *da*
PTCL **PROX** **girl**-GEN grandfather-3 TOP who SAY-SAY.CVB COP-PST PTCL
'What was the name of **this girl**'s grandfather?' (LT34-23)

(4.103) *tʰɔːtʃʰi=l* ***əjjə*** ***ʊʃir****-wi* *nənuː-tʃʰi=l*
tooci=l ***eyye*** ***ʊsir****-wi* *nenuu-ci=l*
DIS.CONN=PTCL **PROX** **affair**-REFL.SG go.back-COOR.CVB=PTCL
əməktʰiː-t-i *ʧintʃi-sa* *kunən*
emegtii-d-i *jinji-sa* *gunen*
wife-DAT-REFL.SG tell-PST hearsay
'Then, (the boy) told **this affair** to his wife as soon as he went back.' (LT08-55)

(4.104) *əmun* *tʰukə-ku* ***tʰari*** ***uri-tu*** *pi-sə* *[...]*
emun *tuge-gu* ***tari*** ***uri-du*** *bi-se* *[...]*
one winter-ADVZ **DIST** **mountain**-DAT COP-PST
'During the whole winter, (people) were at that mountain.' (LT34-43)

(4.105) ***tʰajja*** ***tʰuːpʰiː-ni*** *sʊnin* *paraːŋ* *tʰuːpʰi* *tʰirə-sə-sun* *xuŋ*
tayya ***tuupii-ni*** *sʊnin* *baraaŋ* *tuupi* *tire-se-sun* *xuŋ*
DIST **brick**-3 very many brick press-PST-2PL MIR
'**Those bricks**, you pressed so many bricks.' (LT18-20)

Both proximal and distal are used pronominally, can independently fill argument positions, referring to both animate (4.106, 4.108) and inanimate entities (4.107, 4.109). When referring to humans, demonstratives effectively serve as third-person pronouns, corresponding to 'he', 'she'.

(4.106) *satiːnin* *na* *ə-ʃi-n* *itʰəxə-r* ***tʰari-ni*** *ukə-wə-ni*
saddii-nin *na* *e-si-n* *itexe-r* ***tari-ni*** *uge-we-ni*
old.lady-3 also NEG-AOR-3 believe-CONNEG **DIST**-GEN word-DEF.ACC-3
'His wife also doesn't believe **his** words.' (LT07-11)

(4.107) *taxin* *sampar-tʊ* *tʃʊra-mi* *pʊː-ra-ŋ* ***tʰajja-wə-ni***
daxin *sambar-dʊ* *jʊra-mi* *bʊʊ-ra-ŋ* ***tayya-we-ni***
again blackboard-DAT write-CONN.CVB give-AOR-3 **DIST**-DEF.ACC-3

puː *xʊːla-tʃʰi* *ka-ta-mʊn*
buu *xʊʊla-ci* *ga-da-mʊn*
1PL.EXCL copy.write-COOR.CVB take-AOR-1PL.EXCL
'Then (the teacher) writes (the notes) on the blackboard, and we write **them** down.' (LT23-20)

(4.108) *[...]* *paraːŋ-sal* *na* ***əri-tu*** *tʊra-ʃi* *kunəŋ*
[...] *baraaŋ-sal* *na* ***eri-du*** *dʊra-si* *guneŋ*
many-PL also **PROX**-DAT favor-PROP hearsay
'It is said that people also like **him**.' (lit. It is said that people also have favor on this.) (LT41-06)

(4.109) ***əri***-*wə* *kʰi* *pi* *nan* *məːn-i* *pəjə-tʃi-wi*
eri-*we* *ki* *bi* *nan* *meen-i* *beye-ji-wi*
PROX-DEF.ACC TOP 1SG and REFL-GEN body-INS-REFL.SG

ɔː-r-tɔli *[...]*
oo-r-doli *[...]*
make-IPFV.PTCP-PROL
'Because I did **this** on my own…' (LT39-31)

Number is generally unmarked, except when referring to human referents, where the plural suffix *-ttʃʰil* may attach, forming expressions such as 'these people, those people, they' (4.110-4.111).

(4.110) *ʃiwuŋ_ʊnaːtʃi* ***tʰa-ttʃʰil***-*tʰxi* *nəttʰə-m* *intʃʰiːr* *pʊka-tʊ* *na*
siwuŋ_ʊnaaji ***ta-ccil***-*txi* *nette-m* *inciir* *bʊga-dʊ* *na*
sun.girl **DIST-PL**-ALL smile-CONN.CVB other place-DAT also

attʰita *pi-tʃi-rə-ŋ* *kʰuŋ* *[...]* *kunə-mi* *[...]*
attida *bi-ji-re-ŋ* *kuŋ* *[...]* *gune-mi* *[...]*
dark COP-PROG-AOR-3 MIR say- CONN.CVB
'The sun girl smiled at **them** and said, "another place is also dark…"…' (LT38-22)

(4.111) *tʰa-ppa-wi* *ɔː-mi* *pu-meː* ***ə-ttʃʰil***-*t-i*
ta-bba-wi *oo-mi* *bu-mee* ***e-ccil***-*d-i*
DIST-DEF.ACC-REFL.SG make-CONN.CVB give-1SG **PROX-PL**-DAT-REFL.SG

ɔː-mi *tʃit-kʰəːn-me*
oo-mi *jid-keen-me*
make-CONN.CVB eat-CAUS-1SG
'I make that (food), making for **them** I feed (them).' (LT23-21)

4.2.3.2 Qualitive demonstratives and adverbial demonstratives

The basic forms of the demonstrative pronouns, proximal *ə-* and distal *tʰa-*, can derive other types of pronouns. Notably, the suffixes *-nnAkAːŋ ~ -nnAːŋ* are used to form attributive qualitative demonstratives, meaning 'like this/like that' (4.112-4.114). Additionally, the suffix *-ttʰu* forms adverbial qualitative demonstratives, meaning '(do) like this/(do) like that' (4.115-4.116), and see Table 4-9.

Table 4-9: Qualitive demonstratives and adverbial demonstratives

	qualitive demonstratives	adverbial demonstratives
proximal *ə-*	*ənnəkəːŋ ~ ənnəːŋ* (PROX.QLT)	*əttʰu* (PROX.ADV)
distal *tʰa-*	*tʰannakaːŋ ~ tʰannaːŋ* (DIST.QLT)	*tʰattʰʊ* (DIST.ADV)

(4.112) ***ənnəkəːŋ*** ***paraːn*** *nisxuŋ* *ʃikkʰul-tʃʰil* *pi-tʃi-r-tu*
ennegeeŋ ***baraan*** *nisxuŋ* *sikkul-cil* *bi-ji-r-du*
PROX.QLT **many** small ghost-PL COP-PROG-IPFV.PTCP-DAT

pɔtɔ-kʰi *ə-tu* *law* *ukeː-nin* *pi-ʃi-n* *pa*
bodo-ki *e-du* *law* *ugee-nin* *bi-si-n* *ba*
think-COND.CVB PROX-DAT must nest-3 COP-AOR-3 TAG

'If thinking about (it), here are **so many** small ghosts, their nest must be here, mustn't it?' (LT40-51)

(4.113) *ʃi* ***tʰannaːŋ*** ***pɔŋkɔŋ*** *turun_aːʃin* *pɔŋkɔŋ* *ʃital-tʃʰi* *pi-kkʰi* *[...]*
si ***tannaaŋ*** ***boŋgoŋ*** *durun_aasin* *boŋgoŋ* *sidal-ci* *bi-kki* *[...]*
2SG **DIST.QLT** **big** very big strength-PROP COP-COND.CVB

'If you have **such big** strength…' (LT01-29)

(4.114) *[...]* *pi* ***tʰannaːŋ*** ***atʃil*** *na* *ɔːr* *tʊra-ʃi*
[...] *bi* ***tannaaŋ*** ***ajil*** *na* *oor* *dʊra-si*
1SG **DIST.QLT** **work** also make-IPFV.PTCP favor-PROP

'I also like doing **that kind of work**. (lit. work like that)' (LT39-22)

(4.115) *puː* *ati* ***ətt^{h}u*** *amtira-tʃi-mun*
buu *adi* ***ettu*** *amdira-ji-mun*
1PL.EXCL several **PROX.ADV** live-PROG-1PL.EXCL
'We several are living **like this**.' (LT25-11)

(4.116) *t^{h}ɔːtʃ^{h}i* *ʃʊkʊit^{h}ʊ-ni* *tʃalʊː-sal-wa* ***t^{h}att^{h}ʊ***
tooci *sʊgʊitʊ-ni* *jalʊʊ-sal-wa* ***tattʊ***
DIS.CONN GN-GEN young.man-PL-DEF.ACC **DIST.ADV**

aŋi-xaːn-mi *atʃil* *ɔː-sɔ*
aŋi-xaan-mi *ajil* *oo-so*
follow-CAUS-CONN.CVB work make-PST
'Then (he) guided Shuiguit's young men **like that** and did works.' (LT18-51)

4.2.3.3 Vague expression

Juxtaposed proximal and distal demonstratives can convey vague expressions. Such as in (4.117), it expresses the unclear part of the clothes. And in (4.118), alongside the vague expression, it expresses general extension.

(4.117) ***əri*** ***t^{h}ari-nin*** *ətuː-tʃi-rə-ŋ* *[...]*
eri ***tari-nin*** *edduu-ji-re-ŋ* *[...]*
PROX **DIST**-3 to.break-PROG-AOR-3
'**This and that part (of the clothes)** is breaking.' (LT39-27)

(4.118) *t^{h}ɔːtʃ^{h}i* *tʃit^{h}ə-r* *jəːmə* ***əri*** ***t^{h}ari*** *jəːmə* *tʃalʊŋ*
tooci *jite-r* *yeeme* ***eri*** ***tari*** *yeeme* *jalʊŋ*
DIS.CONN eat-IPFV.PTCP thing **PROX** **DIST** thing fully

əmu-mi *puː-sə*
emu-mi *buu-se*
bring-CONN.CVB give-PST
'Then (he) fully brought food and **such sorts of things** (to us) (lit. this and that things).' (LT26-14)

4.2.4 Interrogative pronouns

Interrogative pronouns in Solon introduce wh-questions/content questions about persons, objects, locations, time, reasons, quantity, and manner. This section focuses on their forms and morphological composition. For their use in content questions, see §9.2.4.

Table 4-10 below shows the interrogative pronouns in Solon and what type of questions they are used in. The general root of interrogative pronouns appears to be *i-*. For example, *i-* followed by the locative case *i-ləː* means 'where', and with the lexicalized locative and ablative case (the so-called delative case, §4.1.2.6.3) *i-ləːxi*, it means 'from where'. It can also form the adverbial interrogative inquiring about manner *i-ttʰu* 'how (manner)' with the suffix *-ttʰU*, which also derives adverbial qualitative demonstratives (see §4.2.3.2 above). The formant *a-* seems to function as an interrogative root in examples like *a-wʊː* 'who', *aː-l* 'when', and *a-ti* 'how many'. However, these forms are not productive.

Table 4-10: The interrogative pronouns in Solon

interrogative pronouns	meanings	questions
iləːxi	from where	'Where are you from?'
antʰi	how (degree)	'How fast is the car?'
ati	how many (<10)	'How many people are there?'
ɔːxi	how many	'How many apples you have?'
ittʰu	how (manner)	'How do you make a cheese?'
ʊxʊn	what (pronominal)	'What was there?'
ɔːnti	what (adnominal)	'What kind of food do you like?'
aːl	when	'When did it happen?'
iləː	where (goal, location)	'Where do you go?' 'Where do you live?'
ijjə	which	'Which person should go?'
awʊː	who	'Who was there?'
jɔːtɔːŋ	why	'Why are you late?'
imaːn kʰəŋ	why	'Why are you late?'

Solon has two interrogative pronouns that both correspond to English ‘how many’: *ati* and *ɔ:xi*. The two forms differ in the scale of quantity they typically target. *ati* is used to inquire about relatively small numbers, generally fewer than ten (4.119a), whereas *ɔ:xi* is employed for larger quantities (4.119b). In addition to its interrogative function, *ati* can also serve as a quantifier meaning ‘several’ (4.119b). When *ɔ:xi* used in quantity questions, may optionally be followed by *para:n* ‘many’ (4.120).

(4.119) a. *su:* ***ati*** *axʊ:-nar* *pi-sə:-suŋ* *kʰə ?*
suu ***adi*** *axʊʊ-nar* *bi-see-suŋ* *ke ?*
2PL **how.many** brother-PL COP-PST-2PL PTCL
‘**How many** brothers were you?’(LT20-245)

b. - ***ɔ:xi*** *tʰu:pʰi* *tʰir-sə?*
ooxi *tuupi* *tir-se?*
how.many brick press-PST
‘**How many** bricks did people press?’ (LT18-61)

- *[…]* ***ati*** *tʰuməŋ.*
[…] ***adi*** *tumeŋ.*
several ten.thousand
‘Tens of thousands.’ (LT18-62)

(4.120) ***ɔ:xi*** ***para:n*** *tʃalʊ:-sal?*
ooxi ***baraan*** *jalʊʊ-sal?*
How.many **many** young.man-PL
‘**How many** young men?’ (LT18-03)

Solon distinguishes between two different pronouns for ‘what’. The pronoun *ɷxɔn* is used for filling an argument slot in the sentence (4.121-4.122). The pronoun *ɔ:nti* is used to inquire about precising a given noun, more precise translation should be ‘what kind of’ (4.123-4.124). Interestingly the two ‘what’ lexemes in Solon have different pragmatic uses: *ɷxɔn*, the

interrogative used to inquire about an argument, is used as a filler, and *ɔːnti*, the interrogative for inquiring about the type of something is used in rhetorical questions (§9.2.5.2)[6] .

(4.121) *ʃi* ***ʊxʊn*** *ɔː-tʃʰi* *pi-ʃi-nti* *mə?*
si ***ʊxʊn*** *oo-ci* *bi-si-ndi* *me?*
2SG **what** make-COOR.CVB COP-AOR-2SG PTCL
'**What** are you doing?' (LT07-21)

(4.122) ***ʊxʊn-tʃi*** *xati-tʃʰaː-sʊn* *xiːna-ja?*
ʊxʊn-ji *xadi-caa-sʊn* *xiina-ya?*
what-INS cut(grass)-PST-2PL hay-PTV
'**What** did you use for cutting hay?' (lit. With what did you cut hay?) (LT17-15)

(4.123) *[...]* ***ɔːnti*** *xitʃʰəːl_tʰurəl-t-i* *xamkiːn* *aja* *sarkai?*
[...] ***oondi*** *xiceel_turel-d-i* *xamgiin* *aya* *sargai?*
what subject-DAT-REFL.SG most good PN
'**What** subject is Sargai best at? (LT11-112)

(4.124) ***ɔːnti*** *uŋkə-ʃi* *poːs* *tʰaːn-tʃi-nti?*
oondi *uŋge-si* *bөөs* *taan-ji-ndi?*
what color-PROP cloth pull-PROG-2SG
'**What color** of cloth are you hanging?' (LT27-12)

Two interrogative forms express the meaning 'why': *jɔːtɔːŋ* and *iːmaːn kʰəːŋ*. The semantic distinction between them remains unclear. Both are rare in the Solon corpus (5 tokens each), and elicitation data show no consistent contrast. The *kʰəŋ* in the second form may derive historically from the say verb converb *-kʰəŋ* to express a purposive meaning 'for what = why', while the origin of *iːmaːn* is unclear.

[6] Linguistically this is not a rare phenomenon; for example, in Tagalog (Austronesian) the interrogative word *ano* 'what' has rich non-interrogative but pragmatic functions, including expressing rhetorical questions and placeholders (Nagaya 2022). The difference lies in the distribution of functions: whereas Tagalog employs a single interrogative form for both functions, Solon has grammaticalized two distinct 'what' pronouns, each specialized for a different pragmatic use: fillers and marker of rhetorical questions.

(4.125) *[...]* *min-u-wə* ***jɔːtɔːŋ*** *əri* *atʃil-waja*
[...] *min-u-we* ***yoodooŋ*** *eri* *ajil-waya*
1SG.OBL-EP-DEF.ACC **why** PROX work-DEF.ACC.1SG

xaːlaː-xaːn-a-ŋ *jum* *[...]*
xaalaa-xaan-a-ŋ *yum* *[...]*
move-CAUS-AOR-3 PTCL
'**Why** make me change this job?' (LT39-119)

(4.126) *[...]* *saːtʃike,* *ʃi* ***iːmaːn_kʰəːŋ*** *sɔŋ-tʃi-nte?* *[...]*
[...] *saajige,* *si* ***iimaan_keeŋ*** *soŋ-ji-nde?* *[...]*
magpie 2SG **why** cry-PROG-2SG
'Magpie, **why** are you crying?' (LT01-22)

Below are the examples of the other interrogative pronouns: *antʰi* 'how (degree)' (4.127), *awʊ* 'who' (4.128), *aːl* 'when' (4.129), *iləː* 'where (location)' (4.130) and 'where (goal) (4.131), *iləːxi* 'from where' (4.132), *ijjə* 'which' (4.133), , *ittʰu* 'how (manner)' (4.134).

(4.127) *[...]* *atʃil-ʃi* ***antʰi*** *jaːrʊ* *pi-tʃi-rə-ŋ?*
[...] *ajil-si* ***anti*** *yaarʊ* *bi-ji-re-ŋ?*
work-2SG **how** busy COP-PROG-AOR-3
'How busy is your work?' (LT27-01)

(4.128) *əʃkʰi* *ʃin-tu* ***awʊː-ni*** *ʃin-tu* *ʃilpaː-m* *pʊː-sa*
eski *sin-du* ***awʊʊ-ni*** *sin-du* *silbaa-m* *bʊʊ-sa*
otherwise 2SG.OBL-DAT **who**-3 2SG.OBL-DAT teach-CONN.CVB give-PST

jəm *[...]*
yem *[...]*
DECT.PTCL
'Otherwise, **who** taught you?' (LT01-46)

(4.129) *[...]* *ʃi* ***aːl*** *min-tʃi* *xʊtaː-ja* *ɔː-nti* *[...]*
[...] *si* ***aal*** *min-ji* *xʊdaa-ya* *oo-ndi* *[...]*
2SG **when** 1SG.OBL-INS wedding-PTV make-2SG
'**When** will you marry me?' (LT19-38)

(4.130) *Talaŋ* *kun-tʃʰəː=ʃi* ***iləː*** *pi-ʃi-n*
Dalaŋ *gun-cee=si* ***ilee*** *bi-si-n*
GN SAY-PFV.PTCP=2SG **where** COP-AOR-3
'**Where** is the place called Dalang?'(LT20-198)

(4.131) *əʃi* ***ilə*** *ul-tʃʰə* *tʰari* *pəjə*
esi ***ile*** *ul-ce* *tari* *beye*
now **where** go-PST DIST human
'**Where** did that person go now?' (LT18-91)

(4.132) *tʰajja-ni* *uru-wə-ni* ***ilə:xi*** *əmuː-tʃi-nti*
tayya-ni *uru-we-ni* ***ileexi*** *emuu-ji-ndi*
DIST-GEN seed-DEF.ACC-3 **from.where** bring-PROG-2SG
'**(From) where** are you bringing the seeds of those (plants)?' (LT27-59)

(4.133) ***ijjə-ni*** *ʃin-iː* *nɔnɔː-ʃe*
iyye-ni *sin-ii* *nonoo-se*
which-3 2SG.OBL-GEN elder.brother-2SG
'**Which one** is your elder brother?'(EL01-41)

(4.134) *əxur* ***ittʰu*** *məːrəː-rə-ŋ* *kʰə*
exur ***ittu*** *meeree-re-ŋ* *ke*
cow **how** moo-AOR-3 PTCL
'**How** do cows moo?' (LT01-65)

4.2.5 Indefinite pronouns

It is a common phenomenon in languages across the world that indefinite pronouns are based on interrogative pronouns (Haspelmath 1996:26). This is the case in Tungusic languages, the indefinite pronouns are derived from interrogative pronouns with particles. The main two particles in Northern Tungusic languages to mark the indefinite pronouns are *=wal* and *=dA* (Aralova & Pakendorf 2020). However, these two particles are not found in Solon, instead, indefinite pronouns are formed by combining interrogative bases with the emphatic particle *=xatʰa~=kʰatʰa*. These constructions yield free choice indefinite meanings such as 'anything, everything, everyone', etc (4.135-4.136).

(4.135) *sulə:=jə* *a:ʃin* ***ʊxʊn=xatʰa*** *ɔ:-mi*
sulee=ye *aasin* ***ʊxʊn=xata*** *oo-mi*
free.time=PTV NEG.EXIS **what=PTCL** make-1SG
'I don't have free time, I do **everything**.' (LT21-23)

(4.136) *əʃi-tʰi* *ərin* *kʰi* *pəjə* ***ʊxʊn=kʰətʰə*** *tʰitʰə-rə-ŋ*
esi-ti *erin* *ki* *beye* ***ʊxʊn=kete*** *tite-re-ŋ*
now-ADJZ time TOP human **what=PTCL** wear-AOR-3
'Nowadays, people wear **everything**.' (LT29-32)

When these combinations occur with negative verbs, they express negative indefinites, meaning 'nothing', nobody', etc (4.137-4.138), also see in negation section §9.1.3. While other emphatic particles can occasionally produce similar readings (4.138), *=xatʰa~=kʰatʰa* are the primary means for forming indefinite pronouns in Solon.

(4.137) *[...]* ***awʊ=xatʰa*** *xɔrikla-m* ***ə-ʃi-n*** *ətʰə-r* *[...]*
[...] ***awʊ=xata*** *xorigla-m* ***e-si-n*** *ete-r* *[...]*
who=PTCL stop-CONN.CVB **NEG**-AOR-3 can-CONNEG
'**Nobody** can stop (me).' (LT19-25)

(4.138) *əm-kʰəːŋ kə untʃʰirəː-tʃʰi* ***ʊxʊn=kʰɔ=l*** ***ə-ʃi-n*** *ɔː-r*

em-keeŋ ge unciree-ci ***ʊxʊn=ko=l*** ***e-si-n*** *oo-r*

one-INTS PTCL be.alone-COOR.CVB **what=PTCL=PTCL NEG**-AOR-3 make-CONNEG

'(The boy) was alone, and he doesn't do **anything**.' (LT41-37)

The other semantic types of indefinite pronouns are not explicitly found in Solon. For instance, the specific indefinite is unmarked in Solon, see (4.139) below. It is translated as specific indefinite known to the speaker 'someone', but literal translation should be 'a person'.

(4.139) *[...] pi məːn-tu-wi tʰɔː-sɔ* ***pəjə-ʃi*** *ɔː-sʊ [...]*

[...] bi meen-du-wi too-so ***beye-si*** *oo-sʊ [...]*

1SG REFL-DAT-REFL.SG like-PFV.PTCP **person**-PROP become-PST.1SG

'I already have **someone** I like.' (lit. I had **a person** whom I liked.) (LT19-11)

4.3 Numerals

Numerals serve to express quantity, order, and grouping. In Solon, they indicate cardinality (§4.3.1), ordinality (§4.3.2), distributivity (§4.3.3), collectivity (§4.3.4), iterativity (§4.3.5), and approximation (§4.3.6), primarily through morphological processes; these different types of numerals will be discussed in this section separately. Solon lacks a dedicated restrictive numeral suffix; the evaluative suffix of adjectives *-xAːn* can convey a restrictive meaning by attaching to a numeral (§4.4.3).

4.3.1 Cardinals

Solon has a decimal numeral system with a mix of unique lexical forms and systematic derivation, see (4.140).

(4.140)

0 tʰək	*12 tʃaːn tʃuːr*	*60 nuŋŋeː*
1 əmun	*13 tʃaːn ilan*	*70 nataŋŋeː*
2 tʃuːr	*…*	*80 tʃaxʊŋŋeː*
3 ilan	*20 ʊrin*	*90 jəkiŋŋeː*
4 tikiŋ	*…*	*100 namaːtʃi*
5 tʰʊŋ	*24 ʊrin tikiŋ*	*200 tʃuːr namaːtʃi*
6 niŋŋʊŋ	*25 ʊrin tʰʊŋ*	*700 nataŋ namaːtʃi*
7 nataŋ	*…*	*1,000 miŋkan*
8 tʃaxʊn	*30 kʊtʰin*	*2,000 tʃuːr miŋkan*
9 jəkin	*40 təxi*	*…*
10 tʃaːn	*50 tʰʊŋŋeː*	*10,000 tʰumən*
11 tʃaːn əmun		

Numbers 0–10 have distinct words, the number 0 *tʰək* is borrowed from Mongolian. Multiples of ten show variation: 20, 30, and 40 have unique forms, while the decades 50 - 90 are derived by adding the suffix *-ŋeː* on the root of the single digits (e.g., *tʰʊŋ* '5' > *tʰuŋ-ŋeː* '50'; a minor exception is the alternation of /i/ to /u/ in 60 '*nuŋŋeː*' < *niŋŋʊŋ* 'six'). The tens with units 11-19, 21-29, 31-39, and so on are formed additively. Hundreds are formed multiplicatively. Larger numbers, including 1,000 and 10,000 have unique forms, likely borrowed from Mongolian.

4.3.2 Ordinals

Ordinal numerals in Solon are derived from cardinal numerals using the suffixes *-xi(n)* (4.141-4.142) and *-tUkAr* (4.143-4.144), with the latter borrowed from Mongolian. The borrowed suffix *-tUkAr* is used more frequently than the *-xi(n)* suffix. In the Solon corpus the *-tUkAr* suffix is used 28 times, the *-xi(n)* suffix is used only 4 times.

(4.141) *axa aja-xan ki kuŋ-kʰəːŋ* ***ilaːn-xin*** *ʊta aŋʊː-(r)-tʊ-ni [...]*
axa aya-xan gi guŋ-keeŋ ***ilaan-xin*** *ʊda aŋʊʊ-(r)-dʊ-ni [...]*
elder.brother good-INTS Q say-SAY.CVB **three-ORD** time ask-IPFV.PTCP-DAT-3
''Brother, are you good?' when (the ghost) asked the **third** time…' (LT40-14)

(4.142) ***nuŋŋeː*** ***ʧuː-xi*** *pʊxʊl-wi* *əmmu-sə*
nuŋŋee ***juu-xi*** *bʊxʊl-wi* *emmu-se*
sixty **two-ORD** bull-REFL.SG bring-PST
'He brought the **sixty-second** bull.' (elicited)

(4.143) *niŋŋʊŋ-**tʊkar*** *ʧuː-tu* *iː-xə!*
*niŋŋʊŋ-**dʊgar*** *juu-du* *ii-xe!*
six-**ORD** house-DAT enter-IMP
'Enter the **sixth** house!' (elicited)

(4.144) *tʰɔkkʰi* ***ʧuːr-tukər*** *inək-ni* *ɔː-sɔː* *tʰuːkə* *pasa=l*
tokki ***juur-duger*** *ineg-ni* *oo-soo* *tuuge* *basa=l*
DIS.CONN **two-ORD** day-3 become-PST wolf again=PTCL

juː-ʧʰi *ul-ʧʰə* *kunəŋ*
yuu-ci *ul-ce* *guneŋ*
go.out-COOR.CVB go-PST hearsay
'It is said that then it became the next day (lit**.** the **second** day), the wolf went out again.' (LT28-84)

Additionally, Solon employs the suffix *-ʃi*, which is specifically restricted to ranking in sports competitions (4.145), this suffix appears to be of Solon origin.

(4.145) *min-iː* *mʊrin* ***ila-ʃi*** *iː-sə*
min-ii *mʊrin* ***ila-si*** *ii-se*
1SG.OBL-GEN horse **three-ORD** enter-PST
'My horse came **third (in the race).**' (elicited)

4.3.3 Collective

Collective numerals in Solon are derived from cardinal numerals with the suffix *-iː~eː*. They can function as either the subject (4.146) or a non-subject argument (4.147). According to my consultants, the collective suffixe *-iː~eː* is not used with numbers higher than ten.

(4.146)

nɔːkʊ	*əmun*	*satti*	*ukkʰəxəŋ-tʃi*	*xuxin-tʃi*	***ilan-iː***
noogʊ	*emun*	*saddi*	*ukkexeŋ-ji*	*xuxin-ji*	***ilan-ii***
old.time	one	old.lady	son-INS	daughter.in.law-INS	**three-COLL**

emtar-tʃi-ra-ŋ *kunəŋ*
emdar-ji-ra-ŋ *guneŋ*
live-PROG-AOR-3 hearsay

'It is said that once upon a time an old lady together with her son and daughter-in-law, **they three** were living together.' (LT03-02)

(4.147)

pakʃi	*mitʰi*	***tʃuːr-iː*-wə**	*əːr-tʃi-rə-ŋ*
bagsi	*miti*	***juur-ii*-we**	*eer-ji-re-ŋ*
teacher	1PL.INCL	**two-COLL**-DEF.ACC	look.for-PROG-AOR-3

'The teacher is calling **the two of us'** (elicited)

When a collective interpretation is required for higher numerals, Solon instead employs the reflexive plural possessive suffix marked by the instrumental case, *-tʃi-wəl* '-INS-REFL.PL' (4.148). This sequence is sometimes phonologically reduced to *-tʃUːl* '-INS.REFL.PL'. The form *-tʃUːl* also conveys collectivity when it co-occurs with quantifiers (4.149). A comparable strategy is found in Even (Pakendorf p.c.), where the instrumental reflexive plural is likewise used to express collectivity in subject position; in Even this form co-occurs with the collective suffix *-(n)I* (4.150).

(4.148)

kʊtʰin	***təxi-tʃi-wəl***	*kəppə-j*	*ɔː-sɔ-mun*
gʊtin	***dexi-ji-wel***	*gebbe-y*	*oo-so-mun*
thirty	**forty-INS-REFL.PL**	work-PTV	do-PST-1PL.EXCL

'Thirty or forty of us did works.' (elicited)

(4.149) *tɔlpɔ pəjə* ***para:n-tʃɵl*** *xɔkkʰɔ a:ʃin-tʃʰa:-tʰxi* *ama-ʃxi [...]*
dolbo beye ***baraan-jɵl*** *xokko aasin-caa-txi* *ama-sxi [...]*
night person **many-COLL** all sleep-PFV.PTCP-ABL back-ADV.ALL
'During the night, after people **all** of the many people slept…' (LT35-47)

(4.150) Lamunkhin Even (Pakendorf field data, glossing adapted)
tar ***dʒo:r-i-dʒur*** *ta-dụ* *teg-e-t-če-r […]*
DIST **two-COLL-INS.REFL.PL** DIST-DAT sit.down-EP-RES-PFV.PTCP-3PL
'The **two of them** lived there.' (Alekseeva_RD_shatun_006)

Additionally, Solon has *tʃu:ŋsə* 'both', which originates from *tʃu:r* 'two' (4.151). The *tʃu:ŋsə* 'both' can co-occur with *tʃu:r-i:* 'two-COLL', in this case it emphasizes the collective meaning (4.152).

(4.151) *tʃu:r urəl-tʃʰi tʰajja=ʃi* ***tʃu:ŋsə*** *ja:pa*
juur urel-ci tayya=si ***juuŋse*** *yaaba*
two child-PROP DIST=2SG **both** mute
'He has two children; they are **both** mute.' (LT18-46)

(4.152) *tʃu:r-i* ***tʃu:ŋsə*** *əmun-tu […]* *pɔŋkɔŋ_tʰaskʊ-ta* *i:-sə*
juur-i ***juuŋse*** *emun-du […]* *boŋgoŋ_tasgʊ-da* *ii-se*
two-COLL **both** one-DAT university-DAT enter-PST
'They two **both** entered university.' (LT39-129)

4.3.4 Distributive

Distributive numerals in Solon are formed by adding the suffix *-tʰAl* to the cardinal numerals. However, this suffix did not appear in my corpus; the following elicited data is based on Hu & Chaoke's description (1986: 43-44).

(4.153) *tʰari* *ʃatʰan-pi* *uril-tu* ***jəji-tʰəl*** *puː-tʃʰə*
tari *satan-bi* *uril-du* ***yeyi-tel*** *buu-ce*
DIST candy-REFL.SG child-DAT **nine-DISTR** give-PST
'He gave **each** child nine of his candies.' (Hu & Chaoke 1986:44, transcription, translation, and glossing adapted)

(4.154) *kuːnʃə-tʰixi* *əmun* *uriləŋ-tʰixi* ***namaːtʃi-tʰal*** *jɔːn* *ʊrʊː-sa*
guunse-tixi *emun* *urileŋ-tixi* ***namaaji-tal*** *yoon* *ʊrʊʊ-sa*
hamlet-ABL one house-ABL **hundred-DISTR** Chinese.yuan charge-PST
'The hamlet goverment charged 100 Chinese yuan from **each** household.' (elicited)

4.3.5 Iterative

The iterative suffix *-rAː* in Solon indicates the number of times an action has been performed (4.155) and can be used with quantifiers *ati* 'several' (4.156). However, this suffix occurs rarely in the Solon corpus. Instead, the iterative meaning is more frequently expressed by a construction that combines an ordinal number with the noun *ʊta* 'time', see example (4.141) above. The noun *ʊta* 'time' is borrowed from Mongolian; this analytical construction should be a result of language contact.

(4.155) *pi* *pəːtʃiŋ-tu* ***ila-ra*** *ninə-tʃʰu*
bi *beejiŋ-du* ***ila-ra*** *nine-cu*
1SG Beijing-DAT **three-ITER** go-PST.1SG
'I went to Beijing **three times.**' (elicited)

(4.156) *[...]* *nattʰi* *əmun* *xɔltʃʰin-pa* *xurtʰələ* ***atiː-ra*** *tʃawa-tʃi-ra-ŋ*
[...] *natti* *emun* *xolcin-ba* *xurtele* ***adii-ra*** *jawa-ji-ra-ŋ*
really one reed-DEF.ACC even **several-ITER** catch-PROG-AOR-3
'(When building the yurt,) it really takes several times to craft a single reed (wall).' (LT22-37)

4.3.6 Approximative

Approximation in Solon is expressed by juxtaposing two adjacent cardinal numerals. According to my consultant, this method is limited to smaller numbers, specifically those below 100 (4.157). The approximate use of numeral juxtaposition is lacking in the Solon corpus; the examples are elicited. Approximations with numbers larger than 100 are derived with the suffix *-tAxAjA*, which expresses a meaning of 'almost, not quite the number' (4.158). The example is elicited, since this suffix does not occur in the corpus.

(4.157)

mun-iː	*ʧuː-tu*	***tʰʊŋ***	***niŋŋuŋ***	*pəjə*	*əm-sə*
mun-ii	*juu-du*	***tʊŋ***	***niŋŋuŋ***	*beye*	*em-se*
1PL.EXCL-GEN	house-DAT	**five**	**six**	person	come-PST

'**Five or six** people came to our house.' (elicited)

(4.158) *a.* *namaːʧi**-taxaja***
*namaaji**-daxaya***
hundred-**APRX**
'**Almost** hundred' (elicited)

b. *miŋka**-taxaja***
*miŋga**-daxaya***
thousand-**APRX**
'**Almost** thousand' (elicited)

4.4 Adjectives

The function and properties of an adjective class vary widely across languages. Adjectives can exhibit properties similar to those of verbs, nouns, both, or neither (Dixon 2009: 112-114). In Solon, adjectives share properties and functions with nouns, as they can fill argument slots in certain contexts. Despite these similarities, there are specific criteria to distinguish adjectives from nouns in Solon: (1) Adjectives and nouns can act as attributive modifiers in a noun phrase. However, adjectives can serve this role in their bare form, while nouns typically require the genitive case. (2) Adjectives and nouns can take case and personal markers. Nevertheless, when adjectives function as arguments, they are often considered headless noun phrases, indicating that the head noun of the attribute noun is omitted.

This section describes the Solon adjective system in terms of its syntactic functions (§4.4.1), degree marking (§4.4.2), and evaluative (§4.4.3).

4.4.1 Functions

Adjectives in Solon function syntactically as attributive modifiers (4.159), predicates (4.160), and arguments (4.161). When adjectives serve as arguments, they represent elliptical constructions, in which the head noun of the attributive phrase is omitted and the adjective stands for the entire noun phrase.

(4.159) ***niʃxuŋ*** *ʊnaːtʃi* ‘**little** girl’
nisxuŋ *ʊnaaji*

nʊnʊm *ikki* ‘**long** tail’
nʊnʊm *iggi*

namatti *inək* ‘**warm** days’
namaddi *ineg*

(4.160) *tʰari* *ujə-ni* *xuŋ* *amitʊral* ***manti***
tari *uye-ni* *xuŋ* *amidʊral* ***mandi***
DIST period-GEN MIR life **difficult**
'The life in that period is **difficult**.' (LT20-92)

(4.161) *tʃʊka* *pikkʰi* *xɔkkʰɔ=l* *pətʃik* *saixa* *tʰajja* *əmun* ***əru*** ***xara***
jʊga *bikki* *xokko=l* *bejig* *saixa* *tayya* *emun* ***eru*** ***xara***
summer TOP all=PTCL PN shoes DIST one **bad** **black**
'When it is summer, (people) all (wear) bejig shoes, that **poor black (shoes)** (lit. bad black)**.**' (LT29-28)

In several Tungusic languages, such as Standard Evenki (I. Nedjalkov 1997: 277) and Bystraja Even (Pakendorf & Aralova 2020: 300) adjectives in attributive position agree with their head nouns in case and number (4.162). In contrast, Solon lacks such agreement entirely (4.163).

(4.162) Standard Evenki (I. Nedjalkov 1997 : 277)
mit *aja-**l-du*** *omakta-**l-du*** *d'u-**l-du*** *bi-d'ere-t*
1PL good-**PL-DAT** new-**PL-DAT** house-**PL-DAT** be-PRS-1PL.INCL
'We live **in good new houses**.'

(4.163) Solon
a. ***ʊlariŋ*** *tʰuːpʰiː-**wə*** *tʰattʰʊ* *ɔː-r* *pəjə*
ʊlariŋ *tuupii-**we*** *tattʊ* *oo-r* *beye*
red brick-**DEF.ACC** DIST.ADV do-IPFV.PTCP human
'(We are) the people who make **the red bricks** like that.' (LT18-33)

b. ***kɔtti*** *tʃalʊː-**sal-wə*** *kəːləː-tʃi-me.*
goddi *jalʊʊ-**sal-we*** *geelee-ji-me.*
tall young.man-**PL-DEF.ACC** search-PROG-1SG
'I am looking for **tall young men**.' (elicited)

4.4.2 Degree

4.4.2.1 Comparative degree

An unmarked adjective expresses a comparative degree in comparative constructions, with the standard of comparison is marked by ablative case (4.164).

(4.164)

[...]	*ur_xataːr-sal*	*nʊkkʊ-**tʰxiː**=tʰ*	*nisxuŋ*	*ʃirtʰə-**tʰxiː**=tʰ*	*narikkʰʊŋ*
[...]	*ur_xadaar-sal*	*nʊggʊ-**txii**=t*	*nisxuŋ*	*sirte-**txii**=t*	*narikkʊŋ*
	mountain-PL	fist-**ABL**=PTCL	small	thread-**ABL**=PTCL	thin

pi-sə *kunəŋ*
bi-se *guneŋ*
COP-PST hearsay
'The **mountains** were smaller than the fist, thinner than the thread.' (LT42-02)

An adverb *kəŋ* 'more.CN', borrowed from Chinese '更' can be involved in the comparative constructions to modify the adjectives (4.165). The native Tungusic adverb *ulxə* 'more' can also serve this function, although it occurs in elicited data (4.166). This is a calque borrowed from Chinese, because Tungusic languages tend to leave the adjectives unmarked or take a comparative suffix *(-tmAr/-dymAr* in Evenki) (Pakendorf 2007a:204).

(4.165)

nɔːkʰʊː-tʰiː-tʃi-wi	*ul-kʰi*	***kəŋ***	*kɔjɔ*	*kuŋ-kʰəŋ*
nookʊʊ-tii-ji-wi	*ul-ki*	***geŋ***	*goyo*	*guŋ-keŋ*
old.time-ADJZ-INS-REFL.SG	go-COND.CVB	**more.CN**	beautiful	SAY-SAY.CVB

pɔtɔː-wʊ-tʃi-rɔ-ŋ
bodoo-wʊ-ji-ro-ŋ
think-PASS-PROG-AOR-3
'It makes me think (lit. it was thought to me) that living the way of old days is **more** beautiful.' (LT22-45)

(4.166) *min-iː* *tʰəkkəttʃʰi-wi* *tʰəjjə-tʰixi* ***ulxə*** *nɔkɔŋ*
min-ii *teggecci-wi* *teyye-tixi* ***ulxe*** *nogoŋ*
1SG.OBL-GEN cloth-1SG DIST-ABL **more** green
'My cloth is **greener** than his.' (elicited)

4.4.2.2 Superlative degree

The superlative degree is expressed analytically using the adverb *xamkiːn* 'the.most.MN' modifying the adjectives. This form is borrowed from Mongolian and is analyzable as *xamk-iːn* 'most-GEN'. An identical construction is found in Mongolian, as illustrated by *qamuɣ-un kündü* [*xamak-iːn xunt*] 'the heaviest' (Chinggeltei 1991: 197).

(4.167) ***xamkiːn*** *nisxun* *nəxun-pi* *tʃuː-kʰəːn* *paːr-tʃʰi* *[...]*
xamgiin *nisxun* *nexun-bi* *juu-keen* *baar-ci* *[...]*
most.MN small younger.brother-1SG two-ATT age-PROP
'My **smallest** brother was only 2 years old.' (LT39-04)

(4.168) *[...]* *ɔːnti* *xitʃʰəːl_tʰurəl-t-i* ***xamkiːn*** *aja* *sarkai*
[...] *oondi* *xiceel_turel-d-i* ***xamgiin*** *aya* *sargai*
what subject-DAT-REFL.SG **most.MN** good PN
'What subject is Sargai **best** at? (LT11-112)

4.4.3 Evaluative

Previous studies have noted that adjective reduplication can express intensification in Solon (Hu & Chaoke 1986: 40-42). However, no instances of intensive reduplication were found in the present corpus. Instead, evaluative meanings on adjectives in Solon are expressed by derivational suffixes. Two such suffixes are attested: the suffix *-xAːn*, which is associated with intensification, and the suffix *-sAlA*, which expresses attenuation.

4.4.3.1 Intensifier(?) *-xAːn*

The suffix *-xAːn* is widespread across the Tungusic and Mongolic languages, with cognates such as *-kAn*/*-kʰAːn*/*-xAːn*/*-xAŋ*. It occurs in the Northern Tungusic languages Evenki, Oroqen, Negidal, Even and the Southern Tungusic languages Udihe, Nanai, Oroč, Orok and Manchu (Whaley & Li 1998, Gorelova 2002: 155-156, Palendorf 2017:146, Pakendorf and Krivoshapkina 2014: 325-327, Cong 2019: 78-80). Cognate forms are also found in several Mongolic languages, including in Mongolian (Inner Mongolian variety) (Chinggeltei 1991:186-187), Khalkha Mongolian (Janhunen 2012a:119), Dagur (Zhong 1982:45-46), and Bao'an (Li 2002: 135-136).

In many Tungusic languages, *-xAːn / -kʰAːn* serves as both intensifier and attenuative, depending on the adjective's position on the semantic scale (Whaley & Li 1998; Pakendorf & Krivoshapkina 2014; Pakendorf 2017: 146–150): When attached to adjectives denoting high-scale properties (e.g., 'big', 'strong'), it often lowers the degree, resulting in attenuation; When attached to adjectives at the lower end of the scale (e.g., 'small', 'weak'), it intensifies the property.

In Solon, *-xAːn* attaches not only to adjectives but also to numerals, quantifiers, and qualitative demonstratives, but not occur with nouns. The suffix appears 27 times in the corpus, a frequency that is insufficient to conclusively determine its evaluative function. Elicited data suggest that *-xAːn* in Solon generally conveys intensification regardless of the adjective's position on the semantic scale. However, given the difficulty of eliciting subtle evaluative contrasts, this conclusion remains tentative and requires further confirmation.

(4.169)

aja-tʰi	*ərin-tu*	*əmun*	*əmu-kkʰəːŋ*	*ulə-r*	***jatʊː-xaːn***
aya-ti	*erin-du*	*emun*	*emu-kkeeŋ*	*ule-r*	***yadʊʊ-xaan***
old.time-ADJZ	time-DAT	one	one-INTS	go-IPFV.PTCP	**poor-INTS**

ukkʰəːxəːŋ	*pi-sə*	*kunəŋ*
ukkeexeeŋ	*bi-se*	*guneŋ*
boy	COP-PST	hearsay

'Once upon a time, there was a **very poor** boy who lived alone.' (LT35-02)

(4.170) *əmun inək ʃiwuŋ ʊnaːtʃi nan* ***ɔriː-xɔːŋ*** *əmkiː-səː-tu-ni [...]*
emun ineg siwuŋ ʊnaaji nan ***orii-xooŋ*** *emgii-see-du-ni [...]*
one day sun girl also **late-INTS** come.back-PFV.PTCP-DAT-3
'One day, when the sun girl also came back **very late**...' (LT38-25)

When attached to numerals (4.171), quantifiers (4.172), or qualitative demonstratives (4.173), *-xAːn / -kʰAːn* expresses a restrictive meaning, roughly equivalent to 'only' or 'just'. In certain contexts, it may also encode the speaker's affective nuance, such as compassion or empathy, as illustrated in (4.171) and in (4.169) above.

(4.171) *xamkiːn nisxun nəxun-pi* ***tʃuː-kʰəːn*** *paːr-tʃʰi əmməː-tʰxiː-wi*
xamgiin nisxun nexun-bi ***juu-keen*** *baar-ci emmee-txii-wi*
most small younger.brother-1SG **two-INTS** age-PROP mother-ABL-REFL.SG

tʊtʰ-sa
dut-sa
be.left-PST
'My smallest younger brother was left behind with his mother when he was **only two years** old.' (LT39-04)

(4.172) ***ati-kʰan*** *jɔːn-ni maimai-tʊ ɔː-tʃʰi*
adi-kan *yoon-ni maimai-dʊ oo-ci*
several-INTS Chinese.yuan-GEN transaction-DAT do-COOR.CVB

əmki-tʃi-nti
come.back-PROG-2SG
'You are coming back with doing **only several** Chinese yuan's transactions.' (LT29-104)

(4.173) | | | | | | |
|---|---|---|---|---|---|
| ***ʊrin*** | ***ati-kʰaːn*** | *uriːləŋ* | *pi-sə-mun* | *xʊita* | *katʃʰa-tʊ* |
| ***ʊrin*** | ***adi-kaan*** | *uriileŋ* | *bi-se-mun* | *xʊida* | *gaca-dʊ* |
| **twenty** | **several-INTS** | household | COP-PST-1PL.EXCL | GN | hamlet-DAT |

mitʰi	***tʰannaː-xan***	*uriːləŋ*	*pi-sə-tʰi*	*xuŋ*
miti	***tannaa-xan***	*uriileŋ*	*bi-se-ti*	*xuŋ*
1PL.INCL	**DIST.QLT-INTS**	household	COP-PST-1PL.INCL[7]	MIR

'We were **only twenty-something** households, at Huida hamlet, we are **only that number** of households.' (LT34-20)

4.4.3.2 Attenuative suffix *-sAlA*

The attenuative suffix *-sAlA / -ʃAlA* is attested only twice in the corpus, both with *kɔr* 'far', but speakers confirm that it is frequently used in daily speech and is productive. It can attach to both native and borrowed adjectives, as in *xutʃʰir-sələ* 'rather difficult' (lit. 'difficult-ATT'). This suggests that *-sAlA* potentially remains an active attenuative marker in Solon.

(4.174) | | | | | | | |
|---|---|---|---|---|---|---|
| *ɔsxɔːŋ* | *koxotʰ-nəː-təli* | *ətʰxəːŋ-nin* | *tʃuː-tʰxi* | ***kɔr-sɔlɔ*** | *ul-tʃʰə* | *kunəŋ* |
| *osxooŋ* | *gɵxɵt-nee-deli* | *etxeeŋ-ninjuu-txi* | | ***gor-solo*** | *ul-ce* | *guneŋ* |
| fish | hook-AM-SIM.CVB | old.man-3 | house-ABL | **far-ATT** | go-PST | hearsay |

'When going fishing, the old man went **rather far** from home.' (LT07-04)

4.5 Derivation of nouns and adjectives

4.5.1 Derivation of nouns

The Solon corpus exhibits only a very limited set of productive nominal derivational suffixes. Only three suffixes are attested as deriving new nouns: *-lak, -ʃin,* and *-ʃil,* as summarized in Table 4-11.

[7] Speech error: the speaker first used 1PL.EXCL, then changed to 1PL.INCL.

Table 4-11: Derivation of nouns

suffix	direction of derivation	comments
-lak	verb -> noun	Derives a noun that is the result of a verb (4.175).
-ʃin	noun -> noun	Derives a person noun that works for a job related to the original noun (4.176).
-ʃil	noun -> noun	It only attaches to seasonal nouns to form a noun expressing 'seasonal pasture' (4.177).

(4.175) *tʃintʃi-* 'tell' -> *tʃintʃi-**lak*** 'what one says = instructions'
jinji- -> *jinji-**lag***

tʰatʰi- 'study' -> *tʰatʰi-**lak*** 'what one studies'
tati- -> *tati-**lag***

(4.176) *xʊni* 'sheep' -> *xʊni-**ʃin*** 'sheep herder'
xʊni -> *xʊni-**sin***

ixə 'pot' -> *ixə-**ʃin*** 'chef'
ixe -> *ixe-**sin***

(4.177) *tʃʊka* 'summer' -> *tʃʊk-**ʃil*** 'summer pasture'
jʊga -> *jʊg-**sil***

nəkkʰi 'spring' -> *nəkkʰi-**ʃil*** 'spring pasture'
nekki -> *nekki-**sil***

4.5.2 Derivation of adjectives

Adjectives in Solon can be derived from both nouns and verbs. A set of derivational suffixes is attested and described in Table 4-12.

Table 4-12: Derivation of adjectives

suffix	direction of derivation	comments
-ʃi~-tʃʰi	noun -> adjective	This is proprietive suffix, and it derives adjectives which have the property of the base noun (4.178).
-kU	noun -> adjective	It only attaches to relational nouns and derives adjectives to modify the spatial relation of the head nouns. (4.179).
-tʰi	noun -> adjective	Derives temporal adjectives, it commonly occurs to express something in the past, or something of nowadays (4.180).
-xi	verb -> adjective	Derives adjectives which have the property of verbs (4.181).

(4.178) *xɔr* 'poison' -> *xɔr**-ʃi*** 'poisonous/toxic'
xor -> *xor**-si***

ʊxa 'wit' -> *ʊxa**-ʃi*** 'smart'
ʊxa -> *ʊxa**-si***

atʰaː 'jealousy' -> *atʰaː**-ʃi*** 'jealous'
ataa -> *ataa**-si***

(4.179) *tʃul* 'front' -> *tʃul**-ku*** 'front (door, house…)'
jul -> *jul**-gu***

ukiː 'up' -> *ukiː**-ku*** 'upper (body, layers…)'
ugii -> *ugii**-gu***

	paraŋ ‘right’	->	*paraŋ-**kʊ***	‘right (hand, gate…)’	
	baraŋ	->	*baraŋ-**gʊ***		
(4.180)	*nɔːkʊ* ‘past’	->	*nɔːkʊ-**tʰi***	*ərin*	‘old time’
	noogʊ	->	*noogʊ-**ti***	*erin*	
	əʃiː ‘now’	->	*əʃiː-**tʰi***	*ərin*	‘present time’
	esii	->	*esii-**ti***		
	niʃxuŋ ‘small’	->	*niʃxuŋ-**tʰi***	*ərin*	‘childhood time’
	nisxuŋ	->	*nisxuŋ-**ti***	*erin*	
(4.181)	*ɔmmɔ-* ‘forget’	->	*ɔmmɔ-**xi***	‘forgetful’	
	ommo-	->	*ommo-**xi***		
	tʃəmuːŋ- ‘be hungry’	->	*tʃəmuːŋ-**xi***	‘hungry’	
	jemuuŋ-	->	*jemuuŋ-**xi***		

5 Noun Phrase

A noun phrase (NP) consists of a noun as its head, together with any associated determiners, adjectives, or other modifiers, and functions to fill an argument position in the clause. As in other Transeurasian languages (Dryer 2007b: 101-102), noun phrases in Solon are head-final.

Following Dryer (2007a: 151-205), noun phrases in Solon can be divided into two major types based on the nature of the modifiers of the head noun. First, simple modifiers (§5.1) contain only single-word modifiers. Second, complex noun phrases (§5.2) involve structurally more elaborate modifiers, including possessive noun phrases, postpositional phrases, adnominal clauses. Conjoined noun phrases are discussed in §5.3. Finally, §5.4 addresses headless noun phrases, in which the nominal head is not overtly expressed.

5.1 Simple modifiers

Simple noun phrases consist of a head noun accompanied by a basic modifier expressed by a single word. Depending on the type of modifier involved, simple noun phrases may include demonstratives (§5.1.1), numerals (§5.1.2), adjectives and nouns (§5.1.3), quantifiers (§5.1.4), indefinite determiners (§5.1.5) and interrogative pronouns (§5.1.6). Each subtype is discussed in turn below.

The use of nouns as modifiers of other nouns is relatively rare in Solon. When nominal modification does occur, the modifying noun typically bears genitive case marking. Such constructions are therefore treated as with a complex modifier (§5.2.1).

5.1.1 Demonstratives

Solon has a two-term demonstrative system distinguishing proximal *əjjə/əri* and distal *tʰajja/tʰari* forms. These demonstrative modifiers are formally identical to demonstrative pronouns (§4.2.3). Demonstratives are deictic elements primarily used for spatial deixis, indicating the position of a referent relative to the speech situation in order to direct the hearer's attention to that referent. This use is referred to as exophoric (Dryer 1989: 94–95).

Demonstratives with a primarily exophoric function can also be extended to anaphoric uses in discourse (Diessel 1999: 96).

(5.1) *[…]* ***əjjə*** *par* *pasa* *əm-sə* *kunəŋ.*
[…] ***eyye*** *bar* *basa* *em-se* *guneŋ.*
PROX tiger again come-PST hearsay
'The next morning, (the boy) went out and saw, **this** tiger came again.' (LT41-66)

(5.2) *kə* ***əri*** *ʊnatʃi-ni* *jəːjəː-nin* *kʰi* *awʊ* *kun=kʰəŋ* *pi-sə* *ta.*
ge ***eri*** *ʊnaji-ni* *yeeyee-nin* *ki* *awʊ* *gun=keŋ* *bi-se* *da.*
PTCL **PROX** girl-GEN grandfather-3 TOP who SAY-SAY.CVB COP-PST PTCL
'What was the name of **this girl**'s grandfather?' (LT34-23)

(5.3) ***tʰajja*** *tʰuːpʰiː-ni* *sʊnin* *paraːŋ* *tʰuːpʰi* *tʰirə-sə-sun* *xuŋ.*
tayya *tuupii-ni* *sʊnin* *baraaŋ* *tuupi* *tire-se-sun* *xuŋ.*
DIST brick-3 very many brick press-PST-2PL MIR
'**Those bricks**, you pressed so many bricks.' (LT18-20)

(5.4) ***tʰari*** *nisxuŋ* *xara* *xəːxəː-ʃi* *pi-ʃi-n* *ki?*
tari *nisxuŋ* *xara* *xeexee-si* *bi-si-n* *gi?*
DIST small black cat-2SG COP-AOR-3 Q
'Is your **that small black cat** there?' (LT27-26)

In addition to their deictic function, demonstratives in Solon also serve an article role by marking nominal referentiality and encoding pragmatic definiteness. However, demonstratives cannot be analyzed as definite articles, as the range of definiteness they encode differs from that of true definite articles. This distinction is summarized in Table 5-1. The crucial difference lies in the ability of definite articles to mark semantic definiteness, including abstract situational and associative anaphoric reference, which demonstratives lack (Becker 2021: 108-115).

Table 5-1: The functional domain of demonstratives and definite articles (Himmelmann 1997:191)

	referential function	demonstratives	definite article
pragmatic definiteness	situational	+	+
	discourse deictic	+	+
	anaphoric	+	+
	anamnestic[8]	+	+
semantic definiteness	abstract situational	-	+
	associative anaphoric	-	+

5.1.2 Numerals

Two types of numerals can modify nouns in Solon: cardinal numerals and ordinal numerals. Cardinal numerals indicate the quantity of the referent, while ordinal numerals identify a referent by its position within an ordered set (5.5-5.6). Ordinal numerals are derived from cardinal numerals by means of the native suffix *-xi(n)* (5.7) as well as the Mongolian-derived suffix *-tUkAr* (5.8) (§4.3.2).

(5.5) *taxin* ***tiki:ŋ*** *pəltir-ni* *əkkə-ʃixi* *nʊkʊr-tʰa:n* *pi-ʃi-n* *[...]*
daxin ***digiiŋ*** *beldir-ni* *egge-sixi* *nʊgʊr-taan* *bi-si-n* *[...]*
again **four** legs-3 bottom-ADV.ALL bend-PFV.CVB COP-AOR-3
'Then the (mother goat's) **four legs** are bent downward.' (LT15-13)

(5.6) *tʰɔ:tʃʰi* *sa:tʃiki* *əʃi* ***ilan*** *ʊmtʰ-i* *pu:sə* *[...]*
tooci *saajigi* *esi* ***ilan*** *ʊmt-i* *buuse* *[...]*
DIS.CONN magpie now **three** egg-REFL.SG give-PST
'Then the magpie gave her **three eggs**…' (LT01-20)

[8] The 'Anamnestic' corresponds recognitional referent and establishing referent (Becker 2021:98, 110). Recognitional referent is identifiable based on the experience or knowledge previously shard by the speaker (What happen to **the** cat we used to have?), the establishing referent is marked as identifiable and thus constructed as such (Did you hear **the** news? They are going to close the museum) (Becker 2021:98).

(5.7) ***nuŋŋeː*** ***ʧuː-xi*** *pʊxʊl-wi* *əmmu-sə*
nuŋŋee ***juu-xi*** *bʊxʊl-wi* *emmu-se*
sixty **two-ORD** bull-REFL.SG bring-PST
'He brought the **sixty-second** bull.' (elicited)

(5.8) ***ilan-tʊkar*** *inək-ni* *pas* *tʰuːkə* *aːʃin* *ərin-tu-ni* *tʰajja* *ʧalʊː*
ilan-dʊgar *ineg-ni* *bas* *tuug* *aasin* *erin-du-ni* *tayya* *jalʊʊ*
three-ORD day-3 also wolf NEG.EXIS time-DAT-3 DIST young.man

pasa=l *əm-sə* *kunəŋ.*
basa=l *em-se* *guneŋ.*
also=PTCL come-PST hearsay
'On the third day, the young man came again during the wolf's absence.' (LT28-94)

5.1.3 Adjectives

One of the core functions of adjectives in Solon is to modify nouns within a noun phrase (5.9-5.10). When used as nominal modifiers, adjectives precede the head noun and do not agree with it in either case or number (5.11).

(5.9) *[...]* *ʧuː-tu-sun* *əmun* ***amitʊ*** *pʊkkʰʊŋ* *pi-ʃi-n [...]*
[...] *juu-du-sun* *emun* ***amidʊ*** *bʊkkʊŋ* *bi-si-n [...]*
house-DAT-2PL one **alive** buddha COP-AOR-3
'There is a **living buddha** in your house.' (LT03-12)

(5.10) *tʰajja* *pəjə* ***ɔttʰɔk*** *pɔkɔ-tʊ* *miːsan-ta-ki*
tayya *beye* ***ottog*** *bogo-dʊ* *miisan-da-gi*
DIST human **empty** ground-DAT gun-VBZ-DUR.CVB

miːsan-ta-ki *ʧəmu-wi* *xɔkʰ* *maːn-ʧʰi* *nəː-səː*
miisan-da-gi *jemu-wi* *xok* *maan-ci* *nee-see*
gun-VBZ-DUR.CVB bullet-REFL.SG all run.out-COOR.CVB put-PST
'That person kept shooting at the **empty ground**, and he ran out of all his bullets.' (LT12-07)

(5.11) ***kɔtti*** *tʃalɔː-sal-wə* *kəːləː-tʃi-me.*
goddi *jalʊʊ-sal-we* *geelee-ji-me.*
tall young.man-PL-DEF.ACC search-PROG-1SG
'I am looking for **tall young men**.' (elicited)

5.1.4 Quantifiers

Quantifiers express the amount or quantity of the referent denoted by the noun. In Solon, quantifiers such as *ati* 'several' (5.12) and *paraːn* 'many' (5.13) can modify nouns directly and provide information about the number or extent of the referent.

(5.12) *min-tu* ***paraːn*** *altʰan* *mukun* *əmuː-m* *puː-sə* *[...]*
min-du ***baraan*** *altan* *mugun* *emuu-m* *buu-se* *[...]*
1SG.OBL-DAT **many** gold silver bring-CONN.CVB give-PST
'(The swallow) brought me much gold and silver…' (LT02-19)

(5.13) *xasxaŋ* *pəjə-ni* *aːʃin,* ***ati*** *xɔnɔr* *ɔː-tʃʰi=l*
xasxaŋ *beye-ni* *aasin,* ***adi*** *xonor* *oo-ci=l*
puppy body-3 NEG.EXIS **several** day become-COOR.CVB=PTCL

əmun *uli-rə-ŋ.*
emun *uli-re-ŋ.*
one go-AOR-3
'The puppy is gone, leaves once **a few** days.' (LT27-43)

5.1.5 Indefinite determiners

Solon also employs a small set of modifiers with more miscellaneous or relational meanings that function similarly to quantifiers in noun phrases, although they do not strictly encode quantity. These include *intʃʰiːr* 'another' (5.14), *ontʰo ~ əntʰə* 'other' (5.15).

(5.14) *[...]* ***intʃʰiːr*** *pʊka-tʊ* *na* *attʰi-ta* *pi-tʃi-rə-ŋ* *kʰuŋ* *[...]*
[...] ***inciir*** *bʊga-dʊ* *na* *atti-da* *bi-ji-re-ŋ* *kuŋ* *[...]*
another place-DAT also dark-DAT COP-PROG-AOR-3 MIR
'**Another** place is also dark.' (LT38-22)

(5.15) *tʰajja* *xʊnin* *naŋ* *ʊtʃiki-tʊ* ***əntʰə*** *pəjə-tu* *ʃiltʃi-sə.*
tayya *xʊnin* *naŋ* *ʊjigi-dʊ* ***ente*** *beye-du* *silji-se.*
DIST sheep also afterwards-DAT **other** people-DAT move-PST
'Those sheep also went to **other** people afterwards.' (LT30-11)

5.1.6 Interrogatives

Interrogative words can also function as modifiers within noun phrases in Solon. In this usage, they precede the head noun and specify different types of information about the referent. This type of noun phrases include such as: *ɔːnti* X 'what sort of X', ijjə X 'which X', *ati* X 'how many X'.

(5.16) *[...]* ***ɔːnti*** *xitʃʰəːl_tʰurəl-t-i* *xamkiːn* *aja* *sarkai?*
[...] ***oondi*** *xiceel_turel-d-i* *xamgiin* *aya* *sargai?*
what subject-DAT-REFL.SG most good PN
'**What subject** is Sargai best at? (LT11-112)

(5.17) *suː* ***ati*** *axʊː-nar* *pi-səː-suŋ* *kʰə?*
suu ***adi*** *axʊʊ-nar* *bi-see-suŋ* *ke?*
2PL **how.many** brother-PL COP-PST-2PL PTCL
'**How many** brothers were you?'(LT20-245)

'Whose' in Solon is expressed by *awʊː-ni* 'who-GEN', such as *awʊː-ni awʊŋ* 'who-GEN hat' whose hat'. As a genitive case is involved, it is not considered as simple modifier, should be possessive noun phrase (§5.2.1).

5.2 Complex modifiers

Complex noun phrases in Solon involve modifiers that are structurally more elaborate than single-word modifiers. These include possessive noun phrases (§5.2.1), postpositional phrases (§5.2.2) and adnominal clauses (§5.2.3).

5.2.1 Possessive noun phrase

Prototypical possessive noun phrases denote an exclusive and asymmetric long-term relationship between a possessor and a possessed entity, with the possessor typically being an individual human being (Taylor 1989: 202-203). In Solon, possessive noun phrases are realized through two structural types. The predominant construction is the genitive noun phrase, while a proprietive construction is attested only rarely. This primarily on the genitive noun phrase, given its overwhelming frequency in the corpus.

In the **genitive noun phrase**, the possessor is marked with the genitive case, and the possessed noun may optionally take a personal possessive suffix. In extremely rare cases, the possessor appears without genitive marking and remains in the nominative case (§5.2.1.2.2).

(5.18) genitive noun phrase:
*patʰʊ**-ni*** *mʊri(-ni)*
*batʊ**-ni*** *mʊri(-ni)*
PN-**GEN** horse(-3)
'Batu's horse'

The **proprietive noun phrase**, by contrast, marks the possessed entity with the proprietive case and places it before the possessor. This construction does not occur many in Solon corpus (5.19-5.20) and is more commonly found in derivational contexts, where it forms adjectival or adverbial modifiers with the meaning 'with X' (5.21) (§4.5.2 and §7.1.2). Given its marginal status, the proprietive noun phrase is not included in the subsequent discussion of possessive noun phrase constructions.

(5.19) *əmkəːl* *xatal**-ʃi*** *mɔrin*
emgeel *xadal**-si*** *morin*
saddle horse.bit-**PROP** horse
'a/the horse with saddle and horse bit' (LT28-52)

(5.20) *məːŋkʰəːŋ* *kun-ə-r* *əmun* *pəkkiː**-ʃi*** *aŋtʃʰin* *pi-sə* *kunəŋ*
meeŋkeeŋ *gun-e-r* *emun* *beggii**-si*** *aŋcin* *bi-se* *guneŋ*
PN SAY-EP-IPFV.PTCP one name-**PROP** hunter COP-PST hearsay
'It is said that there is a hunter called Meenkeng **(**lit. **a hunter with a name called Meenkeng**.' (LT40-02)

(5.21) Proprietive possessive PNP -> adjective derivation
*xɔr**-ʃi*** *mɔkɔi*
*xor**-si*** *mogoi*
poison-**PROP** snake
'a/the poisonous snake. (lit. snake with poison)' (LT02-31)

5.2.1.1 Semantic relationships of possessive noun phrase

5.2.1.1.1 Ownership, kinship and body-part relations

The semantic range of possessive noun phrases in Solon extends well beyond prototypical possession. At the core of possessive constructions are relations of ownership (5.22), kinship (5.23), and body-part (5.24), all of which instantiate the prototypical exclusive and asymmetric relationship between a human possessor and a possessed entity.

(5.22) *[...]* *min**-i*** *mɔrin**-pi*** *xɔjɔr* *iː-sə*
[...] *min**-i*** *mɔrin**-bi*** *xoyor* *ii-se*
1SG.OBL-**GEN** horse-**1SG** two enter-PST
'**My horse** arrived (lit. entered) the second.'(LT09-37)

(5.23) *min-**i*** *axa* *kʰi* *axin* *pikkʰi*
*min-**i*** *axa* *ki* *axin* *bikki*
1SG.OBL-**GEN** elder.brother TOP elder.brother TOP

lɔtʃipʊ *kun-ə-r* *pəjə*
lojibʊ *gun-e-r* *beye*
PN SAY-EP-IPFV.PTCP people

'**My elder brother** is called Lojibu' (lit. My elder brother… is a person who called by Lojibu.) (LT34-28)

(5.24) *tʃuːr* *ʊniːsal-**niː**-n* *naːl-tʊ-**ni*** *xɔkkʰɔ* *səːtʃʰi* *pʊtʊ-naː-sa*
juur *ʊniisal-**nii**-n* *naal-dʊ-**ni*** *xokko* *seeci* *bʊdʊ-naa-sa*
two daughter.PL-**GEN**-3 hand-DAT-**3** all blood paint-AM-PST
'(The boy) went to paint the blood on their **two daughters' hands**.' (LT35-47)

5.2.1.1.2 Part-whole, temporal and locational relations

The range of meanings associated with PNPs is much broader than the possessive (Dryer 2007a: 178). A large portion of which hardly have anything to do with possession in the strict sense. Koptjevskaja-Tamm (2001: 964) considers the basic asymmetry between prototypical possessors and possessed noun is often efficiently employed in discourse for identifying the referent of a nominal via its relation to the referent of the possessor, including not only the ownership, kinship, or body part, but also the relations that are not possessive in the strict sense could be classified as referent relations, for example the part-whole relations (5.25), temporal (5.26) and local relations (5.27).

(5.25) *pi* *[...]* *ikki-**niː**-wi* *tʊlin-pa-**ni*** *muːtu*
bi *[...]* *iggi-**nii**-wi* *dʊlin-ba-**ni*** *muu-du*
1SG tail-**GEN**-REFL.SG half-DEF.ACC-**3** water-DAT

iː-wuː-tʃʰi *aːsan-tʃe*
enter-CAUS-COOR.CVB sleep-PST.MN
'I put the **half of my tail** into water and sleep.' (LT06-06)

(5.26) *[...]* *tʰari* *ərin-**ni*** *atʃil* *pasa=l* *xuntu* *pi-sə* *ta.*
[...] *tari* *erin-**ni*** *ajil* *basa=l* *xundu* *bi-se* *da.*
DIST time-**GEN** work also=PTCL heavy COP-PST PTCL
'**The work at that time** (lit. that time's work) was also heavy.' (LT22-10)

(5.27) *xutəː-**ni*** *ʊlʊr* *paraːn,* *xɔkkʰɔ* *xutəː-**ni*** *ʊlʊr.*
*xudee-**ni*** *ʊlʊr* *baraan,* *xokko* *xudee-**ni*** *ʊlʊr.*
countryside-**GEN** people many all countryside-**GEN** people
'There are many **countryside people**, they are all **countryside people**.' (LT11-130)

In addition, the spatial relations of two entities are expressed by PNP constructions, considering for spatial relations the possessor also provides a referent to the relational nouns, the spatial relations can also be considered as PNPs (5.28).

(5.28) *tʰɔːtʃʰi* *alaːr* *pʊxa-**niː**-nin* *ɔrɔːn-tʊ-**ni*** *əmun* *saːtʃiki*
tooci *alaar* *bʊxa-**nii**-nin* *oroon-dʊ-**ni*** *emun* *saajigi*
DIS.CONN spotty bull-**GEN**-3 above-DAT-**3** one magpie

tɔːn-tʃʰɔ *kunəŋ*
doon-co *guneŋ*
(bird)sit-PST hearsay
'It is said that then a magpie sat **on** their **spotty bull** (lit. spotty bull's top)' (LT04-04)

5.2.1.1.3 Material and purpose relations

In addition to referent-identifying relations, possessive noun phrases may also serve a characterizing function, which are widely attested cross-linguistically (Koptjevskaja-Tamm 2001: 964). In particular in Solon, the relations of material (5.29) and purpose (5.30) are attested.

(5.29) *[...]* *tʰari* *ʧəkərəːŋ-**ni*** *ultə-wə-**ni*** *ʃila-m*
[...] *tari* *jegereeŋ-**ni*** *ulde-we-**ni*** *sila-m*
DIST deer-**GEN** meat-DEF.ACC-**3** roast-CONN.CVB

ʧitʰ-ʧi-sə *kunəŋ*
jit-ji-se *guneŋ*
eat-PROG-PST hearsay
'It is said that he was roasting and eating that **deer meat**.' (LT40-08)

(5.30) - *ʊxʊn-ʧi* *xati-ʧʰaː-sʊn* *xiːna-ja?*
ʊxʊn-ji *xadi-caa-sʊn* *xiina-ya?*
what-INS cut(grass)-PST-2PL hay-PTV
'What did you used for cutting hay?' (LT17-15)

- *xiːna-**ni*** *tʰaraːtʰʊr.*
*xiina-**ni*** *taraatʊr.*
hay-**GEN** tractor
'(By) a **hay tractor** (lit. a tractor used for cutting hay)' (LT17-16)

In these cases, possessive construction does not primarily identify the referent of the head noun but instead specifies inherent properties such as what an object is made of or what it is used for.

5.2.1.2 Marker of possessive noun phrase

5.2.1.2.1 Dependent-marking and double marking

Possessive noun phrases in Solon exhibit either dependent marking or double marking. In dependent-marking constructions, the possessor is marked by the genitive case (5.31). In double-marking constructions, both constituents are morphologically marked: the possessor bears the genitive case, and the possessed noun is marked with a personal possessive suffix that indexes the possessor (5.32).

(5.31) Dependent-marking

*min-**i*** *xʊrkaːn*

*min-**i*** *xʊrgaan*

1SG.OBL-**GEN** fence

'my fence'

(5.32) Double-marking

*ɔmmɔ-**ni*** *əmmə-**ni***

*ommo-**ni*** *emme-**ni***

PN-**GEN** mother-**3**

'Ommo's mother'

The distribution of dependent-marking versus double-marking possessive noun phrases varies across different semantic types of possessive relations. The preferences observed for each relation type are summarized in Table 5-2. As shown there, body-part relations strongly favor double-marking constructions. In contrast, spatial, kinship, ownership, and part-whole relations show intermediate preferences, allowing both dependent-marking and double-marking patterns. Material, locational, temporal, and purpose relations do not occur with double-marking constructions.

Table 5-2 The frequency of double-marking PNPs in different semantic relations in Solon, in descending order of frequency (reduced corpus)

semantic relations of PNPs	frequency of double-marking PNP	choice between dependent or double marking PNPs
body parts	93.8% (15/16)	double-marking
spatial	64.5% (40/62)	intermediate
kinship	63.0% (17/27)	
ownership	55.8% (57/102)	
part-whole relations	35.3% (6/17)	
materials	0.0% (0/19)	dependent-marking
purpose	0.0% (0/36)	
local	0.0% (0/48)	
temporal	0.0% (0/8)	

For those relations that show an intermediate preference between dependent-marking and double-marking possessive noun phrases, no clear semantic distinction can be identified between the two constructions. In narrative texts, the choice between dependent-marking and double-marking appears to be largely free. This is illustrated in example (5.33), where sentences (5.33a) and (5.33b) are taken from the same narrative text and two sentences are adjacent, and both express the ownership relation 'X's enclosure'. However, in (5.33a), the possessive noun phrase is marked through dependent marking, whereas in (5.33b) it is expressed through double marking. The alternation between these two constructions in one discourse context suggests that potentially no systematic semantic difference is associated with the choice of possessive marking in such cases.

(5.33) a. *[...] axin-**ni**ː-nin xʊrkaːn-ta ikkuː-sə atsʊŋ [...]*
*[...] axin-**nii**-nin xʊrgaan-da igguu-se adsʊŋ [...]*
elder.brother-**GEN**-3 fence-DAT maintain-PFV.PTCP live.stock
'The stocks which were maintained in **the elder brother's fence**.' (LT08-24)

b. *[...] əmun tʰʊsxaːn-nin nəxu-**niː**-nin xʊrkaːn-ta-**ni***
*[...] emun tʊsxaan-nin nexu-**nii**-nin xʊrgaan-da-**ni***
one calf-3 younger.brother-**GEN**-3 fence-DAT-**3**

iː-nəː-sə kunəŋ
ii-nee-se guneŋ
enter-AM-PST hearsay
'It is said that one calf entered **the younger brother's fence**.' (LT08-25)

Personal possessive markers have been widely argued to encode definiteness, particularly in Uralic and Semitic languages, as well as in Turkish (Becker 2021: 118–119). A similar function of personal possessive suffixes to mark definiteness is also attested in Solon, especially in third-person forms. In (5.34), the third-person possessive does not express possession; instead, it provides definiteness to 'next year'.

(5.34) *taxi* *əmə-r* *ani-**nin*** *pasa=l* *əm-sə* *kunəŋ* *[...]*
daxi *eme-r* *ani-**nin*** *basa=l* *em-se* *guneŋ* *[...]*
again come-IPFV.PTCP year-**3** again=PTCL come-PST hearsay
'Then **the next year** (lit. the coming year), (the swallow) came again.' (LT02-28)

When the third-person possessive suffixes mark definiteness rather than possession, it is crucial to distinguish this use from genuine double-marking possessive noun phrases. In compiling Table 5-2, care has been taken to avoid ambiguity between possessive marking and definiteness marking. In particular, for semantic relations that strongly favor dependent marking, any possessive suffix attached to the possessed noun functions exclusively as a definiteness marker rather than as part of a double-marking possessive construction. For example, in (5.35), the possessive noun phrase expresses a locational relation in which 'house' serves as a spatial referent for 'owner'. In this case, the third-person possessive suffix attached to 'owner' does not participate in the possessive relation itself but instead marks the definiteness of the referent 'the owner'. Similarly, for example (5.36), which establishes a material relation, the possessive suffix on 'santaloupe tree' does not encode possession, as the material 'santaloupe' cannot possess a 'tree', instead the person marker signals definite referentiality.

(5.35) *ʧuː-**niː**-nin* *əʧin-**ni*** *mun-tuːlə* *xəːxəː* *pi-ʃi-n.*
*juu-**nii**-nin* *ejin-**ni*** *mun-duule* *xeexee* *bi-si-n.*
house-**GEN**-3 owner-**3** 1PL.EXCL.OBL-LOC cat COP-AOR-3
'**The householder (lit. owner of the house)** (said) 'we have cat.'' (LT35-18)
(NOT: a/the house owns an owner)

(5.36) *tʰɔːʧʰi* *ultʰə-**ni*** *mɔː-tʊ-**ni*** *lɔxɔ-sɔ [...]*
toɔci *ulte-**ni*** *moo-dʊ-**ni*** *loxo-so [...]*
DIS.CONN santaloupe-**GEN** tree-DAT-**3** hang-PST
'Then (the boy) hung the meat on **the santaloup tree**.' (LT08-45)
(NOT: a/the sataloupe owns a tree)

5.2.1.2.2 Genitive versus nominative possessor

In the vast majority of cases, the possessor in Solon PNP is marked by the genitive case. Possessors marked with the nominative case are extremely rare and appear to be closely related to the frequency with which the possessive construction is used in daily life. In such cases, the possessor tends to undergo semantic bleaching and functions in a manner similar to an adjectival modifier. A selected list of nominative marked possessors in PNP is shown in (5.37).

(5.37)

saːlpaːn məː *saalbaan moo*	'birch (lit. birch tree)'
əxur tʰəkkəːŋ *exur teggeeŋ*	'cow cart'
xʊnin ultə *xʊnin ulde*	'mutton (lit. sheep meet)'
mʊrin tʰarmʊːl *mʊrin tarmʊʊl*	'horse cart'
tʰimaːʃin ɔri *timaasin ori*	'tomorrow evening'

Compare *saːlpaːn məː* 'birch (lit. birch tree)' with *ultʰə-ni məː* 'santaloup-GEN tree' (5.36), both expressing material relations. Birch trees are common in Hulunbuir and are highly salient in Solon daily life; accordingly, *saːlpaːn* 'birch' appears in the nominative case. In contrast, santaloup trees are not commonly encountered, and the possessor *ultʰə* 'santaloup' is marked with the genitive case.

A similar contrast is observed between *xʊnin ultə* 'mutton' and *tʃəkərəːŋ-ni ultə* 'deer meat'. Mutton constitutes a staple food in Solon daily life, whereas deer meat is comparatively uncommon. Correspondingly, the possessor in *xʊnin ultə* appears in the nominative case, while the possessor in *tʃəkərəːŋ-ni ultə* is genitive-marked.

In addition, relative time expressions such as *tʰimaːʃin* 'tomorrow' are nominative-marked when they modify another relative time expression.

When PNPs that typically take a nominative-marked possessor instead employ a genitive-marked possessor, the construction acquires a specific and referential interpretation. However, in Solon, a genitive possessor on its own does not necessarily encode specificity; rather, it co-occurs with a demonstrative to enhance the referentiality of the possessor (5.38).

(5.38) a. *tʰʊjaː xɔni ultə-jə tʃitʰ-tʃi-rə-ŋ.*
tʊyaa xoni ulde-ye jit-ji-re-ŋ.
PN sheep meat-DEF.ACC eat-PROG-AOR-3
'Tuya is eating the mutton.' (EL01-03)

b. *tʰʊjaː* ***tʰajja*** *xɔni-**niː** ultə-wə tʃitʰ-tʃi-rə-ŋ.*
tʊyaa ***tayya*** *xoni-**nii** ulde-we jit-ji-re-ŋ.*
PN **DIST** sheep-**GEN** meat-DEF.ACC eat-PROG-AOR-3
'Tuya is eating **that** sheep's meat.' (elicited)

5.2.2 Postpositional phrases

Certain postpositional phrases can modify a head noun in Solon. In particular, the similative adpositions *nəkəːŋ* and *tʃəkiŋ* occur in adnominal position and function as modifiers within the noun phrase.

(5.39) ***ʃi*** ***nəkəːŋ*** ***pəjə*** *emit ul-tʃʰi ɔːnti xərkə kʰəŋ […]*
si ***negeeŋ*** ***beye*** *emid ul-ci oondi xerge keŋ […]*
2SG **SIMV** **human** alive go-COOR.CVB what affair PTCL
'What's the point of **a person like you** being alive?' (LT20-100)

(5.40) *[…] naŋ* ***əmun*** ***xoːk*** ***tʃəkiŋ*** ***pʊka**-tʃi xaːlaː-ra-ŋ […]*
[…] naŋ ***emun*** ***xʊʊg*** ***jegiŋ*** ***bʊga**-ji xaalaa-ra-ŋ […]*
also **one** **bridge** **SIMV** **place**-INS move-AOR-3
'(People) also move by **the place as large as a bridge**.' (LT29-92)

5.2.3 Adnominal clauses

Adnominal clauses are subordinate clauses that modify a head noun and together with it form a single constituent within the noun phrase. In such constructions, the entire clause functions as a modifier of the head noun. In Solon, adnominal clauses display a range of structural and semantic properties, they are discussed in detail in §10.4.

5.3 Conjoined noun phrase

A conjoined noun phrase consists of two or more nouns that are coordinated and jointly refer to a set of entities. Solon employs several strategies to form conjoined noun phrases, which differ in their formal marking and semantic restrictions.

The present study does not address the issue of disjoined noun phrases (or 'relation') due to a lack of data and because the elicitation often causes clause disjunction rather than noun disjunction. This issue will be examined at a later stage.

5.3.1 Conjunction 'and'

Solon has the coordinating conjunction *ɔːtʃʰi* 'and', which links two nouns to form a conjoined noun phrase. The conjunction *ɔːtʃʰi* is the form of the copula verb *ɔː-* 'become', marked by coordinative converb *-tʃʰi*. The location of the conjunction *ɔːtʃʰi* 'and' is between the two nouns. The case marker is only marked on the second element of a conjoined noun phrase, that is single marked.

(5.41) *ətʰxəːŋ* ***ɔːtʃʰi*** *pɔŋkɔŋ* *mɔkɔi-ni* *ulikər*
etxeeŋ ***ooci*** *boŋgoŋ* *mogoi-ni* *uliger*
old.man **and** big snake-GEN story
'The story of old man **and** python.' (LT07-01)

(5.42) *[...] xɔkkʰɔ əjjə ʊnaːtʃi* ***ɔːtʃʰi*** *əjjə ukkʰəːxəːŋ-pə pɔtɔrɔŋ*
[...] xokko eyye ʊnaaji ***ooci*** *eyye ukkeexeeŋ-be bodoroŋ*
all PROX girl **and** PROX boy-DEF.ACC think-AOR-3
'(People) all think about this girl **and** this boy.' (LT19-59)

5.3.2 Juxtaposition

Nominal juxtapositions also are used to form conjoined noun phrases. In this construction, the coordinated nouns appear adjacent to each other without an overt conjunction and without any morphological markings. A restriction on this strategy is that the conjuncts must be lexically and semantically similar or closely related.

(5.43) *[...] əʃi mitʰi-ni* ***əmmə*** ***apaː-tʰi*** *naŋ aːʃin ɔː-sɔ*
[...] esi miti-ni ***emme*** ***abaa-ti*** *naŋ aasin oo-so*
now 1PL.INCL-GEN **mother** **father**-1PL.INCL also NEG become-PST
'Now our mother **and** father passed away.' (LT08-13)

(5.44) *aniː-tʊː=l* ***piːntʃʰi*** ***pɔːtʃi-jɔ*** *ɔː-tʃʰʊŋ ki?*
anii-dʊʊ=l ***biinci*** ***booji-yo*** *oo-cʊŋ gi?*
year-DAT=PTCL **dumbling** **bun**-PTV make-2PL Q
'Do you make dumblings **and** buns during the New Year?' (LT20-239)

(5.45) ***tʰukə*** ***tʃʊka-ja*** *aːʃin ilaŋ ani xʊnin atʊːlaː-sa pəjə [...]*
tuge ***jʊga-ya*** *aasin ilaŋ ani xʊnin adʊʊlaa-sa beye [...]*
winter **summer**-PTV NEG.EXIS three year sheep herd-PFV.PTCP person
'It was a person who hered sheet for three entire years (lit. not (distinguishing) winter **and** summer) (LT21-15)

5.3.3 Summary conjunction

The term summary conjunction is a construction in which coordination is not expressed by a linking element between the conjuncts, but rather by a final numeral or quantifier that summarizes the set of conjuncts and signals that the list is complete (Haspelmath 2007:36).

In Solon, a numeral taking collective marker following the noun components expresses the summary conjunction (5.46). Summary conjunction may co-occur with the conjunction *ɔːtʃʰi* 'and' resulting in redundant marking of coordination within the noun phrase (5.47).

(5.46) *[...] ətʰəxəːŋ satti **tʃuːr-i** utʰə urəl aːʃin emtar-tʃi-sa*
*[...] etexeeŋ saddi **juur-i** ute urel aasin emdar-ji-sa*
old.man old.lady **two-COLL** son child NEG.EXIS live-PROG-PST

pi-sə kunəŋ
bi-se guneŋ
COP-PST hearsay
'The old man **and** old lady were living together without a child.' (LT04-02)

(5.47) *pi sun-tu saːtʃiki **ɔːtʃʰi** sʊlxi **tʃuːr-iː-ni** ulikər-wə*
*bi sun-du saajigi **ooci** sʊlxi **juur-ii-ni** uliger-we*
1SG 2PL.OBL-DAT magpie **and** fox **two-COLL-GEN** story-DEF.ACC

tʃin-tʃi-m pɔː-ktʰe
jin-ji-m bʊʊ-gte
tell-CONN.CVB give-HORT
'Let me tell you the story of magpie **and** fox.' (LT01-01)

5.3.4 Comitative conjunction

In Solon, the instrumental case *-tʃi* has extended to a comitative function and can be used to mark co-subjects. When used to express nominal conjunction, the comitative marker (instrumental case) typically co-occurs with summary conjunction.

(5.48) *kə* *pi* *apaː-**tʃi**-wi* *ilan* *nəxun-**tʃi**-wi* ***tʰʊŋ-iː***
ge *bi* *abaa-**ji**-wi* *ilan* *nexun-**ji**-wi* ***tʊŋ-ii***
PTCL 1SG father-**INS**-REFL.SG three younger.brother-**INS**-REFL.SG **five-COLL**

*tʊtʰ-saː-**mʊn***
*dʊt-saa-**mʊn***
be.left-PST-**1PL.EXCL**
'Me **with** my father and three brothers, the five of us stayed behind **together**.' (LT39-61)

(5.49) *əmun* *aŋtʃʰin* *nɛːnxin-**tʃi*** ***tʃuːr-i*** *ɔŋkɔtʃʰ-tʊ* *tʰək-tʰəːn,* *ɔsxɔn*
emun *aŋcin* *nɛːnxin-**ji*** ***juur-i*** *oŋgoc-dʊ* *teg-teen,* *osxon*
one hunter dog-**INS** **two-COLL** boat-DAT sit-PFV.CVB fish

tʃaw-na-saː *kunəŋ*
jaw-na-saa *guneŋ*
catch-AM-PST hearsay
'One hunter **with** his dog, sat on a boat, and went to catch fish.' (LT05-23)

5.4 Headless noun phrase

In Solon, a noun phrase modifier may stand alone and represent the entire noun phrase without an overt head noun. This type of headless noun phrase occurs when the speaker assumes that the listener can readily recover the intended head noun from the discourse context or from shared cultural knowledge. Such usage is particularly common when the head noun has been previously mentioned or when the modifier has become conventionalized.

For instance, in example (5.50), where the speakers are discussing dormitory life for primary school students, the adjectival modifier is understood by default to refer to younger or smaller students. In another example (5.51), the adjective *aja* 'good' has been conventionalized to denote 'kindness' in Solon; the implied full expression would be *aja sanaː* 'lit. good heart'.

(5.50) ***xamkiːn*** ***niʃxuŋ-nin*** *tʰʊŋ* *niŋuŋ* *paːr-tʃʰi* *pi-ʃi-n.*
xamgiin ***nisxuŋ-nin*** *tʊŋ* *niŋuŋ* *baar-ci* *bi-si-n.*
most **small-3** five six age-PROP COP-AOR-3
'**The smallest (student)** is five or six years old' (LT11-40)

(5.51) *tʰɔː tʃʰi* *tʰajja* *təki* *tʰajja* *xasxaːŋ-ni* ***aja-wa-ni*** *saː-saː*
too ci *tayya* *degi* *tayya* *xasxaaŋ-ni* ***aya-wa-ni*** *saa-saa.*
DIS.CONN DIST bird DIST puppy-GEN **good-DEF.ACC-3** know-PST

ʃitə
side
PTCL
'Then that bird realized **the kindness** of that puppy.' (LT05-20)

6 Verbs

This chapter describes the verbal morphology of Solon. Solon exhibits extensive verbal morphology. The discussion primarily focuses on subject agreement (§6.1), tense (§6.2), mood (§6.3), aspect/aktionsart (§6.4) and two non-finite verbal forms: converbs (§6.5) and participles (§6.6). Among these, the section on converbs is treated in particular detail, as they display high versatility in Solon. Finally, the derivation of verbs is briefly discussed in §6.7.

In addition to the categories discussed in this chapter, Solon also employs verbal morphology to express valency-changing operations. Valency-changing morphology, while formally realized on the verb, has consequences for the overall clause structure. For these reasons, the valency change is discussed separately in §8.4 within the chapter on simple clauses.

6.1 Subject agreement

6.1.1 Subject agreement

Verbal predicates in Solon agree in person and number with the subject of both intransitive and transitive verbs. The predicate is marked by subject agreement suffixes. Across the Northern Tungusic languages (Malchukov 1995: 16; I. Nedjalkov 1997: 259; Pakendorf, forthcoming: 27-28), there are typically two series of subject agreement markers. One is the nominal series, which is identical to the possessive markers used on nouns; another is the verbal series. The past indicative employs the nominal series, while the future and non-future indicatives use the verbal series.

Solon has two subject agreement series (Table 6-1), the past and future indicative employees the series 1, and the aorist tense employs the series 2. The 1PL.INCL, 1PL.EXCL and 2PL agreement are the same in both series. The 3-person for past and future indicative (series 1) is zero marked, besides no number distinction (singular/plural) across both series in 3-person.

Series 1 is similar to the nominal possessive suffixes, except the third-person form is unmarked for subject agreement. The final vowel change for 1SG in series 1 may represent the merger of the suffix-final /a/ with the suffix-initial /-w(i)/ of the 1SG possessive marker.

Table 6-1: The subject agreement series in Solon

	series 1: past and future	**series 2: aorist**
1SG	past *-sA/-tʃʰA -> -sU/-tʃʰU* future *-tʃikA -> -tʃikU* (the last vowel of original suffixes inflects into *U*:)	*-mi*
1PL.INCL	*-tʰi*	*-tʰi*
1PL.EXCL	*-mun*	*-mun*
2SG	*-ʃi*	*-nti*
2PL	*-sun/ʃun/tʃʰun*	*-sun/ʃun/tʃʰun*
3SG	Ø	*-ŋ ~ -n*
3PL	Ø	*-ŋ ~ -n*

Below are examples of past and aorist contrast in 1SG (see past tense 6.1, aorist tense 6.2), the subject agreements differ depending on the tense. In the past and future tenses, the 1SG agreement involves a vowel alternation of the suffix-final vowels of the tense markers to *-U*. The imperative mood takes a different subject agreement marker system, see §6.3 for details.

(6.1) *kə jəxə=l atta-mi tʃintʃi-**su**.*
*ge yexe=l adda-mi jinji-**su**.*
PTCL big=PTCL be.happy-CONN.CVB tell-**PST.1SG**
'I said very happily.' (LT25-16)

(6.2) *kə tʰɔːtʃʰi=l tʃuː-wiː=l pɔtɔ-**mi**.*
*ge tooci=l juu-wii=l bodo-**mi**.*
PTCL DIS.CONN=PTCL house-REFL.SG=PTCL think-**1SG**
'Then I miss my home.' (LT39-23)

6.1.2 Conjugation

Subject agreement markers in Solon vary according to tense and the phonological shape of the verb stem. In addition, the copular verb *pi-* and the negative auxiliary *ə-* display minor irregularities in the aorist indicative paradigm.

The conjugational paradigms for regular verbs and auxiliary verbs in the past and future indicative are presented in Tables 6-2 and 6-3. In these paradigms, the final vowel of the tense suffix merges with the 1SG subject agreement marker, yielding the surface form *-U*. Subject agreement suffixes do not distinguish between nasal and oral stem-final consonants. Furthermore, the copular and negative auxiliary verbs do not differ from regular verbs in their agreement patterns in the past and future indicative.

Table 6-2: The conjugation of past tense in Solon with different verbs

	vowel ending ***nʊːtaː-*** **'throw'**	**consonantal ending (including nasal consonants)** ***ʧitʰ-*** **'eat';** ***məjəːn-*** **'hide'**		**copula** ***pi-*** **'be'**	**negative AUX** ***ə-***
1SG	*nʊːtaː-su*	*ʧitʰ-ʧʰu*	*məjəːn-ʧʰu*	*pi-su*	*ə-su*
1PL.INCL	*nʊːtaː-sa-tʰi*	*ʧitʰ-ʧʰə-tʰi*	*məjəːn-ʧʰə-tʰi*	*pi-sə-tʰi*	*ə-sə-tʰi*
1PL.EXCL	*nʊːtaː-sa-mun*	*ʧitʰ-ʧʰə-mun*	*məjəːn-ʧʰə-mun*	*pi-sə-mun*	*ə-sə-mun*
2SG	*nʊːtaː-sa-ʃi*	*ʧitʰ-ʧʰə-ʃi*	*məjəːn-ʧʰə-ʃi*	*pi-sə-ʃi*	*ə-sə-ʃi*
2PL	*nʊːtaː-sa-sun*	*ʧitʰ-ʧʰə-sun*	*məjəːn-ʧʰəː-sun*	*pi-sə-sun*	*ə-sə-sun*
3SG	*nʊːtaː-sa*	*ʧitʰ-ʧʰə*	*məjəːn-ʧʰə*	*pi-sə*	*ə-sə*
3PL	*nʊːtaː-sa*	*ʧitʰ-ʧʰə*	*məjəːn-ʧʰə*	*pi-sə*	*ə-sə*

Table 6-3: The conjugation of future tense in Solon with different verbal endings

	vowel ending ***nʊːtaː-*** **'throw'**	**consonantal ending (including nasal consonants)** ***ʧitʰ-*** **'eat';** ***məjəːn-*** **'hide'**		**copula** ***pi-*** **'be'**	**negative AUX** ***ə-***
1SG	*nʊːta-ʧikʊ*	*ʧitʰ-ʧiku*	*məjəːn-ʧiku*	*pi-ʧiku*	*ə-ʧiku*
1PL.INCL	*nʊːta-ʧika-tʰi*	*ʧitʰ-ʧikə-tʰi*	*məjəːn-ʧikə-tʰi*	*pi-ʧikə-tʰi*	*ə-ʧikə-tʰi*

1PL.EXCL	*nʊːta-ʧika-mun*	*ʧiːtʰ-ʧikə-mun*	*məjəːn-ʧikə-mun*	*pi-ʧikə-mun*	*ə-ʧikə-mun*
2SG	*nʊːta-ʧika-ʃi*	*ʧiːtʰ-ʧikə-ʃi*	*məjəːn-ʧikə-ʃi*	*pi-ʧikə-ʃi*	*ə-ʧikə-ʃi*
2PL	*nʊːta-ʧika-sun*	*ʧiːtʰ-ʧikə-sun*	*məjəːn-ʧikə-sun*	*pi-ʧikə-sun*	*ə-ʧikə-sun*
3SG	*nʊːta-ʧika*	*ʧiːtʰ-ʧikə*	*məjəːn-ʧikə*	*pi-ʧikə*	*ə-ʧikə*
3PL	*nʊːta-ʧika*	*ʧiːtʰ-ʧikə*	*məjəːn-ʧikə*	*pi-ʧikə*	*ə-ʧikə*

Table 6-4 presents the aorist indicative conjugation in Solon. The main aorist tense form is *-rA* for regular verbs and *-ʃi* for auxiliary verbs (§6.2.1) (the other allophones of aorist tense form see Table 6-5 in §6.2.1) . However, for regular verbs, only third-person forms overtly take the aorist tense suffix. In first and second-person forms, the aorist indicative is morphologically unmarked.

Table 6-4: The aorist tense in Solon with different verbal endings

	vowel ending *nʊːtaː*- 'throw'	**consonantal ending (including nasal consonants) *ʧiːtʰ*- 'eat'; *məjəːn*- 'hide'**		**copula *pi*- 'be'**	**negative AUX *ə*-**
1SG	*nʊːta-Ø-mi*	*ʧiːtʰ-Ø-ə[1]-mi*	*məjəːn-Ø-ə[1]-mi*	*pi-ʃi-mi*	*ə-ʃi-mi*
1PL.INCL	*nʊːta-Ø-tʰi*	*ʧiːtʰ-Ø-ə[1]-tʰi*	*məjəːn-Ø-ə[1]-tʰi*	*pi-ʃi-tʰi*	*ə-ʃi-tʰi*
1PL.EXCL	*nʊːta-Ø-mun*	*ʧiːtʰ-Ø-ə[1]-mun*	*məjəːn-Ø-ə[1]-mun*	*pi-ʃi-mun*	*ə-ʃi-mun*
2SG	*nʊːta-Ø-nti*	*ʧiːtʰ-Ø-ə[1]-nti*	*məjəːn-Ø-ə[1]-nti*	*pi-ʃi-nti*	*ə-ʃi-nti*
2PL	*nʊːta-Ø-ʧʰʊn*	*ʧiːtʰ-ʧʰun*	*məjəːn-Ø-ə[1]-ʧʰun*	*pi-ʃi-sun*	*ə-ttʃʰun* *(ə-ʃi-sun)*
3SG	*nʊːta-ra-ŋ*	*ʧiːtʰ-tʰə[2]-ŋ*	*məjəːn-ə[3]-ŋ*	*pi-ʃi-n*	*ə-ʃi-n*
3PL	*nʊːta-ra-ŋ*	*ʧiːtʰ-tʰə[2]-ŋ[2]*	*məjəːn-ə[3]-ŋ*	*pi-ʃi-n*	*ə-ʃi-n*

[1]: The /-ə/ in the conjugation of *ʧiːtʰ*- 'eat' and *məjəːn*- 'hide' is an epenthetic vowel.
[2]: The /-tʰə/ is an allomorph of the aorist suffix *-ra*.
[3]: The /-ə/ is an allomorph of the aorist suffix *-ra* after nasal consonants.

When consonant-final verb stems combine with consonant-initial agreement markers, an epenthetic vowel is inserted (6.3a), except in cases where consonant gemination occurs (e.g. *ʧiːtʰ-ʧʰun* → *ʧiːttʃʰun* 'eat-2PL'). This vowel is analyzed as epenthetic rather than as a realization of the aorist tense suffix, because it does not appear with vowel-final verb stems. Moreover, when a vowel-final progressive aspect marker is added, the epenthetic vowel disappears (6.3b). In the interlinear glosses throughout this dissertation, the unmarked aorist tense is not glossed, except in this section, where it is explicitly indicated for expository purposes.

(6.3) a. *ʧiːtʰ-Ø-**ə**-mi* eat-AOR-**EP**-1SG 'I eat.'
*jit-Ø-**e**-mi*

b. *ʧiːtʰ-Ø-ʧi-mi* eat-AOR-PROG-1SG 'I am eating.'
jit-Ø-ji-mi

6.2 Indicative tense

Tense in Solon can be expressed both morphologically and analytically. Morphologically, Solon has three indicative tense suffixes: past, aorist, and future, which are described in this section. Analytically, tense can be expressed by combining the auxiliary verb *pi-* with a lexical verb to form a complex predicate; this analytical expression of tense is discussed in §8.3.2.6.

The three indicative tense suffixes are: Past: *-sA / -ʧʰA*; Aorist: main form *-rA* (only occur with third person); Future: *-ʧikA*.

There is no distinct present tense in Solon; the present tense reading is expressed by aorist tense. The tense suffix precedes the subject agreement marker. The subject agreement system varies across tense categories. As discussed in §6.1, the past and future tenses share identical agreement patterns, while the aorist tense shows different subject marking.

6.2.1 Aorist

The indicative aorist tense suffix is *-rA,* when attaches to vowel ending verbs (6.4). Considering majority of the verbs in Solon ends with vowels, thus the *-rA* form is the main form for aorist. There are other allophones of aorist tense, shown in Table 6-5:

(6.4) *amiːxaŋ əʃi ati peː-tʰixi nɔːkɔː tʰari-**ra**-ŋ*
*amiixaŋ esi adi bee-tixi noogoo tari-**ra**-ŋ*
uncle now how.many month-ABL vegetable plant-**AOR**-3
'From what month does uncle **plant** vegetables now?' (LT27-46)

Table 6-5: Aorist tense form and its allophones

form and allophones	**conditions**	**examples**
-rA	after vowel ending verbs (with exception on *ka-* 'take', *ɔː-* 'become')	*uli-rə-ŋ* 'go-AOR-3'
-ʃi	after the copula verb *pi-* and negative auxiliary verb *ə-*	*pi-ʃi-n* 'COP--AOR-3' *ə-ʃi-n* 'NEG--AOR-3'
-A	after nasal consonants	*ənuːn-ə-ŋ* 'hurt--AOR-3'
-tA	after /l/ consonants after *ka-* 'take', *ɔː-* 'become'	*kukkəl-tə-ŋ* 'move--AOR-3' ' *ka-ta-ŋ* 'take--AOR-3' *ɔː-tɔ-ŋ* 'become--AOR-3'
-tʰA	unclear, occurred with *tʃitʰ-* 'eat'	*tʃitʰ-tʰə-ŋ* 'eat--AOR-3'

The aorist tense suffix is only present with the third person and is unmarked from the first and second person (6.4 above, and 6.5). When the subject is the first and second person, the subject agreement directly attached to the verb expresses the aorist indicative tense (6.6-6.7).

(6.5) *manti tʰatʰi-r tʊra-ʃi ʊlʊr pi-**ʃi**-n*
*mandi tati-r dʊra-si ʊlʊr bi-**si**-n*
very study-IPFV.PTCP favor-PROP people COP-**AOR**-3
'There **are** people who really enjoy studying.' (LT39-18)

(6.6) *kə* *tʰɔːtʃʰi=l* *tʃuː-wiː=l* *pɔtɔ-**mi**.*
ge *tooci=l* *juu-wii=l* *bodo-**mi**.*
PTCL DIS.CONN=PTCL house-REFL.SG=PTCL think-**1SG**
'Then **I** miss my home.' (LT39-23)

(6.7) *satti* *satti* *ilə:* *ul-tʃi-**nti** ?*
saddi *saddi* *ilee* *ul-ji-**ndi** ?*
old.lady.VOC old.lady.VOC where go-PROG-**2SG**
'Granny, granny, where **are you going**?' (LT33-22)

The aorist functions as the default tense in Solon, and its temporal interpretation is largely determined by context rather than by inherent tense specification. Most commonly, it receives a present-time reading (6.5–6.6). Although Solon has a dedicated future tense suffix (§6.2.3), future reference is more frequently expressed by the aorist (6.8–6.9). Similarly, in contexts where past time has already been established, the aorist may also receive a past interpretation, despite Solon having a dedicated past tense suffix (§6.2.2). For instance, in (6.10), the speakers are discussing events in their past lives; once the temporal frame has been set by the initial clause, the following clause employs the aorist rather than the past suffix to continue the past-time narration.

(6.8) *kə* *tʰɔːtʃʰi* *pəjə-tu* *na* *əʃi-**nti*** *əruː-ʃiː-wu-r,*
ge *tooci* *beye-du* *na* *esi-**ndi*** *eruu-sii-wu-r,*
PTCL DIS.CONN person-DAT also NEG-**2SG** bad-VBZ-PASS-CONNEG

kɔjɔ-tʃi *emtara-**nte***
goyo-ji *emdara-**nde***
beautiful-INS live-**2SG**
'Then you **won't** be despised by others, and you **will** live happily.' (LT39-84)

(6.9) *ə-tuxi* *amar* *ukʰ-kʰə* *min-iː* *ərəktʰeː-wi* *maːsaŋ*
e-duxi *amar* *uk-ke* *min-ii* *eregtee-wi* *maasaŋ*
PROX-ABL quickly go-IMP 1SG.OBL-GEN man-1SG right.now

*əmkiː**-rə**-ŋ*
*emgii**-re**-ŋ*
come.back-**AOR**-3
'Leave quickly from here! My husband **will** come back right now.' (LT28-91)

(6.10) - *ukiː-ku* *pəjə-ʃi* *ati* *xaiʃilaː-kʰiʃi* *pi-sə?*
ugii-gu *beye-si* *adi* *xaisilaa-kisi* *bi-se?*
up-ADJZ person-2SG how.many cut-HAB COP-PST
'How many (catties[9]) did people who were better than you shear (in a day)?'

- *ukiː-ku* *pəjə* *namaːtʃi* *ulxə=tʰə* *xaiʃilaː**-ra**-ŋ*
ugii-gu *beye* *namaaji* *ulxe=te* *xaisilaa**-ra**-ŋ*
up-ADJZ person hundred over=PTCL cut-**AOR**-3
'The people who were better (than me) **used to shear** more than a hundred (catties) a day.' (LT17-44,45)

6.2.2 Past

The indicative past tense form is *-sA* after vowel endings and *-tʃʰA* after consonant endings. The past tense form is used to refer to events that happened in the past (6.11-6.14).

(6.11) *[...]* *tʰiŋŋaŋ-tʰxi* *nixaŋ* *aŋki* *juː-kuː**-sə*** *tʃaxa*
[...] *tiŋŋaŋ-txi* *nixaŋ* *aŋgi* *yuu-guu**-se*** *jaxa*
last.year-ABL Han class go.out-CAUS-**PST** RES
'Because last year, (the school) **opened** (lit. make sth go out) a Han class.' (LT11-101)

[9] A catty (or *jin* / 市斤) is a traditional unit of mass used across East and Southeast Asia. In China, I t is strictly standardized at 500 grams (0.5 kilograms).

(6.12) *uŋkəŋ tʃaːn jəji uŋkəŋ pal-**tʃʰa***
*uŋgeŋ jaan yeyi uŋgeŋ bal-**ca***
cow ten nine cow give.birth-**PST**
'Nineteen cows **calved**.' (LT27-15)

(6.13) *tʰɔːtʃʰi nataŋe tikin-ʃi ɔn-tʊ əməkiː-**su**.*
*toɔci nadaŋe digin-si on-dɔ emegii-**su**.*
DIS.CONN seventy four-PROP year-DAT come.back-**PST.1SG**
'Then I **came back** in 1974.' (LT17-10)

(6.14) *tʰəkkəːn ʊlaː xɔkkʰɔ tuxəm ɔː-**sɔ**, tʰukku na aja ɔː-**sɔ**.*
*teggeen ʊlaa xokko duxem oo-**so**, tuggu na aya oo-**so**.*
car rides all easy become-**PST** road also good become-**PST**
'The car and rides **became** easy; the roads also **became** good.' (LT20-171)

6.2.3 Future

The indicative future tense form is *-tʃikA*. The future tense form doesn't occur much in the corpus (30 occurrences in total), as the future tense in Solon is mainly expressed by the indicative aorist tense.

(6.15) *kə urəl pɔŋkɔŋ ɔː-kʰi-ni sun-wə iʃi-nə-**tʃukə** [...]*
*ge urel boŋgoŋ oo-ki-ni sun-we isi-ne-**juge** [...]*
PTCL child big become-COND.CVB-3 2PL.OBL-DEF.ACC see-AM-**FUT**
'The child **will** go and visit you when he grows up (lit. when it becomes big).' (LT28-151)

(6.16) *[...]* *əri* *xʊrkaːn* *tʃalʊŋ* *attʃʰaːŋ* *utːʰəliː-tu* *tʰari-pa*
[...] *eri* *xʊrgaan* *jalʊŋ* *accaaŋ* *uttelii-du* *tari-ba*
PROX enclosure full mouse run-DAT DIST-DEF.ACC

ə-mi *tʃawa-r* *jɔːtɔːŋ* *ʃin-iː-wə* *tʃawa-**tʃika**[...]*
e-mi *jawa-r* *yoodooŋ* *sin-ii-we* *jawa-**jiga** [...]*
NEG-CONN.CVB catch-CONNEG why 2SG.OBL-GEN-DEF.ACC catch-**FUT**

'When mice are running along the enclosure, why doesn't (the cat) catch them, and it **will** catch your mouse?' (LT35-08)

6.3 Imperative mood

Unlike other Northern Tungusic languages such as Evenki, Negidal, and Even, which have dedicated subjunctive, presumptive, and necessitive moods (Pakendorf & Aralova 2020: 297), Solon lacks such morphological mood categories. Instead, these meanings are expressed analytically, typically through adverbs or periphrastic constructions (§7.1.1.4).

Solon has one synthetic mood category, the imperative, which occurs in two distinct types: immediate future imperative and remote future imperative. The immediate future imperative is used for commands directed toward an addressee and that are expected to be carried out at once. The remote future imperative, on the other hand, is used for commands, requests, or exhortations intended for someone not present or to be carried out later. The prohibitive (negative imperative) construction is described in §9.1.2.

6.3.1 Immediate future imperative

The immediate future imperative has a full person and number paradigm, see Table 6-6. The first person (hortative) is expressed by *-ktʰe*, the second person imperative is expressed by suffix *-xA*, and the third person (jussive) is expressed by *-kin*. The 1PL.EXCL, 1PL.INCL and 2PL take personal markers, and the 1PL.INCL and 2PL marker are different from indicative mood subject agreement (§6.1.1). And the third person does not distinguish the number.

Table 6-6: Immediate future mood in Solon (*marked forms are not found in Solon corpus, but elicited)

		person	plural marker
1st person (hortative)	1SG	*-ktʰe*	0
	1PL.EXCL	*-ktʰe*	*-mun**
	1PL.INCL	*-kA:*	*-ri*
2nd person (imperative)	2SG	*-xA*	0
	2PL	*-xA*	*-ltun*
3rd person (jussive)	3SG	*-kin*	0
	3PL	*-kin*	0*

(6.17) *pi əmun par-tʃi əmun tʰəmtʃʰi-m iʃi-**ktʰe** !*
*bi emun bar-ji emun temci-m isi-**gte** !*
1SG one tiger-COM one fight-CONN.CVB see-**HORT**
'**Let me** try to fight with the tiger!' (LT41-42)

(6.18) *puː naŋ əmun akki pɔtɔ-**ktʰe-mune** !*
*buu naŋ emun aggi bodo-**gte-mune** !*
1PL.EXCL also one solution think-**HORT-1PL.EXCL**
'**Let us (exclusive)** also think of a solution!' (elicitation based on LT05-17)

(6.19) *pitʰə əmun akki pɔtɔ-**kɔː-re** !*
*bite emun aggi bodo-**goo-re** !*
1PL.INCL one solution think-**HORT-1PL.INCL**
'**Let us (inclusive)** think of a solution!' (LT41-19)

(6.20) *ʃi min-i taram-ni ɔrɔːn-tʊ ʊkʊ-**xa** !*
*si min-i daram-ni oroon-dʊ ʊgʊ-**xa** !*
2SG 1SG.OBL-GEN back-GEN above-DAT ride-**IMP**
'**Ride** on my back!' (LT10-16)

(6.21) *tʰɔːtʃʰi ɔːtɔŋ su ukʰu-**kʰu**-ltun pi ultə-**ktʰe**!*
*tooci oodoŋ su uku-**ku**-ldun bi ulde-**gte**!*
DIS.CONN all.right 2PL go-**IMP**-2PL 1SG stay-**HORT**
'Then okay, you guys **go**, **let me** stay!' (LT41-32)

(6.22) *[...]* *tʰari* *tʰimaːʃin* *ə-tu* *ultə-**kine**!*
[...] *tari* *timaasin* *e-du* *ulde-**gine**!*
DIST tomorrow PROX-DAT stay-**JUSS**
'Let that person stay here tomorrow!' (LT41-21)

(6.23) *tʰa-ttʃʰil* *tʰimaːʃin* *ə-tu* *ultə-**kine**!*
ta-ccil *timaasin* *e-du* *ulde-**gine**!*
DIST-PL tomorrow PROX-DAT stay-**JUSS**
'Let them **stay here** tomorrow!' (elicitation based on LT05-20)

6.3.2 Remote future imperative

The remote future imperative is marked by the suffix *-tAː*. In the Solon corpus, only the second-person singular form is attested, with subject agreement marked by *-wə~we*.

(6.24) *[...]* *ʃi* *minə-wə* *amʊs-xaːŋ* *pi-ttʃʰi* *tʃit-**təː-we***
[...] *si* *mine-we* *amʊs-xaaŋ* *bi-cci* *jid-**dee-we***
2SG 1SG.OBL-DEF.ACC soon-DIM COP-COOR.CVB eat-**REM.IMP-2SG**
'Please eat me later!' (Speech in a fairy tale, spoken by a horse to a wolf.) (LT10-15)

Previous descriptions (Hu & Chaoke 1986: 74-75) state that the remote future imperative applies to all type of person except first singular, a pattern also observed in Oroqen (Cong 2019: 233-234). Elicitation with Solon speakers confirms this observation: the remote future imperative suffix is *-tAː*, the subject agreement differs by person and number, see Table 6-7 below.

Table 6-7: Remote future mood in Solon (* marked forms are not found in Solon corpus, but elicited)

person		forms	subject agreement
1st person	1PL.EXCL	*-tA:*	*-mun**
	1PL.INCL		*-wəl**
2nd person	2SG		*-wə*
	2PL		*-ʃun**
3rd person	3SG		*-ni**
	3PL		*-ni**

6.4 Aspect/Aktionsart

Tense is a deictic category denoting the temporal location of a situation relative to a reference point (e.g., past, present, or future). In contrast, aspect/aktionsart (hitherto aspect) is a non-deictic category concerned with the internal temporal structure of the situation (Comrie 1976: 5; Dahl 1985: 25). Tense and aspect are frequently inextricably linked in linguistic expression, making it challenging to analyze either in isolation (Whaley 1997: 205). In Solon the aspect is a separate system from tense.

The Northern Tungusic languages are distinguished by a rich aspectual suffix system (Malchukov 1995: 14-15, I. Nedjalkov 1997: 245-252, Pakendorf & Aralova 2020: 294, Cong 2019: 213). However, the aspect suffixes in Solon are simple: there are progressive, durative, stative iterative and habitual (the habitual suffix is dependent on an auxiliary verb). The iterative aspect suffix *-ltʃa* is borrowed from Mongolian, and this suffix only occurs twice in Solon corpus.

Instead, Solon employs a range of strategies to express various aspects. Verbal complex predicates can express multiple aspects, as outlined in §8.3.2.1. Reduplication of the verb can denote durative aspects, and the copular verb *pi-* can express different types of aspects through analytical construction. The following Table 6-8 provides a comprehensive overview of the various strategies employed to demonstrate Solon's aspect system.

Table 6-8: The aspect/aktionsart in Solon

	suffix	**verbal complex predicate**	**other**
progressive	*-tʃi*	V-CVB finite BE	
durative	*-ki:*		verbal reduplication
stative	*-ʃi*		
habitual	*-kʰiʃi* BE-PST	V-IPFV.PTCP BE-PST (only past habitual)	(aorist tense)
iterative	*-ltʃa*		
completive		V-CVB FINISH	
continuous	*-tʃi*	V-CVB SIT/LIE	
resultative		V-CVB TAKE/GET V-CVB PUT/EXIT	
inchoative		V-CVB START V-IPFV.PTCP BECOME	
conative		V-CVB SEE	

*'Finite BE' means the BE auxiliary verb can inflect into any types of finite form, in contrast with 'BE-PST', the auxiliary verb can only occur with past tense.

The progressive, durative, habitual, continuous aspects are expressed through various strategies, with no detection of semantic difference. The potential cause of this phenomenon is attributable to the divergent origins of the various strategies. For instance, the suffix *-tʃi* is the proto-Tungusic suffix to express the progressive aspect. In contrast, the verbal complex predicate (V-CVB finite BE) can also express progressive aspect but is due to the influence of Mongolian. It is unclear which strategy is preferred, redundant double marking to express a single aspectual meaning is common in Solon. The subsequent sections will address each aspect/aktionsart of the table separately.

6.4.1 Progressive

The progressive aspect can be expressed either suffixally or analytically in Solon. The progressive suffix is *-tʃi* (6.25). The analytical expression of the progressive is 'V-CVB finite BE' (§8.2.3.6), with the absolute tense marked on the finite copula (6.26). It is also noteworthy

that these two strategies are frequently combined, resulting in the progressive being assigned a redundant double marking (6.27).

(6.25) *uŋkəŋ-ʃi* *ant^{h}i* *palti-**tʃi**-ra-ŋ*
uŋgeŋ-si *anti* *baldi-**ji**-ra-ŋ*
cow-2SG how give.birth-**PROG**-AOR-3
'How **are** your cows **calving**?' (LT27-14)

(6.26) *ʃi* *ʊxʊn* *ɔː-**tʃ^{h}i*** ***pi**-ʃi-nti* *mə*
si *ʊxʊn* *oo-**ci*** ***bi**-si-ndi* *me*
2SG what make-**COOR.CVB** **COP**-AOR-2SG Q
'What **are** you **doing**?' (LT07-21)

(6.27) *uːɣiː-t-i* *turn_aːʃin* *sɔŋɔːn-ɔ-**m*** ***pi-tʃi**-sə.*
uuɣii-d-i *durn_aasin* *soŋoon-o-**m*** ***bi-ji**-se.*
nest-DAT-REFL.SG terribly cry-EP-**CONN.CVB** **COP-PROG**-PST
'(The magpie) **was crying** terribly in its nest.' (LT01-20)

6.4.2 Durative

The durative is expressed in two ways in Solon. One such approach involves the use of the durative converb *-kiː* (6.28). However, it is more dominantly expressed through the reduplication of the verb (6.29). The double marking of two strategies expressing one single aspect is possible in Solon, here durative converbs can be reduplicated but only express a single durative aspect (6.30)

(6.28) *[...]* *attʃ^{h}aːn* *tʃʊmpara-ja* *tʃaw-**kiː**=l* *ɔriːta-m*
[...] *accaan* *jʊmbara-ya* *jaw-**gii**=l* *oriida-m*
mouse weasel-PTV catch-**DUR.CVB**=PTCL be.late-CONN.CVB

ul-tʃi-me *[...]*
ul-ji-me *[...]*
go-PROG-1SG
'I **catch and catch** mice and weasels, and I am late.' (LT35-05)

(6.29) *taxi* *muŋəːl-**tʃʰi*** *muŋəːl-**tʃʰi*** *əmun* *tʰʊsxaːn-nin* *nəxun-iː-nin*
daxi *muŋeel-**ci*** *muŋeel-**ci*** *emun* *tʊsxaan-nin* *nexun-ii-nin*
again run-**COOR.CVB** run-**COOR.CVB** one calf-3 younger.brother-GEN-3

xʊrkaːn-ta-ni *iː-nəː-sə*
xʊrgaan-da-ni *ii-nee-se*
fence-DAT-3 enter-AM-PST

'Then again, **running and running**, one calf entered the younger brother's fence.' (LT08-25)

(6.30) *ul-**kiː*** *ul-**kiː*** *tʃuːr-i* *uri-ni* *ɔrɔːn-tʊli* *ul-tʃʰi*
*ul-**gii*** *ul-**gii*** *juur-i* *uri-ni* *oroon-dʊli* *ul-ci*
go-**DUR.CVB** go-**DUR.CVB** two-COLL mountain-GEN above-PROL go-COOR.CVB

uri-ni *tʃaiki-tʊ-ni* *tʃiw-sa* *tʃuːr-iː*
uri-ni *jaigi-dʊ-ni* *jiw-sa* *juur-ii*
mountain-GEN gap-DAT-3 meet-PST two-COLL

'The two of them **went and went**, they went above the mountain, and they met a crevice.' (LT15-07)

6.4.3 Stative

Every verb possesses its own aspect, that is to say, an inherent aspect that speakers assume the verb to convey unless there is an indication to the contrary. The lexicon of verbs comprises four classes of aspects: states, activities, achievements and accomplishments. Within this framework, achievements are predicates denoting a transition in state or dynamic circumstances, while states are predicates indicating non-dynamic status (Whaley 1997: 214-215).

In Solon, the bare stems of certain verbs inherently encode an achievement aspect. The suffix *-ʃi* can be attached to such verbs to shift their aspectual interpretation from achievement to state, thereby deriving a stative aspect. The selected verbs listed in (6.31) illustrate this class of predicates that undergo aspectual reanalysis when marked by *-ʃi*.

(6.31) *tʰəkə-* ‘sit down’ *tʰəkə-ʃi* ‘be sitting’
tege- *tege-si*

xulə- ‘lie down’ *xulə-ʃi* ‘be lying’
xule- *xule-si*

ila- ‘stand up’ *ila-ʃi* ‘be standing’
ila- *ila-si*

mənti- ‘look at’ *mənti-ʃi* ‘be looking’
mendi- *mendi-si*

əjjə- ‘envy sth’ *əjjə-ʃi* ‘be envying’
eyye- *eyye-si*

Examples (6.32-6.33) demonstrate this contrast clearly: in (6.32a) and (6.33a), the unmarked verb stems express achievement meanings such as ‘sit down’ and ‘look at’, whereas in (6.32b) and (6.33b), the addition of the stative suffix *-ʃi* yields a stative interpretation, expressing the state rather than the transition itself.

(6.32) a. *əjjə* *tʃiki:ŋ* *pəjə* *tʃu:-ni* *tʃul-tə-tu* *ʃirən* *ɔrɔ:n-tʊ*
eyye *jigiiŋ* *beye* *juu-ni* *jul-de-du* *siren* *oroon-dʊ*
PROX four person house-GEN front-SIDE-DAT chair above-DAT

tʰək-sə:
teg-see
sit.down-PST
‘These four people **sat down** on the chair at the front of the house.’ (EL03-05)

b. *ʊnatʃi* *ə-sə* *tɔ:lti-r* *nnəkə:ŋ* *əkkə-ʃxi* *mɔr-tʃʰi*
ʊnaji *e-se* *dooldi-r* *nnegeeŋ* *egge-sxi* *mor-ci*
girl NEG-PFV.PTCP listen-CONNEG SIMV down-ADV.ALL bend-COOR.CVB

tikkan *a:ʃin* ***tʰək-ʃi-sə.***
diggan *aasin* ***teg-si-se.***
sound NEG.EXIS **sit-STAT**-PST
‘Then the girl lowered her head and **sat** quietly, as if she hadn't heard.’ (LT28-75)

(6.33) a. *ʃi* *ɔsxɔːŋ* *ə-ʧi* *kuxiːtəː-r* *ʃi* *ʧul-sxi* ***mənti**-xə.*
si *osxooŋ* *e-ji* *guxiidee-r* *si* *jul-sxi* ***mendi**-xe.*
2SG fish NEG-PROH hook-CONNEG 2SG front-ADV.ALL **look.at**-IMP
'Don't you fish, you **look** ahead!' (LT07-22)

b. *ʊnta* *pəːl* *ənnəkəːŋ* *jəːmə* *ulti-m* *puː-rə-ŋ* *kə*
ʊnda *beel* *ennegeeŋ* *yeeme* *uldi-m* *buu-re-ŋ* *ge*
shoes gloves PROX.QLT thing sew-CONN.CVB give-AOR-3 PTCL

tʰajja-wa-ni *na* ***mənti-ʃiː**-mi.*
tayya-wa-ni *na* ***mendi-sii**-mi.*
DIST-DEF.ACC-3 also **look.at-STAT**-1SG
'(My father) sewed things like shoes and gloves for me, and I also **watched** that.' (LT39-30,31)

6.4.4 Habitual

The habitual aspect can be expressed in several ways. The past habitual is expressed by the suffix *-kʰiʃi* which is dependent on the auxiliary verb BE *pi-* (6.34), the habitual suffix *-kʰiʃi* can only occur with past tense. In addition, the verbal complex predicate V-IPFV.PTCP BE-PST is also employed to express past habitual (6.35).

(6.34) *tʰari* *ərin-ni* *xʊrkaːn* *xɔkkʰɔ* *niʃxuŋ* *ɔː* ***-kʰiʃi*** ***pi-sə***
tari *erin-ni* *xʊrgaan* *xokko* *nisxuŋ* *oo* ***-kisi*** ***bi-se***
DIST time-GEN fence all small make-**HAB** **COP-PST**
'The fences at that time, people **used to** make it all small.' (LT20-100)

(6.35) *[...] ʃiwuŋ ʊnaːtʃi-wa ukkʰə-ni tʰul-təː-tu əmun xəsək*
[...] siwuŋ ʊnaaji-wa ukke-ni tul-dee-du emun xeseg
sun girl-DEF.ACC gate-GEN front-SIDE-DAT one part

*ila-ʃi-xaːn pi-ttʃʰi tʰəlin iː-kuː**-r*** ***pi-sə***
*ila-si-xaan bi-cci telin ii-guu**-r*** ***bi-se***
stand-STAT-CAUS COP-COOR.CVB only enter-CAUS-**IPFV.PTCP** **COP-PST**

'(The Mekdeng Buddha) **used to** let the Sun Girl **enter** the palace only after making her stand in front of the gate for a while.' (LT38-24)

When the context of the sentence provides a habitual value, the aorist tense can mark a habitual meaning, see present habitual (6.36), and past habitual (6.37).

(6.36) *əjjə xuxin-ni ukkʰəxəŋ-ni əmmə-wəl sʊnin əruːʃiː**-rə**-ŋ*
*eyye xuxin-ni ukkexeŋ-ni emme-wel sʊnin eruu-sii**-re**-ŋ*
PROX daughter.in.law-3 son-3 mother-REFL.PL very bad-VBZ-**AOR**-3
'This daughter-in-law and the son bully their mother a lot.' (LT03-03)

(6.37) *tʰuːpʰiː-jə talka**-ra**-ŋ ʊlariŋ tʰuːpʰiː-jə talka**-ra**-ŋ*
*tuupii-ye dalga**-ra**-ŋ ʊlariŋ tuupii-ye dalga**-ra**-ŋ*
brick-PTV burn-**AOR**-3 red brick-PTV burn-**AOR**-3
'(In the past), people **used to burn** bricks, **used to burn** red bricks.' (LT18-24)

6.4.5 Iterative

The iterative aspect in Solon is marked by the suffix *-ltʃa*, which appears to be of Mongolian origin. This suffix expresses repeated and fast, high-frequency actions. In the corpus, the suffix is attested only twice, both with the verb *ʃippʰa-* 'shake', describing rapid, repeated motion (e.g., 'shake repeatedly/wag'), as illustrated in (6.38). No additional natural examples were found, and further instances could not be reliably elicited.

(6.38) *tʰima:ʃin-nin pasa=l ikki-wi ʃippʰa:**-ltʃa:**-m əm-sə*
*timaasin-nin basa=l iggi-wi sippaa**-ljaa**-m em-se*
tomorrow-3 again=PTCL tail-REFL.SG shake-**ITR.MN**-CONN.CVB come-PST
'The next day, (the fox) came again **wagging** its tail.' (LT01-15)

6.4.6 Completive

The completive aspect in Solon is expressed by verbal complex predicates in which the auxiliary verb is *ətʰə-* 'FINISH' (§8.3.2.1). In this construction, *ətʰə-* functions as a minor verb modifying the lexical (major) verb and indicates that the event denoted by the major verb has been carried through to its natural endpoint. Formally, the lexical verb appears in converb form, while the auxiliary *ətʰə-* bears the inflectional categories of the clause, including tense, aspect, mood, and subject agreement. The two verbs together form a single monoclausal predicate, sharing arguments and polarity.

(6.39) *əmki**-mi*** ***ətʰə**-tʃʰi=l* *na:tʃi*
*emgi**-mi*** ***ete**-ci=l* *naaji*
come.back-**CONN.CVB** **finish**-COOR.CVB=PTCL maternal

jəjə-t-i ə-ʃi-n tʃintʃi-r ki ?
yeye-d-i e-si-n jinji-r gi ?
grandfather-DAT-REFL.SG NEG-AOR-3 tell-CONNEG Q
'Once I **have returned**, won't I tell my grandfather?' (LT25-14)

(6.40) *tʰajja sʊrkʊ:l-t-i nini-me tʃa:n tʰʊŋ xɔnɔr ɔ:**-mi***
*tayya sʊrgʊʊl-d-i nini-me jaan tʊŋ xonor oo**-mi***
DIST school-DAT-REFL.SG go-1SG ten five day do-**CONN.CVB**

***ətʰə**-tʃʰi tʰʊŋ xɔnɔr əxun ɔ:-sɔ-mʊn*
***ete**-ci tʊŋ xonor exun oo-so-mʊn*
finish-COOR.CVB five day milk do-PST-1PL.EXCL
'I went to my school. We **have made** (cakes) for fifteen days, and we made dairy products for five days.' (LT23-27)

6.4.7 Continuous

The suffix *-tʃi*, discussed earlier in connection with the progressive aspect (§6.4.1), can also be used to express the continuous aspect in Solon (6.41) (it is still glossed as PROG in this context). A semantic distinction can be made to distinguish progressive and continuous aspects: the continuous aspect denotes an action or state that is maintained or sustained over a period of time, whereas the progressive highlights an action as unfolding at a particular reference time.

(6.41) *ʃiː ɔrɔi-t-i tianʃi iʃi-**tʃi**-nte kiː*
*sii oroi-d-i diansi isi-**ji**-nde gii*
2SG evening-DAT-REFL.SG television see-**PROG**-2SG Q
'**Are you watching** TV during your evenings?' (EL01-39)

The continuous aspect is also expressed by complex predicates, when the auxiliary verb is a stative verb SIT/LIE (6.42) (§8.3.2.3). When the verbal complex predicates express continuous aspect, they may co-occur with the *-tʃi* suffix. Once again, the double marking of aspect expresses a single aspectual meaning (6.43).

(6.42) *[...] ə-sə tɔːltiː-r nəkəːŋ ʊlʊr-tʃi-wi tʃuːr-iː*
[...] e-se dooldii-r negeeŋ ʊlʊr-ji-wi juur-ii
NEG-PST hear-CONNEG SIMV people-INS-REFL.SG two-COLL

*arxi mʊxʊ-**m** **tʰəkə**-ʃiː-rə-ŋ*
*arxi mʊxʊ-**m** **tege**-sii-re-ŋ*
liquor drink-**CONN.CVB** **sit**-STAT-AOR-3
'As if (he) didn't hear, he **was drinking while sitting** liquor together with his wife.' (LT28-29)

(6.43) *tʰɔːtʃʰi* *tʰuːkə* *kʰi* *amʊsxʊŋ* *ʃirxa-tʃʰi* *ənuː-tʃʰə* *tʃarin* *sɔnin*
tooci *tuuge* *ki* *amʊsxʊŋ* *sirxa-ci* *enuu-ce* *jarin* *sonin*
DIS.CONN wolf TOP little injury-PROP hurt-PFV.PTCP CONC very

*atta-**mi*** *xulə-ʃi-tʃi*-*rə-ŋ* *kunəŋ*
*adda-**mi*** *xule-si-ji*-*re-ŋ* *guneŋ*
be.happy-**CONN.CVB** **lie.down-STAT-PROG**-AOR-3 hearsay

'Then although the wolf has a small injury and hurt, he **was laying happily**.' (LT28-106)

6.4.8 Resultative

The resultative aspect in Solon is expressed through complex predicates (see §8.3.2.1), in which a lexical verb combines with a grammaticalized minor verb encoding the result state of the event. Four verbs have undergone grammaticalization to serve this function, and they can be distinguished according to whether the resulting state is oriented toward the agent or the patient. The verbs *pax-* 'GET' and *ka-* 'TAKE' yield agent-oriented resultatives, highlighting the successful completion of an action from the perspective of the agent (6.44–6.45).

(6.44) *[...]* *əjjə* *ʊnaːtʃi* *tʃuːr-iː-ni* *ulikər-wə-ni* *pɔtɔ-**m***
[...] *eyye* *ʊnaaji* *juur-ii-ni* *uliger-we-ni* *bodo-**m***
PROX girl two-COLL-GEN story-DEF.ACC-3 think-**CONN.CVB**

***paxa**-ra-ŋ* *ʃitʰə*
***baxa**-ra-ŋ* *site*
get-AOR-3 PTCL

'(People) will **recall (lit. think and get)** the story of the girl and the two of them.' (LT19-58)

(6.45) *tʰajja* *ʊxʊn-ni* *ʃil-niː* *pʊka-wə* *turəsələ-**mi*** ***ka**-sa* *[...]*
tayya *ʊxʊn-ni* *sil-nii* *bʊga-we* *duresele-**mi*** ***ga**-sa* *[...]*
DIST what-GEN GN-GEN place-DEF.ACC rent-**CONN.CVB** **take**-PST

'(Our hamlet) **rented (lit. rented and took)** the Shil hamlet's place.' (LT30-13)

By contrast, *nəː*- 'PUT' and *juː*- 'EXIT' derive patient-oriented resultatives, emphasizing the resultant state of the affected patients. The patient-oriented resultatives can be involved in either transitive verbs or intransitive verbs, see example (6.46, 6.48) for intransitive verbs, and (6.47, 6.49) for transitive verbs.

(6.46) *inəŋ* *tʊlin* *ɔː-tʃʰi* *tʰʊː**-tʃʰi*** ***nəː**-rə-ŋ*
ineŋ *dʊlin* *oo-ci* *tʊʊ**-ci*** ***nee**-re-ŋ*
day middle become-COOR.CVB be.cool **-COOR.CVB** **put**-AOR-3
'It becomes mid-day, and (the hot water) will **cool off**.' (LT11-30)

(6.47) *ikkʰiŋ* *əmun* *tʃuːr* *ɔː-sɔː=l* *tʰajja-pa=l* *man**-tʃʰi***
ikkiŋ *emun* *juur* *oo-soo=l* *tayya-ba=l* *man**-ci***
new one two become-PST=PTCL DIST-DEF.ACC=PTCL use.up**-COOR.CVB**

***nəː**-muŋ*
***nee**-muŋ*
put-1PL.EXCL
'By the first two days of the new year, we would **finish (lit. use up and put)** that (buns).' (LT20-242)

(6.48) *əʃi* *əmə-tʃʰi* *pɔtɔ-tʊ* *na* *tʰuːxə* *ɔː**-tʃʰi***
esi *eme-ci* *bodo-dʊ* *na* *tuuxe* *oo**-ci***
now come-COOR.CVB think-DAT also history become**-COOR.CVB**

***juː**-tʃi-rə-ŋ.*
***yuu**-ji-re-ŋ.*
exit-PROG-AOR-3
'When thinking now, (our past lives) are becoming history.' (LT21-32)

(6.49) *tʰəŋkʰə-tʃi-r* *tʰɔkɔ-tʊ* *nʊːtaː**-tʃʰi*** ***juː**-sə*
teŋke-ji-r *togo-dʊ* *nʊʊdaa**-ci*** ***yuu**-se*
burn-PROG-IPFV.PTCP pot-DAT throw**-COOR.CVB** **exit**-PST
'He **throwed** (the meat) into the burning pot.' (LT40-43)

6.4.9 Inchoative

The inchoative aspect in Solon is expressed by complex predicates with the auxiliary verb *əːkʰəː-* 'START' (§8.3.2.1) and the auxiliary verb *ɔː-* 'BECOME'. The verb 'START' takes verbs with a converb marker (6.50), and the verb 'BECOME' takes verbs with an imperfective marker (6.51).

(6.50) *[...]* *kəttʰi* *pi-sə* *talai* *muː-nin* *nan* *uːnə**-m***
[...] *getti* *bi-se* *dalai* *muu-nin* *nan* *uune**-m***
frozen COP-PFV.PTCP sea water-3 also melt-**CONN.CVB**

***əːkʰəː**-sə* *kunəŋ*
***eekee**-se* *guneŋ*
start-PST hearsay
'It is said that the water of the frozen sea also **started melting**.' (LT38-10)

(6.51) *tʰa-tʊːxi* *ama-sxi* *tʰɔːl* *tɔː-ni* *xuwəː-ni* *ɔltɔːn-tɔli*
ta-dʊʊxi *ama-sxi* *tool* *doo-ni* *xuwee-ni* *oldoon-doli*
DIST-ABL back-ADV.ALL rabbit river-GEN edge-GEN side-PROL

uli-pi *ʊti-tʃʰi* *xəːr_tʰal* *ɔrɔːn-tɔ* *ul-tʃʰi* *ɔrɔːtʰi*
uli-bi *ʊdi-ci* *xeer_talor* *oon-do* *ul-ci* *orooti*
go-REFL.SG stop.doing-COOR.CVB grassland above-DAT go-COOR.CVB grass

*tʃittʰə**-r*** *ɔː-sɔ* *kunəŋ*
*jitte**-r*** ***oo**-so* *guneŋ*
eat**-IPFV.PTCP** **become**-PST hearsay
'After that, the rabbit stopped going around the riverbank and **started grazing** in the grassland.' (LT06-12)

6.4.10 Conative

The conative aspect, expressing an attempted but not necessarily successful action, is encoded in Solon by complex predicates with the auxiliary verb *iʃi-* 'SEE' (§8.3.2.1). In this

construction, *ifi-* has undergone semantic extension from a verb of perception to an auxiliary indicating that the subject tries or attempts to carry out the action denoted by the lexical verb.

(6.52) *[...] putənə-ni tʃintʃi-saː-tʃi-ni əmun ɔː-**m** **ifi-kt^{h}e** [...]*
*[...] budene-ni jinji-saa-ji-ni emun oo-**m** **isi-gte** [...]*
quail-GEN tell-PFV.PTCP-INS-3 one do-**CONN.CVB** **see-HORT**
'Let me **try to do** as quail told!' (LT01-30)

6.5 Converbs

The term converb was first introduced by Ramstedt (1903) in Mongolian, and then more broadly introduced by V. Nedjalkov and I. Nedjalkov (1987, as cited in Haspelmath 1995) for Evenki and has since been widely adopted in the study of Transeurasian languages. In Haspelmath (1995:3), converbs are typically defined as non-finite verbal forms whose primary function is to express adverbial subordination. Cross-linguistically, converbs are inherently polyfunctional and can be categorized into at least three functional types:

Subordination: This is the most canonical function of converbs. A converb-marked clause provides background information or sets the discourse frame for the main clause, expressing relations such as temporal sequencing, condition, concession (e.g., I. Nedjalkov 1995; Haspelmath 1995), see example (6.53) from Evenki.

(6.53) Evenki (I. Nedjalkov 1997 :43, glossing adapted)
*d'u-la-vi eme-**mi** ulle-ve dev-d'enge-s*
house-ALL-REFL come-**CVB** meat-DEF.ACC eat-FUT-2SG
'**When/If** you come home, you will eat meat.'

Coordination: Converbs can connect two or more clauses that have the same discursive status, see example (6.54) from Korean. When a string of events is juxtaposed and marked by converbs, only the last verb is the finite form, and this phenomenon is referred to as clause-chaining (I. Nedjalkov 1995: 110, Haspelmath 1995: 21-23). In English, the chains can be

translated with "and." In this study, I consider clause chaining as a type of coordination in which more than two sentences are syntactically linked and semantically coordinated.

(6.54) Korean (Martin and Lee 1986:51, glossing adapted)
Achim *mek-**ko*** *hakkyo* *ka-ss-eyyo*
breakfast eat-**CVB** school go-PST-IND
'I ate breakfast and went to school.'

Complex predicate: The link of two or more verbs by converbs may result in a single predicate. The semantic relation of the component verbs can be either symmetric or asymmetric (see the §8.3 for details). In some languages, complex predicates are morphologically unmarked, a phenomenon called verb serialization. In converbal languages, these predicates are morphologically marked. However, these two phenomena do not exhibit functional differences (Bisang 1995; Janhunen 2012a: 163). See example (6.55) from Tamil is provided below, the converbs plus *koṇ-ṭu* 'hold' plus *vaa* 'come' express durative. In several Mongolic languages, the two verbs can be linked as a complex predicate without an overt marker (Janhunen 2012a: 166). It is rare in Mongolian, but it is found in Chakhar Mongolian: *sal-Ø yad-* 'to be unable to part (from each other)' (Sechenbaatar 2003: 156, cited from Janhunen 2012a: 166).

(6.55) Tamil (Lehmann 1989:208, cited from Bisang 1995: 159, glossing adapted)
vilai *eer̲-**i.k*** *koṇ-**ṭu*** *var-um.*
price rise-**CONV** hold-**CONV** come-FUT:3sn
'The prices keep on rising.'

The converb system in Solon encompasses all the aforementioned functions. Solon converbs are classified into two types, see Table 6-9 below. The Type 1 converbs consist of coordinative converb *-tʃʰi* and connective converb *-mi*. The Type 1 converbs are multifunctional in forming clause coordination and complex predicates. The Type 1 converbs consists of a group of subordinating converbs, these are perfective, durative, conditional, simultaneous and temporal. The subsequent subsections will address these distinctions in greater detail.

Table 6-9: Solon converbs

Type1 converbs	coordinative *-tʃʰi*
	connective *-mi*
Type2 converbs	perfective *-tʰAn*
	durative *-ki*
	conditional *-kʰi~kkʰi*
	simultaneous *-t(A)li*
	temporal *-tʃʰixi*

6.5.1 Type1 converbs

This section discusses the two converbs in Solon: the coordinative converb *-tʃʰi* and the connective converb *-mi*. Both converbs serve two functions: they express coordinating relations in clause linkage and form complex predicates within a single clause. Although converbs are typically defined as markers of adverbial subordination, these two converbs do not express subordinating relations in Solon. To demonstrate this, §10.1 presents morphosyntactic tests showing that they express coordination rather than subordination in clause linkage.

The functions of the two converbs overlap. In clause linkage, the coordinative converb *-tʃʰi* is the predominant marker of coordination, whereas the coordinating use of the connective converb *-mi* is restricted to a small number of speakers in the corpus. By contrast, when forming complex predicates, the connective converb *-mi* is more frequently used, though semantically these two converbs are interchangeable, see §6.5.1.3.

6.5.1.1 Coordinative converb *-tʃʰi*

In the literature, the coordinative converb *-tʃʰi* has been labeled in various ways: Hu & Chaoke (1986: 77) refer to it as the "uniting converb (联合副动词, my translation)", Tsumagari (2009: 10) calls it the "subordinative converb", and Baek (2023: 223) uses the term "coordinative converb". In this study, I adopt Baek's terminology and refer to *-tʃʰi* as the coordinative converb.

The *-tʃʰi* converb is not cognate with converb forms in other Northern Tungusic languages, nor is it found in Manchu, another Tungusic language that has undergone strong Mongolic influence. The plausible external source appears to be Mongolian, which has an imperfective converb *-e.J* (pronounced /*-tʃ/tʃʰ*/, written as *-ǰU/-čU*) (Chinggeltei 1991: 268; Janhunen 2012a: 163-164). This Mongolian converb also displays a broad functional range, especially in coordinating structures and complex predicates. Thus, it is possible that Solon's *-tʃʰi* is borrowed from Mongolic. Another possible source of the coordinative converb *-tʃʰi* in Solon is the instrumental case marker *-tʃi*. In some Tungusic languages, the instrumental case can give rise to converb forms through the combination of a participle with the instrumental case. For instance, in Even, the coordinative converb *-riŋi / -riŋur* is derived from the imperfective participle marked with the possessive-reflexive-marked instrumental case (Pakendorf 2017: 137). It is therefore plausible that the Solon coordinative converb *-tʃʰi* may have undergone a similar grammaticalization pathway, with the participial element subsequently lost, as happened in the converbalization of the prolative case (§6.5.2.5).

Below are some examples of the coordinative converb functioning in clause coordination (6.56), clause chaining (also a clause coordination) (6.57), and forming complex predicates (6.58) (see more details on complex predicates in §8.3). The clause chaining example (6.56) is composed of 4 clauses; the first three clauses are linked by two coordinative converbs *-tʃʰi* (*ʊti-tʃʰi* 'be no more-COOR.CVB' and *saː-tʃʰi* 'know-COOR.CVB'). The third chain is marked by the connective converb *-mi*, and this will be discussed more below.

(6.56) *xaiʃi-tʊ-ni* *naː-pʊː-**tʃʰi*** *ʊxʊn-ni* *tətthəliː-ni* *xɔntʃʰɔk-sɔ* *kunəŋ.*
xaisi-dʊ-ni *naa-bʊʊ-**ci*** *ʊxʊn-ni* *dettelii-ni* *xoncog-so* *guneŋ.*
scissors-DAT-3 touch-PASS-**COOR.CVB** PH-3 wing-3 cut.off-PST hearsay
'(The bird) was touched by the scissors **and** its wings were cut off.' (LT02-08)

(6.57) *tʰa-tʊːxi* *ama-sxi* *tʰɔːl* *əjjə* *kɔjɔ* *ikki-wi* *taxi* *ʊtʃikiːta*
ta-dʊʊxi *ama-sxi* *tool* *eyye* *goyo* *iggi-wi* *daxi* *ʊjigiida*
DIST-ABL back-ADV.ALL rabbit PROX beautiful tail-REFL.SG again afterwards

katʃi-kiː-m *əthə-(r)-pi* *ʊti-**tʃʰi*** *xakki*
gaji-gii-m *ete-(r)-bi* *ʊdi-**ci*** *xaggi*
take-ITR-CONN.CVB finish-IPFV.PTCP-REFL.SG be.no.more-**COOR.CVB** pheasant

axaː-ni	*məxə-tə-ni*	*iː-səː-wi*	*saː-**tʃʰi***	*tʰɔːtʃʰi*	
axaa-ni	*mexe-de-ni*	*ii-see-wi*	*saa-**ci***	*tooci*	
brother-GEN	trick-DAT-3	enter-PFV.PTCP-REFL.SG	know-**COOR.CVB**	DIS.CONN	

tʰa-tʊːxi	*ama-ʃxi*	*tʰɔːl-ni*	*kɔjɔ*	*nantaːxaŋ*	*nʊnʊm*	*ikki-ni*
ta-dʊʊxi	*ama-sxi*	*tool-ni*	*goyo*	*nandaaxaŋ*	*nʊnʊm*	*iggi-ni*
DIST-ABL	back-ADV.ALL	rabbit-GEN	beautiful	beautiful	long	tail-3

ʊkkʊ-m	*ə-mi*	*ətʰə-r*	*taxi*	*tʰa-nnaːŋ*	*ɔttɔːr*
ʊggʊ-m	*e-mi*	*ete-r*	*daxi*	*ta-nnaaŋ*	*oddoor*
grow-CONN.CVB	NEG-CONN.CVB	finish-CONNEG	again	DIST-QLT	short

ikkə-ʃi	*ɔː-sɔ*	*kunəŋ.*
igge-si	*oo-so*	*guneŋ.*
tail-PROP	become-PST	hearsay

‘After that, the rabbit was unable to take back her long tail **and** she realized she had been tricked by the pheasant brother, **and** after that, the rabbit’s long tail never grew back, and she was left with a short tail.’ (LT06-11)

(6.58)

tʰarikaːn	*tʰari-mi*	*ə-ʃi-n*	*ətʰə-r*	*kuŋ-kʰəːŋ*
tarigaan	*tari-mi*	*e-si-n*	*ete-r*	*guŋ-keeŋ*
field	plant-CONN.CVB	NEG-AOR-3	finish-CONNEG	SAY-SAY.CVB

tʰʊsxaːn-pi	*mantaː-tʃʰi*	*waː-**tʃʰi***	***nəː-**sə*	*kunəŋ.*
tʊsxaan-bi	*mandaa-ci*	*waa-**ci***	***nee-**se*	*guneŋ.*
calf-REFL.SG	hit-COOR.CVB	kill-**COOR.CVB**	**put**-PST	hearsay

‘(The silly boy) hit and **(successfully) killed** his calf because it can’t plow the field.’ (LT08-29)

Furthermore, the coordinative converb *-tʃʰi* combined with distal demonstrative verb *tʰɔː-* to form the reference clause in the bridging linkage constructions (§11.3).

6.5.1.2 Connective converb *-mi*

The converb *-mi* is referred to as the "coordinative converb (并列副动词)" by Hu & Chaoke (1986: 77), Chaoke (1986: 117; 1995: 97) and Tsumagari (2009: 10), while Baek (2023:223) uses the term "connective converb". In this study, I retain the label connective converb from Baek.

The connective converb *-mi* functions primarily to mark coordination and clause chaining (6.59-6.60) and to form complex predicates (6.61-6.62) (see more details on complex predicates in §8.3). There is ambiguity between coordination and complex predicates. Its coordinating usage is limited, with the majority of examples in the corpus coming from a single speaker, indicating its restricted distribution.

(6.59)

tʰɔːtʃʰi	*pʊkkʰʊŋ*	*tʰəŋkər*	*ʊppʊ-**m***	*tʰa-nnaːŋ*	*pɔŋkɔŋ*	*tikkaŋ*
toɔci	*bʊkkʊŋ*	*teŋger*	*ʊbbʊ-**m***	*ta-nnaaŋ*	*boŋgoŋ*	*diggaŋ*
DIS.CONN	Buddha	sky	turn.over-**CONN.CVB**	DIST-QLT	big	sound

juː-səː-tu *[...]*
yuu-see-du *[...]*
exit-PFV.PTCP-DAT

'Then, when the sky rolled over **and** a great noise like that sounded.' (LT42-23)

(6.60)

xasaŋ	*xaːn*	*paran-kʊ*	*xaːltʰ-wə*	*tʃatta*	*pʰuslaː-**mi***
xasaŋ	*xaan*	*baran-gʊ*	*xaalt-we*	*jadda*	*puslee-**mi***
PN	emperor	west-ADJ	gate-DEF.ACC	ONOM	kick-**CONN.CVB**

ʊnaːtʃi-wi	*xumli-**m***	*məːn-i*	*tʃuː-tu-wi*
ʊnaaji-wi	*xumli-**m***	*meen-i*	*juu-du-wi*
daughter-REFL.SG	hug-**CONN.CVB**	self-GEN	house-DAT-REFL.SG

*iː-kuː-**m***	*xulə-xəːn-tʃʰə*
*ii-guu-**m***	*xule-xeen-ce*
enter-CAUS-**CONN.CVB**	lie-CAUS-PST

'The Hashang emperor kicked (open) the west gate, **and** hugged his daughter, **and** made her enter his room, **and** made her lie down.' (LT38-38)

(6.61) *utʰə-ni* *ɔsxɔn* *ə-ʃi-n* *tʃitʰ-**mi*** *puː-r*
ute-ni *osxon* *e-si-n* *jit-**mi*** *buu-r*
child-3 fish NEG-AOR-3 eat-**CONN.CVB** give-CONNEG
'Her child doesn't **eat** fish **(for their mother when she fed them).**' (LT05-32)

(6.62) *pi* *əjjə* *uri-li* *ə-ttʰu* *tʰənə-**m*** *emtar-tʃi-r*
bi *eyye* *uri-li* *e-ttu* *tene-**m*** *emdar-ji-r*
1SG PROX mountain-PROL PROX-ADV loiter-**CONN.CVB** live-PROG-IPFV.PTCP

pəjə *pi-ʃi-m.*
beye *bi-si-m.*
person COP-AOR-1SG
'I am a person who **lives loitering** along this mountain.' (LT25-13)

Although the connective converb *-mi* does not serve as the marker of subordination, there are two analytical forms involving it express clear anterior subordinating relations. These analytical constructions typically involve typically involve the copular verb *pi-*, shown in (6.63), and see the following example (6.64-6.65).

(6.63) *V-mi pi-sə-tʃi* 'V-CONN.CVB COP-PFV.PTCP-INS'
V-mi pi-ttʃʰi 'V-CONN.CVB COP-COOR.CVB'

(6.64) *[...]* *tʰijja* *tʃuː-tu-ni* *nənə-**m*** ***pi-səː-tʃi*** *ɔkkʰiraːː-sa*
[...] *tiyya* *juu-du-ni* *nene-**m*** ***bi-see-ji*** *ɔkkiraa-sa*
DIST house-DAT-3 go.to-**CONN.CVB** **COP-PFV.PTCP-INS** shout-PST
'**Having** gone to that house, (the fox) shouted.' (LT01-53)

(6.65) *[...]* *usxəːŋ-pi* *juː-kuː-**m*** ***pi-ttʃʰi*** *iːkətəː-sə*
[...] *usxeeŋ-bi* *yuu-guu-**m*** ***bi-cci*** *iigedee-se*
knife-REFL.SG exit-CAUS-**CONN.CVB** **COP-COOR.CVB** sharpen-PST
'**Having** taken out the knife, the boy sharpened it.' (LT41-44)

6.5.1.3 Comparison of the coordinative converb *-tʃʰi* and the connective converb *-mi*

The coordinative converb *-tʃʰi* and the connective converb *-mi* exhibit a significant degree of functional overlap in both syntactic and discourse-related contexts. The two tables below provide a comparative overview of these converbs.

Table 6-10 provides the frequency of use of the different syntactic functions. While both converbs can perform similar roles, there is a clear functional tendency: coordination is mainly expressed by the coordinative converb *-tʃʰi*, while complex predicates are more frequently formed with the connective converb *-mi*.

Table 6-10: The frequency of different syntactic functions of the coordinative converb *-tʃʰi* and the connective converb *-mi* (in the reduced corpus)

	coordinative converb *-tʃʰi*	connective converb *-mi*
coordination	294 (78.2%)	82 (21,8%)
complex predicates	118 (36.3%)	207 (63.7%)

In the overlapping functions, the two converbs can often be used interchangeably. In example (6.66a), the complex predicate is marked by the coordinative converb *-tʃʰi*. But my consultant accepts the sentence when the coordinative converb *-tʃʰi* is replaced by the connective converb *-mi* in example (6.66b).

(6.66) a. *tʰɔːtʃʰi=l* *əmun* *ətʰxəːŋ-tə* *əmun* *tʃittʰə-r* *jəːmə=jə*
tooci=l *emun* *etxeeŋ-de* *emun* *jitte-r* *yeeme=ye*
DIS.CONN=PTCL one old.man-DAT one eat-IPFV.PTCP thing=PTCL

ərxəː-liː-ni *tʃɔltɔ-**tʃʰi*** *puː-sə*
erxee-lii-ni *joldo-**ci*** *buu-se*
yurt.window-PROL-3 throw-**COOR.CVB** give-PST

'Then the (old lady) **threw** food **to** the old man through the window of the yurt.' (LT04-45)

b. *tʰɔːtʃʰi=l* *əmun* *ətʰxəːŋ-tə* *əmun* *tʃittʰə-r* *jəːmə=jə*
tooci=l *emun* *etxeeŋ-de* *emun* *jitte-r* *yeeme=ye*
DIS.CON=PTCL one old.man-DAT one eat-IPFV.PTCP thing=PTCL

ərxəː-liː-ni *tʃɔltɔ-**mi*** *puː-sə*
erxee-lii-ni *joldo-**mi*** *buu-se*
yurt.window-PROL-3 throw-**CONN.CVB** give-PST

'Then the (old lady) **threw** food **to** the old man through the yurt's window.' (elicitation based on 6.66a, LT04-45)

This phenomenon is also observed in clause chains, where the coordinative converb *-tʃʰi* and the connective converb *-mi* co-occur within the same clause chain (6.67), repeated here for convenience as (6.57). As discussed above, the example contains four sentences forming a clause chain: the first three clauses are linked by the coordinative converb *-tʃʰi*, while the final clause is linked by the connective converb *-mi*, which attaches to the negative verb *ə-*. The third clause, in particular, presents a complex predicate structure composed of three verbs: *ʊkkʊ-m ə-mi ətʰə-r* 'grow-CONN.CVB NEG-CONN.CVB finish-CONNEG' (underlined in the example). Here, the first occurrence of *-mi* attaches to *ʊkkʊ-* 'grow' and forms a complex predicate with *ətʰə-* 'finish' modifies the ability, while the second *-mi*, attached to the negative verb *ə-*, functions as a clause-chaining device, coordinating the third clause with the fourth. This example highlights the multifunctionality and structural complexity of converb usage in Solon, where a single converb form may serve distinct syntactic functions, complex predicate formation and inter-clausal coordination within the same sentence.

(6.67) *tʰa-tʊːxi* *ama-sxi* *tʰɔːl* *əjjə* *kɔjɔ* *ikki-wi* *taxi* *ʊtʃikiːta*
ta-dʊʊxi *ama-sxi* *tool* *eyye* *goyo* *iggi-wi* *daxi* *ʊjigiida*
DIST-ABL back-ADV.ALL rabbit PROX beautiful tail-REFL.SG again afterwards

katʃi-kiː-m *ətʰə-(r)-pi* *ʊti-**tʃʰi*** *xakki*
gaji-gii-m *ete-(r)-bi* *ʊdi-**ci*** *xaggi*
take-ITR-CONN.CVB finish-IPFV.PTCP-REFL.SG be.no.more-**COOR.CVB** pheasant

axaː-ni	*məxə-tə-ni*	*iː-səː-wi*		*saː-**tʃʰi***		*tʰɔːtʃʰi*
axaa-ni	*mexe-de-ni*	*ii-see-wi*		*saa-**ci***		*tooci*
brother-GEN	trick-DAT-3	enter-PFV.PTCP-REFL.SG		know-**COOR.CVB**		DIS.CON

tʰa-tʊːxi	*ama-ʃxi*	*tʰɔːl-ni*	*kɔjɔ*	*nantaːxaŋ*	*nʊnʊm*	*ikki-ni*
ta-dʊʊxi	*ama-sxi*	*tool-ni*	*goyo*	*nandaaxaŋ*	*nʊnʊm*	*iggi-ni*
DIST-ABL	back-ADV.ALL	rabbit-GEN	beautiful	beautiful	long	tail-3

ʊkkʊ-m	*ə-**mi***	*ətʰə-r*	*taxi*	*tʰa-nnaːŋ*	*ɔttɔːr*
ʊggʊ-m	*e-**mi***	*ete-r*	*daxi*	*ta-nnaaŋ*	*oddoor*
grow-CONN.CVB	NEG-**CONN.CVB**	finish-CONNEG	again	DIST-QLT	short

ikkə-ʃi	*ɔː-sɔ*	*kunəŋ.*
igge-si	*oo-so*	*guneŋ.*
tail-PROP	become-PST	hearsay

'After that, the rabbit was unable to take back her long tail **and** she realized she had been tricked by the pheasant brother, **and** after that, the rabbit's long tail never grew back, **and** she was left with a short tail.' (LT06-11)

6.5.2 Type2 converbs

Type 2 converbs comprise a group of converbs that express subordinating relations, including the perfective, durative, conditional, simultaneous, and temporal converbs. Section §6.5.2.1 first discusses cross-reference marking on converbs in Solon, a feature inherited from Proto-Tungusic. Then the subsequent sections then describe each converb in turn.

6.5.2.1 Cross-reference marking with converbs

Prototypical Northern Tungusic languages distinguish three types of converbs based on subject reference: same subject converbs (SS), different subject converbs (DS), and variable subject converbs (VS). SS converbs are restricted to contexts in which the subordinate and main clauses share the same subject. In theory, these converb forms do not allow different-subject constructions and never take person markers, see (6.68) from Lamunkhin Even). DS converbs, by contrast, are used exclusively in contexts with differing subjects between the main and

subordinate clauses. These always require overt person marking on the verb, see (6.69) from Evenki. VS converbs are flexible: when the subordinate clause shares its subject with the main clause, the verb typically takes a reflexive possessive suffix; when the subjects differ, a personal suffix is used. This pattern of switch-reference marking is well attested in languages like Oroqen (6.70).

(6.68) Lamunkhin Even (Pakendorf 2026:48)

stado-la	*bi-tɕe*	*bi-**mi***	*ti:k*	*Hebe:n-dule*
herd.R-LOC	COP-PFV.PTCP	AUX-**SS.COND**	now	GN-LOC

təgə-tɕ-tɕe	*bi-mtɕe-l-ti*
sit.down-TAM2-PFV.PTCP	AUX-SBJV-PL-1PL

'If we'd been in the herd, we would now be sitting in Sebjan.'

(6.69) Evenki (I. Nedjalkov 1997: 47)

bira-li	*ngene-d'e-**reki-n***	*tygde-l-le-n*
river-PROL	go-IMPV-**CVB-3SG**	rain-INCH-NFUT-3SG

'When (s)he was going along the river, it began to rain.'

(6.70) Oroqen (Cong 2019: 268, translation and glossing adapted)

a. | *min-ŋi* | *amin-iw* | *pʰantʃʰa-**tʃəkʰeen-mi*** | *arakʰi-ja* |
|---|---|---|---|
| 1SG.OBL-GEN | father-1SG | be.angry-**IMM.CVB-REFL.SG** | liquor-PTV |

im-na-n.
drink-AOR-3
'As soon as my father gets angry, he drinks.'

b. | *ʃiwən* | *tʰikʰtʰə-**tʃəkʰeen-in*** | *mərkən* | *tʃʊʊ-laa-wi* | *əmərki-tʃʰə* |
|---|---|---|---|---|
| sun | fall-**IMM.CVB-3** | PN | house-LOC-REFL.SG | come.back-PST |

'As soon as the sun set, Mergen returned his home.'

In Solon, subordinate converbs include both SS and VS types. The durative and perfective converbs clearly behave as SS forms: they do not take person marking and only occur when the subordinate and main clause subjects are the same. Solon does not appear to have any

dedicated DS converbs. Several VS converbs are attested, specifically the conditional, simultaneous, and temporal converbs. However, the cross-reference marking on VS converbs exhibits signs of erosion. The following Table 6-12 offers a summary of the frequency of person marking in subordinate clauses formed with VS converbs in the reduced Solon corpus.

Table 6-12: The frequency of overt cross-reference markers in VS converbal subordination (from reduced corpus)

converb	form	same subject	different subject
conditional converb	*-kʰi ~ -kkʰi*	4.2% (1/24)	21.2% (7/33)
simultaneous converb	*-t(A)li*	46.2% (6/13)	36.4% (8/22)
temporal converb	*-tʃʰixi*	0.0 % (0/2)	89.5% (17/19)

As can be seen in Table 6-12, the cross-reference system found in other Tungusic languages is no longer consistently maintained in Solon. Person marking in subordinate clauses is largely optional or in decline. Regarding the person marker, the cross-reference marker of 3-person seems to be omitted most easily. The sole exception to this phenomenon is the temporal converb *-tʃʰixi*, which demonstrates a comparatively higher frequency of personal marking when employed with different subjects.

6.5.2.2 Perfective converb *-tʰAːn*

The perfective converb *-tʰaːn* is a SS (same subject) converb. It indicates one action is completed before another begins and provides background information or context for the main clause.

(6.71) *əmun tʃʊk tʰir-**tʰəːŋ** pɔl talka-saː-mʊŋ.*
*emun jʊg tir-**teeŋ** bol dalga-saa-mʊŋ.*
One summer press-**PFV.CVB** autumn burn-PST-1PL.EXCL
‘**Having pressed** (the bricks) one summer, we burned them in the autumn.’ (LT18-80)

(6.72) *pəltir-wi* *juː-kuː-**tʰəːn*** *məːn-i-n* *pasa=l* *ukkʰə-tu*
beldir-wi *yuu-guu-**teen*** *meen-i-n* *basa=l* *ukke-du*
leg-REFL.SG exit-CAUS-**PFV.CVB** REFL-EP-3 again=PTCL door-DAT

xulaːː-ʃi-tʃi-rə-ŋ *kunəŋ*
xulee-si-ji-re-ŋ *guneŋ*
lie-STAT-PROG-AOR-3 hearsay
'**Having stretched out** its paw, the tiger was still lying at the door.' (LT41-54)

6.5.2.3 Durative converb *-ki*

The durative converb *-ki* is an SS (same subject) converb that refers to an action that has been ongoing over a period of time (6.73). However, verbal reduplication also serves as a productive strategy for expressing durative meaning/aspect (6.74), see §8.4.2 for details. Based on the corpus data, verbal reduplication appears to be the primary strategy for encoding durativity in Solon. This is evidenced by the fact that in the Solon corpus only 3/17 instances of the durative converb *-ki* express continuous action without additional reduplication.

(6.73) *[...]* *attʃʰaːn* *tʃʊmpara-ja* *tʃaw-**kiː**=l* *ɔriːta-m*
[...] *accaan* *jʊmbara-ya* *jaw-**gii**=l* *oriida-m*
mouse weasel-PTV catch-**DUR.CVB**=PTCL be.late-CONN.CVB

ul-tʃi-me *[...]*
ul-ji-me *[...]*
go-PROG-1SG
'I've **been catching** mice and weasel, and I am late.' (LT35-05)

(6.74) *tʰəjjə* *pəjə* *ɔttʰɔk* *pɔkɔ-tʊ* ***miːsan-ta-kiː*** ***miːsan-ta-kiː***
teyye *beye* *ottog* *bogo-dʊ* ***miisan-da-gii*** ***miisan-da-gii***
DIST person empty place-DAT **gun-VBZ-DUR.CVB** **gun-VBZ-DUR.CVB**

tʃəmu-wi *xɔkʰ* *maːn-tʃʰi* *nəːː-səː*
jemu-wi *xok* *maan-ci* *nee-see*
bullet-REFL.SG all ran.out-COOR.CVB put-PST
'That person **shot and shot** at the empty place and ran out of his bullets.' (LT12-07)

6.5.2.4 Conditional converb *-kʰi ~ -kkʰi*

The conditional converb form is *-kʰi~kkʰi*, it is a VS (variable subject) converb that is used to express a conditional subordinate relation. The person marker on the conditional converb is optional (Table 6-11), see example (6.75) with a person marker and example (6.76) without a person marker. In example (6.75) the person marker redundantly co-occurs with the overt subject *ʃi* '2SG'.

(6.75) *ʃì ə-tu aːsan-**kʰiː-ʃi** pi ʃìn-u-wə*
*si e-du aasan-**kii-si** bi sin-u-we*
2SG PROX-DAT sleep-**COND.CVB-2SG** 1SG 2SG.OBL-EP-DEF.ACC

sattʃʰi-tʃʰi waː-mi.
chop-COOR.CVB kill-1SG
'**If you** sleep here, I will kill you by chopping.' (LT40-30)

(6.76) *əjjə par iː-tʃʰi əmə-**kʰi** pi pai=l*
*eyye bar ii-ci eme-**ki** bi bai=l*
PROX tiger enter-COOR.CVB come-**COND.CVB** 1SG with.nothing=PTCL

ə-tʃì tʃì-wuː-r ki
e-ji ji-wuu-r gi
NEG-PROH eat-PASS-CONNEG Q
'**If** this tiger enters, would I be eaten without (a fight)?' (LT41-51)

Topic markers can develop out of conditionals (Haiman 1978). In Solon, the copular *pi-* carrying the conditional converb: *pi-kkʰi* can mark topics, see example (6.77). Further details on the topic particle *pikkʰi* see §7.3.1.1 and topicalization §11.1.

(6.77) *pi **pikkʰi** sʊrkʊːl-tʊ na ə-sə ulə-r pəjə*
*bi **bikki** sʊrgʊʊl-dʊ na e-se ule-r beye*
1SG **TOP** school-DAT also NEG-PST go-IPFV.PTCP person
'**As for me**, (I am) a person who didn't even go to school.' (LT21-03)

6.5.2.5 Simultaneous converb *-t(A)li*

The simultaneous converb form is *-t(A)li* and it is a VS (variable subject) converb. It historically derives from the prolative case *-t(A)li*. It functions like a case-marked participle or quasi-converb, expressing simultaneous temporal relations, but omits the participial morphology and retains only the case marking on the verb.

Theoretically, case markers are expected to attach to nominal elements; thus, their occurrence on verbal stems challenges the conventional morphological boundaries between nouns and verbs. Because the prolative form is frequently and productively directly used on a verb, in this context it is analysed as a converb rather than a nominal case form.

(6.78) *[...] uːsxi uːriː**-təli-ni** əkkiː-təː-ni puxu=l səːtʃʰi ɔːsɔ*
*[...] uu-sxi uurii**-deli-ni** eggii-dee-ni buxu=l seeci oo-so*
up-ADV.ALL raise-**SIM.CVB-3** bottom-DAT-3 entire=PTCL blood become-PST
'**When (the rabbit) raised her (tail)**, the bottom of its tail became entirely bloody.' (LT06-10)

(6.79) *niŋŋuŋ peː itərə**-təli** nɔːkɔː tʰari-ra-ŋ [...]*
*niŋŋuŋ bee idere**-deli** noogoo tari-ra-ŋ [...]*
six month approach-**SIM.CVB** vegetables plant-AOR-3
'**When** June approaches, people grow vegetables.' (LT27-48)

A comparable development is observed with the dative case marker *-tU*, which also appears on verbal forms in some contexts. In these cases, the participle marker may be omitted as well, see example (6.80). Nonetheless, I did not consider this usage as a converb, as the dative case still more frequently co-occurs with the overt participle form, see example (6.81).

(6.80) *xəːxəː-ni ɔltɔːn-tʊli juː**-tu**-ni xəːxəː aːʃan-tʃi-r xəːxəː*
*xeexee-ni oldoon-dʊli yuu**-du**-ni xeexee aasan-ji-r xeexee*
cat-GEN side-PROL exit-**DAT**-3 cat sleep-PROG-IPFV.PTCP cat

sərə-səː
seree-se
be.awake-PST
'**When** (the mice) passed by the cat, the sleeping cat was awake.' (LT16-03)

(6.81) *atʃil* *ɔː**-r-tʊ*** *pikkʰi* *əməː-wu-r* *jəːmə-jə* *aːʃin*
ajil *oo**-r-dʊ*** *bikki* *emee-wu-r* *yeeme-ye* *aasin*
work do-**IPFV.PTCP-DAT** TOP reduce-PASS-IPFV.PTCP thing-PTV NEG.EXIS
'There are no absent persons **when** doing works.' (LT22-08)

6.5.2.6 Temporal converb *-tʃʰixi*

The temporal converb *-tʃʰixi* expresses the relationship of 'when'. This converb is not found in other Tungusic languages, and its origin has not been detected. Formally this converb seems to have something in common with the coordinative converb *-tʃʰi* or the ablative case form *-tʰ(i)xi* in Solon, but it is difficult to identify with the current data.

The temporal converb *-tʃʰixi* often requires a personal marker; however, in the Solon narratives, only 3-person markers are observed; see example (6.82) with 3-person marker and (6.83) without 3-person marker.

(6.82) *[...]* *ʊːkantaː**-tʰxi-ni*** *xʊlʊː-tʰxi-ni* *pexal* *altʰan* *mukun* *juː-sə*
[...] *ʊʊgandaa**-txi-ni*** *xʊlʊʊ-txi-ni* *bexal* *altan* *mugun* *yuu-se*
saw-**TEM.CVB-3** gourd-ABL-3 many gold silver go.out-PST
'**When** (the old lady) sawed (the gourd), a lot of gold and silver went out from the gourd.' (LT02-17)

(6.83) *parikat-tʰixi* *əʃi* *ʊlti* *ʊːsa-tʃi-ra-ŋ* *kun**-tʃʰixi***
barigad-tixi *esi* *ʊldi* *ʊʊsa-ji-ra-ŋ* *gun**-cixi***
village.centre-ABL now blanket distribute-PROG-AOR-3 say-**TEM**

parikat-tʊ *kələː-nə-mi* *nin-tʃʰu.*
barigad-dʊ *gelee-ne-mi* *nin-cu.*
village.centre-DAT search-AM-CONN.CVB go-PST.1SG
'**When** the village centre said they were distributing blankets, I went to the village centre to ask for a blanket.' (LT25-09)

6.6 Participles

Participles are non-finite verbal forms that combine both verbal and nominal features, its main function is noun modifying. Solon has two participial forms: the imperfective participle suffix *-r(A)* (6.84), identical with the aorist tense suffix, and the perfective participle *-tʃʰA/-sA* (6.85), identical with the past tense suffix. Compared to other Northern Tungusic languages (Pakendorf & Aralova 2020: 298), Solon exhibits a notably reduced number and variety of participial forms, retaining only the two basic present and perfective participle. Another Northern Tungusic language spoken in China, Oroqen, also has a reduced number of participles. However, it does have one more than Solon, namely the habitual participle *-ŋkʰi/-ŋkʰɪ* (Cong 2019: 257–258).

(6.84) *mʊrin-pa-j* *pʊltʊxlaː**-r*** *pəjə* *aːʃin*
mʊrin-ba-y *bʊldʊxlaa**-r*** *beye* *aasin*
horse-DEF.ACC-1SG ride-**IPFV.PTCP** person NEG.EXIS
'There is nobody who rides my horse.' (LT09-15)

(6.85) *mun-i* *tʰir**-sə*** *tʰuːpʰi*
mun-i *tir**-se*** *tuupi*
1PL.EXCL.OBL-GEN press-**PFV.PTCP** brick
'(Those are) the bricks that we pressed.' (LT18-53)

Morphologically, participles resemble verbs in that they inflect for aspect (6.86) and voice (6.87) and also convey temporal and modal meanings. They resemble nouns in taking nominal case (6.88) and possessive suffixes (6.89).

(6.86) *ɔsxɔn* *tʃaw**-tʃi-r*** *ʃittən-tu-ni* *təki* *təkli-tʃʰi* *əm-səː*
osxon *jaw**-ji-r*** *sidden-du-ni* *degi* *degli-ci* *em-see*
fish catch-**PROG-IPFV.PTCP** moment-DAT-3 bird fly-COOR.CVB come-PST
'At the moment (when the hunter) was catching fish, a bird flew in.' (LT05-24)

(6.87) *[...]* *naːtʃil* *jəjə-ni* *min-ə-wə* *tʰatʰi-**kaː-sa***
[...] *naajil* *yeye-ni* *min-e-we* *tati-**gaa-sa***
maternal grandfather-GEN 1SG.OBL-EP-DEF.ACC learn-**CAUS-PFV.PTCP**

ukə-tʃi-wi *[...]*
uge-ji-wi *[...]*
word-INS-REFL.SG
'With the words which my grandfather taught me (lit. **made me learn**).' (LT25-25)

(6.88) *[...]* *ɔː-**rɔ-wɔ*** *tʰatʃʰa-mʊn.*
[...] *oo-**ro-wo*** *taca-mʊn.*
make-**IPFV.PTCP-DEF.ACC** learn-1PL.EXCL
'We learn how to **make (bread).**' (LT23-01)

(6.89) *na* *atta-nti* *nɔːkʊː-tʰi* *ul-**tʃʰəː-wi*** *pɔtɔ-kʰi*
na *adda-ndi* *noogʊʊ-ti* *ul-**cee-wi*** *bodo-ki*
also be.happy-2SG old.time-ADJZ go-**PFV.PTCP-REFL.SG** think-COND.CVB
'You will also be happy, if you think about how you lived in the past days (lit. your past days livings).' (LT22-26)

The imperfective participle *-r(A)* can be omitted when followed by the dative case (6.90). This pattern suggests a possible grammaticalization process, where the dative case may be developing into a converbial form, comparable to the simultaneous converb *-t(A)li*, which derives from the prolative case (§6.5.2.5).

(6.90) *xəːxəː-ni* *ɔltɔːn-tʊli* *juː-**(r)-tu**-ni* *xəːxəː* *aːʃan-tʃi-r*
xeexee-ni *oldoon-dʊli* *yuu-**(r)-du**-ni* *xeexee* *aasan-ji-r*
cat-GEN side-PROL exit-**IPFV.PTCP-DAT**-3 cat sleep-PROG-IPFV.PTCP

xəːxəː *sərə-səː*
xeexee *sere-see*
cat be.awake-PST
'**When** (the mice) pass by the cat, the sleeping cat was awake.' (LT16-03)

Syntactically, participles serve a wide range of functions: they function (1) as the sentential argument of adjuncts, see §10.4 on complement clauses; (2) as attributive modifiers, see §10.5 on adnominal clauses; (3) they can form a case-marked participle, that is, a quasi-converb (as termed by Janhunen 2012a: 169-172), to express adverbial relations, see §10.5.1.1.2, §10.5.1.3.2 and §10.5.3.1; (4) they can form a complement of postpositions to show adverbial relations, see §10.5.4 and 10.5.6; (5) and they can form a complex verbal predicate to express inflectional meanings, see §8.3.2.6 and §8.3.2.7.

6.7 Derivation of verbs

In Solon, verbs can be productively derived from nouns and adjectives. The primary verbal derivational suffixes are *-tA:*, *-lA:*, and *-nA:*, which form verbs expressing meanings such as 'to use X (as an instrument)', 'to become X', 'to have X', 'to do X', or more generally 'to perform an action involving X'. Synchronically, it is not possible to establish clear distributional or semantic conditions that distinguish these three suffixes. Across the corpus, their functions largely overlap, as summarized in Table 6-13. From a phonological perspective, the three allomorphs show no obvious conditioning: all of them can attach to stems ending in short vowels, long vowels, oral consonants, and nasal consonants, as illustrated in (6.91), all three suffixes can attach to noun or adjective ends with nasal consonants.

Table 6-13 Derivation of verbs

functions	examples with different suffixes
to use X (as an instrument)	*ʊ:kan* 'saw' -> *ʊ:kan-**ta:**-* 'saw sth.' *xaiʃi* 'scissors' -> *xaiʃi-**la:**-* 'cut sth. with scissors' *amma* 'mouth' -> *amma-**na:**-* 'hold sth. with mouth'
to become X	*kɔr* 'far' -> *kɔr-**lɔ:**-* 'become far' *kunʃə* 'village' -> *kunʃə-**tə:**-* 'become a village'
to have X	*ʃirxa* 'wound' -> *ʃirxa-**ta:**-* 'have wound = injure' *a:ʃi* 'temper' -> *a:ʃi-**la:**-* 'have temper = be mad' *ʊlkan* 'sunshine' -> *ʊlka-**na:**-* 'have sunshine = be bright'
to do X	*aŋ* 'hunting' -> *aŋ-**na:**-* 'do hunting = hunt' *xʊta* 'wedding' -> *xʊta-**la:**-* 'do wedding = marry'

to perform an action involving X	*tʰukkʰu* ‘pocket’	->	*tʰukkʰu-**ləː***-	‘put sth. into pocket’
	ʃiwar ‘mud’	->	*ʃiwar-**taː***-	‘be stuch into mud’
	miːkan ‘heart’	->	*miːkan-**naː***-	‘heart beating = afraid’

(6.91)

aːwɔŋ	‘hat’	->	*aːwɔŋ-**laː***-	‘wear a hat’
aawɔŋ		->	*aawɔŋ-**laa***	
miːsan	‘gun’	->	*miːsan-**taː***-	‘use a gun = shoot’
miisan		->	*miisan-**daa***	
aŋ	‘hunt’	->	*aŋ-**naː***-	‘do hunting = hunt’
aŋ		->	*aŋ-**naa***	

In addition to these main suffixes, a small number of other morphemes *-ʃi*, *-rAː* and *-tʰA* are attested with verbal derivational functions (6.92).

(6.92)

əruː	‘bad’	->	*əruː-**ʃi***-	‘bully’
eruu		->	*eruu-**si***-	
satti	‘old/old lady’	->	*satti-**raː***-	‘become old’
saddi		->	*saddi-**raa***	
saŋaːl	‘hole’	->	*saŋaːl-**tʰa***-	‘have a hole = break’
saŋaal		->	*saŋaal-**ta***-	

7 Adverbs, postpositions and particles

7.1 Adverbs

Adverbs function as modifiers of verbs, adjectives, or entire sentences. Adverbs as a word class are not morphologically inflected in Solon. Nouns taking the dative case and instrumental case can function as temporal, locational and manner adverbs. This section does not discuss these types of adverbs; relevant information can be found in §8.2.

Some words can function as both adjectives and adverbs. Solon has borrowed many adverbs from Mongolian and Chinese, leading to the loss of some Northern Tungusic converb and mood suffixes, thereby increasing the functional importance of adverbs. Based on semantics, adverbs in Solon can be classified into four categories: degree adverbs, manner adverbs, temporal adverbs, and modal adverbs, and each adverb type will be discussed in the §7.1.1. The §7.1.2 describes the derivation to adverbs.

7.1.1 Classification of adverbs

7.1.1.1 Degree adverbs

Degree adverbs typically modify adjectives, nouns, and other adverbs. In Solon, they can also modify verbal predicates, expressing the intensity or degree of an event. Multiple adverbs in Solon translate to ‘very’ in English (Table 7-1), but they differ in intensity, as indicated by elicitation data. There are several adverbs to express the meaning of ‘really’, among them *jɔttʰi* is clearly borrowed from Mongolian *jɔstʰɔi*. The two forms *jɔttʰi* and *nattʰi* express a neutral degree of ‘really, whereas *nəːrəŋ*, which is also likely to be borrowed from Mongolian *nəːrən*, expresses a meaning of ‘really’ while also conveying a mirative sense. Table 6-1 lists the commonly used degree adverbs in the Solon corpus, followed by examples (which are cross-referenced in the table).

Table 7-1: The degree adverbs in Solon (selected)

miːŋ~miːn	'very' (the strongest) (7.1)	*nattʰi*	'really' (7.6)
manti	'very' (2nd strongest) (7.2)	*nəːrəŋ*	'really.MIR' (7.7)
mənəŋ	'very' (3rd strongest) (7.3)	*antaxal*	'rather' (7.8)
turun aːʃin	'very' (lit. no appearance) (7.4)	*niləːn*	'rather.MN' (7.9)
sɔnin turun	'very' (lit. weird appearance)	*təmi~təmpəl*	'not.very' (7.10)
jɔttʰi	'really.MN' (7.5)		

(7.1) *taxi* *satti:-ni* ***miːn*** *ə-mi* *itʰəxə-r* *[...]*
daxi *saddii-ni* ***miin*** *e-mi* *itexe-r* *[...]*
again old.lady-3 **very** NEG-CONN.CVB believe-CONNEG
'Again, the old lady didn't believe **at all**.' (LT07-13)

(7.2) ***manti*** *tʰatʰi-r* *tʊra-ʃi* *ʊlʊr* *pi-ʃi-n*
mandi *tati-r* *dʊra-si* *ʊlʊr* *bi-si-n*
very study-IPFV.PTCP favor-PROP people COP-AOR-3
'There are people who like learning **very much**.' (LT39-18)

(7.3) *xəːmə-nin* ***mənəːŋ*** *aja*
xeeme-nin ***meneeŋ*** *aya*
meal-3 **very** good
'The meal is **very** good.' (LT11-21)

(7.4) *ə-tʃi* *tʃintʃi-ra* *nəlkʰi-ri* *əttiŋ* *kʰi* ***turuŋ aːʃin*** *sutʃʰ-tʃʰi*
e-ji *jinji-ra* *nelki-ri* *eddiŋ* *ki* ***duruŋ aasin*** *suc-ci*
NEG-PROH tell-CONNEG spring-ADJZ wind TOP **very** severity-PROP
'Don't mention it, the spring wind is **very** severe.' (LT27-68)

(7.5) *aja-tʃi* *məkɔ-m* *tʃɔkɔ-m* *ul-tʃʰəː-mun* ***jɔttʰi***
aya-ji *mogo-m* *jogo-m* *ul-cee-mun* ***yotti***
good-INS suffer-CONN.CVB grieve-CONN.CVB go-PST-1PL.EXCL **really.MN**
'We suffered a lot, **really**.' (LT20-163)

(7.6) ***natt^{h}i*** *naːl-tʃi-wal* *ɔː-sɔ* *ʊlʊr*
natti *naal-ji-wal* *oo-so* *ʊlʊr*
really hand-INS-REFL.PL do-PFV.PTCP people
'(We) **really** worked by our own hands. (lit. (We are the) people who really did work by their own hands.) (LT18-35)

(7.7) ***nəːrən***=*t^{h}* *alt^{h}an* *kat^{h}a* *kunəŋ.*
neeren=*t* *altan* *gata* *guneŋ.*
Really.MN=PTCL gold star hearsay
'It was **really** Venus!' (suprise to the speaker) (LT33-43)

(7.8) *talka-sa-t^{h}e* ***antaxal*** *pʊtt^{h}i-ta* *ɔː-tʃ^{h}i* *aːʃin=l*
dalga-sa-te ***andaxal*** *bʊtti-da* *oo-ci* *aasin=l*
burn-PST-1PL.INCL **rather** cold-DAT become-COOR.CVB NEG=PTCL

ɔː-wʊː-sɔ *pi-sə* *t^{h}ari*
oo-wʊʊ-so *bi-se* *tari*
become-CAUS-PFV.PTCP COP-PST DIST
'We burned (bricks the whole autumn), the weather became **rather** cold, we finished burning the bricks.' (LT18-83)

(7.9) *əʃi* *ɔwɔː* *xʊŋ* *əʃi* ***nilәːn*** *takk^{h}iː-laː-tʃi-ra-ŋ*
esi *owoo* *xʊŋ* *esi* ***nileen*** *dakkii-laa-ji-ra-ŋ*
now GN MIR now **rather.MN** close-VBZ-PROG-AOR-3
'Now, it is getting **rather** close to the Oboo.' (LT09-31)

(7.10) *əxur* *t^{h}əkkən-tu* ***təmpəl*** *t^{h}ək-ʃi-k^{h}iʃi* *pi-sə*
exur *teggen-du* ***dembel*** *teg-si-kisi* *bi-se*
cow car-DAT **not.very** sit-STAT-HAB COP-PST
'People **seldom** (lit. **not very**) take a seat on the cart (instead, they walk next to the cart).' (LT08-08)

7.1.1.2 Manner adverbs

Manner adverbs modify verbs and describe the way an action is performed. Semantically, they

encompass various aspects of the verb's meaning, including manner proper, scope and frequency.

Manner adverbs proper specifically modify verbs to indicate how an action is carried out. Frequency adverbs specify how often an action occurs, indicating habitual, repetitive, or occasional events. Scope adverbs define the extent, inclusivity, or exclusivity of an action or state, clarifying whether an event applies universally, collectively, individually, or to a limited degree, see Table 7-2 and the following a selection of examples.

Table 7-2: The manner adverbs in Solon (selected)

manner adverbs proper	*amar*	'quickly'	*pe:*	'for.nothing.CN'
	səmə:r	'quietly.MN'	*kəl kəl*	'almost'
	tʰə:tə	'quietly'	*araŋkʰəŋ*	'hardly'
	pʊrʊ	'wrong.MN'		
scope adverbs	*amʊsxʊŋ*	'a.little'	*suttʰu*	'all'
	əmkʰə:ŋ	'alone'	*əmrə:tʰə*	'together'
	xəkkʰɔ	'all'		
frequency adverbs	*xi:r*	'not.at.all'	*itti ~ jətti*	'normally'
	xa:ja	'sometimes.MN'	*ʊri:l*	'constantly'
	ə:ril ə:ril	'again.and.again'		
	nəitəm	'generally.MN'		

(7.11) *[...] ʃi* ***amar*** *ukʰ-kʰə [...]*
[...] si ***amar*** *uk-ke [...]*
2SG **quickly** go-IMP
'You go **quickly**!' (LT29-89)

(7.12) ***ara:ŋkʰaŋ*** *əjjə əwən-pə-ni ka-ttʃʰi əw-u:-sə [...]*
araaŋkaŋ *eyye ewen-be-ni ga-cci ew-uu-se [...]*
hardly PROX thorn-DEF.ACC-3 get-COOR.CVB go.down-CAUS-PST
'(The boy) was **hardly** able to remove this thorn.' (LT41-62)

(7.13) *pai* *par-tʊ* *tʃit-wuː-m* *ə-ʃi-n* *ɔː-tɔː.*
bai *bar-dʊ* *jid-wuu-m* *e-si-n* *oo-doo.*
for.nothing.CN tiger-DAT eat-PASS-CONN.CVB NEG-AOR-3 become-CONNEG
'(I) can't be eaten by the tiger without (a fight) (lit. **for nothing**)' (LT41-40)

(7.14) *tʰɔːtʃʰi* *əjjə-wə* *iʃi-tʃʰi* *ʊnatʃi* ***amʊsxʊŋ*** *sətʃiklə-səː*
tooci *eyye-we* *isi-ci* *ʊnaji* ***amʊsxʊŋ*** *sejigle-see*
DIS.CONN PROX-DEF.ACC see-COOR.CVB girl **a.little** be.suspicious-PST
'Then the girl saw this and she was **a bit** suspicious.' (LT28-107)

(7.15) *pəjə* ***xɔkkʰɔ***=*l* *əmu*=*l* *atal* *pi-sə*
beye ***xokko***=*l* *emu*=*l* *adal* *bi-se*
person **all**=PTCL one=PTCL same COP-PST
'People used to be **all** the same.' (LT21-24)

(7.16) *tʰɔːtʃʰi* *pɔŋkɔŋ* *ukkʰəːxəŋ-nin* *əmmə* *apaː-tʃi-wi* ***əmrəːtʰ***
tooci *boŋgoŋ* *ukkeexeŋ-nin* *emme* *abaa-ji-wi* ***emreet***
DIS.CONN big son-3 mother father-INS-REFL.SG **together**

emtar-tʃi-sa *kunəŋ*
emdar-ji-sa *guneŋ*
live-PROG-PST hearsay
'Then the older son was living **together** with his parents.' (LT08-06)

(7.17) *tʰər* *min-tu* ***əːril_əːril*** *tianxua* *əmə-rə-ŋ*
ter *min-du* ***eeril_eeril*** *dianxua* *eme-re-ŋ*
DIST 1SG.OBL-DAT **again.and.again** phone come-AOR-3
'He calls me **again and again**.' (EL01-90)

(7.18) *ikkitʃʰi* ***xaːja*** *təttʰə-kʰiʃi* *pi-sə* *ʃintʃə*
iggici ***xaaya*** *dette-kisi* *bi-se* *sinje*
food **sometimes** to.wet-HAB COP-PST PTCL
'The food used to get wet **sometimes**.' (LT20-180)

(7.19) *xara* *əxur* ***jətti*** *sakaːn* *əxur* *nəkəːn* *ɔː-kʰiʃi* *pi-sə* *ʧaxa*
xara *exur* ***yeddi*** *sagaan* *exur* *negeen* *oo-kisi* *bi-se* *jaxa*
black cow **normally** white cow SIML become-HAB COP-PST PTCL
'Black cows **normally** became like white cows (because of numerous mosquito bites).' (LT20-79)

7.1.1.3 Temporal adverbs

Solon has some general temporal adverbs which are used to provide temporal information on an event. Some of them are listed below:

Table 7-3: Temporal adverbs in Solon (selected)

nɔːʧʰi	'before'	*tʰəliŋ*	'just.before'
aːlxat	'forever'	*əsxuŋ*	'just.before'
parin	'immediately.MN'	*jak*	'exact.duration.MN'
xiːtʰ	'immediately'		

(7.20) *ʊlkʰʊŋ* *pʊkkʊŋ-pa-ʃi* ***nɔːʧʰi*** *nənə-ʧʰi* *xata-naː-ra-ŋ*
ʊlkʊŋ *bʊggʊŋ-ba-si* ***nooci*** *nene-ci* *xada-naa-ra-ŋ*
wet willow-DEF.ACC-2SG **before** go-COOR.CVB cut-AM-AOR-3
'People go and cut the fresh willows **beforehand**.' (LT20-37)

(7.21) *[...]* *ʧalʊː* *paital* *əru* *ɔː-sə-wə* *saː-ʧʰi*
[...] *jalʊʊ* *baidal* *eru* *oo-so-we* *saa-ci*
young.man situation bad become-PFV.PTCP-DEF.ACC know-COOR.CVB

parin *ul-ʧʰə* *[...]*
barin *ul-ce* *[...]*
immediately.MN go-PST

'The young man knew that the situation became bad and left **immediately**.' (LT28-81)

(7.22) *[...]* *nantʰʊŋ-tʊ* *nənə-(r)-tu* *kʰi* ***xiːtʰ-ə=l*** *iː-tʃʰi*

[...] *nantʊŋ-dʊ* *nene-(r)-du* *ki* ***xiidʰ-e=l*** *ii-ci*

GN-DAT go-IPFV.PTCP-DAT TOP **immediately**-EP=PTCL reach-COOR.CVB

əmə-rə-ŋ

eme-re-ŋ

come-AOR-3

'As for going to Nantun, one can **immediately** reach there.' (LT20-166)

(7.23) *tʰɔːtʃʰi* *pəitʃiŋ-tu* *iʃi-saː-mʊn* ***jak*** *əmun* *peka*

tooci *beijiŋ-du* *isi-saa-mʊn* ***yag*** *emun* *bega*

DIS.CONN GN-DAT reach-PST-1PL.EXCL **exact.duration.MN** one month

ul-tʃʰə-mun.

ul-ce-mun.

go-PST-1PL.EXCL

'Then we reached Beijing, we travelled **exactly** 1 month.' (LT36-14,15)

7.1.1.4 Modal adverbs

Solon has several modal adverbs, the majority of which are borrowed from Mongolian to express epistemic and deontic modality. See Table 7-4 below.

Table 7-4: The modal adverbs in Solon

kəltʃʰu kultʃʰu	'almost'	*tʃaːwal*	'obligatory (deontic)' (MN)
parak	'probably' (MN)	*law*	'must (epistemic)' (MN)
kʰəːnəŋ	'probably'(CN)		

(7.24) *tʰɔːtʃʰi* *ətʰxəŋ* *əjjə-wə* *tɔːlti-tʃʰi* *tili-ni* *ənuː-tʃʰi*
tooci *etxeŋ* *eyye-we* *dooldi-ci* *dili-ni* *enuu-ci*
DIS.CONN old.man PROX-DEF.ACC hear-COOR.CVB head-3 hurt-COOR.CVB

kəltʃʰə *manaraː-tʃʰi* *tʰixi-rə-ŋ*
gelce *manaraa-ci* *tixi-re-ŋ*
almost faint-COOR.CVB fall-AOR-3
'Then the old man hears this, his head hurts and he **almost** faints.' (LT28-16)

(7.25) *ajja* *pi* ***parak*** *məːŋkʰəːŋ* *na* *lanwəi_ʃəwʃuː* *na* *ɔː-sʊ.*
ayya *bi* ***barag*** *meeŋkeeŋ* *na* *lanwei_sewsuu* *na* *oo-sʊ.*
INTERJ 1SG **probably** REFL also appendectomy also do-PST.1SG
'Oh, I have **probably** operated an appendectomy all by myself as well.' (LT39-99)

(7.26) *[...]* *apa* ***tʃaːwal*** *min-tu* *puː-rə-ŋ.*
[...] *aba* ***jaawal*** *min-du* *buu-re-ŋ.*
father **obligatory** 1SG.OBL-DAT give-AOR-3
'My father **must** (lit. obligatory**)** give it to me.' (LT39-87)

(7.27) *mitʰi-ni* *tɔː-lə* ***law*** *əmun* *pəjə* *əjjə* *par-wa*
miti-ni *doo-lo* ***law*** *emun* *beye* *eyye* *bar-wa*
1PL.INCL-GEN inside-LOC **must** one person PROX tiger-DEF.ACC

aliː-xaːn-tʃʰa
alii-xaan-ca
be.angry-CAUS-PST
'One of us **must** have angered this tiger.' (LT41-14)

Unlike other Northern Tungusic languages, where presumptive and necessitive/debitive meanings are conveyed through mood suffixes (Pakendorf & Aralova 2020: 296-297, I. Nedjalkov 1997: 263-264), Solon expresses these modalities through adverbs. Due to language contact, the Northern Tungusic mood suffixes have been lost in Solon. For instance, Evenki uses the mood suffix *-mAchi* to express necessitive/debitive meanings (7.28), and Lamunkhin Even has developed the bimorphemic suffix *-čAːdʒi* for the presumptive mood (7.29). In contrast, Solon relies entirely on adverbs to express these meanings.

(7.28) Evenki (I. Nedjalkov 1997: 264, glossing adapted)
*baka-**machi**-m*
find-**NEC**-1SG
'I will **have to** find.'

(7.29) Lamunkhin Even (Pakendorf & Aralova 2020: 297)
*biː=de kočuken bi-d-niken ecin ebi-**čedʒi**-m*
1SG=PTCL small be-PROG-SIM.CVB like.this play-**PRES**-1SG
'I **probably** played like this when I was small.'

7.1.2 Derivation of adverbs

Adverbs in Solon are derived from adjectives and nouns. Table 7-5 summarizes the attested adverbial derivational markers and their functions.

Table 7-5: Derivational to adverbs

suffix	direction of derivation	comments
-ʃi~-tʃʰi	noun -> adverb	This is proprietive suffix, and it derives adverbs which have the property of the base noun (7.30).
-tʃi	adjective -> adverb	This is the instrumental case, attaches to the adjectives to express 'do something with the property of the adjective' (7.31).
-kU	noun -> adverb	It only attaches to temporal nouns and derives adverbs expressing the meaning of 'whole X'. (7.32).
-ʃxi	noun -> adverb	It only attaches to relational nouns and derives adverbs expressing the meaning of 'X toward'. (7.33).

(7.30) *xunsun* 'force' -> *xunsun-**tʃʰi*** 'with force = firmly'
xunsun -> *xunsun-**ci***

xatʰʊːtʃil	‘suffering’	->	*xatʰʊːtʃil**-tʃʰi***	‘with suffering’
xatʊʊjil		->	*xatʊʊjil**-ci***	
sətʃiːk	‘suspicion’	->	*sətʃiːk**-tʃʰi***	‘with suspicion = suspiciously’
sejiig		->	*sejiig**-ci***	

(7.31)

kɔjɔ	‘beautiful’	->	*kɔjɔ**-tʃi***	‘with beautiful = nicely’
goyo		->	*goyo**-ji***	
aja	‘good’	->	*aja**-tʃi***	‘with good = nicely/well’
aya		->	*aya**-ji***	
tʰukun	‘fast’	->	*tʰukun**-tʃi***	‘fast’
tugun		->	*tugun**-ji***	

(7.32)

tɔlpɔn	‘night’	->	*tɔlpɔn**-kʊ***	‘(do X) whole night’
dolbon		->	*dolbon**-gʊ***	
inək	‘day’	->	*inək**-ku***	‘(do X) whole day’
ineg		->	*ineg**-gu***	
tʰukə	‘winter’	->	*tʰukə**-ku***	‘(do X) whole winter’
tuge		->	*tuge**-gu***	

(7.33)

tʃul	‘front’	->	*tʃulə**-ʃxi***	‘face toward’
jul		->	*jule**-sxi***	
əkkə	‘bottom’	->	*əkkə**-ʃxi***	‘bottom toward’
egge		->	*egge**-sxi***	
ama	‘back’	->	*ama**-ʃxi***	‘back toward’
ama		->	*ama**-sxi***	

7.2 Postpositions

This section discusses postpositions and extends the discussion to postpositional phrases or postpositional constructions. Postpositions belong to the broader class of adpositions, which also includes prepositions. Following Hagège (2010: 8), an adposition (Adp) is "*an unanalysable or analysable grammatical word constituting an adpositional phrase (Adp-phrase) with a term that it puts in relationship, like case affixes, with another linguistic unit, by marking the grammatical and semantic links between them.*"

The linguistic unit that the adposition relates to is referred to as the head of the adpositional phrase, typically a verb, noun, or adjective. The term that is related to the head by the adposition and functions as its complement is called the governed term of the adposition. The position of the adposition relative to the governed term determines whether the language uses postpositions (Adp follows the governed term) or prepositions (Adp precedes it) (Hagège 2010: 9).

Solon employs only postpositions, forming postpositional phrases. Based on their structure, Solon postpositional phrases can be divided into two main types: (1) Complex postpositional phrases, where the postposition is derived from a relational noun and co-occurs with a case suffix; (2) Circumstantial postpositions (simple postpositional constructions), where a single postposition governs its complement directly. The complex postpositional phrase is discussed in §7.2.1, and the circumstantial postpositional phrase is in §7.2.2.

7.2.1 Complex postpositional phrase

7.2.1.1 Constructions

In complex postpositional phrases, the postpositions originate from relational nouns (noun-derived postpositions) and typically take a genitive or unmarked nominative case on the governed term.

A complex postpositional phrase generally involves five elements, as shown in (7.34):

(1) the governed term ‘dog’;

(2) the genitive or nominative case marked on the governed term;

(3) the postposition derived from a relational noun ‘front’;

(4) the postpositional affix *-tA*, which historically conveys the meaning ‘side’ but is often semantically bleached.

(5) the dative case marked on the postposition, which related to the function of postpositional constructions in the clause;

(6) an optional possessive suffix attached to the postposition, cross-referencing the governed term.

(7.34) *nɛnixin(-ni) ʧul-tə-tu(-ni)*
nɛnixin(-ni) jul-de-du(-ni)
dog(-GEN) front-SIDE-DAT(-3)
‘In front of the dog’

7.2.1.1.1 Nominative–genitive alternation on the governed term

The governed term in the complex postpositional construction can be either marked by the nominative or genitive case. Compare examples (7.35a and 7.35b), both expressing ‘on top of the mountain’, and (7.36a and 7.36b), both expressing ‘into the tent’. In the examples (7.36), two sentences come from the same speaker within a single narrative, both nominative and genitive marked governed term is accepted, though there is a variation of the personal-marker on the postposition. Therefore, it is unclear whether the alternation between genitive and nominative marking on the governed term is functionally meaningful. However, in the Solon corpus, the genitive-marked form is more frequent (74.7%, 130 out of 174 occurrences).

(7.35) a. *əjjə pəjə uri* ***ɔrɔːn****-tʊliː-ni aŋ ɔː-mi*
eyye beye uri ***oroon****-dʊlii-ni aŋ oo-mi*
PROX person mountain **top**-PROL-3 hunting make-CONN.CVB

ul-ʧi-rə-ŋ
ul-ji-re-ŋ
go-PROG-AOR-3
‘This person is hunting **on the mountain**.’ (EL04-37)

b. *tʰɔːtʃʰi* *unəxun-tʃi* *tʃuːr-iː* *kʰi* *uri-**ni*** ***ɔrɔːn**-liː* *ul-tʃʰə*
tooci *unexun-ji* *juur-ii* *ki* *uri-**ni*** ***oroon**-lii* *ul-ce*
DIS.CONN kid-INS two-COLL TOP mountain-**GEN** **top**-PROL go-PST
'Then (the mother goat) walked **on the mountain** together with goat lamb.' (LT15-17)

(7.36) a. *xɔkkʰɔ* *maixaːn* ***tɔː**-lɔː-n* *nəː-m* *puː-rə-ŋ.*
xokko *maixaan* ***doo**-loo-n* *nee-m* *buu-re-ŋ.*
all tent **inside**-LOC-3 put-CONN.CVB give-AOR-3
'The tiger put all the things **into the tent**.' (LT41-73)

b. *əmun* *pilti:r* *maixaːn**-ni*** ***tɔː**-lɔː* *iː-wuː-sə*
emun *bildiir* *maixaan**-ni*** ***doo**-loo* *ii-wuu-se*
one leg tent-**GEN** **inside**-LOC enter-CAUS-PST
'(The tiger) entered one leg **into the tent**. (LT41-49)

7.2.1.1.2 Personal possessive marking on the postposition

The presence of possessive suffixes on postpositions is also variable and appears to be optional. When the governed term is nominative-marked, the postposition may appear with or without the possessive suffix (7.37 and 7.38). Similarly, when the governed term is genitive-marked, both patterns are attested (7.39 and 7.40). Although no comprehensive statistical analysis has been conducted, preliminary observations suggest that constructions with a nominative governed term and no possessive suffix (as in 7.38) are comparatively rare.

(7.37) *əjjə* *xʊrkan* ***tɔː**-lɔː**-n*** *urilən* *pi-tʃi-rə-ŋ*
eyye *xʊrgan* ***doo**-loo**-n*** *urilen* *bi-ji-re-ŋ*
PROX enclosure **inside**-LOC**-3** household COP-PROG-AOR-3
'There is a household **inside this enclosure**.' (EL02-06)

(7.38) *[...]* *ɔrɔ* ***ɔrɔːn**-tɔ* *tʰətt*ʰ*ukəː-tʃʰi=l* *aːʃin-tʃʰa*
[...] *oro* ***oroon**-do* *tettugee-ci=l* *aasin-ca*
bed **top**-DAT climb-COOR.CVB=PTCL sleep-PST
'(He) climbed **on the bed** and slept. (EL08-60)

(7.39) *[...]* *tɔːlti-tʃʰi* *taxi* *tʃuː-**ni*** ***tɔː-lɔ-n*** *ʊxʊn* *kaːlaːsʊn* *xʊr-sa*
[...] *dooldi-ci* *daxi* *juu-**ni*** ***doo-lo-n*** *ʊxʊn* *gaalaasʊn* *xʊr-sa*
hear-COOR.CVB again house-**GEN** **inside**-LOC-**3** what swallow trap-PST

kunəŋ
guneŋ
hearsay
'(The old lady) heard about it, and she trapped a swallow **inside the house**.' (LT02-22)

(7.40) *kʊtta* *urə-**niː*** ***ɔrɔːn-tʊ*** *aŋtʃʰin* *ul-tʃi-rə-ŋ*
gʊdda *ure-**nii*** ***oroon-dʊ*** *aŋcin* *ul-ji-re-ŋ*
tall mountain-**GEN** **top**-DAT hunter go-PROG-AOR-3
'A hunter is walking o**n the high mountain**.' (EL04-07)

7.2.1.1.3 Postpositional suffix *-tA*

Another unclear phenomenon involves the use of the postpositional sffix *-tA* 'SIDE,' which appears with a few relational nouns only when followed by the dative case marker. Other spatial case forms do not require the *-tA* suffix, and the other case markers also do not require the *-tA* suffix. This pattern seems to be influenced more by phonological factors than by syntactic or semantic ones, because relational nouns ending in nasal consonants tend not to take the *-tA* suffix, see Table 7-5 below.

Table 7-5: The requirement of -tA 'SIDE' suffix when attaching dative case

ɔrɔːn 'top'	*əkki* 'bottom'	*ami* 'behind'	*akkʰaŋ* 'behind'	*tʃul* 'front'	*tɔː* 'inside'	*tʰul* 'outside'	*ɔltɔːn* 'side'	*ʃittən* 'middle'
-	+	+	-	+	-	+	-	-

(7.41) *tʰɔːtʃʰi* *əjjə* *satti* *əjjə* *xʊlʊː-wi* *pas* *sɔŋkʰɔ-niː-wi*
tooci *eyye* *saddi* *eyye* *xʊlʊʊ-wi* *bas* *soŋko-nii-wi*
DIS.CONN PROX old.lady PROX gourd-REFL.SG also window-GEN-REFL.SG

əkki-təː-tu-ni *tʰari-sa* *kunəŋ* *kʰə*
eggi-dee-du-ni *tari-sa* *guneŋ* *ke*
bottom-SIDE-DAT-**3** plant-PST hearsay PTCL
'It is said that the old lady also planted this gourd **under her window**.' (LT02-29)

(7.42) *əjjə* *nɛːnixin* *tʃuː-ni* ***tʃul-tə-tu*** *akka-ʃiː-tʃi-ra-ŋ*
eyye *nɛːnixin* *juu-ni* ***jul-de-du*** *agga-sii-ji-ra-ŋ*
PROX dog house-GEN **front-SIDE**-DAT walk-STAT-PROG-AOR-3
'This dog is walking **in front of the house**.' (EL08-13)

(7.43) *[...]* *əmun* *pəjə* *əmun* *ʊxʊn-ʃi* *ʊltʊ-wal* ***ami-taː-tʊ-wal***
[...] *emun* *beye* *emun* *ʊxʊn-si* *ʊldʊ-wal* ***ami-daa-dʊ-wal***
one person one what-PROP blanket-REFL.PL **back-SIDE**-DAT-REFL.PL

iŋŋi-səː-mun
iŋŋi-see-mun
carry.on.back-PST-1PL.EXCL
'Each person had one what, and we carried the **blankets at our behind.**' (LT36-12)

(7.44) *tʰɔːtʃʰi* *əmun* *əxur* *ikki-tʃi-r* *uriːlən-ni*
tooci *emun* *exur* *iggi-ji-r* *uriilen-ni*
DIS.CONN one cow maintain-PROG-IPFV.PTCP household-GEN

tʰul-təː-tə-ni *nuttʃʰi-tʃi-rə-ŋ*
tul-dee-de-ni *nucci-ji-re-ŋ*
outside-SIDE-DAT-3 pass.through-PROG-AOR-3
'Then (they) passed through the outside of a household which keeps cows.' (LT01-62)

7.2.1.2 Postpositions derived from relational nouns

In complex postpositional phrases, postpositions are derived from a set of relational nouns that convey spatial, temporal, or other relations. The full inventory of these relational-noun-based postpositions is presented in Table 7-6 below and followed by examples.

Table 7-6: The relational nouns as postpositions and their functions

Relational noun	Form	Spatial relations	Temporal relations	Other relations
top	*ɔrɔːn*	on X (7.35)	-	-
bottom	*əkki*	under X (7.41)	-	-
back	*ami* *akkʰaŋ*	behind X (7.43) (7.45)	-	-
front	*tʃul*	in front of X (7.42)	before X (7.46)	-
inside	*tɔː*	inside X (7.36)	-	among X (7.47)
outside	*tʰul*	outside X (7.48)	-	-
side	*ɔltɔːn* *tɔkɔ*	X side (7.49) next to X (7.50)	-	marker of comparee (only *tɔkɔ*) (7.51)
middle/gap	*ʃittən*	gap of X (7.52)	during X (7.53)	-

(7.45) *tʰɔːtʃʰi satti əʃi attar-ni **akkʰan**-tali məjəːn-tʃʰə kunəŋ*
*tooci saddi esi addar-ni **akkan**-dali meyeen-ce guneŋ*
DIS.CONN old.lady now cabinet-GEN **back**-PROL hide-PST hearsay
'Then, the old lady hid **behind the cabinet**.' (LT04-32)

(7.46) *tʰɔːtʃʰi* *ɔri* *asa-r-ni* ***tʃul****-təː-tu-ni* *əri* *ukkʰəːxəːŋ*
tooci *ori* *asa-r-ni* ***jul****-dee-du-ni* *eri* *ukkeexeeŋ*
DIS.CONN evening sleep-IPFV.PTCP-GEN **front**-side-DAT-3 PROX boy

tʃuː-niː-nin *ətʃin-tu-ni* *kun-tʃʰəː*
juu-nii-nin *ejin-du-ni* *gun-ce:*
house-GEN-3 owner-DAT-3 say-PST

'Then in the evening, **before sleeping,** this boy said to the owner of the house.' (LT35-15)

(7.47) *əri* *ati* *pəjə-ni* ***tɔː****-lɔː-n* *əmun* *nisxuŋ* *tʃalʊ* *pi-ʃi-n.*
eri *adi* *beye-ni* ***doo****-loo-n* *emun* *nisxuŋ* *jalʊ* *bi-si-n.*
PROX several person-GEN **inside**-LOC-3 one small young.man COP-AOR-3
'There is a small young man **among** these several persons.' (LT41-03)

(7.48) *tʰɔːtʃʰi* *əmun* *əxur* *ikki-tʃi-r* *uriːlən-ni*
tooci *emun* *exur* *iggi-ji-r* *uriilen-ni*
DIS.CONN one cow maintain-PROG-IPFV.PTCP household-GEN

tʰul*-təː-tə-ni* *nuttʃʰi-tʃi-rə-ŋ*
tul*-dee-de-ni* *nucci-ji-re-ŋ*
outside-side-DAT-3 pass.through-PROG-AOR-3
'Then (they) passed through the outside of a household which keeps cows.' (LT01-62)

(7.49) *xəːxəː-ni* ***ɔltɔːn****-tʊli* *juː-(r)-tu-ni* *xəːxəː* *aːʃan-tʃi-r* *xəːxəː*
xeexee-ni ***oldoon****-dʊli* *yuu-(r)-du-ni* *xeexee* *aasan-ji-r* *xeexee*
cat-GEN **side**-PROL exit-IPFV.PTCP-DAT-3 cat sleep-PROG-IPFV.PTCP cat

sərə-səː
sere-see
be.awake-PST
'When (the mice) passed by **next to the cat**, the sleeping cat was awake.' (LT16-03)

(7.50) *[...]* *əjjə* *pu-sə* *xəːxəː* *ninxin-niː-nin* ***tɔkɔ**-lɔː-tʊ-ni*
[...] *eyye* *bu-se* *xeexee* *ninxin-nii-nin* ***dogo**-loo-dʊ-ni*
PROX die-PFV.PTCP cat dog-GEN-3 **side**-LOC-DAT-3

xulɔː-ʃi-tʃi-rə-ŋ
xulee-si-ji-re-ŋ
lie-STAT-PROG-AOR-3
'This dead cat was lying **next to their dog**.' (LT35-23)

(7.51) *[...]* *nɔːkʊː-tʰi* *nəikəm* ***tɔk**-lɔ* *əʃi* *kʰi* *sʊnin* *aja* *ɔː-sɔ*
[...] *noogʊʊ-ti* *neigem* ***dog**-lo* *esi* *ki* *sʊnin* *aya* *oo-so*
past.time-ADJZ society **side**-LOC now TOP weird good become-PST

ʃintʃə
sinje
PTCL
'**Compared** to the society of the past (lit. next to the society of the past), it has become so good.' (LT20-136)

(7.52) *[...]* *ɔntʰɔːn-pɔ-ni* *ur-ni* ***ʃittən**-tu* *nʊːtaː-tʃʰi* *[...]*
[...] *ontoon-bo-ni* *ur-ni* ***sidden**-du* *nʊʊdaa-ci* *[...]*
drum-DEF.ACC-3 mountain-GEN **middle**-DAT throw-COOR.CVB
'(He) threw the shaman's drum to the **mountain gap**.' (LT42-22)

(7.53) *ɔsxɔn* *tʃaw-tʃi-r* ***ʃittən**-tu-ni* *təki* *təkli-tʃʰi* *əm-səː*
osxon *jaw-ji-r* ***sidden**-du-ni* *degi* *degli-ci* *em-see*
fish catch-PROG-IPFV.PTCP **middle**-DAT-3 bird fly-COOR.CVB come-PST
'**During his fishing**, a bird flew in. (lit. At his fishing moment)' (LT05-24)

7.2.2 Circumstantial postpositional phrase

Solon has a number of circumstantial postpositions that combine with nominals (and occasionally with verbal forms) to express various contextual or situational meanings. These postpositions contribute semantic nuances such as distribution, limitation, similarity,

concession, and cause. Table 7-7 below lists these postpositions together with their core functions and glosses.

The origins of most circumstantial postpositions remain unclear in the current study. Notably, *ʧaːrin* and *ʧaxa* resemble subordinating conjunctions in meaning; however, since they follow participle-marked predicates, they are analyzed here as postpositions with subordinating functions. The governed term of these postpositions can thus be either a noun phrase or a participle-marked predicate. The following subsections describe each circumstantial postposition in detail.

Table 7-7: The circumstantial postpositions in Solon

form	**meaning**	**origin**	**glossing**
tʰaniŋ	every X	unclear	DISTR
ʧakkʰa	until X/ up to X	noun ‘edge’	TERM
ʧəkiŋ	as big as X	unclear	SIMV
nəkəːŋ	same as X	unclear	SIMV
ʧaːrin	although for the sake of X	unclear	CONC
ʧaxa	because of X	unclear	RSN

7.2.2.1 Distributive postposition *tʰaniŋ*

The distributive postposition *tʰaniŋ* governs temporal nouns to express the meaning of ‘every X.’ It functions similarly to the distributive suffix *-tAn* found in Even, for instance *ineŋ-ten* ‘every day’ (Pakendorf, p.c.). It is possible that Solon *tʰaniŋ* and Even *-tAn* are historically cognate. However, in Solon, *tʰaniŋ* does not follow vowel harmony and clearly behaves as an independent postposition rather than a suffix, as in: *inək tʰaniŋ* ‘every day’.

(7.54) *ɔntʰɔːn-pi* *mantaː-**r*** ***tʰaŋiŋ*** *jirtʰəntʃʰi* *pɔŋkɔŋ*
ontoon-bi *mandaa-**r*** ***taŋiŋ*** *yirtenci* *boŋgoŋ*
drum-REFL.SG hit-**IPFV.PTCP** **DISTR** world big

ɔː-xiʃi *pi-sə* *kunəŋ*
oo-xisi *bi-se* *guneŋ*
become-HAB COP-PST hearsay
'It is said that **every time he beats his drum**, the world will become big.' (LT42-05)

(7.55) *ɔri* ***tʰaŋiː**=l* *xɔkkʰɔ* *pəltiːr* *məltiːr-wəl* *ʃikkʰa-ra-ŋ*
ori ***taŋii**=l* *xokko* *beldiir* *meldiir-wel* *sikka-ra-ŋ*
evening **DISTR**=PTCL all foot M-RED-REFL.PL wash-AOR-3
'**Every evening**, (the students) all wash their feet and such things.' (LT11-84)

7.2.2.2 Terminative postposition *tʃakkʰa*

The terminative postposition *tʃakkʰa* governs nouns, typically temporal nouns or numerals, to express the meaning of 'until' or 'up to' a certain point in time (7.56) or quantity (7.57). Etymologically, *tʃakkʰa* originates from the noun meaning 'edge', as illustrated in (7.58).

(7.56) *tʃaːn* *tʃaxʊn* *paːr-pi* ***tʃakkʰa*** *xʊnin* *atʊːlaː-sʊ*
jaan *jaxʊ n* *baar-bi* ***jakka*** *xʊnin* *adʊʊlaa-sʊ*
ten eight age-REFL.SG **TERM** sheep herd-PST.1SG
'**Until I was eighteen**, I herded sheep.' (LT21-05)

(7.57) *pɔːtʃi-tʊ* *tʊraʃi* *pɔːtʃi-ja* *kʰi* *jətti* *natan* *tʃaxʊn-tʰxi* *jəkin*
booji-dʊ *dʊrasi* *booji-ya* *ki* *yeddi* *nadan* *jaxʊn-txi* *yegin*
bun-DAT favor-PROP bun-PTV TOP normally seven eight-ABL nine

tʃaːn ***tʃakkʰa*** *tʃitʰ-tʰə-ŋ*
jaan ***jakka*** *jit-te-ŋ*
ten **TERM** eat-AOR-3
'(The students) like buns, the buns they eat from seven or eight **up to nine or ten**.' (LT11-24)

(7.58) *[...] tɔː-ni* ***ʧakkʰa*** *ʧul-ku ɔltɔːn-tʊ-ni əmun awrak pɔŋkɔŋ*
[...] doo-ni ***jakka*** *jul-gu oldoon-dʊ-ni emun awrag boŋgoŋ*
river-GEN **edge** front-ADJZ side-DAT-3 one enormous big

mɔkɔi əmun amisxaː-ra-ŋ əmun ərkəː-rə-ŋ
mogoi emun amisxaa-ra-ŋ emun ergee-re-ŋ
snake one inhale-AOR-3 one exhale-AOR-3

'At the **edge of the river**, at the front side, one enormous snake was inhaling and exhaling.' (LT07-16)

7.2.2.3 Similative postpositions *ʧəkiŋ* and *nəkəːŋ*

Solon employs two similative postpositions, *ʧəkiŋ* and *nəkəːŋ*, each carrying distinct semantic nuances.

- *ʧəkiŋ* specifically expresses similarity in size or measure, meaning 'as big as X' or 'the same size as X' (7.59).
- *nəkəːŋ* has a broader use, denoting general similarity or equivalence, as in 'the same as X' (7.60).

(7.59) *naːttʰi təppəltʃi-ləː-tʃʰi, təppəltʃi-ləː-tʃʰi itta-raː-mi miːŋ nʊnʊm*
naatti debbelji-lee-ci, debbelji-lee-ci idda-raa-mi miiŋ nʊnʊm
really square-VBZ-COOR.CVB square-VBZ-COOR.CVB comb-AOR-3 very long

soutʃi ***ʧəkiŋ*** *uji-ʃi-n.*
səuji ***jegiŋ*** *uyi-si-n.*
mobile.phone **SIMV** tether-AOR-3

'Really make (the hair) into a cube, comb it like a cube, very long, attach it **as big as a mobile phone.**' (LT29-17)

(7.60) *pʊk maltʰa-tʃʰi xatʰa əwsəŋ xurəː* ***nəkəːŋ*** *xərəŋ ɔː-xiʃi pi-sə*
bʊg malta-ci xata ewseŋ xuree ***negeeŋ*** *xereŋ oo-xisi bi-se*
place dig-COOR.CVB PTCL grass enclosure **SIMV** wall make-HAB COP-PST

'People dug the ground and made walls **like a grass enclosure.**' (LT22-20)

Both similative postpositions typically combine with nominal elements. However, the *nəkəːŋ* also shows innovative usage among younger speakers: it may follow a finite predicate to express clausal similative meaning. This pattern is attested in the speech of a younger speaker (Tani, 14 years old), as shown in (7.61).

(7.61) *əmun pɔŋkɔŋ mɔkɔi ʃinu-wə mənsiː-tʃi-**rə-ŋ** **nəkəːŋ***
*emun boŋgoŋ mogoi sinu-we mensii-ji-**re-ŋ** **negeeŋ***
one big snake 2SG.OBL-DEF.ACC look.at-PROG-**AOR-3** **SIMV**
'**It seems** a big snake is looking at you.' (LT07-23)

7.2.2.4 Postposition *tʃaːrin*

The postposition *tʃaːrin* has multiple functions in Solon. It can mark concessive adverbial clauses (7.62), function as a focus particle, or express purpose ('for the sake of X'). Its usage in the Solon corpus is distributed as follows:

- Marking Concessive adverbial relations: 48% (27/56) (7.62)
- Sentence particle: 48% (27/56) (see §7.3.2.2) (7.63)
- Purpose ('for the sake of X'): 4% (2/56) (7.64)

(7.62) *ʃi min-i ɔntʰɔːn-pɔjɔ əmun tʰal-wa-ni sɔpʰ*
si min-i ontoon-boyo emun tal-wa-ni sop
2SG 1SG.OBL-GEN drum-DEF.ACC.1SG one side-DEF.ACC-3 IDEO

*nəː-sə-ʃi **tʃarin** pi tʰajja əmun tʰal-kiːtʃi-ni pasa=l*
*nee-se-si **jarin** bi tayya emun tal-giiji-ni basa=l*
put-PFV.PTCP-2SG **CONC** 1SG DIST one side-ELT-3 again=PTCL

ʃinu-wə təilə-mi ətʰə-mi
sinu-we deile-mi ete-mi
2SG.OBL-DEF.ACC beat-CONN.CVB finish-1SG

'**Although** you have removed one side of my drum, I can still beat you from that one (=the other) side.' (LT42-29)

(7.63) *tʰukə-ri* *tʰəkkəttʃʰi* ***tʃarin*** *pəjə-tu* *uləx* *aːʃin*
tuge-ri *teggecci* ***jarin*** *beye-du* *ulex* *aasin*
winter-ADJZ clothes **PTCL** person-DAT extra NEG.EXIS
'Winter clothes, people don't have extra (ones).' (LT29-120)

(7.64) *[...]* *pəjə* *paltisʊŋ* *ɔːtʃʰi* *tʰumən* *tʃaxaːsʊn-ni* *tʃikkala-ʃi*
[...] *beye* *baldisʊŋ* *ooci* *tumen* *jaxaasʊn-ni* *jiggala-si*
person mammal and ten.thousands creatures-GEN happiness-PROP

nantaːxaːŋ *emtʊːl-ni* ***tʃaːriŋ*** *ətʰtʰu* *məriː-r-pə-ni* *[...]*
nandaaxaaŋ *emdʊʊl-ni* ***jaariŋ*** *ettu* *merii-r-be-ni* *[...]*
beautiful life-GEN **for.sake.of** PROX.ADV work.hard-IPFV.PTCP-DEF.ACC-3
'(Her) such hard working **for the sake of** people and all creature's happy and beautiful lives.'(LT38-19)

7.2.2.5 Postposition *tʃaxa*

The primary function of the postposition *tʃaxa* is to express reason or cause within adverbial relations. In most cases, *tʃaxa* takes a participle or nominal complement. Among the 33 instances in the corpus, only one occurs with a converb and two with finite predicates.

Although consultants were generally unable to provide a direct translation for *tʃaxa*, its syntactic behavior, namely the fact that it requires a nominal or participial complement, supports its analysis as a postposition, rather than a particle.

(7.65) *xɔkkʰɔ* *ʊxʊn-tʃi* *uliː-xəːn-tʃi-r* ***tʃaxa*** *namat*
xokko *ʊxʊn-ji* *ulii-xeen-ji-r* ***jaxa*** *namad*
all what-INS run-CAUS-PROG-IPFV.PTCP **RSN** warm
'**Because** (the rooms) are all heated by what[10] (heaters), they are warm.' (LT11-70)

(7.66) *tʰʊsxaːn* *jəːm* ***tʃaxa*** *ɔːnti* *tʰarikaːn* *tʰari-mi* *ətʰə-rə-ŋ* *kikə*
tʊsxaan *yeem* ***jaxa*** *oondi* *tarigaan* *tari-mi* *ete-re-ŋ* *gige*
calf thing **RES** what field plant-CONN.CVB finish-AOR-3 Q
'**Because** it is a calf, what field can it plant?' (LT08-28)

[10] In this example, the interrogative pronoun 'what' is functions as a filler.

7.3 Particles

The particles fulfill the function of serving to modify another word or clause in order to encode grammatical categories, such as negation, mood, tense, or to play a role in information structure. The distinguishing feature of particles is that they do not function as constituent elements of clauses and thus cannot be questioned. Furthermore, they are never inflected.

Solon extensively uses particles, which are either clitics or independent. This section proposes a categorization of particles into three distinct types based on their function: topic particles (§7.3.1), focus particles (§7.3.2), and discourse particles (§7.3.3). The discussion pertaining to discourse particles incorporates evidential particles. This chapter doesn't discuss the interrogative particles, as the role of particles as question markers is addressed in §9.2.

7.3.1 Topic particles

The topic of a sentence is defined as the element to which the proposition expressed by the sentence refers (Lambrecht 1994:118). Mongolian is recognized as both a 'topic-prominent' and 'subject-prominent' language, where the topic-comment (theme-rheme) structure coexists with the subject-predicate structure (Janhunen 2012a: 235). It might be that Solon has been influenced by this pattern, as the topic-theme structure plays a significant role in the language, as evidenced by the heavy use of topic markers.

7.3.1.1 Topic particle *pikkʰi ~ kʰi*

In Solon, the topic particle is *pikkʰi*, which originates from the conditional converb form of the copular verb 'COP-COND.CVB'. Over time, this particle developed further, leading to the reduced form *kʰi* (bare conditional converb form), which functions as a topic marker and occurs more frequently than the full form *pikkʰi*. In the complete Solon corpus, *pikkʰi* appears 140 times, while *kʰi* occurs 270 times. Conditional-marked copulas as topic markers are also attested in other Tungusic languages (Matić 2016: 349, Malchukov 2024: 283).

(7.67) *pi* ***pikkʰi*** *sʊrkʊːl-tʊ* *na* *ə-sə* *ulə-r* *pəjə.*
bi ***bikki*** *sʊrgʊʊl-dʊ* *na* *e-se* *ule-r* *beye.*
1SG **TOP** school-DAT also NEG-PST go-IPFV.PTCP person
'**As for me,** I am a person who didn't even go to a school.' (LT21-03)

(7.68) *pɔːtʃi-tʊ* *tʊra-ʃi,* *pɔːtʃi-ja* ***kʰi*** *jətti* *natan* *tʃaxʊn-tʰxi*
booji-dʊ *dʊra-si,* *booji-ya* ***ki*** *yeddi* *nadan* *jaxʊn-txi*
bun-DAT favor-PROP bun-PTV **TOP** normally seven eight-ABL

jəkin *tʃaːn* *tʃakkʰa* *tʃitʰ-tʰə-ŋ.*
yegin *jaan* *jakka* *jit-te-ŋ.*
nine ten until eat-AOR-3
'(The students) like buns, **as for buns**, (the students) normally eat from seven eight to nine ten.' (LT11-24)

(7.69) *kə* *əri* *ʊnatʃi-ni* *jəːjəː-nin* ***kʰi*** *awʊ* *kun-kʰəŋ* *pi-sə* *ta*
ge *eri* *ʊnaji-ni* *yeeyee-nin* ***ki*** *awʊ* *gun-keŋ* *bi-se* *da*
PTCL PROX girl-GEN grandfather-3 **TOP** who SAY-CVB COP-PST PTCL
'**As for this girl's grandfather**, what was he called?' (LT34-23)

7.3.1.2 Topic particle *pa*

Another topic particle in Solon is *pa*, which is less frequently used; furthermore, it can co-occur with the topic marker *pikkʰi*.

(7.70) *jak* *pi* *xʊtaːja* *ɔː-m* *kun-ə-(r)-tu*
yag *bi* *xʊdaa-ya* *oo-m* *gun-e-(r)-du*
exact.duration 1SG marriage-PTV make-1SG SAY-EP-IPFV.PTCP-DAT

pa *xɔja-tʊkaːr* *nəxun-pi* *na* *xʊtaːja*
ba *xoya-dʊgaar* *nexun-bi* *na* *xʊdaa-ya*
TOP two-ORD younger.brother-REFL.SG also marriage-PTV

ɔː-xɔːn-tʃʰʊ
oo-xoon-cʊ
make-CAUS-PST.1SG
'**Just when I was about to get married**, I made my second little brother get married too.' (LT39-71)

(7.71) *tʰajja* *tʃalʊ* ***pikkʰi*** ***pa*** *atʃil-tʊ-wi* *pasa* *nutəjə_aːʃin* *aja*
tayya *jalʊ* ***bikki*** ***ba*** *ajil-dʊ-wi* *basa* *nudeye_aasin* *aya*
DIST young.man **TOP** **TOP** work-DAT-REFL.SG also very good
'That **young man** was also very good at his work.' (LT19-13)

7.3.2 Additive particle

Additive particles convey meanings such as 'also,' 'too,' 'as well,' 'either' or 'in addition.' Below is a list of commonly occurring additive particles in the Solon corpus:

- *naː~naŋ*: and, also, too, either (7.72)
- *pas*: also, too, either, again (borrowed from Mongolian) (7.73)

(7.72) *sʊrkʊːl-ni* *pakʃi-nar* ***na*** *əwəŋkʰi* *ʊlʊr* *paraːn.*
sʊrgʊʊl-ni *bagsi-nar* ***na*** *eweŋki* *ʊlʊr* *baraan.*
school-GEN teacher-PL **also** Solon (Evenki) people many
'**The teachers at the school are also** many Solons.' (LT11-63)

(7.73) *pi* ***pas*** *ɔsxɔːŋ* *tʃittʰə-mi* *kuŋ-kʰəːŋ* *pɔtɔ-tʃi-me*
bi ***bas*** *osxooŋ* *jitte-mi* *guŋ-keeŋ* *bodo-ji-me*
1SG **also.MN** fish eat-1SG SAY-SAY.CVB think-PROG-1SG
'**I am also** thinking of eating fish.' (LT06-04)

Without the context, it can be ambiguous to distinguish which element takes the scope of additive meaning, such as in (7.74). Either the predicate 'come' could have an additive meaning (interpretation a), or the subject 'tiger' takes the additive meaning (interpretation b).

(7.74) *tʰɔːtʃʰi* *tʰamaːʃin* *ɔriː-ni* *par* ***pas*** *əm-sə* *kunəŋ*
tooci *tamaasin* *orii-ni* *bar* ***bas*** *em-se* *guneŋ*
DIS.CONN tomorrow evening-3 tiger **again.MN** come-PST hearsay
(a) 'It is said that the next evening, the tiger **came again.**'
(b) 'It is said that the next evening, the **tiger also** came.' (LT41-24)

In addition to functioning as an additive particle, *naː~naŋ* ‘and, also, too, either’ also serves as a discourse connector. It is placed at the beginning of a sentence and indicates coordination between two sentences. Although syntactically and semantically the two clauses are coordinated, the clause modified by *naː~naŋ* ‘and, also, too’ may have stronger focus meanings added by the speaker. The current study will not address this problem, and it will be studied further.

(7.75) a. *[...]* *pair-iːn* *pakʃi* *ɔː-tʃʰi* *na* *uːrək* *xuntə*
[...] *bair-iin* *bagsi* *oo-ci* *na* *uureg* *xunde*
dormitory-GEN.MN teacher become-COOR.CVB also duty heavy

ɔː-sɔ
oo-so
become-PST
‘I became the dormitory teacher, again, the duty is heavy.’ (LT11-139)

b. ***naː*** *sələː-jə* *aːʃin*
naa *selee-ye* *aasin*
and free.time-PTV NEG.EXIS
‘**And** there are no free times.’ (LT11-139)

7.3.3 Focus particle

The focus particles highlight the informational importance of the focused element and appears directly after it. Most focus particles in Solon are clitics, are *(=)xAtʰA~kʰAtʰA*, *=l*, *=jA*, *=tʃʰi*.

The main function of particle *(=)xAtʰA~kʰAtʰA* is to express the emphasis (7.76-7.77), in combination with interrogative pronouns, it can form indefinite pronouns (§4.2.5).

(7.76) *pɔxɔ* *ultə-nin* *əmən=**kʰətʰə*** *aːʃin*
boxo *ulde-nin* *emen=**kete*** *aasin*
buddha meat-3 one=**PTCL** NEG.EXIS
‘Oh god, there is not a **SINGLE** piece of meat left.’ (LT08-62)

(7.77) *tʰukku sʊnin aja onto ʃitʰə tʰukku tʃama-ja* ***xatʰa*** *a:ʃin.*
tuggu sʊnin aya ʊndʊ site tuggu jama-ya ***xata*** *aasin.*
road very good NEG PTCL road road-PTV **PTCL** NEG.EXIS
'The roads were not good, there are (even) no **TRAIL**.' (LT19-27)

The particle *=l* is particularly versatile, expressing not only emphasis (7.78) but also a restrictive meaning 'only' (7.79). Additionally, when attached to a verb, *=l* can convey the meaning of 'as soon as V.' (7.80) The restrictive and 'as soon as V' meanings likely derive from its core emphatic focus function.

(7.78) *mu:* *pi-ʃi-n* *ʊttʊŋ* *tʰaŋi:***=l** *jʊtti* *ʊxu:t* *mu:-jʊ*
muu *bi-si-n* *eddeŋ* *taŋii***=l** *yeddi* *exuud* *muu-ye*
water COP-AOR-3 morning every=**PTCL** normally hot water-PTV

ka-m *pʊ:-mʊna*
ga-m *bʊʊ-mʊna*
get-CONN.CVB give-1PL.EXCL
'There is water, **EVERY** morning we bring hot water for (the students).' (LT11-29)

(7.79) *mini:* *ata-wi* *na:jʊ-tʃi-wi***=l** *ke:-tʊ* *tʰʊxʊ:rʊ-rʊ-ŋ*
minii *ada-wi* *naayʊ-ji-wi***=l** *gee-dʊ* *texeere-re-ŋ*
1SG-GEN elder.sister-1SG friend-INS-REFL.SG=**PTCL** street-DAT stroll-AOR-3
'My elder sister goes shopping **only with her friends**.' (EL01-75)

(7.80) *[...] ʊjjʊ* *ʊʃir-wi* *nʊnu:-tʃʰi***=l** *ʊmʊktʰi:-t-i*
[...] eyye *ʊsir-wi* *nenuu-ci***=l** *emegtii-d-i*
PROX affair-REFL.SG go.back-COOR.CVB=**PTCL** wife-DAT-REFL.SG

tʃin-tʃi-sa [...]
jin-ji-sa [...]
tell-PROG-PST
'**As soon as** (the old man) **went back**, he told his wife his affair.' (LT08-55)

The translation of focus particle *=jA* is close to 'even' in English (7.81). And the particle *=tʃʰi:* expresses emphasis as well, seems borrowed from Mongolian (7.82).

(7.81) *əmun xʊnin waː-saː=**ja**, pəjə ʃiləː=l kun-kʰəŋ ʊkkʰira-tʃi-nti*
*emun xʊnin waa-saa=**ya**, beye silee=l gun-keŋ ʊkkira-ji-ndi*
one sheep kill-PST=**PTCL** person soup=PTCL SAY-SAY.CVB shout-PROG-2SG
'People **even SLAUGHERED A SHEEP** and shouted, "(Let's have) soup!"' (LT29-79)

(7.82) *əʃi kʰi ʊxʊn kɔjɔ pi-sə tʃarin kanməː ʃiŋkʰiːŋ=**tʃʰi** naŋ*
*esi ki ʊxʊn goyo bi-se jarin ganmoo siŋkiiŋ=**ci** naŋ*
now TOP what beautiful COP-PFV.PTCP CONC flu coughing=**PTCL** also

əmun tatʃiŋ jəːməː [...]
emun dajiŋ yeemee [...]
one nasty thing
'Although nowadays is good, the **FLU AND COUGHING** is also a nasty thing.' (LT29-38)

7.3.4 Discourse particle

Discourse particles in Solon can appear at the beginning or end of a sentence. Sentence-initial particles primarily serve to maintain the flow of discourse, while sentence-final particles emphasize declarative mood, evidentiality, and mirativity.

7.3.3.1 Sentence initial particles

Solon has one sentence-initial particle, *kə*, which functions to maintain the continuity and cohesion of speech.

(7.83) a. *[...] məːnkʰəŋ əjjə sutʃi-ni atʃil-tʰixi əwə-su*
[...] meenkeŋ eyye suji-ni ajil-tixi ewe-su
REFL PROX clerk-GEN work-ABL go.down-PST.1SG
'I stepped down from the clerk's position by myself.' (LT30-22)

b. ***kə*** *tʰa-tʊxi* *am-sxi* *maltʃʰin-ni* *atʃil* *ɔː-tʃi-me.*
ge *ta-dʊxi* *am-sxi* *malcin-ni* *ajil* *oo-ji-me.*
PTCL DIST-ABL after-ADV.ALL stock.farmer-GEN work make-PROG-1SG
'**Well**, Since then I am doing stock farmer's job.' (LT30-23)

(7.84) a. *[...]* *puː* *aja* *pikkʰi* *nɔːkʊː-tʊ=l* *pʊlaːr*
[...] *buu* *aya* *bikki* *noogʊʊ-dʊ=l* *bʊlaar*
1PL.EXCL old.time TOP old.time-DAT=PTCL GN

kun-ə-r *pʊka-tʊ* *pi-sə* *tʰari* *ami-laː* *[...]*
gun-e-r *bʊga-dʊ* *bi-se* *tari* *ami-laa* *[...]*
SAY-EP-IPFV.PTCP place-DAT COP-PST DIST back-LOC

'In the past, we were at a place called Bular.' (speech error: mismatch subject agreement marker on the finite verb *pi-* 'COP')

b. ***kə*** *tʰa-ttʊ* *pi-ʃi-(r)-tʊ* *kʰi* *pi* *niŋŋuŋ* *paːr-tʃʰi*
ge *ta-ddʊ* *bi-si-(r)-dʊ* *ki* *bi* *niŋŋuŋ* *baar-ci*
PTCL DIST-DAT COP-AOR-IPFV.PTCP-DAT TOP 1SG six age-PROP

pi-su
bi-su
COP-1SG
'**Well**, when we were there, I was six years old.' (LT34-01,02,03)

7.3.3.2 Sentence final particles

7.3.3.2.1 Evidentiality particle: hearsay

The hearsay particle *kunəŋ* originates from the third-person aorist form of the generic verb of speech, *ku-nə-ŋ* ('say-AOR-3'). This particle is frequently used in Solon, particularly in storytelling narratives.

(7.85) *əmun-ni* *atʰaː-ʃi* ***kunəŋ*** *pəjə-tu* *sɔnin* *atʰaː-ʃi* *satti*
emun-ni *ataa-si* ***guneŋ*** *beye-du* *sonin* *ataa-si* *saddi*
one-3 jealousy-PROP **hearsay** person-DAT weird jealousy-PROP old.lady

kunəŋ *əmun-nin* *kʰi* *aja* *sanaː-ʃi* *satti* ***kunəŋ***
guneŋ *emun-nin* *ki* *aya* *sanaa-si* *saddi* ***guneŋ***
hearsay one-3 TOP good mind-PROP old.lady **hearsay**

'**It is said that** one (old lady) is jealous, **it is said that** (the old lady) is very jealous of others, as for the other, **it is said that** she is a warm-hearted old lady.' (LT02-03)

7.3.3.2.2 Mirative particle

Solon has several means to express mirative meanings (also see §11.2.1), one of which is the mirative particle *xUŋ ~ kʰUŋ*. In example (7.86-7.87), the speaker expresses the counterexpectation or suprise to the addressee. And in examples (7.88-7.89) the particle expresses the mirativity of the speaker.

(7.86) *[...]* *ʃin-i* *xəːxəː-ʃi* *min-i* *attʃʰaːŋ-paj*
[...] *sin-i* *xeexee-si* *min-i* *accaaŋ-bay*
2SG.OBL-GEN cat-2SG 1SG.OBL-GEN mouse-DEF.ACC.1SG

tʃawa-kʰi *pi* *attʃʰaːn* *ə-ʃi-m* *ka-ta* ***kʰuŋ***
jawa-ki *bi* *accaan* *e-si-m* *ga-da* ***kuŋ***
catch-COND.CVB 1SG mouse NEG-AOR-1SG get-CONNEG **MIR**

ʃin-i *xəːxəː-wə-ʃi* *ka-ta-me* *[...]*
sin-i *xeexee-we- si* *ga-da-me* *[...]*
2SG.OBL-GEN cat-DEF.ACC-2SG get-AOR-1SG

'If your cat caught my mouse, **I won't take a mouse (as compensation)**, I will take your cat.' (in a general sense, I should take a mouse as compensation for my mouse, but now I am not doing that = counterexpectation/surprise to the addressee) (LT35-44)

(7.87) *əjjə* *sun-i* *ultə-sun* *ənt^{h}ə* ***xuŋ*** *[...]* *min-i* ***xuŋ***
eyye *sun-i* *ulde-sun* *ente* ***xuŋ*** *[...]* *min-i* ***xuŋ***
PROX 2PL.OBL-GEN meat-2PL NEG **MIR** 1SG.OBL-GEN **MIR**
'This is not your meat … it is mine.' (you thought this is your meat, but it is mine = counterexpectation to the addressee) (LT08-37,38)

(7.88) *əʃi* *ɔwɔː* ***xʊŋ*** *əʃi* *nilə:n* *takk^{h}iː-laː-tʃi-ra-ŋ*
esi *owoo* ***xʊŋ*** *esi* *nileen* *dakkii-laa-ji-ra-ŋ*
now GN **MIR** now rather close-VBZ-PROG-AOR-3
'Now, it is getting rather close to the Oboo.' (unprepared mind to the speaker) (LT09-31)

(7.89) *t^{h}ajja* *t^{h}uːp^{h}iː-ni* *sʊnin* *paraːŋ* *t^{h}uːp^{h}i* *t^{h}irə-sə-sun* ***xuŋ***
tayya *tuupii-ni* *sʊnin* *baraaŋ* *tuupi* *tire-se-sun* ***xuŋ***
DIST brick-3 very many brick press-PST-2PL **MIR**
'Those bricks, you pressed so many bricks.' (surprise to the speaker) (LT18-20)

7.3.3.2.3 Declarative particles

Solon has several sentence-final declaratives particles that emphasize the speaker's mood and attract the addressee's attention. The following is a list of declarative particles. The differences in function are unclear in the current study.

- *ʃintʃə* (7.90)
- *tA* (7.91)
- *ʃit^{h}ə ~ ʃitəː* potentially borrowed form Mongolian (7.92)
- *jumː* borrowed from Mongolian, it can also be the interrogative marker in alternative questions (see §9.3.2) (7.93)

(7.90) *ɔŋ* *t^{h}utʃiːpə* *k^{h}əŋ* *ət^{h}xəŋ* *pi-sə* ***ʃintʃə***
oŋ *tujiibe* *keŋ* *etxeŋ* *bi-se* ***sinje***
INTERJ PN SAY.CVB old.man COP-PST **PTCL**
'Oh, there was an old man called Tujibe.' (LT34-38)

(7.91) *əməkt^{h}i pəjə-ni atʃil t^{h}ari ərin-ni atʃil pasa=l xuntu pi-sə* ***ta***
emegti beye-ni ajil tari erin-ni ajil basa=l xundu bi-se ***da***
female person-GEN work DIST time-GEN work also=PTCL heavy COP-PST **PTCL**
'Women's work, the work at that time was also heavy.' (LT22-10)

(7.92) *xeːna-wa əxur t^{h}əkkəːŋ-tʃi=l t^{h}əwə-nti* ***ʃit^{h}ə***
xeena-wa exur teggeeŋ-ji=l tewe-ndi ***site***
hay-DEF.ACC cow cart-INS=PTCL load-2SG **PTCL**
'You load the hay by cow-cart.' (LT20-81)

(7.93) *t^{h}əkkən-tʃi-wəl nin-tʃ^{h}ə, katʃʊ-tʃ^{h}i əmuː-tʃ^{h}i*
teggen-ji-wel nin-ce, gajʊ-ci emuu-ci
car-INS-REFL.PL go-PST take.back-COOR.CVB bring-COOR.CVB

t^{h}ari-tʃi-mun xaja-ni sɔjɔl-sɔ urə ***jumu***
tari-ji-mun xaya-ni soyol-so ure ***yumu***
plant-PROG-1PL.EXCL sometimes-3 sprout-PFV.PTCP seed **PTCL**
'We went by car, we bring (seeds) and plant. Sometimes the seed has already sprouted.' (LT27-62,63)

8 Simple clauses

This chapter is concerned with a number of grammatical categories of simple clauses in Solon, begins with a discussion of word order (§8.1), followed by a discussion of semantic roles and case coding (§8.2). Subsequently, the section on verbal complex predicates (§8.3) is of significant importance in the context of Solon syntax structure. Following this, the sections addressing valency change (§8.4) are introduced. In the final analysis, the description of non-verbal predication construction (§8.5) is provided, particularly incorporating locational-existential clauses and possessed-predicate constructions.

8.1 Word order within the clause

This section examines the internal word order of the Solon simple clauses. Solon displays two basic word orders. The first is the canonical verb-final SOV order, shared with other Tungusic languages. The second involves a scene-setting configuration, where temporal and locative elements occur clause-initially to establish the setting or background of the event. These basic orders, however, are often modified by pragmatic and discourse factors such as topic fronting, preverbal focus, and right-dislocation constructions.

8.1.1 Basic word order

8.1.1.1 SOV order

In a simple clause containing only a subject, object, and predicate, without additional adjuncts or contextual framing, the basic word order is subject–object–verb (SOV). In such cases, the subject typically functions as the topic, and the object as the focus (8.1). In Solon, the presence of a subject or object is not obligatory; they can be absent based on the context. Consequently, a sentence can be formed with a single predicate and both the subject and object omitted (8.2).

(8.1) *pɔr mʊrin-paj xutʰlə:-sə*
bor mʊrin-bay xutlee-se
PN horse-DEF.ACC.1SG hold-PST
'Bor held my horse.' (LT09-09)

(8.2) *tʰɔ:tʃʰi pasa=l tʃawa-m pax-sa.*
toɔci basa=l jawa-m bax-sa.
DIS.CONN again=PTCL catch-CONN.CVB get-PST
'Then (the fox) caught (the quail) again.' (LT01-69)

In the ditransitive clauses, the recipient (indirect object) can either precede the theme (object) (8.3) or follow it (8.4). The goal follows the theme (object) (8.5).

The position of other arguments, such as goal, instrument, transport are flexible, vary easily under the influence of information structure.

(8.3) *mə:ŋkʰə:ŋ […] **tʰajja** **əməktʰi-tu** ati ə:tʰələ puː-sə kunəŋ*
*meeŋkeeŋ […] **tayya** **emegti-du** adi eetele buu-se guneŋ*
PN **DIST** **woman-DAT** several rib give-PST hearsay
'Meenkeng gave several ribs **to that woman**.' (LT40-25)

(8.4) *[…] pal-tʃʰa ʊnatʃi-wi **araːtʰan-tʊ** puː-nti*
*[…] bal-ca ʊnaji-wi **araatan-dʊ** buu-ndi*
give.birth-PRF.PST daughter-REFL.SG **beast-DAT** give-2SG
'You give your own daughter **to a beast**.' (LT28-28)

(8.5) *ukkʰəxəŋ aliː-tʃʰi xasxaŋ-pi **pɔkɔ-tʊ** nʊtaː-sa*
*ukkexeŋ alii-ci xasxaŋ-bi **bogo-dʊ** nʊdaa-sa*
boy be.angry-COOR.CVB puppy-REFL.SG **place-DAT** throw-PST
'The boy was angry and threw his puppy **on the floor**.' (LT13-04)

8.1.1.2 Scene-setting initial elements

When a clause includes temporal or locative adjuncts that provide background or framing information, these elements appear in clause-initial position (8.6-8.7). When the temporal and locational adjuncts occur together, the temporal adjuncts precede (8.8). These fronted oblique elements function as external topics, establishing the situational frame for the proposition that follows.

(8.6) *kə* ***tʰa-tʊ*** *tʃʰuːtʃuŋ-pi* *tʰatʰi-tʃʰi* *kɔʊtʃuŋ-pi*
ge ***ta-dʊ*** *cuujuŋ-bi* *tati-ci* *goʊjuŋ-bi*
PTCL **DIST-DAT** secondary.school-REFL.SG study-COOR.CVB high.school-REFL.SG

naŋ *tʰatʰi-tʃʰi* *ətʰə-su.*
naŋ *tati-ci* *ete-su.*
also study-COOR.CVB finish-PST.1SG

'**There**, I finished studying my secondary school and finished studying my high school.' (LT39-37)

(8.7) *taxiː=l* *əpxəi* ***nataŋŋe*** ***ati*** ***aniː-tʊ***=*l* *tʰumər* *xuːxəŋ* *kuŋ-kʰəːŋ*
daxii=l *ebxei* ***nadaŋŋe*** ***adi*** ***anii-dʊ***=*l* *tumer* *xuuxeŋ* *guŋ-keeŋ*
again=PTCL INTERJ **seventy** **several** **year-DAT**=PTCL iron girl SAY-CVB

juː-səː=ʃi *kʰi* *jəx* *jawtal.*
yuu-see=si *ki* *yex* *yawdal.*
exit-PFV.PTCP=2SG TOP big affair

'Then, oh god, **in the 1970s**, a thing called 'Iron Girl' occurred, which was a big deal.' (LT22-16)

(8.8) ***kɔttijɔː-tʰi*** ***ərin-tu*** ***əmun*** ***niːla*** ***pɔka-tʊ*** *ətʰəxəːŋ* *satti* *tʃuːr-i*
goddiyoo-ti ***erin-du*** ***emun*** ***niila*** ***bɔga-dʊ*** *etexeeŋ* *saddi* *juur-i*
old.time-ADJZ **time-DAT** **one** **far** **place-DAT** old.man old.lady two-COLL

utʰə *urəl* *aːʃin* *emtar-tʃi-sa* *pi-sə* *kunəŋ*
ute *urel* *aasin* *emdar-ji-sa* *bi-se* *guneŋ*
son child NEG.EXIS live-PROG-PFV.PTCP COP-PST hearsay

'**Once upon a time, at a faraway place**, there was an old man and an old lady who were living without children.' (LT04-02)

8.1.2 Topic fronting

The clause-initial position in Solon is pragmatically associated with topicality. Any constituent that appears clause-initially outside of its canonical position serves as a topic for pragmatic purposes. The most common fronted element is the direct object, which can appear sentence-initially for topicalization (8.9-8.10). Topicalized constituents are generally unmarked, though they may co-occur with the topic particle *pikkʰi* ~ *kʰi* (8.10).

(8.9) ***ʃin-u-wə*** *pi* *ənnəːŋ* *aja-tʃi* *ʊxʊn*
sin-u-we *bi* *enneeŋ* *aya-ji* *ʊxʊn*
2SG.OBL-EP-DEF.ACC 1SG QLT.PROX good-INS HES

tʃɔtʃʰɔːlɔː-r-tʊ-wi *ʃi* *xarin* *ətːʰu* *ɔː-nti* *kun-kʰəŋ.*
jocooloo-r-dʊ-wi *si* *xarin* *ettu* *oo-ndi* *gun-keŋ.*
host-IPFV.PTCP-DAT-REFL.SG 2SG MIR PROX.ADV do-2SG SAY-SAY.CVB
'I hosted **you** so nicely, how can you do this (to me)?' (LT28-79)

(8.10) ***əri*** ***nantaːxaŋ*** ***aja*** ***ʃimaː-wə*** ***kʰi*** *amar* *əmmə-tə-ʃun*
eri ***nandaaxaŋ*** ***aya*** ***simee-we*** ***ki*** *amar* *emme-de-sun*
PROX **beautiful** **good** **news-DEF.ACC** **TOP** quickly mother-DAT-2PL

tʃintʃi-m *puː-ktʰe*
jinji-m *buu-gte*
tell-CONN.CVB give-HORT

'**THIS GOOD NEWS**, let me quickly tell your mother!' (LT28-152)

Besides direct objects, other elements such as goals (8.11) and beneficiaries (8.12) can also be fronted as topics. The multi topic construction also occurs in (8.11), the goal 'Dalang' is a fronted topic, followed by a temporal subordinate clause topic marked by particle *kʰi* and *pa*.

(8.11) ***talaŋ-tʊ*** *nɔːkʊ* *ikkitʃʰi* *mikkitʃʰi-jə* *pakkiː-naː-m* *nənə-tu*
dalaŋ-dʊ *noogʊ* *iggici* *miggici-ye* *baggii-naa-m* *nene-du*
GN-DAT old.time food M.RED-PTV prepare-AM-CONN.CVB go-DAT

kʰi ***pa*** *tʃuːr* *xɔnɔːr* *iː-kʰiʃi* *pi-sə* *ə-tuːxi*.
ki ***ba*** *juur* *xonoor* *ii-kisi* *bi-se* *e-duuxi*.
TOP **TOP** two night enter-HAB COP-PST PROX-ABL

'**To Dalang**, **in the old times when people go there and prepare food**, it used to take two days.' (LT20-168)

(8.12) ***sarkai-tʊ*** *ɔri* *tasxaːl* *masxaːl-wa-ni* *ʃilpaː-m* *pʊː-nti* *pa*
sargai-dʊ *ori* *dasxaal* *masxaal-wa-ni* *silbaa-m* *bʊʊ-ndi* *ba*
PN-DAT evening homework M.RED-DEF.ACC teach-CONN.CVB give-2SG TAG

'**Sargai (lit. to Sargai)**, during the evening, you help her with teaching her homework, right?' (LT11-66)

The fronted topic can co-occur with external topics (see §8.1.1.2 above), in which case the very initial position is still occupied by the external topics, and the fronted syntactic topic follows the external topics, see (8.13), where the fronted topic is enhanced with the topic particle *kʰi*.

(8.13) ***əʃi*** ***mukun-pə-ni*** ***kʰi*** *ʃi* *puː-m* *puː-nti*
esi ***mugun-be-ni*** ***ki*** *si* *buu-m* *buu-ndi*
now **money-DEF.ACC-3** **TOP** 2SG give-CONN.CVB give-2SG

'**Now**, **his money**, you will pay (lit. give) it for him.' (LT08-67)

8.1.3 Preverbal focus

In many SOV languages, the preverbal position is the canonical focus position (Herring & Paolillo 1995: 191). In a simple SOV clause, this naturally results in the object occupying the focus position under neutral conditions. Solon exhibits similar pragmatic use of preverbal positioning to mark focus. For example, the adverb *kəntʰxəːl(ŋ)* 'suddenly' naturally occurs sentence-initially or immediately after the subject (20/23 instances in full Solon corpus) (8.14a), while it occasionally appears in preverbal position, in this case it can be interpreted as the focal element (8.14b).

(8.14) a. *tʰɔːtʃʰi=l* ***kəntʰxəːŋ*** *əmun* *inək* *tʰənək* *ukkʰəːxəŋ-ni* *əməktʰiː-ni*
tooci=l ***gentxeeŋ*** *emun* *ineg* *teneg* *ukkeexeŋ-ni* *emegtii-ni*
DIS.CONN-PTCL **suddenly** one day silly boy-GEN woman-3

tʃintʃi-sa *kunəŋ*
jinji-sa *guneŋ*
say-PST hearsay
'Then, **suddenly,** one day, the silly boy's wife said (something).' (LT08-10)

b. *tʰɔːtʃʰi* *taxi* *əjjə* *ukkʰəxəŋ-nin* ***kəntxəːl*** *mət-sə* *[...]*
tooci *daxi* *eyye* *ukkexeŋ-nin* ***gendxeel*** *med-se* *[...]*
DIS.CONN also PROX boy-3 **suddenly** know-PST
'Then, also, this boy **SUDDENLY** realized.' (LT03-17)

Topic fronting and preverbal focus often co-occur, for example when the direct object is topic fronted, the subject will be in the preverbal position and function as a focus, see examples (8.12) above and (8.15). Other syntactic constituents also can occupy the preverbal focus position, such as the goal (8.16).

(8.15) *tʰajja-wa-ni* *pasa* ***pakʃi-nar*** ***su*** *ittʰɔ-m* *pʊː-tʃʰʊn* *ki*
tayya-wa-ni *basa* ***bagsi-nar*** ***su*** *itto-m* *bʊʊ-cʊn* *gi*
DIST-DEF.ACC-3 also **teacher-PL** **2PL** how-CONN.CVB give-2PL Q
'That is also **YOU TEACHERS** arranged (lit. how to do) for them?' (LT11-87)

(8.16) *tʰəjjə pəjə* ***ɔttʰɔk*** ***pɔkɔ-tʊ*** *miːsanta-ki* *miːsanta-ki [...]*
teyye beye ***ottog*** ***bogo-dʊ*** *miisanda-gi* *miisanda-gi [...]*
DIST person **empty** **place-DAT** gun-VBZ-DUR gun-VBZ-DUR
'That person shoots and shoots **AT AN EMPTY SPACE.**' (LT12-07)

The interrogative pronouns are inherent with high focality, and they tend to occur in the preverbal positions (8.17). While in Solon the preverbal position for interrogative pronoun is not completely fixed, a non-preverbal position is also accepted (8.18). compare the (8.17) and (8.18), in (8.17) the interrogative pronouns *ilə:xi* is preverbal, while in (8.18) is not preverbal, though in (8.18) the preverbal unmarked nominative direct object may affect the word order.

(8.17) *tʰajja-ni* *uru-wə-ni* ***ilə:xi*** *əmuː-tʃi-nti ?*
tayya-ni *uru-we-ni* ***ileexi*** *emuu-ji-ndi ?*
DIST-GEN seed-DEF.ACC-3 **from.where** bring-PROG-2SG
'(**From) where** are you bringing the seeds of those (plants)?' (LT27-59)

(8.18) *kə* *əʃi* ***ilə:xi*** *mukun* *paxa-ra-ŋ* *kə ?*
ge *esi* ***ileexi*** *mugun* *baxa-ra-ŋ* *ge ?*
PTCL now **from.where** money take-AOR-3 PTCL
'Now, **(from) where** (I) should take the money?'

8.1.4 Right-dislocation

Right-dislocation refers to a construction in which an argument appears in sentence-final position (Tanaka 2001 :551, Ott & De Vries 2016), following the main clause. The right-dislocation is also called afterthoughts, the function of right-dislocation is the speaker wanted to add a supplement information to the main clause, either due to the emphasis reason (8.19-8.20), or due to the speaker retrospectively adds information that was omitted, unclear, or ambiguous in the initial utterance (8.21-8.22).

The interrogative pronouns are inherent with a high focality; thus, they never occur in the right-dislocated position in Solon

(8.19) *satti* *pasa=l* *mɔkɔ-mi* *ul-tʃi-rə-ŋ* *kunəŋ* ***kɔr***
saddi *basa=l* *mogo-mi* *ul-ji-re-ŋ* *guneŋ* ***gor***
old.lady also=PTCL be.stressed-CONN.CVB go-PROG-AOR-3 hearsay **far**

pʊka-tʊ
bʊga-dʊ
place-DAT
'The old lady is still stressed and going **to a far place**.' (LT04-16)

(8.20) *nisxuŋ-tʰixi-ʃi* *ə-ttu* *pi-sə-mun* ***puː***
nisxuŋ-tixi-si *e-ddu* *bi-se-mun* ***buu***
small-ABL-2SG PROX-DAT COP-PST-1PL.EXCL **1PL.EXCL**
'Ever since you were little, **we** have been here.' (lit. Since you were little, we were here, **we**.) (LT32-01)

(8.21) *pair-ni* *namat* *ki* ***tʰukə-t-i***
bair-ni *namad* *gi* ***tuge-d-i***
dormitory-3 warm Q **winter-DAT-REFL.SG**
'Is the dormitory warm? **during the winter**.' (LT11-68)

(8.22) *tʃit-tʃʰi=l* *atta-tʃʰi* *taxi* *ukkʰə-wi* *naŋiː-m*
jit-ci=l *adda-ci* *daxi* *ukke-wi* *naŋii-m*
eat-COOR.CVB=PTCL be.happy-COOR.CVB again door-REFL.SG open-CONN.CVB

pʊː-sa *kunəŋ* ***satti-t-i***
bʊʊ-sa *guneŋ* ***saddi-d-i***
give-PST hearsay **old.lady-DAT-REFL.SG**
'(The old man) ate the (sausage) and was happy, and opened the door, **for his old lady**.' (LT04-46)

8.2 Semantic roles and case coding

Semantic roles describe the link between participants and events, identifying the functions that participants assume within a situation (Berk 1999; Davis 2011: 400). This section examines

how core semantic roles are encoded through case markers in Solon. Solon has a rich case inventory (§4.1.2). The following subsections discuss the encoding of the major semantic roles in Solon: agent and experiencer (§8.2.1), possessor (§8.2.2), patient and theme (§8.2.3), recipient (§8.2.4), beneficiary (§8.2.5), addressee (§8.2.6), instrument (§8.2.7), path (§8.2.8), source (§8.2.9), location and goal (§8.2.10), time (§8.2.11), and accompaniment (§8.2.12). Table 8-1 summarizes the distribution of case markers across these roles.

Table 8-1: Semantic roles and case coding in Solon

	NOM	GEN	ACC	DAT	LOC	ALL	ABL	ELT	PROL	INS
agent	+			+			+			
experiencer	+			+						
possessor	+	+		+						
patient/theme	+		+							
recipient				+						
beneficiary				+						
addressee			+	+		+	+			
instrument										+
path			+						+	
source							+	+		
location				+	+				+	
goal				+					+	
time	+			+					+	
accompaniment										+

8.2.1 Agent and experiencer

The agent is the initiator of an action, typically volitional and controlling the event. The experiencer is aware of an event or state but does not control it. Both functions normally appear as subjects.

In both intransitive (8.23) and transitive (8.24) clauses, agents are encoded by unmarked nominative case. In passive constructions, the demoted agent is expressed by the dative case (see §8.4.3).

(8.23) *[...] paraːn xɔr-ʃi* ***mɔkɔi*** *juːsə*
[...] baraan xor-si ***mogoi*** *yuu-se*
many poison-PROP **snake** exit-PST
'Many poisonous **snakes** went out.' (LT02-30)

(8.24) ***tʰʊjaː*** *ultə-jə tʃitʰ-tʃi-rə-ŋ*
tʊyaa *ulde-ye jit-ji-re-ŋ*
PN meat-PTV eat-PROG-AOR-3
'**Tuya** is eating meat.' (EL01-01)

The agent may also appear in the ablative case when the subject implies an administrative or institutional decision. This usage is restricted to contexts involving policies, rules, or directives issued by higher administrative units or government bodies. In the Solon corpus, only the ablative form of institutional agents occurs in this context, potentially indicating the source of the policies/rules/directives.

(8.25) *taxi əmnəlkə-**tʰixi** kʰi min-u-wə tʰatʰi-kaːsa*
*daxi emnelge-**tixi** ki min-u-we tati-gaa-sa*
again hospital-**ABL** TOP 1SG.OBL-EP-DEF.ACC study-CAUS-PST
Then **the hospital** trained me (lit. made me study).' (LT39-14)

(8.26) *kuːnʃə-**tʰixi*** *əmun* *urilәŋ-tʰixi* *namaːtʃi-tʰal* *jɔːn* *ʊrʊː-sa*
*guunse-**tixi*** *emun* *urileŋ-tixi* *namaaji-tal* *yoon* *ʊrʊʊ-sa*
hamlet-**ABL** one house-ABL hundred-DISTR Chinese.yuan charge-PST
'**The hamlet (government)** charged 100 Chinese yuan from each household.'
(Elicited)

Experiencers are unmarked and occur in the nominative case when the predicate is an emotional verb (8.27). Constructions expressing meanings such as 'X is good/bad/difficult/easy to someone' are not attested in the Solon corpus. Instead, speakers typically use impersonal clauses of the type 'X is good/bad/difficult/easy' (8.28). However, elicited data show that in such evaluative constructions, experiencers can be expressed and are marked with the dative case (8.29).

(8.27) *tʰɔːtʃʰi* *tʰəjjə* ***xasxaːŋ*** *sɔnin* *atta-sa*
tooci *teyye* ***xasxaaŋ*** *sonin* *adda-sa*
DIS.CONN DIST **puppy** weird be.happy-PST
'Then that **puppy** was very happy.' (LT05-12)

(8.28) *sɔnin* *manti* *pisə* *[...]*
sonin *mandi* *bise* *[...]*
weird tough COP-PST
'That was very tough.' (LT29-76)

(8.29) *aːtʃʰik* *ɔː**-r*** *ʃin**-tu*** *amakkʰʊŋ*
aacig *oo**-r*** *sin**-du*** *amakkʊŋ*
cheese make-**IPFV.PTCP** 2SG.OBL-**DAT** easy
'Making cheese is easy **for you**.' (elicited)

8.2.2 Possessor

In this particular semantic role, the possessor is exclusively defined by its association with ownership. In Solon, the possessor is primarily encoded by the genitive case (8.30-8.31). Case

alternations of the possessor role arise from different syntactic constructions: in existential-predicative constructions (§8.5.2.2.1), the possessor is marked by the dative case (8.32); in proprietive-possessive constructions, the possessor appears in the unmarked nominative form (8.33) (§8.5.2.2.2).

(8.30) ***ʧuːr*** ***ɔniːsal-niː****-n* ***naːl-tɔ-ni*** *xɔkkʰɔ* *səːʧʰi* *pɔtɔ-naːː-sa*
juur ***ɔniisal-nii****-n* ***naal-dɔ-ni*** *xokko* *seeci* *bɔdɔ-naa-sa*
two **daughter.PL-GEN**-3 **hand**-DAT**-3** all blood paint-AM-PST
'(The boy) went to paint the blood on their **two daughters'** hands.' (LT35-47)

(8.31) *[...]* *məːn****-i*** *atʃil-pi* *xɔkkʰɔ* *ɔː-rɔ-ŋ*
[...] *meen****-i*** *ajil-bi* *xokko* *oo-ro-ŋ*
REFL-**GEN** work-REFL.SG all do-AOR-3
'(The women) do all **their** own works.' (LT22-09)

(8.32) *kə* *tʰajja* *ərin-tu* *mitʰi****-tɔ*** *ɔxɔn* *pi-sə* *pi-ʧikə* *nɔːnɔː*
ge *tayya* *erin-du* *miti****-dɔ*** *ɔxɔn* *bi-se* *bi-jige* *noonoo*
PTCL DIST time-DAT 1PL.INCL-**DAT** what COP-PST AUX-FUT daughter.VOC
'At that time, what would **we have**, daughter?' (LT32-06)

(8.33) ***tʰɔːl*** *ɔttɔːr* *ikki-ʃi* *ɔː-sɔː-ni*
tool *oddoor* *iggi-si* *oo-soo-ni*
rabbit short tail-PROP become-PFV.PTCP-3
'(The story of) rabbits became **having** short tails.' (LT06-01)

8.2.3 Patient and theme

The patient is the participant undergoing the effect of an action, typically involving a change of state. The theme, while also undergoing the action, does not necessarily undergo a change of state. In Solon, these two semantic roles are not distinguished morphologically: both may be coded either by the accusative case or by unmarked nominative. In passive constructions, patients and themes appear as unmarked nominatives (§8.4.3), while the agent is demoted. Solon distinguishes two accusative cases, definite and indefinite (§4.1.2.2; §4.1.2.3).

Excluding passive constructions, the patient and theme function as the direct object in a clause. Therefore, the differential case coding of patient and theme can be regarded as differential object marking (DOM) via case assignment. The influence of both nominal and verbal parameters on DOM, also termed the argument-triggered DOM or the predicate-triggered DOM (Witzlack-Makarevich & Seržant 2018: 4), has been demonstrated. The nominal parameters primarily encompass the animacy/person hierarchy, the referentiality hierarchy and the topicality hierarchy. The verbal parameters may include clause type, affectedness and telicity (Witzlack-Makarevich & Seržant 2018; Aissen 2003; Dalrymple and Nikolaeva 2011; Malchukov and de Hoop 2011; Naess 2004; Kizilkaya, Levy-Forsythe & Von Heusinger 2022.

In this study, I focus exclusively on nominal properties of direct objects, and only preverbal direct objects are considered. Other factors, such as topicality or verbal features, may also influence DOM, but these lie beyond the scope of the present discussion.

In Solon, more prominent objects are more likely to carry overt accusative case marking than less prominent ones. Prominence correlates with the Animacy/Person Hierarchy and Referentiality Hierarchy, shown below. The patients/themes carrying one of the underlined features in the scale below are obligatory accusative case-marked.

Animacy/Person

<u>1/2 > 3 Pronoun > Name > Human</u> > Animate > Inanimate

(Comrie 1989: 135; Croft 1988: 164)

Referentiality (definiteness/specificity)

<u>Pronoun > Name > Definite</u> > Specific Indefinite > Non-specific

(Aissen 2003: 437; Comrie 1989: 135; Croft 1988: 164)

All human direct objects are obligatorily accusative-marked, and their definiteness determines whether they appear in the accusative (definite object) or partitive (indefinite object) form (8.34-8.36).

(8.34)	*[...]*	*əmun*	*pɔŋkɔŋ*	*mɔkɔi*	*ʃin-u-**wə***	*mənsiː-ʧi-rə-ŋ*	*nəkəːŋ*
	[...]	*emun*	*boŋgoŋ*	*mogoi*	*sin-u-**we***	*mensii-ji-re-ŋ*	*negeeŋ*
		one	big	snake	2SG.OBL-EP-**DEF.ACC**	look-PROG-AOR-3	SIMV

'As if a big snake is looking at **you**.' (LT07-23)

(8.35) *patʰʊ-**wa*** *əriː-tʃʰi* *əmxə!*
*batʊ-**wa*** *erii-ci* *emxe!*
PN-**DEF.ACC** call-COOR.CVB come-IMP
'Call **Batu** over here.' (elicited)

(8.36) *urələ-**jə*** *xamaːr-ra-ŋ* *tʃaxa=ʃi.*
*urele-**ye*** *xamaar-ra-ŋ* *jaxa=si.*
child-**PTV** manage-AOR-3 RES=2SG
'Because one has to take care of (lit. manage) **children**.' (LT11-141)

Likewise, all definite nouns, regardless of animacy, must take the accusative (8.37-8.38). One additional rule interacts with DOM: when the direct object is possessed by the subject, it takes a reflexive possessive and does not taking accusative case marking (8.39). This pattern is typical of Turkic, Mongolic, and Tungusic languages, and the object is inherently definite as it is possessed by the subject.

(8.37) *tʰɔːkʰi* *tʃəŋxɔw* *inəŋ* *tʊlin* *ɔː-tʃʰi* *tʰʊː-tʃʰi*
tooki *jeŋxow* *ineŋ* *dʊlin* *oo-ci* *tʊʊ-ci*
DIS.CONN just.right day half become-COOR.CVB be.cool-COOR.CVB

nəː-rə-ŋ ***tʰa-ppa**=l* *ima-ra-ŋ*
nee-re-ŋ ***ta-bba**=l* *ima-ra-ŋ*
put-AOR-3 **DIST-DEF.ACC**=PTCL drink-AOR-3
'It is just about noon, and (the water) will be cooled off, (the students) drink **that**.' (LT11-30)

(8.38) *[...]* *alaːr* *pʊxa-niː-wi* *til-**pa**-ni* *mʊnta-tʃʰi* *waː-sa*
[...] *alaar* *bʊxa-nii-wi* *dil-**ba**-ni* *mʊnda-ci* *waa-sa*
spooty bull-GEN-REFL.SG head-**DEF.ACC**-3 hit-COOR.CVB kill-PST
'The old lady hit her spotty bull's **head** and killed (the bull)' (LT04-05)

(8.39) *unkəŋ-**pi*** *saka-tʃi-nti* *xʊltʃʰin-**pi*** *ɔː-tʃi-nti* *[...]*
*ungeŋ-**bi*** *saga-ji-ndi* *xʊlcin-**bi*** *oo-ji-ndi* *[...]*
cow-**REFL.SG** milk-PROG-2SG reed-**REFL.SG** make-PROG-2SG
'You are milking **your cows**, marking **your reeds**.' (LT21-28)

The case encoding of indefinite direct objects in Solon shows considerable variation, and the present study has not been able to identify all the factors conditioning this alternation. One possible factor is specificity: a specific indefinite direct object may be marked with the partitive (8.40). However, this correlation is not consistent, as non-specific indefinite direct objects can also occur with partitive marking (8.41).

(8.40) *[...]* *pi* *ʃin-tu* *kɔjɔ* *pʊka-**ja*** *tʃintʃi-m*
[...] *bi* *sin-du* *goyo* *bʊga-**ya*** *jinji-m*
1SG 2SG.OBL-DAT beautiful place-**PTV** tell-CONN.CVB

puː-meː=l
buu-mee=l
give-1SG=PTCL

'I will tell you about **a beautiful** place.' (a **certain** beautiful place) (LT04-18)

(8.41) *pasa* *nəitʰiːn* *tʃitʃuːr* *iːxəː-**jə*** *ɔː-rɔ-ŋ* *pa*
basa *neitiin* *jijuur* *iixee-**ye*** *oo-ro-ŋ* *ba*
also public duty VAG-**PTV** do-AOR-3 TAG
'(The students) also do the **public duty or such things**, right?' (LT11-85)

Frequently used noun–verb collocations, such as *xʊnin atʊːlaː-* 'herd sheep', *tʰarikan tʰari-* 'farm (lit. plant field)', *atʃil ɔ-* 'do work', *aŋ aŋna-* 'hunt (lit. hunt hunting)', and *ɔsxɔn koxitə-* 'fish (lit. hook fish)'. In such collocations, the direct object typically remains unmarked, even when it receives a specific interpretation (8.42). However, narrative data indicate that less frequent noun-verb collocations may also appear with an unmarked nominative direct object despite having a clearly specific interpretation. For example, in (8.43), *xərəm ɔː-* 'build a wall' is not a conventionalized collocation, yet the direct object *xərəm* 'wall' is specified as 'a wall like a grass fence' and nonetheless occurs without accusative marking.

(8.42) *pi* *xʊi* *sʊrkʊːl-tʊ* *pair-iːn* *pakʃi-ni* ***atʃil*** *ɔː-tʃʰi*
bi *xʊi* *sʊrgʊʊl-dʊ* *bair-iin* *bagsi-ni* ***ajil*** *oo-ci*
1SG Hui school-DAT dormitory-GEN.MN teacher-GEN **work** do-COOR.CVB

əmun ani ulxə ɔː-sʊ.
emun ani ulxe oo-sʊ.
one year more make-PST.1SG
'I have been doing dormitory teacher **work** at Hui School for over a year.' (LT11-07)

(8.43) *pʊk malt^{h}a-tʃ^{h}i xat^{h}a əwsəŋ xurəː nəkəːŋ* ***xərəŋ***
bʊg malta-ci xata ewseŋ xuree negeeŋ ***xereŋ***
ground dig-COOR.CVB PTCL her fence SIMV **wall**

ɔː-xiʃi pi-sə.
oo-xisi bi-se.
make-HAB COP-PST
'(People) used to dig the ground and make **walls** like a grass fence.' (LT22-20)

8.2.4 Recipient

The recipient, the animate endpoint of transfer (physical or abstract), is exclusively marked by the dative in Solon.

(8.44) *piː ʊnatʃi-**t**-i əmun ati jɔːn puː-kt^{h}eː*
*bii ʊnaji-**d**-i emun adi yoon buu-gtee*
1SG daughter-**DAT**-REFL.SG one several Chinese.yuan give-HORT
'Let me give several Yuan **to my daughter**.' (EL01-68)

(8.45) *t^{h}ɔːtʃ^{h}i sʊlxi-**tʊ** əmun ʊmat^{h}a-ja puː-sə*
*tooci sʊlxi-**dʊ** emun ʊmata-ya buu-se*
DIS.CONN fox-**DAT** one egg-PTV give-PST
'Then (the magpie) gave one egg to the fox.' (LT01-07)

8.2.5 Beneficiary

A beneficiary is the participant for whose benefit an action is performed. Cross-linguistically, the dative is the most common case for encoding this role (Kittilä & Zúñiga 2010: 7), and Solon likewise uses the dative.

(8.46) *par-**tʊ*** *əwən-pə-ni* *ka-m* *pʊː-sa*
*bar-**dʊ*** *ewen-be-ni* *ga-m* *bʊʊ-sa*
tiger-**DAT** thorn-DEF.ACC-3 take-CONN.CVB give-PST
'(The boy) removed the thorn **for the tiger**.' (LT41-01)

8.2.6 Addressee

The addressee can be encoded by the dative, allative, accusative, or ablative. The dative is the default and most frequent marker (8.47), and rarely the addressee is marked by allative case (8.48).

(8.47) *əmməː-nin* *ʊnaːtʃi-**tʊ**-wi* *ʊnaːtʃe* *əm-sə*
emmee-nin *ʊnaaji-**dʊ**-wi* *ʊnaaje* *em-se*
mother-3 daughter-**DAT**-REFL.SG daughter.VOC come-PFV.PTCP

ailtʃʰin-tʊ *sai* *sɔxɔː-tʃʰi* *xəːmə-ji* *ɔː-m* *pʊː-xɔ*
ailcin-dʊ *sai* *soxoo-ci* *xeeme-yi* *oo-m* *bʊʊ-xo*
guest-DAT tea serve-COOR.CVB meal-ACC.MN make-CONN.CVB give-IMP

kun-tʃʰə *kunəŋ*
gun-ce *guneŋ*
say-PST hearsay
'The mother **said to her daughter** 'Daughter, serve tea and make the meal for the arrived guest!''(LT35-36)

(8.48) *tʰɔːtʃʰi* *saːtʃikiː-**tʰixi*** *saːtʃike* *ʃi* *iːmaːn* *kʰəːŋ* *sɔŋ-tʃi-nte*
tooci *saajigii-**tixi*** *saajige* *si* *iimaan* *keeŋ* *soŋ-ji-nde*
DIS.CONN magpie-**ALL** magpie 2SG why SAY.CVB cry-PROG-2SG

kun-tʃʰə
gun-ce
say-PST

'Then (the quail) **said to magpie**, 'magpie, why are you crying?'' (LT01-22)

Accusative case-marked addressees only occur when the speaker expresses strong negative emotion (blame, anger) (8.49). And ablative-marked addressees occur when the speaker asks for information from them and conceptualizes the addressee as the source of an answer (8.50).

(8.49) *ʃi* *nəkəːŋ* *pəjə* *emit* *ul-tʃʰi* *ɔːnti* *xərkə* *kʰəŋ*
si *negeeŋ* *beye* *emid* *ul-ci* *oondi* *xerge* *keŋ*
2SG SIMV person alive go-COOR.CVB what affair SAY.CVB

*tʃalʊː-**wə*** *tʃintʃi-sa* *kunəŋ*
*jalʊʊ-**we*** *jinji-sa* *guneŋ*
young.man-**DEF.ACC** tell-PST hearsay
'The girl said **to the young man** 'What's the point of a person like you being alive?'' (LT28-100)

(8.50) *tʰɔːtʃʰi* *pa* *ʃi* *aːl* *min-tʃi* *xʊtaː-ja* *ɔː-nti*
tooci *ba* *si* *aal* *min-ji* *xʊdaa-ya* *oo-ndi*
DIS.CONN PTCL 2SG when 1SG.OBL-INS wedding-PTV make-2SG

kuŋ-kʰəŋ *tʰajja* ***ʊnaːtʃi-tʰxi*** *aŋʊː-tli* *[...]*
guŋ-keŋ *tayya* ***ʊnaaji-txi*** *aŋʊʊ-dli* *[...]*
SAY-SAY/CVB DIST **girl-ABL** ask-SIM.CVB
'When (the hunter) asked **the girl**, 'then when will you marry me?'' (LT19-38)

8.2.7 Instrument

The instrument, an inanimate entity used by an agent to carry out an action, is exclusively encoded by the instrumental case in Solon.

(8.51) *ʊxʊn* *səilə**-ʧi*** *səiluː-rə-ŋ* *kunəŋ.*
ʊxʊn *seile**-ji*** *seiluu-re-ŋ* *guneŋ.*
what sieve-**INS** sieve-AOR-3 hearsay
'People sieve the soil **with sieves**.' (LT18-69)

(8.52) *xeːna-wa* *naːl**-ʧi**-wi* *uː-ʃxi* *ʧɔltɔː-rɔ-ŋ.*
xeena-wa *naal**-ji**-wi* *uu-sxi* *joldoo-ro-ŋ.*
hay-DEF.ACC hand-**INS**-REFL.SG up-ADV.ALL throw-AOR-3
'People toss the hay upwards **by hand (lit. with their hand)**.' (LT20-95)

8.2.8 Path

A path, understood as the entity or route traversed during a motion event or an action, is typically encoded by the prolative case (8.53-8.54). The accusative case may also be used to mark a path (8.55), the semantic distinction between prolative and accusative-marked paths remains unclear on the basis of the available data.

(8.53) *tʰɔːtʃʰi* *ʃiwuŋ* *ʊnaːʧi* *xaːltʰ-ni* *ʧakkʰa**-li*** *tɔː-ʃxi*
tooci *siwuŋ* *ʊnaaji* *xaalt-ni* *jakka**-li*** *doo-sxi*
DIS.CONN sun girl door-GEN gap-**PROL** inside-ADV.ALL

mənti-səː-tu *[…]*
mendi-see-du *[…]*
see-PFV.PTCP-DAT
'Then when the sun girl looked **through the door gap**…' (LT38-26)

(8.54) *[...]* *unəxun-ni* *pas* ***tʃɔl-li*** *tʰʊttʃʰaːn-mi* *ə-mi*
[...] *unexun-ni* *bas* ***jol-li*** *tʊccaan-mi* *e-mi*
son-3 again **stone-PROL** jump-CONN.CVB NEG-CONN.CVB

əthə-r *tʰixə-səː*
ete-r *tixe-see*
can-CONNEG fall-PST

'The son (goat lamb) was not able to jump **over the stone** and fell.' (LT15-05)

(8.55) *tʰɔːtʃʰi* *tʰari-wa* *əmun* *tɔː**-wɔ*** *əːlpi-kʰəːn-tʃʰi […]*
tooci *tari-wa* *emun* *doo**-wo*** *eelbi-keen-ci […]*
DIS.CONN DIST-DEF.ACC one river**-DEF.ACC** swim-CAUS-COOR.CVB
'We made it (the horse) swim **through a river**.' (LT09-11)

8.2.9 Source

The source is expressed by the ablative or elative case. The ablative is the primary marker (8.56). The elative is restricted to relational nouns and cannot occur with other lexical classes (8.57).

(8.56) *əjjə* *ʊːkantaː-tʰxi-ni* *xʊlʊː**-tʰxi**-ni* *pexal* *altʰan* *mukun* *juː-sə* *kunəŋ*
eyye *ʊʊgandaa-txi-ni* *xʊlʊʊ**-txi**-ni* *bexal* *altan* *mugun* *yuu-se* *guneŋ*
PROX saw-TEM-3 gourd-**ABL**-3 many gold silver exit-PST hearsay
'It is said that when (the old lady) sawed (the gourd), much gold and silver went out **from the gourd**.' (LT02-17)

(8.57) ***tʃuliː-kiːtʃi**-ni* *əmun* *əməktʰi* *pəjə* *əm-sə* *kunəŋ.*
***julii-giiji**-ni* *emun* *emegti* *beye* *em-se* *guneŋ.*
front-ELT-3 one woman people come-PST hearsay
'A woman came **from in front of** (Meenkeng).' (LT40-11)

8.2.10 Location and goal

In Solon, both location (8.58) and goal (8.59) roles are dominantly encoded by the dative case. The locative retains a function only in a restricted environment: with relational nouns, demonstratives (8.60) and personal pronouns, and its use is lexicalized (§4.1.2.6.3). The allative no longer marks goal arguments in Solon (§4.1.2.6.4).

(8.58) *əmun tʰukə-ku tʰari uri-**tu** pi-sə muːn-i əri ʊlʊr*
*emun tuge-gu tari uri-**du** bi-se muun-i eri ʊlʊr*
one winter-ADZ DIST mountain-**DAT** COP-PST 1PL.EXCL-GEN PROX people
'(They) were **on the mountain** for a whole winter, our people (lit. our these people).' (LT34-44)

(8.59) *tʰɔːtʃʰi əmun inək sumə-**tu** nin-tʃʰə […]*
*tooci emun ineg sume-**du** nin-ce […]*
DIS.CONN one day temple-**DAT** go-PST
'Then one day they went to a temple.' (LT03-10)

(8.60) *[…] ilan ani tʰukə-ʃiː-tʃʰ xʊltʃʰin-ni tʰalpai-ja*
[…] ilan ani tuge-sii-c xʊlcin-ni talbai-ya
three year winter-VBZ-COOR.CVB reed-GEN field-PTV

*saxi-mi **tʰa-la** pi-sə ʊlʊr*
*saxi-mi **ta-la** bi-se ʊlʊr*
guard-CONN.CVB **DIST-LOC** COP-PFV.PTCP people
'It was people who stayed **there**, spent three years of winter, guarding reed's field.' (LT17-09)

The prolative case can encode distributive location and goal, expressing the meaning of 'by/through each location or goal'. See (8.61) for distributive location, and (8.62) for distributive goal.

(8.61) *tʰɔːtʃʰi* *əjjə* *uri-**li*** *ati* *ani* *tʰən-səː-ʃe* *[...]*
tooci *eyye* *uri-**li*** *adi* *ani* *ten-see-se* *[...]*
DIS.CONN PROX mountain-**PROL** how.many year loiter-PST-2SG
'Then how many years have you been loitering **along this mountain**?' (LT40-19)

(8.62) *tʰa-tʊːxi* *ama-sxi* *tʰɔːl* *taxi* ***tɔː-ni*** ***xuwəː-ni*** ***ɔltɔːn-tɔli***
ta-dʊʊxi *ama-sxi* *tool* *daxi* ***doo-ni*** ***xuwee-ni*** ***oldoon-doli***
DIST-ABL back-ADV.ALL rabbit again **river-GEN** **edge-GEN** **side-PROL**

ulə-(r)-pi *ʊti-tʃʰi* *[...]*
ule-(r)-bi *ʊdi-ci* *[...]*
go-IPFV.PTCP-REFL.SG be.no.more-COOR.CVB
'After that the rabbit no longer went **along the river's side**' (LT06-12)

8.2.11 Time

The role of time can be encoded by the nominative, dative and prolative cases. Time can be divided into relative time (e.g. 'tomorrow', 'yesterday', 'evening') and absolute/anchored time. Relative times are encoded with the unmarked nominative case (8.63-8.64), while absolute times are marked with the dative case (8.65). The times modified by demonstratives are dative case marked, as they are interpreted as absolute times (8.66).

(8.63) *[...]* *tʰari* ***tʰimaːʃin*** *ə-tu* *ultə-kine*
[...] *tari* ***timaasin*** *e-du* *ulde-gine*
DIST **tomorrow** PROX-DAT stay-JUSS
'**Tomorrow** that person stays here!' (LT41-21)

(8.64) *əmun* ***ɔri*** *əmun* *par* *əm-sə* *kunəŋ*
emun ***ori*** *emun* *bar* *em-se* *guneŋ*
one **evening** one tiger come-PST hearsay
'One **evening**, the tiger came again.' (LT41-07)

(8.65) *natan pe ʊrin tʃaxʊn-**tʊ** kʰi xʊtaː-ja ɔː-sɔ.*
*nadan be ʊrin jaxʊn-**dʊ** ki xʊdaa-ya oo-so.*
seven month twenty eight-**DAT** TOP marriage-PTV make-PST
‘(My daughter) married **on 28th July**.’ (LT39-141)

(8.66) *tʰari ərin-**tu** pu xɔkkʰɔ nisxuŋ.*
*tari erin-**du** bu xokko nisxuŋ.*
DIST time-**DAT** 1PL.EXCL all small
‘**At that time**, we were all small.’ (LT39-47)

To express duration, time expressions meaning ‘for how long’ are marked by the unmarked nominative case (8.67). The prolative case can also be used with temporal expressions to emphasize the meaning ‘during X’ (8.68), but this usage is rare, with only three occurrences attested in the Solon corpus.

(8.67) *[…] **ilaŋ** **ani** xʊnin atʊːlaː-sa pəjə ta nisxuŋ*
*[…] **ilaŋ** **ani** xʊnin adʊʊlaa-sa beye da nisxuŋ*
three **year** sheep herd-PFV.PTCP person PTCL small

nasʊŋ-t-i.
nasʊŋ-d-i.
age-DAT-REFL.SG
‘(I am) a person who herd sheep **for three years** during one’s childhood.’ (LT21-51)

(8.68) *[…] əri ukkʰəːxəːŋ tɔlpɔ-**li** pasa tʰəːtə juː-m*
*[…] eri ukkeexeeŋ dolbo-**li** basa teede yuu-m*
PROX boy night-**PROL** also quietly exit-CONN.CVB

pi-səː-tʃi […]
bi-see-ji […]
COP-PFV.PTCP-INS
‘This boy went out **during the night**.’ (LT35-29)

8.2.12 Accompaniment

Accompaniment, also known as Comitative (Whaley 1997: 65), is a semantic role for an entity accompanying the agent in performing an action. This is encoded by the instrumental case in Solon.

(8.69)

pi	*niʃxuŋ*	*pi-ʃi-(r)-t-i*	*naːtʃil*	*jəjə-**tʃĩ***
bi	*nisxuŋ*	*bi-si-(r)-d-i*	*naajil*	*yeye-**ji***
1SG	small	COP-AOR-IPFV.PTCP-DAT-REFL.SG	maternal	grandfather-**INS**

paraːŋ *pi-su*
baraaŋ *bi-su*
many COP-PST.1SG
'When I was small, I stayed **with my maternal grandfather** a lot.' (LT25-02)

8.3 Verbal complex predicates

Verbal complex predicates (VCPs) are monoclausal constructions consisting of at least two verbal or "verb-like" elements that jointly encode a single event. The components of a VCP share the same argument structure, polarity, and TAME categories. VCP is a cover term for several constructions, including serial verb constructions, converb constructions, light-verb constructions, and auxiliary constructions (Bisang et al., forthcoming).

Within the Transeurasian languages, Mongolic and Turkic make extensive use of converb-based or auxiliary VCPs to express aspectual, modal, and related categories (e.g., Mongolian: Nargil 2020; Kazakh: Gyorfi 2022; overview in Malchukov & Czerwinski 2024). The Tungusic languages, however, show uneven degrees of VCP development, strongly shaped by areal contact. Geographically the Tungusic languages spoken towards the north of their distribution (Evenki, Even, Negidal) make the least use of VCPs, those spoken to the south (Solon, Oroqen, Manchu, Sibe) make the most use of VCPs, and those in the southeast (Uilta, Ulcha, Nanai, Orochi, Udihe) are intermediate (Baek 2016: 75-103).

A second typological parameter concerns dependency between the components, distinguishing asymmetric and symmetric VCPs (Aikhenvald 2006: 21-35). In asymmetric

VCPs, one verb belongs to an unrestricted class (*major verb*), while the other belongs to a semantically restricted or closed class (*minor verb*). The minor verb modifies the major verb, typically adding aspect, direction, valency change, or other functional meanings. In symmetric VCPs, both components come from unrestricted verb classes and jointly represent subevents of a single complex event. Neither verb determines the overall semantics independently. Asymmetric VCPs typically express meanings such as (1) direction/orientation, (2) aspect and change-of-state, (3) secondary predicates, (4) complement-type serialization, (5) valency increase, (6) valency reduction, (7) comparatives/superlatives, and (8) event-argument serialization; Symmetric VCPs express action sequences, concomitant actions, cause-effect relations, manner, or synonymous verb juxtaposition (Aikhenvald 2006: 21-35).

This section first describes the formal properties of VCPs in Solon (§8.3.1), before turning to asymmetric VCPs (auxiliary constructions) (§8.3.2) and symmetric VCPs (§8.3.3). Solon heavily uses VCPs, likely a contact influence from Mongolian, as the other Northern Tungusic languages spoken in Siberia rarely use VCPs; a comparative outlook of VCPs in Solon is provided in §8.3.4.

8.3.1 The VCPs in Solon

The VCPs in Solon mainly involve converbs: the connective converb *-mi* and the coordinative converb *-tʃʰi.* The connective converb is used in VCPs more frequently than the coordinative converb *-tʃʰi* (§6.4.1.3). The participles can also be involved in VCPs, but they only occur in constructions where the minor verb is a copula.

The following schema illustrates the structure of VCPs in Solon. The VCPs in Solon may comprise two or more than two verbs; however, for the purpose of simplicity, only two components are listed in the VCPs (8.70).

(8.70) V1-CVB V2-
V1-PTCP V2-

VCPs in Solon manifest the following structural characteristics, also see the illustrated example (8.71): They exclusively combine verbs; V1 and V2 are adjacent to each other and do not permit the presence of other elements between them; the inflectional categories are marked

on V2, but are shared with V1 (term used as split marking in Bisang et al., forthcoming), and do not allow for the inversion of verb orders. The VCPs may contain more than two verbs, depending on the construction (8.72).

(8.71) *[...] əttəŋ tʰaŋiː=l jətti əxuːt muː-jə* ***ka-m***
[...] eddeŋ taŋii=l yeddi exuud muu-ye ***ga-m***
morning every=PTCL normally hot water-PTV take-**CONN.CVB**

***pɔː**-mɔn*
***bɔɔ**-mɔn*
give-1PL.EXCL
'Every morning, we **take** hot water (**for** the students).'
(GIVE-> valency operator: beneficiary) (LT11-29)

(8.72) *[...] alaːr pɔxa-wi* ***mɔnta-tʃʰi*** *waː-**tʃʰi*** ***nəː**-sə.*
[...] alaar bɔxa-wi ***mɔnda-ci*** *waa-**ci*** ***nee**-se.*
spotty bull-REFL.SG hit-**COOR.CVB** kill-**COOR.CVB** **put**-PST
'She hit and killed her spotty bull.' (LT33-12)
(hit + kill -> manner; PUT -> resultative)

8.3.2 Auxiliary constructions (Asymmetric VCPs)

Asymmetric VCPs consist of a major verb and a minor verb, the latter expressing a grammaticalized modification of the major verb's event. The minor verb is grammaticalized to modify the major verb. While some minor verbs can be partially grammaticalized, others are fully grammaticalized. Based on the extent of grammaticalization, Malchukov and Czerwinski (forthcoming) consider the VCPs with fully grammaticalized minor verbs as auxiliary constructions and the VCPs with partially grammaticalized minor verbs as light verb constructions. In this study, I will focus on the functions of the minor verbs instead of the extent of their grammaticalization. Based on their functions, I consider the asymmetric VCPs in Solon auxiliary constructions, as one verb modifies the other. Technically, the negative auxiliary verb negating a verbal predicate is also a auxiliary construction, it is discussed separately in §9.1.1.1.

In Solon, a great number of verbs can be the minor verb and express aspect/aktionsart, motion/direction, modality and valency change functions. This is shown in Table 8-2 below, which summarizes their grammaticalization pathways. The two copula verbs *pi-* 'be' and *ɔː-* 'become' can also function as the minor verb, they are grammaticalized to express temporal periphrasis and other meanings. This will be discussed separately in §8.3.2.6 and §8.3.2.7, as those constructions are more complex. The VCPs are linked by converbs for the majority of cases; the participle-marked VCPs only occur with copula verbs as minor verbs.

Table 8-2: The grammaticalization of auxiliary constructions in Solon

	lexical meaning	**grammaticalized meaning**	**forms**
aspect/aktionsart	FINISH	completive	*ətʰə-*
	GET	resultative (agent-oriented)	*pax-*
	EXIT	resultative (patient-oriented)	*juː-*
	TAKE	resultative (agent-oriented)	*ka-*
	PUT	resultative (patient-oriented)	*nə-*
	SEE	conative	*iʃi-*
	START	inchoative	*əːkʰəː-*
direction	GO	andative	*ulə-*
	COME	venitive	*əmə-*
	EXIT	motion out of	*juː-*
continuous-posture	SIT	continuous-sitting	*tʰək-ʃi-*
	LIE	continuous-lying	*xulə-ʃi*
modality	FINISH	ability	*ətʰə-*
valency increase	GIVE	beneficiary	*puː-*

8.3.2.1 Aspect/aktionsart

Solon expresses several aspectual and aktionsart categories through auxiliary constructions. A completive meaning is conveyed by constructions grammaticalized from the verb *ətʰə-* FINISH (8.73). The conative aktionsart is grammaticalized from the verb *iʃi-* SEE (8.74), while the inchoative aktionsart is expressed by auxiliary constructions derived from *əːkʰəː-* START (8.75). The inchoative aspect is also expressed by VCPs which the auxiliary verb is *ɔː-* 'become', this is discussed in §8.3.2.7 separately, as it requires a participle marked main verb.

(8.73) *əmki-**mi*** ***ətt**ʰ**ə-**tʃ**ʰ**i=l*** *naːtʃil* *jəjə-t-i*
*emgi-**mi*** ***ette-**ci=l*** *naajil* *yeye-d-i*
return-**CONN.CVB** **finish**-COOR.CVB=PTCL maternal grandfather-DAT-REFL.SG

ə-ʃi-n *tʃintʃi-r* *ki*
e-si-n *jinji-r* *gi*
NEG-AOR-3 tell-CONNEG Q
'Once I **have returned**, won't I tell my grandfather?' (LT25-14)
(FINISH -> completive)

(8.74) *[...]* *putənə-ni* *tʃintʃi-saːtʃi-ni* *əmun* *ɔː**-m*** ***iʃi-kt**ʰ**e*** *[...]*
[...] *budene-ni* *jinji-saa-ji-ni* *emun* *oo**-m*** ***isi-gte*** *[...]*
quail-GEN tell-PFV.PTCP-INS-3 one do-**CONN.CVB** **see-HORT**
'Let me **try to do** as quail told!' (LT01-30)
(SEE -> conative)

(8.75) *[...]* *tʰajja* *tʃalʊ* *kʰi* *nutəjə_aːʃin* *sanaː* *tʃɔkɔ**-tʃ**ʰ**i*** ***əːkʰəː-sə***
[...] *tayya* *jalʊ* *ki* *nudeye_aasin* *sanaa* *jogo**-ci*** ***eekee-se***
DIST young.man TOP very mind grieve-**COOR.CVB** **start**-PST
'That young man **started grieving** terribly.' (LT19-20)
(START -> inchoative)

Resultative meanings are expressed by auxiliaries derived from *pax-* GET and *ka-* TAKE, which yield agent-oriented resultatives (8.76-8.77), *ka-* TAKE as auxiliary verb also

adds the meaning of separation (8.77). The *nəː*- PUT and *juː*- EXIT express patient-oriented resultatives, either with intransitive verbs (8.78-8.79) and transitive verbs (8.80-8.81).

(8.76) *tʰɔːtʃʰi* *pasa=l* *tʃawa**-m*** ***pax**-sa*
tooci *basa=l* *jawa**-m*** ***bax**-sa*
DIS.CONN again=PTCL catch-**CONN.CVB** **get**-PST
'Then (the fox) **caught** (the quail) again.' (LT01-69)
(GET -> agent-oriented resultative)

(8.77) *[...]* *tʰəkkətʃʰi-tʰxi* *əmun* *pəːs-i* *əttə**-tʃʰi*** ***ka**-ttʃʰi*
[...] *teggeci-txi* *emun* *bees-i* *edde**-ci*** ***ga**-cci*
clothes-ABL one cloth-ACC.MN to.break-**COOR.CVB** **take**-COOR.CVB

əjjə *pəltir-wə-ni* *uki-m* *puːsə*
eyye *beldir-we-ni* *ugi-m* *buu-se*
PROX feet-DEF.ACC-3 tether-CONN.CVB give-PST
'Then (the boy) **tore** a piece of cloth from his clothes and wrapped (the tiger's) paw with it.' (LT41-63)
(TAKE -> agent-oriented resultative)

(8.78) *inəŋ* *tʊlin* *ɔː-tʃʰi* *tʰʊː**-tʃʰi*** ***nəː**-rə-ŋ*
ineŋ *dʊlin* *oo-ci* *tʊʊ**-ci*** ***nee**-re-ŋ*
day middle become-COOR.CVB be.cool **-COOR.CVB** **put**-AOR-3
'It becomes mid-day, and (the hot water) will **cool off**.' (LT11-30)
(PUT -> patient-oriented resultative, intransitive verb)

(8.79) *əʃi* *əmə-tʃʰi* *pɔtɔ-tʊ* *na* *tʰuːxə* *ɔː-tʃʰi*
esi *eme-ci* *bodo-dʊ* *na* *tuuxe* *oo-ci*
now come-COOR.CVB think-DAT also history become-COOR.CVB

***juː**-tʃi-rə-ŋ.*
***yuu**-ji-re-ŋ.*
exit-PROG-AOR-3
'When thinking now, (our past lives) are becoming history.' (LT21-32)
(EXIT -> patient-oriented resultative, intransitive verb)

(8.80) *ikkʰiŋ* *əmun* *tʃuːr* *ɔː-sɔː=l* *tʰajja-pa=l* ***man-tʃʰi***
ikkiŋ *emun* *juur* *oo-soo=l* *tayya-ba=l* ***man-ci***
new one two become-PST=PTCL DIST-DEF.ACC=PTCL use.up-**COOR.CVB**

nəː-muŋ
nee-muŋ
put-1PL.EXCL

'By the first two days of the new year, we would **finish (lit. use up and put)** that (buns).' (LT20-242)

(PUT -> patient-oriented resultative, transitive verb)

(8.81) *tʰəŋkʰə-tʃi-r* *tʰɔkɔ-tʊ* *nʊːtaː-**tʃʰi*** ***juː-sə***
teŋke-ji-r *togo-dʊ* *nʊʊdaa-**ci*** ***yuu-se***
burn-PROG-IPFV.PTCP pot-DAT throw-**COOR.CVB** **exit**-PST

'He **throwed** (the meat) into the burning pot.' (LT40-43)

(EXIT -> patient-oriented resultative, transitive verb)

8.3.2.2 Direction

Directional meanings are likewise expressed by auxiliary constructions in which the minor verb is typically a verb of motion encoding spatial orientation and deixis. In Solon, *ulə-* GO grammaticalizes into an andative marker (8.82), *əmə-* COME into a venitive marker (8.83), and *juː-* EXIT into a meaning of motion away or out from a reference point (8.84).

(8.82) *[...]* *pətənə* *təɣliː-**tʃʰi*** ***ul-tʃʰə*** *[...]*
[...] *bedene* *deɣlii-**ci*** ***ul-ce*** *[...]*
quail fly-**COOR.CVB** **go**-PST

'The quail **flew away**.' (LT01-67)

(GO -> andative)

(8.83) *ʃikkʰul* *iː-**tʃʰi*** ***əmə-tʃʰi=l*** *ɔrɔ-t-i* *xulɔː-sə [...]*
sikkul *ii-**ci*** ***eme-ci=l*** *oro-d-i* *xulee-se [...]*
ghost enter-**COOR.CVB** **come**-COOR.CVB=PTCL bed-DAT-REFL.SG lie-PST

'The ghost **(came) entered** (the house) and lied on his bed.' (LT04-36)

(COME -> venitive)

(8.84) *[...] lama turun_aːʃin atta-m pi-səː-tʃiː=l*
[...] lama durun_aasin adda-m bi-see-jii=l
lama very be.happy-CONN.CVB COP-PFV.PTCP-INS=PTCL

*tʰajja pɔkɔ-tʰxi mikki-**tʃʰi** **juː**-m pi-səː-tʃi [...]*
*tayya bogo-txi miggi-**ci** **yuu**-m bi-see-ji [...]*
DIST place-ABL crawl-**COOR.CVB** **exit**-CONN.CVB COP-PFV.PTCP-INS
'The lama having been very happy, and he having crawled out of that place…' (LTLT42-27)
(EXIT -> motion out of)

8.3.2.3 Continuous-posture

State verbs, such as *tʰəkʰ-ʃi-* sit.town-STAT 'be sitting', *xulə-ʃi-* lie.down-STAT 'be lying' can contribute a continuous aspect reading (Aikhenvald 2005:30-31, Bisang et al. forthcoming). However, in Solon these state verbs are not fully grammaticalized as continuous aspect markers; rather, they retain their original posture meanings (8.85).

(8.85) *pɔŋkɔŋ ʊnaːtʃi-nin [...] pɔtɔ-**m** **tʰəkə-ʃi**-sə kunəŋ.*
*boŋgoŋ ʊnaaji-nin [...] bodo-**m** **tege-si**-se guneŋ.*
big daughter-3 think-**CONN.CVB** **sit.down-STAT**-PST hearsay
'The big daughter **was thinking while sitting**.' (LT35-46)
(SIT -> continuous-sit)

When state verbs function as minor verbs and modify the continuous-posture, they frequently occur with the progressive aspect marker *-tʃi*. Consequently, it is sometimes unclear whether the continuous meaning is contributed by the stative verb itself or by the progressive marker, or by both (8.86).

(8.86) *əmmə:-nin [...] nə:lə-m tʃɔttʃɔxɔ:ʃi:-m*
emmee-nin [...] neele-m jojjoxoosii-m
mother-3 afraid-CONN.CVB be.scared-CONN.CVB

*tʰək-ʃi:-**tʃi**-rə-ŋ*
*teg-sii-**ji**-re-ŋ*
sit.down-STAT-**PROG**-AOR-3
'His mother is **very scared while sitting**.' (LT03-16)
(SIT -> continuous-sit)

The posture meaning exchanges when different posture verbs are substituted, the corresponding posture meaning of the construction changes accordingly, compare (8.87a and 8.87b).

(8.87) *a. tʰɔ:tʃʰi tʰu:kə kʰi amʊsxʊŋ ʃirxa-tʃʰi ənu:-tʃʰə tʃarin sɔnin*
tooci tuuge ki amʊsxʊŋ sirxa-ci enuu-ce jarin sonin
DIS.CONN wolf TOP little injury-PROP hurt-PFV.PTCP CONC very

*atta-**mi** **xulə-ʃi**-tʃi-rə-ŋ kunəŋ*
*adda-**mi** **xule-si**-ji-re-ŋ guneŋ*
be.happy-**CONN.CVB** **lie.down-STAT**-PROG-AOR-3 hearsay
'Then although the wolf has a small injury and hurt, he **was lying happily** (lit. was happy while lying).' (LT28-106)
(LIE -> continuous-lie)

b. *[...] atta-**mi** **tʰəkʰ-ʃi**-tʃi-rə-ŋ kunəŋ*
*[...] adda-**mi** **tek-si**-ji-re-ŋ guneŋ*
be.happy-**CONN.CVB** **sit.down-STAT**-PROG-AOR-3 hearsay
'He **was sitting happily** (lit. was happy while sitting).' (elicitation based on 8.87a, LT28-106)
(SIT -> continuous-sit)

8.3.2.4 Modal

As discussed in §8.3.2.1, *ətʰə-* FINISH can develop a completive aspectual reading. Another grammaticalized path of *ətʰə-* FINISH is to express the ability. Thus, FINISH follows two distinct grammaticalization paths in Solon: one yielding a completive aspectual interpretation and the other yielding a modal interpretation of ability. These two functions are not formally distinguished by any overt morphological marker; rather, the intended reading is determined by the syntactic and semantic context in which the construction occurs.

(8.88) *pair-iːn* *pakʃi-naːr* *pasa* *karik-tʊː=l*
bair-iin *bagsi-naar* *basa* *garig-dʊʊ=l*
dormitory-GEN.MN teacher-PL.MN also weekend-DAT=PTCL

*əmkiː-**m*** ***ətʰə-**rə-ŋ* *[...]*
*emgii-**m*** ***ete-**re-ŋ* *[...]*
return-**CONN.CVB** **finish**-AOR-3
'The dormitory teachers also **can return** (home) during their weekend.' (LT11-73)
(FINSIH -> ability)

(8.89) *ənnəkəːŋ* *tʰannakaːŋ* *ɔː-kʰi* *ʊxʊn* *ʃi*
ennegeeŋ *tannagaaŋ* *oo-ki* *ʊxʊn* *si*
PROX-QLT DIST.QLT become-COND.CVB what 2SG

*taː-**mi*** ***ətʰə-**nti* *ki*
*daa-**mi*** ***ete-**ndi* *gi*
take.responsibility-**CONN.CVB** **finish**-2SG Q
'If this and that happens, **can** you **take responsibility**?' (LT27-09)
(FINSIH -> ability)

8.3.2.5 Benefactive

The verb GIVE in VCPs can add the role of recipient or beneficiary; this type of construction is also known as benefactive applicative periphrasis (or quasi-applicative) (Creissels 2010:31). The recipient or the beneficiary is marked by the dative case.

(8.90) *par-tʊ* *əwən-pə-ni* ***ka-m*** ***pʊː-sa.***
bar-dʊ *ewen-be-ni* ***ga-m*** ***bʊʊ-sa.***
tiger-DAT sting-DEF.ACC-3 take-**CONN.CVB** **give**-PST
'(The boy) **removed** the sting **for** the tiger.' (LT41-01)
(GIVE-> benefactive)

(8.91) *[...]* *əttəŋ* *tʰaŋiː=l* *jətti* *əxuːt* *muː-jə* ***ka-m***
[...] *eddeŋ* *taŋii=l* *yeddi* *exuud* *muu-ye* ***ga-m***
morning every=PTCL normally hot water-PTV take-**CONN.CVB**

pʊː-mʊn
bʊʊ-mʊn
give-1PL.EXCL
'Every morning, we **take** hot water (**for** the students).' (LT11-29)
(GIVE-> benefactive)

8.3.2.6 Copula pi- 'be' as minor verb

In Solon auxiliary constructions, the copula *pi-* can function as a minor verb and contributes temporal periphrasis as well as several other grammatical meanings. The participle-marked VCPs occur with *pi-* as minor verb, but *pi-* as a minor verb occurs not only with participle-marked lexical verbs, but also with converb-marked verbs. Table 8-3 summarizes the functions of VCPs with *pi-* as the minor verb, followed by illustrative examples.

Present and past progressive meanings can be expressed by both the coordinative converb and the connective converb, with no distinct semantic or functional difference between the two. Likewise, there are two constructions for expressing anterior subordination, but again no clear distinction between them is attested in the corpus; their distribution appears to depend largely on individual speaker preference. These constructions are discussed in detail in the converb section (§6.5.1.2).

Table 8-3: The function of the auxiliary construction involving the copula *pi-* 'be'

AUX construction	grammaticalized function	example number
V_1-IPFV.PTCP BE-PST	past habitual (past present)	(8.92)
V_1-PFV.PTCP BE-PST	pluperfect	(8.93)
V_1-HAB BE-PST	past habitual (past present)	(8.94)
V_1-CONN.CVB/COOR.CVB BE-AOR	present progressive	(8.95)
V_1-CONN.CVB/COOR.CVB BE-PROG-AOR	present progressive	(8.96)
V_1-CONN.CVB/COOR.CVB BE-PROG-PST	past progressive	(8.97)
V_1-PFV.CVB BE-AOR	present perfective	(8.98)
V_1-PFV.CVB BE-PROG-AOR	present perfect progressive	(8.99)
V_1-PFV.CVB BE-PROG-PST	pluperfect progressive	(8.100)
V_1-CONN.CVB BE-COOR.CVB	anterior subordination	(8.101)
V_1-CONN.CVB BE-PFV.PTCP-INS	anterior subordination	(8.102)

V_1-IPFV.PTCP BE-PST → past habitual (past present)

(8.92) *məːnkʰəŋ* *ɔː**-r*** ***pi**-sə* *ʃintʰi*
meenkeŋ *oo**-r*** ***bi**-se* *sinti*
REFL make**-IPFV.PTCP** **COP**-PST PTCL
'People **used to make** (bread) by themselves.' (LT23-39)

V_1-PFV.PTCP BE-PST → pluperfect

(8.93) *paltʃʰaː-ni* *əjjə* *pɔŋkɔŋ* *ukkʰəːxəːŋ-pə-ni* *tʰɔː**-sɔ*** ***pi-sə**.*
balcaa-ni *eyye* *boŋgoŋ* *ukkeexeeŋ-be-ni* *too**-so*** ***bi-se**.*
relative-GEN PROX big son-DEF.ACC-3 like**-PFV.PTCP** **COP-PST**
'(The girl) **had liked** this elder son of the relatives.' (LT19-12)

V_1-HAB BE-PST → past habitual (past present)

(8.94) *tʰari* *ərin-ni* *xʊrkaːn* *xɔkkʰɔ* *niʃxuŋ* *ɔː-**kʰiʃi*** ***pi-sə***
tari *erin-ni* *xʊrgaan* *xokko* *nisxuŋ* *oo-**kisi*** ***bi-se***
DIST time-GEN fence all small make-**HAB** **COP-PST**
'The fences at that time, people **used to** make them all small.' (LT20-100)

V_1-CONN.CVB/COOR.CVB BE-AOR → present progressive

(8.95) *ʃi* *ʊxʊn* *ɔː-**tʃʰi*** ***pi-ʃi-**nti*** *mə*
si *ʊxʊn* *oo-**ci*** ***bi-si-**ndi*** *me*
2SG what make-**COOR.CVB** **COP-AOR**-2SG Q
'What **are** you **doing**?' (LT07-21)

V_1-CONN.CVB/COOR.CVB BE-PROG-AOR → present progressive

(8.96) *əjjə* *tʃuːr* *pəjə* *xuːm-lit-ə-m* *pi-tʃi-rə-ŋ*
eyye *juur* *beye* *xuum-ld-e-mi* *bi-ji-re-ŋ*
PROX two person hug-RECP-EPCONN.CVB COP-PROG-AOR-3
'These two people are being hugged.' (EL06-49)

V_1-CONN.CVB/COOR.CVB BE-PROG-PST → past progressive

(8.97) *[…] ətʰxəŋ* *satti* *ilan* *ʊnatʃi-tʃi-wil* *uri-tu*
[…] etxeŋ *saddi* *ilan* *ʊnaji-ji-wil* *uri-du*
old.man old.lady three daughter-INS-REFL.PL mountain-DAT

*emtara-**mi*** ***pi-tʃi-sə*** *kunəŋ*
*emdara-**mi*** ***bi-ji-se*** *guneŋ*
live-**CONN.CVB** **COP-PROG-PST** hearsay
'An old man and an old woman were living in the mountains with their three daughters.' (LT28-02)

V_1-PFV.CVB BE-AOR → present perfect

(8.98) *əmmə-ni* *tili-wi* *əkkə-ʃxi* ***mɔr-tʰɔːn*** ***pi-ʃi-n***
mother-3 head-REFL.SG bottom-ADV.ALL **bend-PFV.CVB** **COP-AOR-3**
'The mother **has bent** her head down.' (LT15-11)

V_1-PFV.CVB BE-PROG-AOR → present perfect progressive

(8.99) *iːmaːn kʰəːŋ pəltiːr-wi ukkʰə-tə juː-kuː-**tʰəːn** **pi-tʃi-rə-ŋ?***

*iimaankeeŋ beldiir-wi ukke-de yuu-guu-**teen** **bi-ji-re-ŋ?***

why SAY.CVB feet-REFL.SG gate-DAT exit-CAUS-**PFV.CVB** **COP-PROG-AOR**-3

'Why **has** the tiger **been stretching out** its paw at the gate?' (LT41-57)

V_1-PFV.CVB BE-PROG-PST → pluperfect progressive

(8.100) *əmun xaiʃi attʃʰiː-**tʰaːn** **pi-tʃi-sə** kunəŋ*

*emun xaisi accii-**taan** **bi-ji-se** guneŋ*

one scissor be.open-**PFV.CVB** **COP-PROG-PST** hearsay

'A pair of scissors **had been opening**.' (LT02-07)

V_1-CONN.CVB BE-COOR.CVB → anterior subordination

(8.101) *[...] xuktʃimi nəː-**m** **pi-ttʃʰi** putʃikləː-xəːn-tʃi-rə-ŋ*

*[...] xugjimi nee-**m** **bi-cci** bujiglee-xeen-ji-re-ŋ*

music put-**CONN.CVB** **COP-COOR.CVB** dance-CAUS-PROG-AOR-3

kʰə tʰamiriːn_tʰalpar-tʊ.

ke tamiriin_talbar-dʊ.

PTCL playground-DAT

'**Having** put on music, (the teacher) make the students dance in the playground.' (LT11-126)

V_1-CONN.CVB BE-PFV.PTCP-INS → anterior subordination

(8.102) *[...] putənə tikkan-pə-n tɔːltiː-**mi** **pi-səː-tʃi***

*[...] budene diggan-be-n dooldii-**mi** **bi-see-ji***

quail sound-DEF.ACC-3 hear-**CONN.CVB** **COP-PFV.PTCP-INS**

saːtʃikiː-la əm-sə

saajigii-la em-se

magpie-LOC come-PST

'Having heard the sound, the quail came to the magpie.' (LT01-21)

8.3.2.7 Copula ɔː- ‘become’ as minor verb

The copula ɔː- ‘become’ may also function as a minor verb in verbal complex predicates (VCPs). In this use, it combines exclusively with the present participle, yielding the structure V1-IPFV.PTCP + BECOME. Lexically, *ɔː-* denotes a change of state (8.103). When occurring in VCPs, however, it is grammaticalized to indicate an inchoative change in activity rather than a change in inherent state. Therefore, this should also be considered a construction that expresses the inchoative aspect.

This construction is analyzed as a VCP because the imperfective participle-marked lexical verb is immediately followed by *ɔː-* ‘become’, together forming a single predicate unit. In (8.104), the activity shifts from ‘the rabbit went to the riverside (to eat fish)’ to ‘the rabbit goes to the grassland to graze’. In (8.105), the transition is from ‘a peaceful life’ to ‘the ghost becomes active and begins harming people’. This construction may originate from expressions such as ‘the rabbit becomes an eater (of grass)’, which subsequently developed into a meaning comparable to ‘start/begin eating grass’.

(8.103) *[...] uːrək xuntə* ***ɔː-sɔ.***
[...] uureg xunde ***oo-so.***
task heavy **become**-PST
‘The task **became** heavy.’ (LT11-139)

(8.104) *tʰa-tʊːxi ama-sxi tʰɔːl tɔː-ni xuwəː-ni ɔltɔːn-tɔli*
ta-dʊʊxi ama-sxi tool doo-ni xuwee-ni oldoon-doli
DIST-ABL back-ADV.ALL rabbit river-GEN edge-GEN side-PROL

uli-pi ʊti-tʃʰi xəːr_tʰal ɔrɔːn-tɔ ul-tʃʰi ɔrɔːtʰi
uli-bi ʊdi-ci xeer_taloroon-do ul-ci orooti
go-REFL.SG stop.doing-COOR.CVB grassland above-DAT go-COOR.CVB grass

*tʃìttʰə-**r*** *ɔː-sɔ* *kunəŋ*
*jitte-**r*** ***oo**-so* *guneŋ*
eat-**IPFV.PTCP** **become**-PST hearsay
‘After that, the rabbit stopped going around the riverbank and **started** grazing in the grassland.’ (LT06-12)

(8.105) *[...] ʃikkʰul sʊlmʊs xətʰər-tʃʰi kʰi jətti pəjə-ni*
[...] sikkul sʊlmʊs xeter-ci ki yeddi beye-ni
ghost monster be.overtly-COOR.CVB TOP normally person-GEN

*ami-wa-ni xɔrɔː-**r** ɔː-sɔ kunəŋ*
*ami-wa-ni xoroo-**r** **oo**-so guneŋ*
life-DEF.ACC-3 harm-**IPFV.PTCP** **become**-PST hearsay
'It is said that there are many ghosts and monster and **began to** harm people's lives.'
(lit. the ghost and monster … became to harm people's lives.' (LT40-04)

From this meaning, a further extension has developed in which the construction conveys the subject's intentional decision, as illustrated in (8.106).

(8.106) *[...] xakki axaː-ni ʃilpaː-saː-tʃi-ni tɔː-ni xupəː-tə*
[...] xaggi axaa-ni silbaa-saa-ji-ni doo-ni xubee-de
pheasant elder.brother-GEN teach-PFV.PTCP-INS-3 river-GEN side-DAT

*əmə-tʃʰi aːsa-na-**r** ɔː-sɔ*
*eme-ci aasa-na-**r** **oo**-so*
come-COOR.CVB sleep-AM-**IPFV.PTCP** **become**-PST
'(The rabbit) **decided to** go to the riverside to sleep, as his pheasant brother had taught him.' (LT06-08)

8.3.3 Symmetric VCPs

In symmetric VCPs, the two verbal components are of equal status. Each verb contributes comparably to the overall predicate, and the construction may either describe a single event from different perspectives or encode a temporal or semantic relation between closely integrated subevents. In Solon, symmetric VCPs express four major semantic relations: concomitant action, cause-effect, manner, and synonymy.

A general issue with symmetric VCPs concerns the boundary between monoclausal verbal complex predicates and biclausal constructions, particularly in cases involving manner (8.107) and cause–effect relations (8.108).

(8.107) *kə* *jəxə=l* *atta-**mi*** *tʃintʃi-su.*
ge *yexe=l* *adda-**mi*** *jinji-su.*
PTCL big=PTCL be.happy-**CONN.CVB** say-PST.1SG
(a) 'I **said happily**.'
(b) 'I was happy **and** said.' (LT25-16)

(8.108) *unəxun-ni* *[...]* *tʰa-wʊː-**tʃʰi*** ***tʰixə**-səː.*
unexun-ni *[...]* *ta-wʊʊ-**ci*** ***tixe**-see.*
child-3 trip-PASS-**COOR.CVB** **fall**-PST
'The goat lamb (lit. the child) was **tripped** (by stone) **and fell**.' (LT15-03)

Ambiguity between monoclausal and biclausal analyses is inherent in such constructions, and their interpretation often depends on speaker and reader's judgments. Negation provides evidence for both readings. In (8.109a) and (8.110a), the negative auxiliary precedes both verbs and takes scope over the entire sequence, negating both events; this pattern supports a monoclausal, complex-predicate analysis. In contrast, in (8.109b) and (8.110b), the negative auxiliary occurs between the two verbs and negates only the second verb, yielding a biclausal interpretation. These patterns indicate that the constructions are structurally ambiguous and may be analyzed either as complex predicates or as biclausal sequences. For the purposes of this section, I treat them primarily as complex predicates.

(8.109) a. *kə* ***ə-**su* *atta-mi* *tʃintʃi-**r***
ge ***e-**su* *adda-mi* *jinji-**r***
PTCL **NEG-**PST.1SG be.happy-CONN.CVB say-**CONNEG**
'I **didn't say happily**.' (elicitation based on 8.107, LT25-16)

b. *kə* *attta-mi* ***ə-su*** *tʃintʃi-**r***
ge *addda-mi* ***e-su*** *jinji-**r***
PTCL be.happy-CONN.CVB **NEG-PST.1SG** say-**CONNEG**
'I was happy, and/but I **didn't say**.' (elicitation based on 8.107, LT25-16)

(8.110) a. *unəxun-ni* *[...]* ***ə-sə*** *tʰa-wɔː-tʃʰi* *tʰixə**-r.***
unexun-ni *[...]* ***e-se*** *ta-wʊʊ-ci* *tixe**-r.***
son-3 **NEG-PST** trip-PASS-COOR.CVB fall-**CONNEG**
'Her son **wasn't tripped** (by the stone) **and fell**.' (elicitation based on 8.108, LT15-03)

b. *unəxun-ni* *[...]* *tʰa-wɔː-tʃʰi* ***ə-sə*** *tʰixə**-r.***
unexun-ni *[...]* *ta-wʊʊ-ci* ***e-se*** *tixe**-r.***
son-3 trip-PASS-COOR.CVB **NEG-PST** fall-**CONNEG**
'Her son was tripped (by the stone), **and/but didn't fall**.' (elicitation based on 8.108, LT15-03)

8.3.3.1 Concomitant actions

In concomitant-action VCPs, the two actions occur simultaneously and jointly describe a single event from different perspectives. In example (8.111), the actions 'do' and 'study' are equal components: neither verb modifies the other. Instead, they describe two facets of one complex event: carrying out an operation while learning how to do it. Another example is given in (8.112), the actions 'kill' and 'rob' are equal, they are separate components for one single predicate which describes from different perspectives.

(8.111) *taxi* *tʰari* *paraːn* *ʊxʊn* *ɔː-r-tʊ-wi* *tʰʊrʃiltʰa-ja*
daxi *tari* *baraan* *ʊxʊn* *oo-r-dʊ-wi* *tʊrsilta-ya*
again DIST many what do-IPFV.PTCP-DAT-REFL.SG operation-PTV

ɔː-m ***tʰatʰi**-r-tʊ-wi* *[...]*
oo-m ***tati**-r-dʊ-wi* *[...]*
do-CONN.CVB **learn**-IPFV.PTCP-DAT-REFL.SG
'Again, when (I) **do and learn** that many surgeries…' (LT39-10)

(8.112) *pəjə-wə* ***waː-m*** ***təːrəmtə-r*** *ənə* *jəːmə-nin*
beye-we ***waa-m*** ***deeremde-r*** *ene* *yeeme-nin*
person-DEF.ACC **kill-CONN.CVB** **rob-**IPFV.PTCP PROX.MN thing-3

əm-sə *pa* *[...]*
em-se *ba* *[...]*
come-PST TAG
'The thing that **kills and robs** people came, right?' (LT40-10)

8.3.3.2 Cause-effect

Symmetric VCPs may also express cause-effect relations, where the first action represents the cause and the second represents the resulting effect. Semantically, the cause precedes the effect, although the two remain within a single monoclausal unit. The two verbs share the same tense interpretation, but tense identity is semantic rather than formally marked on each verb.

(8.113) *unəxun-ni* *[...]* *tʰa-wʊː-**tʃʰi*** ***tʰixə-**səː*
unexun-ni *[...]* *ta-wʊʊ-**ci*** ***tixe-**see*
child-3 trip-PASS-**COOR.CVB** **fall**-PST
'The goat lamb (lit. the child) was **tripped** (by stone) **and fell**.' (LT15-03)

(8.114) *nəːriŋ* *ɔː-tɔli* *kəttʰi-**tʃʰi*** ***sərə-**tʃʰi* *[...]*
neeriŋ *oo-doli* *getti-**ci*** ***sere-**ci* *[...]*
dawn become-SIM.CVB be.cold-**COOR.CVB** **be.awake**-COOR.CVB
'When it became the dawn, (the rabbit) was **freezing awake**.' (LT06-09)

8.3.3.3 Manner

Manner relations represent another subtype of symmetric VCPs. Here, one verb expresses the manner in which the other action is performed. The verb conveying manner belongs to an unrestricted class, yet it does not behave as a minor verb in an asymmetric VCP. Instead, both verbs remain in an equal structural position and jointly form a symmetric VCP.

(8.115) *[...] ikki-wi* *ʃippʰaː-ltʃaː-**m*** ***əm**-sə* *kunəŋ*
[...] iggi-wi *sippaa-ljaa-**m*** ***em**-se* *guneŋ*
tail-REFL.SG shake-ITR-**CONN.CVB** **come**-PST hearsay
'(The fox) **came wagging his tail**.' (LT01-15)

(8.116) *ɔltɔːn-tʊliː-ni* *tʰajja* ***tʃʊɣaːlaː-m*** ***təɣliː-m*** *ul-tʃi-r*
oldoon-dʊlii-ni *tayya* ***jʊɣaalaa-m*** ***deɣlii-m*** *ul-ji-r*
side-PROL-3 DIST **stroll-CONN.CVB** **fly**-CONN.CVB go-PROG-IPFV.PTCP

putənə [...]
budene [...]
quail
'The quail who was **flying around** (lit. flying strollingly) next to (magpie)…'

8.3.3.4 Synonymous VCPs

Symmetric VCPs may also involve two synonymous or near-synonymous verbs, though such constructions are rare in Solon. Their function is to express repetition, emphasis of the duration, or intensification of an action (Aikhenvald 2005: 30). In Solon data, the attested example intensifies the action.

(8.117) *əmməː-nin [...]* ***nəːlə-m*** ***tʃɔttʃɔxɔːʃiː-m***
emmee-nin [...] ***neele-m*** ***jojjoxoosii-m***
mother-3 **afraid-CONN.CVB** **be.scared**-CONN.CVB

tʰək-ʃiː-tʃi-rə-ŋ
teg-sii-ji-re-ŋ
sit.down-STAT-PROG-AOR-3
'His mother is sitting **very scared**.' (LT03-16)

8.3.4 Comparative outlook

Among the Northern Tungusic languages, VCPs are generally limited, especially in those spoken in Siberia: Evenki, Even, and Negidal. In these languages, VCPs occur primarily with a copula verb functioning as a minor verb to form temporal periphrasis. This pattern suggests that the prototypical Northern Tungusic profile involves a highly restricted VCP system.

In contrast, Mongolian exhibits a rich and elaborated VCP system, with at least fifteen distinct constructions (Nargil 2020). Given the extensive contact between Mongolian and Solon, the VCP system of Solon shows strong similarities to Mongolian, both in its richness and in the grammaticalization pathways.

For instance, Northern Tungusic languages such as Lamunkhin Even express the conative aspect through a dedicated verbal suffix *-ssi* (8.118a), whereas Solon expresses conative meaning through a VCP with the verb SEE functioning as the minor verb (8.118b), exactly parallel to Mongolian (8.118c).

(8.118) a. Lamunkhin Even (Aralova and Pakendorf 2010)

noŋandun *bəle-**ssi**-mi* *turki* *her-de-li-n*
3SG.DAT help-**CON**-SS.COND sled bottom-SIDE-PROL-3SG
ʧuː-na-m
disappear-NFUT-1SG
'**Trying** to help him I disappeared under the sled!'

b. Solon

pi *əmun* *par-ʧi* *əmun* *tʰəmtʃʰi-**m*** ***iʃi-**kt*ʰ*e***
bi *emun* *bar-ji* *emun* *temci-**m*** ***isi-**gte***
1SG one tiger-INS one fight-**CONN.CVB** **see**-HORT
'Let me **try to** fight with the tiger!' (LT41-42)

c. Mongolian (Nargil 2020: 31)

či *tere* *aγuu_yeke* *küsel-eče-ben* *qolada-**ǰu*** ***üǰe***
2SG DIST massive dream-ABL-REFL be.away-**CVB** **see**
'**Try** to stay away from that massive dream of yours!'

As noted above, in other Northern Tungusic languages, verbal complex predicates (VCPs) typically involve a copula functioning as the minor verb in temporal periphrasis; this pattern is also attested in Solon (§8.3.2.6). A characteristic feature of Northern Tungusic languages is their strong preference for participial forms in such constructions (Malchukov & Czerwinski, forthcoming). Solon, however, allows both participles and converbs in VCPs.

This contrast is illustrated by the analytic progressive. In Northern Tungusic languages, the lexical (major) verb in progressive constructions is typically marked by a participle (8.119a), whereas in Solon, and similarly in Mongolian, it appears in converb form (8.119b-c). This divergence highlights a structural shift in Solon away from the participle-centered periphrastic patterns characteristic of Northern Tungusic, aligning it instead with Mongolic models.

(8.119) a. Even (Malchukov & Czerwinski forthcoming, glossing adapted)

bi *em-**ri*** ***bi-**he-m*

1SG come-**IPFV.PTCP** **COP-**AOR-1SG

'I **am** coming.'

b. Solon

ʃi *ʊxʊn* *ɔː-**tʃʰi*** ***pi-**ʃi-nti* *me*

si *ʊxʊn* *oo-**ci*** ***bi-**si-ndi* *me*

2SG what do-**COOR.CVB** **COP-**AOR-2SG Q

'What **are** you doing?'(LT07-21)

c. Mongolian

čai *uuɣu-**ǰu*** *bai-na*

tea drink-**CVB** COP-PRS

'(I) **am** drinking tea.'

Solon is not the only Tungusic language showing Mongolian influence. Other Tungusic languages that have been in prolonged contact with Mongolian exhibit similar patterns. Oroqen, another Northern Tungusic language spoken in Hulunbuir, employs a converb (rather than a participle) in the analytical progressive (8.120). Manchu and Sibe also show extensive VCP systems with grammaticalization patterns comparable to Mongolian (8.121-8.122). Although comprehensive studies on these languages are still lacking, existing descriptions already indicate clear attestation of VCPs.

(8.120) Oroqen (Hu 1986: 170)

beje *ŋənə-**mi*** ***pi**-ʃi-n*

person go-**IMPF.CVB** **COP**-AOR-3

'The person **was going**.'

(8.121) Manchu (Gorelova 2002: 311)

jafa-fi ***baha***

grasp-COOR.CVB **get**

'…**Succeeded** in grasping.'

(GET -> agent-oriented resultative)

(8.122) Sibe (Zikmundová 2013: 167, glossing adapted)

əmdan *ta-m* ***ta***

once look-IMPF.CVB **look**

'Just have **(try)** a look!'

(LOOK -> conative)

Table 8-4 summarizes the grammaticalization of minor verbs in Mongolian, Solon, and several Tungusic languages, excluding constructions in which copulas function as minor verbs. Mongolian represents the dominant contact language for Solon; Even is taken as representative of Siberian Northern Tungusic languages; and Oroqen, Manchu, and Sibe represent other Tungusic languages that have been in contact with Mongolian. Owing to gaps in the existing descriptions of verbal complex predicates in Oroqen, Manchu, and Sibe, unattested constructions in Table 8-4 should not be interpreted as evidence of absence, but rather as reflecting the current limits of study.

It should also be noted that the grammaticalization of FINISH as an ability marker in Solon cannot be attributed to Mongolian influence. In Mongolian, ability is expressed by auxiliary verbs meaning CAN/WIN. This particular grammaticalization path in Solon therefore remains unclear.

Table 8-4: The comparison of grammaticalization of VCPs in Mongolian, Solon and several Tungusic languages (excluding the copula as minor verb)

source verb	function	MN	SL	EVE	ORQ	MNC	SB
CAN/WIN	ability	+				+	
COME	venitive	+	+			+	
DO	conative			+			
FINISH	completive	+	+	+			
FINISH	ability		+		+		+
GET	resultative	+	+		+	+	
GET	ability						
GIVE	benefactive	+	+		+	+	+
GO	andative	+	+			+	
EXIT	motion out of	+	+				
EXIT	resultative	+	+				
GRASP	inchoative					+	
KNOW	possibility	+					+
LIE	continuous	+	+				
PUT	resultative	+	+			+	
SEE	conative	+	+			+	+
SEND	missive					+	
SIT	continuous	+	+			+	
STAND	continuous	+				+	+
START	inchoative	+	+				+
STOP	terminative			+			
TAKE	resultative	+	+			+	
THROW	completive	+					

MN: Mongolian; SL: Solon; EVE: Even; ORQ: Oroqen; MNC: Manchu; SB: Sibe.

(Malchukov and Czerwinski forthcoming; Hu 1986: 104, 122, 143,188; Gorelova 2002: 125, 164, 217, 250, 270–272, 306, 311; Zikmundová 2013: 165, 166, 167)

8.4 Valency change

This section analyzes the impact of valency-changing verbal morphology on argument expression, including the (anti)causative, passive and reciprocal constructions. Table 8-5 shows the valency changing morphemes in Solon. The (anti)causative suffix *-U:* can express causal and non-causal relations; furthermore, *-U:* developed a passive function. The section is divided into four parts, each corresponding to one of the valency-changing topics mentioned in the Table 8-6. The allomorphs *-U:*, *-wU:*, and *-kU:* occur in (anti)causative and passive constructions. Their distribution is phonologically conditioned. The allomorph *-U:* is used after consonant-final verb stems, whereas *-wU:* appears after vowel-final verb stems. The allomorph *-kU:* has a restricted distribution and is attested only with the verbs *ju:-* 'exit' and *i:-* 'enter'.

Table 8-5: Valency changing morphemes in Solon

	forms	
causative	*-xA:n ~ -kʰA:n*	*-kA:*
(anti)causative	*-U:~ -wU:~-kU:*	
passive	*-U:~ -wU:~-kU:*	
reciprocal	*-lti*	*-mA:ʃi*

8.4.1 Causative

8.4.2.1 Verbal morphemes

Causativization is a process that increases a verb's valency by introducing an additional agent, called the causer, resulting in a causative form with n+1 arguments from the original valency (Comrie 1975: 2). In transitive contexts (referred to as causer-related causation by Kittilä 2013), the causer prompts the causee to perform an action (Song 2013). In intransitive contexts (agent-related causation), an agent argument is added, and the causee takes on the role of a patient and undergoes a change of condition or state due to the causer's action. Solon has two causative suffixes:

The suffix *-xAːn ~ -kʰAːn* is productive in Solon and attaches to both transitive and intransitive verbs; see (8.123) for an example with an intransitive base. Cognate causative forms are attested in other Northern Tungusic languages as *-βkAn / -wkhAːn* (Aralova & Pakendorf 2023: 30; Cong 2019: 274). A related form *-UxAːn* also occurs in Solon, but it is rare and appears to be lexically restricted, attested only with the verb *iʃ-* 'see', yielding *iʃ-uːxəːn-* 'cause to see, show' (8.124).

(8.123) *pəjə-səl [...] ʃiwuŋ ʊnaːtʃi-wa tʃuː-t-i sʊli-m*
beye-sel [...] siwuŋ ʊnaaji-wa juu-d-i sʊli-m
person-PL sun girl-DEF.ACC house-DAT-REFL.SG invite-CONN.CVB

*xəːm sai tʃitʰ-**kʰəːn**-ə-m amraː-**xaːn**-a-m kun-tʃʰə-tu [...]*
*xeem sai jit-**keen**-e-m amraa-**xaan**-a-m gun-ce-du [...]*
meal tea eat-**CAUS**-AOR-1SG rest-**CAUS**-AOR-1SG SAY-PFV.PTCP-DAT
'When people wanted to invite the sun girl into their homes and **let her eat and drink and rest**…' (LT38-21)

(8.124) *ʃiwuŋ ʊnaːtʃi pəjə paltisʊŋ ɔːtʃʰi ɔttʃʰilɔŋ_tʰəŋkər-tu kəŋ paraːn*
siwuŋ ʊnaaji beye baldisʊŋ ooci occiloŋ_teŋger-du geŋ baraan
sun girl person mammal and universe-DAT more many

*aja-ʃi-ja iːs-**uːxəːn**-ə-m [...]*
*aya-si-ya is-**uuxeen**-e-m [...]*
good-PROP-PTV see-**CAUS**-EP-CONN.CVB
'The sun girl **makes** the mammals and universe see more good things.' (LT38-11)

In addition, Solon has a suffix *-kAː*, which is likely borrowed from Mongolian (Nargil 2018) (8.125). Functionally, it overlaps with *--xAːn ~ -kʰAːn*.

(8.125) *taxi əmnəlkə-tʰixi kʰi min-u-wə tʰatʰi-**kaː**-sa*
*daxi emnelge-tixi ki min-u-we tati-**gaa**-sa*
again hospital-ABL TOP 1SG.OBL-EP-DEF.ACC study-**CAUS**-PST
'Then the hospital **trained** me **(**lit. **made me study)**.' (LT39-14)

8.4.2.2 Transitivity and causee marking

Both intransitive and transitive verbs can occur in causative constructions in Solon, but the case marking of the causee differs according to the transitivity of the base verb. When the base verb is intransitive, the causee is marked exclusively by the accusative case. In contrast, when the base verb is transitive, the case coding of the causee varies: the causee may be marked by the accusative, dative, or instrumental case, each associated with different semantic nuances.

The semantic interpretation of causative constructions depends on several interacting factors related to the verb, the causee, and the causer (Dixon 2012: 268). Verb-related factors include stative vs. dynamic meaning and transitivity; causee-related factors include degree of control, volition, and affectedness; and causer-related factors include directness, intentionality, naturalness, and degree of involvement.

8.4.2.2.1 Causation of intransitive verb

As noted above, when intransitive verbs undergo causativization, the causee can only be marked by the accusative case. In these constructions, semantic distinctions such as factitive versus permissive causation are not morphologically encoded and must instead be inferred from the discourse context.

Examples (8.126) and (8.127) both involve the intransitive verb ‘go’ with a causative marker. In (8.126), the causation has a factitive interpretation, supported by contextual cues such as ‘chase’, which implies direct coercion. In contrast, (8.127) receives a more permissive reading: the father announces his intention to leave and inform his wife, and no direct forcing is implied. Permissive interpretation therefore arises contextually rather than morphologically.

(8.126) *[…] (xasaŋ xaːn) məktəŋ pʊkkʰʊŋ ɔːtʃʰi ʊlʊr-**pa**-ni tʰəŋkər-ni*
*[…] (xasaŋ xaan) megdeŋ bʊkkʊŋ ooci ʊlʊr-**ba**-ni teŋger-ni*
PN emperor PN buddha and people-**DEF.ACC**-3 sky-GEN

*ɔrtɔn-tʰxi asa-m **uliː-xəːn**-ə-m […]*
*ordon-txi asa-m **ulii-xeen**-e-m […]*
palace-ABL chase-CONN.CVB **go-CAUS**-EP-CONN.CVB

‘(The Hasang emperor) chased and **made** the Megdeng budhha and his families **away** from sky palace.’ (LT38-41)

(8.127) *tʰɔːmi* *pi-sə-tʃi* *kə* *ɔnatʃi* *xurəːxən* *tʃuːr-iː*
toomi *bi-se-ji* *ge* *ɔnaji* *xureexen* *juur-ii*
DIS.CONN COP-PFV.PTCP-INS PTCL girl son.in.law two-COLL

*appa-**wal*** ***uliː-xəːn**-tʃʰə* *kunəŋ*
*abba-**wal*** ***ulii-xeen**-ce* *guneŋ*
father-**REFL.PL** **go-CAUS**-PST hearsay
'(The father said, 'let me leave and tell this good news to my wife.') Then the daughter and her husband **sent away** their father.' (LT28-152)

8.4.2.2.2 Causation of transitive verbs

Causativization of transitive verbs permits several strategies for case marking on the causee. The causee may be marked by the accusative, dative, or instrumental case, and these options correlate with distinct semantic interpretations. The choice of case reflects differences in the degree of control, affectedness, and directness of the causal relation.

8.4.2.2.2.1 Accusative case marked causee

When the causee is marked by the accusative case, the construction typically conveys a factitive (direct) causative meaning. Semantically, the causee has little or no control over the event and is strongly affected by the causer's action. The causal relation is interpreted as direct.

For example, in (8.128), the causee has no control over the situation and is forced to change her job. Similarly, in (8.129), the causee 'mother' is compelled by the son and daughter to eat undesirable food. In both cases, the accusative marking corresponds to low autonomy and high affectedness of the causee.

(8.128) *[...]* *min-u-**wə*** *jɔːtɔːŋ* *əri* *atʃil-waja*
[...] *min-u-**we*** *yoodooŋ* *eri* *ajil-waya*
1SG.OBL-EP-**DEF.ACC** why PROX job-DEF.ACC.1SG

*xaːlaː-**xaːn**-a-ŋ* *[...]*
*xaalaa-**xaan**-a-ŋ* *[...]*
change-**CAUS**-AOR-3
'Why they **made** me change this job?' (LT39-119)

(8.129)

tʰɔːtʃʰi	*əjjə*	*xuxin-ni*	*ukkʰəxəŋ-ni*	*əmmə-**wəl** [...]*	
tooci	*eyye*	*xuxin-ni*	*ukkexeŋ-ni*	*emme-**wel** [...]*	
DIS.CONN	PROX	daughter.in.law-3	boy-3	mother-**REFL.PL**	
əru	*xəːmə-jə*	*tʃik-**kʰəːn**-ə-ŋ*	*kunəŋ*		
eru	*xeeme-ye*	*jig-**keen**-e-ŋ*	*guneŋ*		
bad	meal-PTV	eat-**CAUS**-AOR-3	hearsay		

'Then the daughter and law and the son **made their mother eat** bad meals.' (LT03-03)

(8.130)

taxi	*əmnəlkə-tʰixi*	*kʰi*	*min-u-**wə***	*tʰatʰi-kaːsa*	
daxi	*emnelge-tixi*	*ki*	*min-u-**we***	*tati-gaa-sa*	
again	hospital-ABL	TOP	1SG.OBL-EP-**DEF.ACC**	study-CAUS-PST	

'Then the hospital trained me (lit. **made** me study).' (LT39-14)

8.4.2.2.2.2 Dative-marked causee

In contrast, the dative-marked causee typically expresses a permissive causative meaning. Here, the causee retains a higher degree of control and volition. Rather than forcing the action, the causer allows or enables the causee to perform it. In (8.131), the causee 'whom' is responsible for taking care of the children and has the option to decide whether to carry out the action. The causative interpretation is therefore permissive.

(8.131)

kə	*tʰari*	*urəl-pə*	*awɔː-**tʊ***	*xatalaː-**xaːn**-a-ŋ*	
ge	*tari*	*urel-be*	*awʊʊ-**dʊ***	*xadalaa-**xaan**-a-ŋ*	
PTCL	DIST	son-DEF.ACC	who-**DAT**	take.care-**CAUS**-AOR-3	

'Then (people) would **let whom** to take care of the children?' (LT22-05)

The dative case marked causee meanwhile conveys the meaning that the causative event benefits the causee, the causee functions as a beneficiary. Compare the following examples: in (8.132a) 'the mother' is marked as a direct object through reflexive-possessive encoding, the causation is not beneficial. In contrast, in (8.132b), where the causee is marked with the dative case, the speaker cooks for the causee 'them,' who benefits from the event.

(8.132) *a.* *tʰɔːtʃʰi* *əjjə* *xuxin-ni* *ukkʰəxəŋ-ni* *əmmə-**wəl*** *[...]*
tooci *eyye* *xuxin-ni* *ukkexeŋ-ni* *emme-**wel*** *[...]*
DIS.CONN PROX daughter.in.law-3 boy-3 mother-**REFL.PL**

əru *xəːmə-jə* ***tʃik-****kʰəːn-ə-ŋ* *kunəŋ*
eru *xeeme-ye* ***jig-****keen-e-ŋ* *guneŋ*
bad meal-PTV **eat-CAUS**-AOR-3 hearsay

'Then the daughter and law and the son **made their mother eat** bad meals.' (LT03-03)

b. *ərəi* *pasa* *[...]* *tʰa-ppi* *ɔː-mi* *pu-meː*
oroi *basa* *[...]* *ta-bbi* *oo-mi* *bu-mee*
evening also DIST-REFL.SG make-CONN.CVB give-1SG

*ə-ttʃʰil-**t**-i* *ɔː-mi* ***tʃit-kʰəːn****-me*
*e-ccil-**d**-i* *oo-mi* ***jid-keen****-me*
PROX-PL-**DAT**-REFL.SG make-CONN.CVB **eat-CAUS**-1SG

'In the evening, I also make that (bread) for these people (my family members), I make bread and **let them eat**.' (LT23-21)

A further extension of the dative marked causee is assistive causation, a subtype of sociative causation (Guillaume & Rose 2018). Here, the causer both initiates and helps the causee perform the action. For example, in (8.133) the causee 'mother' may be encoded either as accusative or dative, but the choice results in different interpretations: when it is encoded as direct object (8.133a), there is no assistive involvement; in contrast, when it is encoded by the dative (8.133b), an assistive meaning is added 'I helped my mother dress'. This assistive meaning naturally derives from the benefactive interpretation of the dative causee.

(8.133) a. *pi* *əmmə-**wi*** *tʰitʰ-xəːn-su*
bi *emme-**wi*** *tit-xeen-su*
1SG mother-**REFL.SG** wear-CAUS-PST.1SG
'I **dressed** my mother.' (elicited)

b. *pi* *əmmə-**t**-i* *tʰitʰ-xəːn-su*
bi *emme-**d**-i* *tit-xeen-su*
1SG mother-**DAT**-REFL.SG wear-CAUS-PST.1SG
'I **helped** my mother dress.' (elicited)

8.4.2.2.2.3 Instrumental case marked causee

The instrumental case marked caussee is semantically not related to the factitive and permissive causative. Instead, the causative construction involving an instrumental-marked causee has a selective meaning on the causee, expresses that the causee was selected from a larger set of potential participants. In (8.134a), the causee is marked by the accusative case as a direct object, expressing the meaning: let the boy ride the horse!'. In contrast, in (8.134b), the causee is marked by the instrumental case, conveying the idea that the causer chose the 'children' as a horse rider, that is, 'Adults and children can both ride horses, but only children have been selected to do so'. See also example (8.135), where the causer chooses 'you' as the person to do the work; a selective meaning is always involved. The instrumental case-marked causee is rare, with all documented instances and further investigation is required.

(8.134) a. *tʰari uril-**pə** mʊrin-pə **ʊkʊ-xaːn**-tʃʰu*
*tari uril-**be** mʊrin-be **ʊgʊ-xaan**-cu*
DIST child-**DEF.ACC** horse-DEF.ACC **ride-CAUS**-PST.1SG
'I **made that child** ride the horse.' (elicited)

b. *mʊrin xɔwwɔː-r-tʊ kʰi uril-**tʃi** mʊrin **ʊkʊ-xaːn**-a-ŋ.*
*mʊrin xowwoo-r-dʊ ki uril-**ji** mʊrin **ʊgʊ-xaan**-a-ŋ.*
horse run-IPFV.PTCP-DAT TOP child-**INS** horse **ride-CAUS**-AOR-3
'When racing horses, (people) **choose children to ride** their horse.' (elicited)

(8.135) *ʃi tʃalʊː pi-ʃi-nti, ʃin-**tʃi** ɔː-**xɔːn**-kʰtʰe*
*si jalʊʊ bi-si-ndi, sin-**ji** oo-**xoon**-kte*
2SG young COP-AOR-2SG 2SG-**INS** make-**CAUS**-HORT
'You are young, let me **choose you to do this** (work)!' (elicited)

8.4.2 (Anti)causative

The suffix series *-Uː ~ -wUː ~ -kUː* alters verbal valency in both directions and thus participates in causal-noncausal alternations. It functions primarily as a causative marker when attached to intransitive verbs. As illustrated in (8.136a), the verb 'stand' is intransitive. When the same verb takes the (anti)causative suffix in (8.136b), it forms a causative construction: the original

agent argument of the intransitive verb becomes the causee and is reanalyzed as the direct object, which in this case is unmarked direct object.

(8.136) *a.* *tʰɔːtʃʰi* *ɔnaːtʃi-nin* ***ila-****tʃʰi* *ukkʰəːxəːŋ-tu* *sai*
tooci *ɔnaaji-nin* ***ila-****ci* *ukkeexeeŋ-du* *sai*
DIS.CONN girl-3 **stand**-COOR.CVB boy-DAT tea

sɔxɔː-m *puː-tʃʰi* *[...]*
soxoo-m *buu-ci* *[...]*
serve-CONN.CVB give-COOR.CVB
'Then the girl **stands** and serves tea to the boy.' (LT35-37)

b. *tʰɔːtʃʰi* *(pəjə-səl)* *katasɔn* ***il-ɔ****ː-sa*
tooci *(beye-sel)* *gadasɔn* ***il-ɔɔ****-sa*
DIS.CONN person-PL wooden.stake **stand-VL**-PST
'Then (people) **erected wooden** stakes.' (LT34-42)

A list of intransitive verbs that take *-Uː ~ -wUː ~ -kUː* is provided in (8.137). The suffix series is largely restricted to motion verbs, and these verbs do not permit other causative suffixes *-xAːn ~ -kʰAːn*.

(8.137)

əwə-	'come.down'	*əw-****uː****-*	'make/let sth down'
ewe-		*ew-****uu****-*	
iː-	'enter'	*iː-****kuː****-*	'make/let sth enter'
ii-		*ii-****guu****-*	
juː-	'exit'	*juː-****kuː****-*	'make/let sth exit'
yuu-		*yuu-****guu***	
tʰixə-	'fall'	*tʰix-****u****ː-*	'drop'
tixe-		*tix-****uu****-*	

In addition to its causative function, *-Uː ~ -wUː ~ -kUː* can also express an anticausative meaning, this usage is not productive in Solon and is attested with only two verbs in the corpus

(8.138). As shown in (8.139), *əttə* 'break' is transitive in (8.139a), whereas in (8.139b), when marked with the (anti)causative suffix, it becomes intransitive and expresses a spontaneous event ('be broken').

Finally, the suffix series *-U:* ~ *-wU:* ~ *-kU:* also functions as a passive marker, a use discussed in detail in §8.4.3.

(8.138) *mana-* 'finish, use up' *manʊ:-* 'run out'
mana- *manʊʊ-*

ətə- 'to break' *ətu:-* 'be broken'
ede- *eduu-*

(8.139) a. *lama* *ɔntʰɔ:n-pɔ* *tʃa:wal* ***əttə-tʃʰi*** *[...]*
lama *ontoon-bo* *jaawal* ***edde-ci*** *[...]*
lama drum-DEF.ACC must **to.break**-COOR.CVB
'Lama must **break** the drum.' (LT42-19)

b. *tʰukku* *ixə:-tu* *tʰəkkən* ***ətt-u-rə-ŋ*** *[...]*
tuggu *ixee-du* *teggen* ***edd-u-re-ŋ*** *[...]*
road vague.expression-DAT car **to.break-VL**-AOR-3
'The car **break**s down on the road or such.' (LT26-16)

8.4.3 Passive

Passivization is a process by which a transitive clause is transformed into an intransitive one. This is achieved by promoting the underlying object to the subject and relegating the agent to a peripheral role (Dixon 2012: 206). The syntactic feature of the passive construction in Solon involves the new subject being in the unmarked nominative, while the agent argument is marked with the dative case.

(8.140) *sama:n* *ʃi* *min-**tu*** *təil-**u:**-sə:-ʃi* *pa*
samaan *si* *min-**du*** *deil-**uu**-see-si* *ba*
shaman 2SG 1SG.OBL-**DAT** win-**PASS**-PST-2SG TAG
'Shaman, you have **been beaten** by me, right?' (LT42-27)

(8.141) *tʰɔːtʃʰi* *əjjə* *atʰaː-ʃi* *satti* *əjjə* *mɔkɔi-**tʊ*** *akkʰi-**wʊː**-sa*
tooci *eyye* *ataa-si* *saddi* *eyye* *mogoi-**dʊ*** *akki-**wʊʊ**-sa*
DIS.CONN PROX jealousy-PROP old.lady PROX snake-**DAT** stab-**PASS**-PST
'Then this jealous old lady **was stabbed** by this snake.' (LT02-33)

The agent of passive construction is often omitted, in Solon 60% (18/30) of passive constructions the agent is absent.

(8.142) *[...]* *əmun* *xəsək* *tʰəkkəʧʰi* *nʊːtaː-**wʊ**-sa* *pi-sə*
[...] *emun* *xeseg* *teggeci* *nʊʊdaa-**wʊ**-sa* *bi-se*
one piece clothes throw-**PASS**-PFV.PTCP AUX-PST
'For a while, the (the traditional) clothes **were abandoned**.' (LT22-47)

(8.143) *ninxin-nin* *pʊxa-niː-n* *iːkə-tu-ni* *lɔx-**ʊː**-tʰaːn* *pi-tʃi-rə-ŋ*
ninxin-nin *bʊxa-nii-n* *iige-du-ni* *lox-**ʊʊ**-taan* *bi-ji-re-ŋ*
dog-3 cow-GEN-3 horn-DAT-3 hang-**PASS**-PFV.CVB AUX-PROG-AOR-3
'Her dog is (killed and) **being hanging** on the cow's horn.' (LT35-32)

8.4.4 Reciprocal

Reciprocal meaning refers to an event involving at least two participants who stand in a mutual and symmetrical relationship, each performing the same action toward the other(s). Prototypical reciprocals foreground this mutuality and correspond to meanings such as 'each other' (V. Nedjalkov 2007a:6-7). Reciprocal often displays semantic polysemy, extending into sociative, comitative, and assistive domains. While the prototypical reciprocal reduces verbal valency, these extended meanings may increase valency depending on the syntactic configuration.

In Solon, reciprocal relations are expressed through two strategies: verbal morphology (§8.4.4.1), and reduplication of reflexive pronouns (syntactic reciprocals) (§8.4.4.2). The polysemy of reciprocal is discussed in §8.4.4.3.

8.4.4.1 Verbal morphemes

Solon has two reciprocal verbal morphemes, cognate with the Tungusic reciprocal *-mA:ʃi* and the Tungusic sociative *-lti*. Of the two, *-lti* is clearly dominant, accounting for 34 of the 39 reciprocal tokens in the full corpus.

The *-mA:ʃi:* is cognate with the Northern Tungusic reciprocal suffix *-mA:t* (I. Nedjalkov 1997: 217–235; Pakendorf & Aralova 2020: 299–300; Cong 2019: 282). The Solon suffix *-mA:ʃi* is likely cognate with this Tungusic form. It occurs only five times in the Solon corpus, suggesting that it is marginal in productivity. The available examples indicate a tendency for *-mA:ʃi* to be used when the reciprocal event involves more than two participants (8.144-8.145).

(8.144) *ul-**məːʃi**-rə-ŋ* *aja-tʃi* *ul-**məːʃi**-rə-ŋ* *nɔːkʊː-tʰi* *ʊlʊr*
*ul-**meesi**-re-ŋ* *aya-ji* *ul-**meesi**-re-ŋ* *noogʊʊ-ti* *ʊlʊr*
go-**RECP**-AOR-3 good-INS go-**RECP**-AOR-3 past-ADJZ people
'People in the past days **hang out** (lit. **go to each other**) a lot.' (LT29-89)

(8.145) *əjjə* *tikiːŋ-iː* *məːn* *məːn-pəl* *alakta-**maʃi**-saː*
eyye *digiiŋ-ii* *meen* *meen-bel* *alagda-**masi**-saa*
PROX four-COLL REFL REFL-REFL.PL slap-**RECP**-PST
'These four (people) **slapped each other**.' (EL03-04)

The suffix *-lti* corresponds to the Tungusic sociative marker *-ldi/-lti*, which is widely attested across the Northern Tungusic languages (I. Nedjalkov 1997: 217-235; Pakendorf & Aralova 2020: 299–300; Cong 2019: 285), and it frequently appears in lexicalized forms, such as *baka-ldi* 'get-SOC' > 'meet'. In Oroqen, for example, -ldi retains a clear sociative–cooperative function (Cong 2019: 285). In Solon, however, this suffix has developed into the primary marker of reciprocal relations (8.146-8.147). This functional shift from sociative ('together') to reciprocal ('each other') is typologically natural, but it may also have been reinforced by contact with Mongolian, where the formally similar suffix -lti serves as a productive reciprocal marker.

(8.146) *ɔtɔ* *ʧuːr* *mʊrin* *tʰimsəː**-ltiː**-ʧi-rə-ŋ* *jətti* *uː-ʃxi*
odo *juur* *mʊrin* *timsee**-ldii**-ji-re-ŋ* *yeddi* *uu-sxi*
now two horse battle-**RECP**-PROG-AOR-3 normally top-ADV.ALL
'Now two horses are **battling with each other**, upward.' (LT09-36)

(8.147) *əjjə* *ʧuːr-eː* *xumli**-lti**-səː*
eyye *juur-ee* *xumli**-ldi**-see*
PROX two-COLL hug-**RECP**-PST
'These two (people) **hugged each other**.' (EL03-01)

8.4.4.2 Reflexive-reciprocal

Reciprocal meaning is expressed through reduplication of the reflexive pronoun, yielding the meaning 'each other'. In this construction, the plural reflexive possessive suffix attaches to the second reflexive pronoun. The syntactic relation (argument coding) is also marked on the second reflexive pronoun. See (8.148), where the sentence expresses the meaning of 'two young people like each other'. The predicate 'like' requires a dative-marked stimulus, thus the dative case is marked on the second reflexive pronoun and followed by the reflexive possessive marker. If the syntactic relation is a direct object, then the second reflexive pronoun takes no case-marking, as the reflexive possessive can mark the direct object (8.149) (§4.1.3.2).

(8.148) *tʰɔːʧʰi* *ʧuːr* *ʧalʊː-sal* ***məːn*** ***məːn-tu-wəl*** *mənəːŋ*
tooci *juur* *jalʊʊ-sal* ***meen*** ***meen-du-wel*** *meneeŋ*
DIS.CONN two young.people-PL **REFL** **REFL-DAT-REFL.PL** very

ajaːwʊ-ʧʰi *ʊnaːʧi* *pasa* *sʊnin* *altʃi-ʧi-ra-ŋ* *kunəŋ*
ayaawʊ-ci *ʊnaaji* *basa* *sʊnin* *alji-ji-ra-ŋ* *guneŋ*
like-COOR.CVB girl also very be.shy-PROG-AOR-3 hearsay
'It is said that then the two young people **liked each other** very much, the girl is also very shy.' (LT35-38)

(8.149) *nisxuŋ urəl-wə usxəŋ-tʃi ukiː-xəːn ə-ʃi-n əː-təː,*
nisxuŋ urel-we usxeŋ-ji ugii-xeen e-si-n oo-doo,
small child-DEF.ACC knife-INS play-CAUS NEG-AOR-3 become-CONNEG

məːn məːn-pəl *ənuː-xəːn-ə-ŋ*
meen meen-bel *enuu-xeen-e-ŋ*
REFL **REFL-REFL.PL** hurt-CAUS-AOR-3

'One cannot let little children play with knives; they will **hurt each other**.' (EL07-32)

The Solon speakers sometimes use the reflexive-reciprocal and morphological marker together (8.150).

(8.150) *əjjə tikiːŋ pəjə* ***məːn məːn-pəl*** *xumli-**lti**-səː*
eyye digiiŋ beye ***meen meen-bel*** *xumli-**ldi**-see*
PROX four person **REFL** **REFL-REFL.PL** hug-**RECP**-PST
'These four people **hugged each other**.' (EL03-01)

8.4.4.3 Reciprocal polysemy: sociative, comitative and assistive

In Solon, reciprocal constructions display polysemy with three related semantic interpretations: sociative, comitative, and assistive. These meanings differ in their effects on verbal valency. The sociative interpretation does not alter the base valency of the verb, whereas both the comitative and assistive interpretations increase valency by one. In the comitative use, the added argument denotes an accompaniment, while in the assistive use, the additional argument corresponds to an assistee/beneficiary.

This polysemy is restricted to morphological reciprocal constructions, and more specifically to those formed with the suffix *-lti*. Other reciprocal strategies in Solon do not exhibit this range of extended meanings.

8.4.4.3.1 Sociative

The sociative meaning (also called associative, collective, cooperative, etc.) suggests that an action is performed jointly and simultaneously by a group of people (at least two) named by the subject and engaged in the same activity. The main feature is that the participants in this construction are considered as a group: either they carry a collective marker, or the subject has a group meaning. This type of polysemy is found in Turkic, Mongolic and Tungusic languages (V. Nedjalkov 2007b: 272).

In Solon, the reciprocal suffix *-lti* can also express a reciprocal–sociative meaning. In these cases, the grouped subject is typically marked by the unmarked nominative. In (8.151), the subject 'small ghosts' denotes a collective entity, and the verb 'shout' marked with *-lti* describes a joint action performed together, yielding a sociative rather than reciprocal interpretation. Similarly, in (8.152), the subject 'we' refers to a group that intends to divide up the wealth left by their parents. Here, the suffix *-lti* on the verb 'share/distribute' indicates collective participation in the same event, while the hortative plural subject agreement further supports a sociative, rather than reciprocal, reading.

(8.151) *[...]* *nisxuŋ* *nisxuŋ* *ʃikkʰul-tʃʰil* *ʊkkʰiraː**-lti**ː-tʃʰi* *əmə-tʃʰi* *[...]*
[...] *nisxuŋ* *nisxuŋ* *sikkul-cil* *ʊkkiraa**-ldii**-ci* *eme-ci* *[...]*
small small ghost-PL shout-**RECP**-COOR.CVB come-COOR.CVB
'The small ghosts come **shouting together**.' (LT40-44)

(8.152) *əʃi* *əjjə* *ul-sə* *ati* *pʊjan-pa-ni* *pikkʰi*
esi *eyye* *ul-se* *adi* *bʊyan-ba-ni* *bikki*
now PROX leave-PFV.PTCP several wealth-DEF.ACC-3 TOP

mitʰi *tʃuː-ri* *ʊːsaː**-lti**ː-kaːre***
miti *juu-ri* *ʊʊsaa**-ldii-gaare***
1PL.INCL two-COLL distribute-**RECP-HORT.PL**
'Now let's **share** (lit. divide up) the wealth which (parents) left.' (LT08-14)

8.4.4.3.2 Comitative

In sociative constructions, all participants contribute equally to the action, and their denotation is the same (e.g., 'Jane and I watched the movie **together**'), in comitative constructions, while one participant is selected as more prominent, and discursively highlighted (e.g., '**I** watched the movie **with** Jane'). Unequal position leads to the additional participant being coded as a non-subject argument, either with a comitative marker or direct object marker (V. Nedjalkov 2007a: 37).

In Solon, the *-lti* suffix can mark the reciprocal-comitative polysemy. The unequal participant is marked by the instrumental case. Below are a pair of examples that clearly highlight the comitative and sociative difference. Examples (8.153a) and (8.153b) both use the same verb, 'talk,' marked with the reciprocal morpheme *-lti*. In (8.153a), the comitative meaning is expressed because the participant is marked with the instrumental case to express an accompaniment role, and the finite verb is singular. In contrast, (8.153b) expresses the sociative meaning, as shown by the plural finite verb, indicating a group subject.

(8.153) a. *[...] pi əjjə ilan ʊnatʃi-**tʃi**-wi xəːrə-**lti**-mi*
*[...] bi eyye ilan ʊnaji-**ji**-wi xeere-**ldi**-mi*
1SG PROX three girl-**INS**-REFL.SG talk-**RECP**-CONN.CVB

ʃin-tu ijjə-nin əməkt^{h}e ɔː-r tʊr-ʃi-wə-ni
sin-du iyye-nin emegte oo-r dʊr-si-we-ni
2SG.OBL-DAT which-3 wife become-IPFV.PTCP favor-PROP-DEF.ACC-3

*aŋŋʊ-tʃ^{h}i saː-**kt^{h}eː***
*aŋŋʊ-ci saa-**gtee***
ask-COOR.CVB know-**HORT.SG**

'Let me **talk with my three daughters**, ask and know which one would like to become your wife.' (LT28-12)

b. *əʃi* *awɔː-ni* *tʰuːkə-ni* *əməktʰeː* *ɔː-r-pə-ni*
esi *awɔɔ-ni* *tuuge-ni* *emegtee* *oo-r-be-ni*
now who-3 wolf-GEN wife become-IPFV.PTCP-DEF.ACC-3

*xəːrə-lti-**kəːreː*** *[...]*
*xeere-ldi-**geeree*** *[...]*
talk-RECP-**HORT.PL**
'Now **let us talk together** about who will become the wolf's wife.' (LT28-22)

The verb *paxa-lti-* get-RECP meet someone' is lexicalized as 'meet' in Solon. It involves a comitative meaning, because the participant involved is always in the instrumental case, that is, not equally marked as a subject (8.154).

(8.154) *tʰɔːtʃʰi* *əmun* *par-**ʧi*** *paxa-ltiː-sa* *kunəŋ*
tooci *emun* *bar-**ji*** *baxa-ldii-sa* *guneŋ*
DIS.CONN one tiger-**INS** get-RECP-PST hearsay
'It is said that then (the old lady) met with a tiger.' (LT04-17)

8.4.4.3.3 Assistive

The assistive meaning is a natural extension of the comitative meaning: if an action is performed by one person with another, it can sometimes be considered to be an assistance to the latter. The assistive is characterized by the involvement of two participants: the person who receives assistance is marked with the dative case, and the person who provides the assistance is in the unmarked nominative.

The assistive meaning only occurs once in Solon corpus, and the construction is not complete, as the person who receives the assistance is not overt (8.155). A better illustration is shown in elicitation when asking the 'uncle' to be overt (8.156), the assistee 'uncle' carries the dative case marker, and the assistant 'aunt' is the nominative subject. Likewise, in (8.157) the assistee is in the dative case.

(8.155) *əniːxəŋ* *ɔːtʰɔ-wi* *təkkə-**lti**-nti* *ki?*
eniixeŋ *ooto-wi* *degge-**ldi**-ndi* *gi?*
aunt manure-REFL.SG spread.out-**RECP**-2SG Q
'Aunty, do you **help** (uncle) spreading out the manure?' (LT27-78)

(8.156) *əniːxəŋ* *amiːxan-**tʊ*** *ɔːtʰɔ-wi* *təkkə-**lti**-nti* *ki?*
eniixeŋ *amiixan-**dʊ*** *ooto-wi* *degge-**ldi**-ndi* *gi?*
aunt uncle-**DAT** manure-REFL.SG spread.out-**RECP**-2SG Q
'Aunty, do you **help uncle** with spreading out the manure?' (elicitation based on 8.155, LT27-78)

(8.157) *min-**tu*** *tʰəkkətʃʰi* *ʃikka-**lti**-xa*
*min-**du*** *teggeci* *sigga-**ldi**-xa*
1SG.OBL-**DAT** cloth wash-**RECP**-IMP
'**Help** me with washing clothes!' (elicited)

8.5 Non-verbal predication

Non-verbal predication is defined as follows: "Non-verbal predicative constructions can be defined as constructions giving rise to non-elliptical clauses analyzable as consisting of an argument and a predicate phrase in which the property- or relation-denoting element that determines the assignment of semantic roles is not a verb" (Creissels, Bertinetto & Ciucci 2026: 3). Non-verbal predicative constructions may involve verbs (copular verbs); however, such verbs do not affect the argument structure of the construction. Depending on the presence or absence of a copular verb, non-verbal predicative constructions can be classified into two types: verbless constructions (called copula-less or constructions with a non-verb-like copula) and verbful constructions (with a verb-like copula) (Creissels, Bertinetto & Ciucci 2026: 3).

Following Creissels, Bertinetto & Ciucci (2026: 6), non-verbal predicative constructions can be classified along three intersecting dimensions.

- By morphosyntactic nature of the predicate, they include nominal, adjectival, and adverbial predication.

- By predicative marking, languages may employ copula constructions, juxtaposition constructions, predicative inflection, or a combination of copula and predicative inflection strategies.
- By semantic interpretations, non-verbal predicative constructions includes inclusion, identity, quantification, locational and existential predication, ostension, and possessive predication.

This section examines non-verbal predication in Solon primarily from the perspectives of predicative marking and semantic interpretation. It does not focus on the morphosyntactic nature of non-verbal predicates as such, since this dimension largely overlaps cross-linguistically. Section §8.5.1 classifies non-verbal predicative constructions according to predicative strategies, namely copula constructions and juxtaposition constructions and discusses the conditions under which each strategy is employed. While predicative inflection is attested in some Tungusic languages (e.g. Nanai, Uilta, Even; Pakendorf 2026: 282–283), it is not found in Solon. Section §8.5.2 then turns to the semantic types of non-verbal predication in Solon, with particular attention to possessive predication and locational-existential predication.

8.5.1 Predicative types

8.5.1.1 Copula constructions

Solon has two copular verbs: *pi-* 'to be' (static) and *ɔ:-* 'to become' (dynamic). The latter conveys a semantic nuance of change of state or the beginning of a new state and, as such, is never omitted from the clause. It can therefore be regarded as a semi-copula (Pakendorf 2026: 278). Both copular verbs can also function as auxiliary verbs in complex predicates (see §8.3.2.6 and §8.3.2.7).

The copulas behave like other verbs in taking subject agreement markers and various TAM markers (8.158-8.161), while the subject agreement paradigm of the copula *pi-* differs from that of lexical verbs (see §6.1.2 for details).

(8.158) *əʃi-tʰi* *ʊlʊkʰʊŋ* ***pi-tʃi****-rə-ŋ.*
esi-ti *ʊlʊkʊŋ* ***bi-ji****-re-ŋ.*
now-ADJZ wet **COP-PROG**-AOR-3
'Now (the land surface) is wet.' (LT27-75)

(8.159) *nixan* *pəjə* ***pi-****sə*
nixan *beye* ***bi-****se*
Han person **COP**-PST
'(Zhinaisun) was a Han person.' (LT18-95)

(8.160) *kə* *ʊnatʃi* *əʃi* *ʃi* *tʰuːkə-ni* *əməktʰe-ni* ***ɔː-****nti*
ge *ʊnaji* *esi* *si* *tuuge-ni* *emegte-ni* ***oo-****ndi*
PTCL girl now 2SG wolf-GEN wife-3 **become**-2SG
'Now, girl, you will **become** the wolf's wife.' (LT28-45)

(8.161) *əʃi* *kʰi* *xata-r* *kʰi* *sɔnin* *tʰukkəŋ* ***ɔː-****sɔ*
esi *ki* *xada-r* *ki* *sonin* *tuggeŋ* ***oo-****so*
now TOP mow-IPFV.PTCP TOP very fast **become**-PST
'Now mowing **has become** very fast.' (LT20-132)

8.5.1.2 Juxtaposition

The label juxtaposition construction (also referred to as no-copula, null-copula, or copula-less construction) is commonly used cross-linguistically (Creissels, Bertinetto & Ciucci 2026: 17). In Solon, juxtaposition occurs when the copula *pi-* 'to be' is omitted; the copula *ɔː-* 'to become' cannot be omitted.

In all Tungusic languages discussed in the literature, the copula *bi-/pi-* is obligatory in the past and future tenses, but in the present tense, especially with third-person singular subjects, it can be omitted, resulting in juxtaposition (Pakendorf 2026: 280). However, the extent to which *bi-* can be omitted varies among Tungusic languages. For example, in Evenki, juxtaposition of the copular argument and the non-verbal predicate is possible only in the present tense 3SG form (I. Nedjalkov 1997: 61), while in Negidal and Udihe, juxtaposition can

also occur with first- and second-person arguments, although it remains infrequent (Nikolaeva and Tolskaya 2001: 609, Pakendorf 2026:281-282).

In Solon, omission of the copula *pi-* is quite common under the following conditions:

1. Plain present tense: when no additional mood or aspectual nuances are expressed, the copula *pi-* may be omitted regardless of the person of the subject, as shown in the first-person (8.162), second-person (8.163), and third-person (8.164) examples.

(8.162) *tʃaːn niŋu-ʃi-xəːŋ pi xʊltʃʰin-tʊ ul-tʃʰə pəjə*
jaan niŋu-si-xeeŋ bi xʊlcin-dʊ ul-ce beye
ten six-PROP-DIM 1SG reeds-DAT go-PFV.PTCP person
'I **am** a person who went to (cut) reeds (when I was) only sixteen years old' (LT11-08)

(8.163) *ʃi=ʃi ittʰu əru sana-ʃi pəjə jumə*
si=si ittu eru sana-si beye yume
2SG=2SG[11] how bad mind-PROP person PTCL
'How bad **are** you?!' (lit. How are you such a bad-hearted person?) (LT28-29)

(8.164) *xəːmə-ni tʰɔː-kʰi mənəːŋ aja*
xeeme-ni too-ki meneeŋ aya
meal-3 DEM.V-COND.CVB really good
'Then the meal **is** really good.'(LT11-20)

2. Contextually implied past tense: when the past tense is already clear from the discourse context. For instance, in the following example (8.165), the speaker describes attending a baking class. The narrative context is understood to be in the past, and the copular verb is not included because the temporal reference is inferable. In another example (8.166) the temporal setting is explicitly stated at the beginning of the sentence 'in the 1970s', thus rendering the copular verb unnecessary.

[11] The 2SG in this sentence does not express the possessive, rather than mirativity.

(8.165) *ənt^{h}u parkat-niː paraːŋ=k^{h}i pəjə ʊlan pʊlak-ni=k^{h}i turun_aːʃin*
entu bargad-nii baraaŋ=ki beye ʊlan bʊlag-ni=ki durun_aasin
other group-GEN many=TOP person GN group-GEN=TOP very

paraːŋ
baraaŋ
many

'There were many people from other groups, (the people) from the Ulan group w**ere** so many.' (LT23-52)

(8.166) *[...]* ***natanŋŋe*** ***ati*** ***aniː***-*tʊ=l* *t^{h}umər* *xuːxəŋ* *kuŋ-k^{h}əːŋ*
[...] ***nadaŋŋe*** ***adi*** ***anii***-*dʊ=l* *tumer* *xuuxeŋ* *guŋ-keeŋ*
seventy **several** **year**-DAT=PTCL iron girl SAY-SAY.CVB

juː-səː=ʃi *k^{h}i* *jəx* *jawtal*
yuu-see=si *ki* *yex* *yawdal*
exit-PFV.PTCP=2SG[12] TOP big thing

'In the 1970s, the happening of (an event) called Iron Girl **was** a big deal.' (LT22-16)

In sum, these conditions suggest that the omission of the copula in Solon is contingent on the clause's expression of a general temporal meaning, devoid of mood or aspectual specification.

8.5.2 Semantic types

The semantic types (or functional types) of non-verbal predication include inclusion predication, identity predication, quantification, locational and existential predication, ostensive predication, and possessive predication (Creissels, Bertinetto & Ciucci 2026:22). Based on the different syntactic markings, this section discusses the inclusion, quantification and identity (§8.5.2.1), locational and existential predication (§8.5.2.2) and possessive predication (§8.5.2.2). The

[12] The 2SG in this sentence does not express the possessive, rather than mirativity.

typical ostensive predication did not occur in Solon corpus, thus the ostension is out of the discussion in current study.

8.5.2.1 Inclusion, quantification and identity

Some Tungusic languages do not show a formal morphosyntactic distinction between inclusion, quantification, and identity predications (Pakendorf 2026: 284–285). In Solon, however, these semantic types display subtle formal differences.

The inclusion (8.167-8.168) and quantification (8.169) predications demonstrate a similar pattern; the subject is nominative case unmarked and can be expressed through copula constructions or juxtapositions. The condition of juxtaposition is determined by the general temporal meaning of the clause, and if the time is not general, such as a explicit past temse, then the copula verb is overt (8.168).

(8.167) *ʃi* *ʊnaːtʃi* *pəjə* *[...]*
si *ʊnaaji* *beye* *[...]*
2SG girl person
'You **are** a girl.' (LT39-83)

(8.168) *tʰari* *ərin-ni* *ɛmtaral* ***jatoː*** ***pi-sə***
tari *erin-ni* *ɛmdaral* ***yadʊʊ*** ***bi-se***
DIST time-GEN life **poor** **COP**-PST
'Life at that time **was** poor.' (LT25-31)

(8.169) *əwəŋkʰi* *sʊrʊktʃʰi* ***paraːn***
ewеŋki *sʊrʊgci* ***baraan***
Solon(Evenki) student **many**
'The Solon (Evenki) students **are many**.' (LT11-98)

Identity predication, by contrast, tends to require a topicalized subject, an explicit topic particle follows the subject (8.170a and 8.171). The speakers judge the clauses without a topicalized subject in identity clauses are unnatural (8.170b). In addition, certain inclusion

constructions in which the nominal predicate contains more elaborate descriptive material, thus narrowing the scope of reference are semantically close to identity predications. These constructions likewise tend to show subject topicalization (8.172).

Despite these formal differences in affirmative clauses, the three predication types behave uniformly under negation: all are negated by the particle *ənt^{h}ə ~ ont^{h}o* (see §9.1.1.2.1).

(8.170) a. *[...] axin **pikk^{h}i** lɔtʃipʊ kunə-r pəjə*
*[...] axin **bikki** lojibʊ gune-r beye*
elder.brother **TOP** PN SAY-IPFV.PTCP person
'(My) elder brother **is** a person who is called Lojibu' (LT34-28)

b. **[...] axin lɔtʃipʊ kunə-r pəjə*
[...] axin lojibʊ gune-r beye
elder.brother PN SAY-IPFV.PTCP person
'*(My) elder brother **is** a person who is called Lojibu' (elicitation based on 8.170a, LT34-28)

(8.171) *aija əri uriːləŋ k^{h}i min-iː ʊnatʃi-ni-wi tʃuː-ni*
aiya eri uriileŋ ki min-ii ʊnaji-ni-wi juu-ni
INTERJ PROX house TOP 1SG.OBL-GEN daughter-GEN-REFL.SG house-3
'Oh, this house is my daughter's home.' (LT28-143)

(8.172) *pi **pikk^{h}i** sʊrkʊːl-tʊ na ə-sə ulə-r pəjə.*
*bi **bikki** sʊrgʊʊl-dʊ na e-se ule-r beye.*
1SG **TOP** school-DAT also NEG-PST go-CONNEG person
'I **am** a person who didn't even go to school' (LT21-03)

8.5.2.2 Locational-existential clauses

Creissels (2014: 4-5) describes locational clauses as encoding a prototypical figure-ground relationship: "an episodic spatial relationship between a concrete, movable entity (the figure) and another concrete entity (the ground), conceived as occupying a fixed position in space, or at least as being less easily movable than the figure." Depending on perspective, two main types

can be distinguished. A plain locational clause describes the relation from the figure to the ground (e.g., “The dog is in the house” in English). An inverse locational clause conveys the same relationship but from a perspective of the ground to the figure (e.g., “There is a dog in the house”). Thus, plain locational clauses state the position of the figure relative to the ground, while inverse locational clauses express the same configuration with reversed perspectival focus.

Cross-linguistically, many languages distinguish between plain and inverse locational clauses, but most lack a dedicated inverse-locational construction, using the same structure for both (Creissels 2014: 18). Solon belongs to this latter group. It expresses both plain and inverse locational clauses with the same syntactic construction, differing only in word order. However, in the Solon reduced corpus, inverse-locational clauses are much more frequent (22/26, or 85%) than plain-locational clauses (4/26, or 15%).

This section first examines the syntactic behavior of locational-existential clauses, encompassing both plain and inverse variants (§8.5.2.1.1). It then explores the factors influencing the choice between plain and inverse clauses in expressing figure-ground relationships (§8.5.2.1.2). Finally, it introduces another structurally similar construction, the presentational construction (8.5.2.1.3). Negation in locational-existential clauses is discussed in §8.1.1.2.2

8.5.2.2.1 Syntactic behavior of Locational-existential clauses

The syntactic features of plain and inverse locational clauses are largely identical. The copular verb *pi-* is typically overt and rarely omitted (24/26 occurrences in the reduced corpus include an overt copula). The subject (the figure) is in the unmarked nominative case, while the ground (the location) is most commonly marked with the dative case and less frequently with the locative case. Negation is handled in the same way across both types (§9.1.1.2.2.1).

The main distinction between plain and inverse locational clauses lies in word order:

- In plain-locational clauses, the figure (subject) is followed by the ground (location) (8.173).
- In inverse-locational clauses, the ground (location) precedes the figure (subject) (8.174-8.175).

(8.173) ***puː*** *aja* *pikkʰi* *nɔːkʊː-tʊ=l* *pʊlaːr* *kun-ə-r*
buu *aya* *bikki* *noogʊʊ-dʊ=l* *bʊlaar* *gun-e-r*
1PL.EXCL past TOP old.day-DAT=PTCL GN SAY-AOR-PRE.PTCP

pʊka-tʊ ***pi****-sə*
bʊga-dʊ ***bi****-se*
place-DAT **COP**-PST[13]
'In the old days, **we were at** a place called Bular.' (LT34-01)

(8.174) *attar-niː-n* *tɔː-lɔ****-tʊ****-ni* *pəjə-ni* *tili* ***pi****-ʃi-n [...]*
addar-nii-n *doo-lo****-dʊ****-ni* *beye-ni* *dili* ***bi****-si-n [...]*
locker-GEN-3 inside-LOC-**DAT**-3 person-GEN head **COP**-AOR-3
'There **is** a human head **in** his locker.' (LT20-30)

(8.175) *[...]* *tʃuː****-tu****-sun* *əmun* *amitʊ* *pʊkkʰʊŋ* ***pi****-ʃi-n [...]*
[...] *juu****-du****-sun* *emun* *amidʊ* *bʊkkʊŋ* ***bi****-si-n [...]*
house-**DAT**-2PL one alive Buddha **COP**-AOR-3
'There **is** a living Buddha **at** your home.' (LT03-12)

8.5.2.2.2 The choice of plain or inverse locational clauses

According to Creissels (2014: 19), the choice of clause type in expressing a figure-ground relationship depends on which element functions as the perspectival center. When the figure is the perspectival center, a plain-locational clause is used; when the ground is central, an inverse-locational clause is preferred.

In Solon, the frequent use of inverse-locational clauses suggests that the language is ground-centered. In neutral, non-topicalized contexts where both figure and ground are newly introduced or equally definite, Solon typically employs the inverse-locational structure. For instance, in example (8.176), both the figure 'that kind of water' and the ground 'their dormitory' are definite and the speaker chooses the inverse-locational structure. This is also attested during elicitation using the picture stimulus on stative relations (Bowerman & Pederson

[13] The speaker used the wrong agreement marker on the finite verb, which should be *pi-sə-mun* 'COP-PST-1PL.EXCL'

1992), for example when I show a picture meaning ‘a ball is under the table’, the speaker will use the inverse-locational clauses (8.177).

(8.176) *pair-**tʊ**-ni* *tʰannakaːŋ* *muː* ***pi-**ʃi-n* *ki*
*bair-**dʊ**-ni* *tannagaaŋ* *muu* ***bi-**si-n* *gi*
dormitory-**DAT**-3 DIST.QLT water **COP**-AOR-3 Q
‘**Is there** that kind of water in their dormitory?’ (LT11-28)

(8.177) *ʃirəː-ni* *əkki-lə-**tu**-ni* *pompok* ***pi-**ʃi-n*
siree-ni *eggi-le-**du**-ni* *bəmbəg* ***bi-**si-n*
table-GEN down-LOC-**DAT**-3 ball **COP**-AOR-3
‘There is a ball under the table.’ (EL02-12)

When the figure is selected as the perspectival center, it is presented as definite and topicalized. For example, in (8.178), the ‘fox’ is searching for the ‘quail’; here, the figure ‘quail’ is definite, confirmed by its accusative marking in subsequent discourse. In this case, the figure ‘quail’ appears clause-initially. If the order of figure and ground is inverted (8.179), the figure becomes indefinite, changing the meaning to something like ‘the fox is hungry and looking for any quail.’

(8.178) *[...]* *sʊlxi* ***putənə*** *ilə* ***pi-**tʃi-rə-ŋ* *tʰa-ppa* *juː-ɣuː-xə*
[...] *sʊlxi* ***budene*** *ile* ***bi-**ji-re-ŋ* *ta-bba* *yuu-ɣuu-xe*
fox **quail** where **COP**-PROG-AOR-3 DIST-DEF.ACC exit-CAUS-IMP

kun-tʃʰə
gun-ce
say-PST
‘The fox said, ‘Where is **the quail**? Let her out!’’ (LT01-49)

(8.179) *sʊlxi* *iləː* ***putənə*** ***pi-**tʃi-rə-ŋ* *kun-tʃʰə.*
sʊlxi *ilee* ***budene*** ***bi-**ji-re-ŋ* *gun-ce.*
fox where **quail** **COP**-PROG-AOR-3 say-PST
‘The fox said, ‘Where **are quails**?’’(elicitation based on 8.178, LT01-49)

8.5.2.2.3 Presentational construction and plain existential construction

Two constructions closely related to the locational-existential clauses are the presentational and plain existential constructions. In both constructions, the figure and the copular verb are present, while the ground element is absent.

In Solon, the presentational constructions are found especially at the beginning of utterances, where they introduce new referents to the addressee. For example, in (8.180) the phrase 'there were two old ladies' introduces 'two old ladies'. The plain existential construction, by contrast, expresses the meaning 'there is / exists', with the noun phrase functioning as the existing entity (8.181-8.182). These two constructions are structurally the same in Solon, but Creissels (2014:15-16) emphasizes the importance of distinguishing between existential predication and presentational sentences.

(8.180)

kə	*nɔːɣʊ*	*əmun*	*ʧuːr*	*satti*	***pi-sə***	*kunən*	*[...]*
ge	*nooɣʊ*	*emun*	*juur*	*saddi*	***bi-se***	*gunen*	*[...]*
PTCL	old.days	one	two	old.lady	**COP**-PST	hearsay	

'It is said that once upon a time, **there were** two old ladies.' (LT02-02)

(8.181)

niʃxuŋ	*jaːpa*	***pi-ʃi-n***	*pɔŋkɔŋ*	*jaːpa*	*aːʃin*	*pa*
nisxuŋ	*yaaba*	***bi-si-n***	*boŋgoŋ*	*yaaba*	*aasin*	*ba*
small	dumb.person	**COP**-AOR-3	big	dumb.person	NEG.EXIS	TAG

'The small dummy **exists**, the big dummy is gone, right?'(LT18-95)

(8.182)

ənnəkəːŋ	*paraːŋ-ʧi=l*	*aŋʧin*	*uril*	***pi-ʧi-rə-ŋ***
ennegeeŋ	*baraaŋ-ji=l*	*aŋjin*	*uril*	***bi-ji-re-ŋ***
PROX.QLT	many-INS=PTCL	orphan	child	**COP**-PROG-AOR-3

'There **are/exist** many such orphans.' (LT25-10)

8.5.2.3 Possessive prediction

A prototypical possessive relationship typically denotes an exclusive, asymmetric, and long-term association between a possessor and a possessee, with the possessor usually being an individual human being (Taylor 1989: 202-203). Such relationships are commonly expressed cross-linguistically through both noun–modifier constructions (possessive noun phrases) and predicative constructions (Creissels 2024: 2). Similarly, Solon features both types. This section focuses on possessive predication, while possessive noun-phrase constructions are discussed in detail in §5.2.1.

Solon employs two main strategies for expressing possessive predication:

1. the proprietive construction
2. the possessed-exist construction

The proprietive strategy is more frequent (60/80 tokens) than the possessed-exist one (20/80 tokens) in the reduced Solon corpus. The following subsections describe these two constructions in detail, followed by a discussion of their competition and the existence of a mixed construction combining both strategies.

8.5.2.3.1 Proprietive construction

The proprietive derivation strategy is widely attested in languages of Siberia and the Americas, though relatively uncommon elsewhere (Creissels 2024: 7). In Solon, the proprietive marker -*ʃi~tʃʰi* attaches to nouns, expressing the meaning ‘possession of X’. The possessor typically serves as the subject and appears in the unmarked nominative case, though in some cases it may take dative marking (§8.5.2.3.4). The predicate position is occupied by the possessee, marked with the proprietive suffix (8.183). Since nouns bearing the proprietive suffix behave like adjectives, the construction is treated as a non-verbal clause. It may optionally include the copular verb *pi-* ‘be’ (8.184), which can be omitted in the present tense when no mood or aspect is expressed. Additionally, when a change of state is implied, the copular verb *ɔː-* ‘to become’ may appear instead (8.185).

(8.183) *xamkiːn niʃxuŋ-nin $t^hɔŋ$ niŋuŋ paːr-**$tʃ^hi$** pi-ʃi-n.*
*xamgiin nisxuŋ-nin tɔŋ niŋuŋ baar-**ci** bi-si-n.*
most small-3 five six year-**PROP** COP-AOR-3
'The smallest (child) is five six years old.' (lit. The smallest (child) **has** five six years.) (LT11-40)

(8.184) *tʃuːr urəl-**$tʃ^hi$** t^hajja=ʃi tʃuːŋsə jaːpa.*
*juur urel-**ci** tayya=si juuŋse yaaba.*
two child-**PROP** DIST=2SG two.COLL mute
'(He) **has** two children; they are both mute.' (LT18-46)

(8.185) *$t^hɔːl$ ɔttɔːr ikki-**ʃi** **ɔː**-sɔː-ni*
*tool oddoor iggi-**si** **oo**-soo-ni*
rabbit short tail-**PROP** **become**-PFV.PTCP-3
'(The story of how) rabbits **became having** short tails.' (LT06-01)

8.5.2.3.2 Possessed-exist construction

Solon lacks a dedicated verb meaning 'to have'. Possession is instead expressed through the possessed-exist construction, structurally identical to the inverse-locational clause pattern, with the copula *pi-*.

In this construction, the possessor is marked by the dative case (and less commonly by the locative), while the possessee remains unmarked. The possessor precedes the possessee, and the possessee usually appears immediately before the existential copula *pi-* (8.186). The sentence subject is the possessed item, as verbal agreement follows the person of the possessee rather than the possessor (8.187).

(8.186) *[...] mun-**tu** ilan pəjə **pi-**ʃi-n*
*[...] mun-**du** ilan beye **bi-**si-n*
1PL.EXCL.OBL-**DAT** three person **COP-**AOR-3
'We **have** three people.' (LT23-53)

(8.187) *min-**tu*** *ɔːnti* *tʰuːxə* *xətʰə* ***pi-**ʃi-n*
*min-**du*** *oondi* *tuuxe* *xete* ***bi-**si-n*
1SG.OBL-**DAT** what history PTCL **COP**-AOR-3
'What history do I **have**?' (LT20-02)

8.5.2.3.3 Competition of proprietive and possessed-exist construction

The proprietive possessive construction (60/80 tokens) is overall more frequent than the possessed-exist construction (20/80 tokens) in Solon. The two strategies can often be used interchangeably, as shown in examples (8.188).

(8.188) a. *[...]* *urəl* *sʊrʊktʃʰi* *tʃariŋ* *xɔkkʰɔ* *nʊnʊm* *tʰəkkətʃʰi-**ʃi**.*
[...] *urel* *sʊrʊgci* *jariŋ* *xokko* *nʊnʊm* *teggeci-**si**.*
child student even all long clothes-**PROP**
'Even the children and students all **have** the (traditional) long dress.' (LT22-49)

b. *urəl* *sʊrʊktʃʰi-**tʊ*** *tʃariŋ* *xɔkkʰɔ* *nʊnʊm* *tʰəkkətʃʰi* ***pi-**ʃi-n*
urel *sʊrʊgci-**dʊ*** *jariŋ* *xokko* *nʊnʊm* *teggeci* ***bi-**si-n*
child student-**DAT** even all long clothes **COP**-AOR-3
'Even the children and students all **have** the (traditional) long dress.'
(elicitation based on 8.188a, LT22-49)

There is a semantic distinction between permanent and temporary possession. The proprietive construction tends to encode permanent possession (8.189), whereas the possessed-exist construction is preferred for temporary possession (8.190). Additionally, interrogative pronouns in Solon only allow the possessed-exist construction, never the proprietive one (8.191).

(8.189) *pi* *ukiː-təː-t-i* *tʃuːr* *əxə-**ʃi***
bi *ugii-dee-d-i* *juur* *exe-**si***
1SG above-SIDE-DAT-REFL.SG two elder.sister-**PROP**
'I **have** two elder sisters.' (LT39-02)

(8.190) *tʰa-ttʃʰil-**tʊ*** *əmun* *akka* ***pi-**ʃi-n*
*ta-ccil-**dʊ*** *emun* *agga* ***bi-**si-n*
DIST-PL-**DAT** one method **COP**-AOR-3
'They have one solution.' (elicited)

(8.191) *kə* *tʰajja* *ərin-tu* *mitʰi-**tʊ*** *ʊxʊn* ***pi-**sə* *pi-tʃikə* *nɔːnɔː*
ge *tayya* *erin-du* *miti-**dʊ*** *ʊxʊn* ***bi-**se* *bi-jige* *noonoo*
PTCL DIST time-DAT 1PL.INCL-**DAT** what **COP**-PST AUX-FUT daughter.VOC
'At that time, what would we **have**, daughter?' (LT32-06)

8.5.2.3.4 Mixed construction: the combination of proprietive and possessed-exist construction

In rare cases, the proprietive and possessed-exist strategies combine into a mixed construction. Here, the possessor is marked by the dative case, while the possessee bears the proprietive suffix (8.192). Although this type is rare, it cannot be ignored: among all overt possessive predicate constructions, it occurs occasionally and is accepted in elicitation (8.193). Janhunen (2012:234) notes that in Mongolian, similar combinations of existential and proprietive constructions are typical of Inner Mongolian varieties, especially in spoken language (8.194). The limited presence of such constructions in Solon may similarly reflect influence from contact with Mongolic languages.

A structural issue arises in this construction: since no unmarked nominal can serve as the subject, it may be analyzed as a subjectless clause. Both Janhunen (2012: 234) and Creissels (p.c.) suggest this interpretation, given the adjectival nature of the proprietive marked noun.

(8.192) *samaːn-**tʊ*** *putʰu* *nanta-tʃi* *puri-sə* *ərtənin* *ɔntʰɔn-**ʃi***
*samaan-**dʊ*** *butu* *nanda-ji* *buri-se* *erdenin* *onton-**si***
shaman-**DAT** full fur-INS wrap-PFV.PTCP precious drum-**PROP**
'The Shaman **has** a precious drum which is fully wrapped in fur.' (LT42-04)

(8.193) *min-**tu*** *mʊri-**ʃi*** ***pi-**sə*
*min-**du*** *mʊri-**si*** ***bi-**se*
1SG.OBL-**DAT** horse-**PROP** **COP**-PST
'I **had** a horse.' (elicited)

(8.194) Mongolian (Janhunen 2012a: 234, glossing adapted)

*nad**-e.d***	*nom**-tai***	*bai-sen*
1SG.OBL**-DAT**	book**-PROP**	COP-PST.PRF

'I **had** a book/ some books'

8.5.2.3.5 Inverse-locational use of the proprietive predication

This construction type is even rarer in Solon, but it is a genuine grammatical pattern rather than a speech error. Here, the figure-ground relationship is expressed through a proprietive marker, with the ground marked by the dative or locative case, and with the figure marked by the proprietive. As in the mixed construction, there is no nominative-marked subject, and the proprietive suffix functions adjectively. Consequently, this type also represents a subjectless clause structure. The inverse-locational use of proprietive predication and the mixed construction mentioned in §8.5.2.3.4 are rare in Solon corpus; therefore, their functions and semantic uses are unclear in this study.

(8.195)

sʊːpal-wə	*iŋki-me*	*tɔː**-lɔː**-ni*	*muː*	*imi-r*	
sʊʊbal-we	*iŋgi-me*	*doo**-loo**-ni*	*muu*	*imi-r*	
backpack-DEF.ACC	carry.on.back-1SG	inside**-LOC**-3	water	drink-IPFV.PTCP	

*tʃʰɔmɔ**-ʃi***	*əmun*	*təwtʰər**-tʃʰi***	*əmun*	*xaranta**-tʃʰi***
*como**-si***	*emun*	*dewter**-ci***	*emun*	*xaranda**-ci***
cup**-PROP**	one	book**-PROP**	one	pencil**-PROP**

'I carry the backpack, inside (the backpack) **there were** a water cup, one book and one pencil.' (LT23-26)

9 Negation and questions

The present chapter is focused on the topics of negation (§9.1) and questions (§9.2) in Solon. Different clause types in Solon takes different negation. The imperative and indefiniteness negations are discussed in the following negation section. The question section comprises a discussion of five distinct question types: polar questions, tag questions, alternative questions, content questions and rhetorical questions.

9.1 Negation

Solon employs multiple negation strategies depending on the predicate type and clause structure. In verbal predicate clauses, negation is expressed by the negative auxiliary verb *ə-*, which carries the inflectional categories, including TAM, subject agreement, and converbal morphology, but not the valency changing suffixes. The lexical verb in such clauses appears with connegative form *-rA*, which is originally from imperfective participle (Janhunen 2023: 15). In non-verbal predicate clauses, negative particles are used instead of a negative verbal auxiliary. The negative particle/negative existential *aːʃîn* negates locational-existential and possessive predicative clauses, while *ənt^{h}ə* is used in other copular predications, especially those expressing inclusion, identity, quantification.

Negation in subordinate clauses differs from that in independent clauses, as the negative auxiliary *ə-* is not productive across all subordinate verb forms. Solon does not possess dedicated constituent negation.

In the negative imperative, the negative auxiliary verb takes the imperative/hortative/jussive suffix, while the lexical verb remains in the connegative form. Negative indefinites are formed analytically, involving an interrogative pronoun, an emphatic particle, and a negative marker. While many languages allow double negation to produce a positive interpretation (Dixon 2011:127), no clear examples of such a pattern were found in the Solon corpus. However, speakers frequently combine negation with an interrogative marker to create emphatic positive meaning through rhetorical questioning (§9.2.5.1).

This section begins with clause negation (§9.1.1), including negation in main clauses and subordinate clauses, followed by prohibitives (§9.1.2) and negative indefinites (§9.1.3). This section is relatively concerned with the elicitation of judgments and translations, a necessity arising from the lack of sufficient negating data on all clause constructions.

9.1.1 Clause negation

Different clause types in Solon require different negation markers, see Table 9-1. In verbal predicate clauses, the negative auxiliary *ə-* precedes the lexical verb and scopes over the entire event. In non-verbal predicate clauses, the negative particle is placed either before the overt copula, or sentence-finally if the copula is absent.

Table 9-1: Clause negation in Solon

clause type	**negative marker**
verbal-predicates	negative auxiliary verb *ə-*
non-verbal predicates (inclusion, quantification, identity)	negative particle *ənt^{h}ə*
non-verbal predicates (locational-existential, possessive predicate)	negative particle/negative existential *a:ʃin*

9.1.1.1 Negation of verbal predicates

9.1.1.1.1 Single predicates

To negate a verbal predicate, Solon uses the negative auxiliary verb *ə-*, a strategy shared with other Tungusic languages (Hölzl 2015), including Evenki (I. Nedjalkov 1997:96), Negidal (Pakendorf & Aralova 2020:295), Even (Malchukov 1995:16; Pakendorf & Aralova 2020:295), and Oroqen (Cong 2019:363–366).

The conjugation of the negative auxiliary verb is different from lexical verbs, as shown in §6.1.2. In verbal negation, the TAM, agreement and converbal categories of the verbal predicates are expressed on the negative auxiliary *ə-* (9.1-9.3), and the lexical verb is formed

with connegative marker *-rA*. However, the valency-changing morphology remains on the lexical verb (9.4).

(9.1) *[...] əmun inək xəːmə sai-ja* ***ə-su*** ***tʃitʰ-tʰə*** *[...]*
[...] emun ineg xeeme sai-ya ***e-su*** ***jit-te*** *[...]*
one day meal tea-PTV **NEG-PST.1SG** **eat-CONNEG**
'I **didn't have (lit.eat)** any food and tea all day.' (LT38-30)

(9.2) *satti:-ni tʰattʰʊ pasa məːn-i pəjə-wi* ***ə-tʃi-rə-ŋ***
saddii-ni tattʊ basa meen-i beye-wi ***e-ji-re-ŋ***
old.lady-3 DIST.ADV also REFL-GEN body-REFL.SG **NEG-PROG-AOR-3**

*itʰxə-**r***
*itxe-**r***
believe-**CONNEG**
'The old lady also **doesn't believe** herself.' (lit. The old lady also doesn't believe her own body.) (LT07-15)

(9.3) *suxə-wi* ***ə-mi*** *ka-**ta*** *mʊsʊː-mi kun-təli [...]*
suxe-wi ***e-mi*** *ga-**da*** *mʊsʊʊ-mi gun-deli [...]*
axe-REFL.SG **NEG-CONN.CVB** take-**CONNEG** return-1SG SAY-SIM.CVB
'The old man **did not take** his axe, and when he wanted to return ...' (LT28-06)

(9.4) *[...] kə tʰɔːtʃʰi pəjə-tu na* ***ə-ʃi-nti***
[...] ge tooci beye-du na ***e-si-ndi***
PTCL DIS.CONN human-DAT also **NEG-AOR-2SG**

*əru-ʃiː-**wu-r*** *kɔjə-tʃi emtara-nte [...]*
*eru-sii-**wu-r*** *goyo-ji emdara-nde [...]*
bad-VBZ-**PASS-CONNEG** beautiful-INS live-2SG
'You **won't be looked down on** by other people, and you will live well.' (LT39-04)

9.1.1.1.2 Complex predicates

Complex predicates originate from biclausal structures, and the boundary between monoclausal VCPs and loose verb sequences can be fluid (Aikhenvald 2011:22). A key diagnostic is polarity sharing: all verbal components must fall under the same scope of negation (Haspelmath 2016:299; Aikhenvald 2011:19).

Solon employs three structural patterns in the negation of verbal complex predicates:

- Pattern 1: NEG-finite V_1-CVB V_2-CONNEG
- Pattern 2: NEG-CVB V_1-CONNEG V_2-finite
- Pattern 3: V_1-CVB NEG-finite V_2-CONNEG

The position of the negative auxiliary verb in each pattern is different, and whether the position of the negative auxiliary verb distinguishes complex predicates or biclausal constructions is problematic. The following discussion will address each pattern.

9.1.1.1.2.1 Pattern 1: NEG-finite V_1-CVB V_2-CONNEG

This pattern involves the negative auxiliary preceding the entire verbal sequence, while the final verb in the chain carries connegative marker. This structure ensures that the negation applies to the entire complex predicate. It is characteristic of highly grammaticalized auxiliary verb constructions, including those derived from verbs meaning GIVE->benefactive (9.5), PUT->resultative (9.6), and SEE->conative (9.7), as well as motion-based auxiliaries expressing, see GO->andative (9.8).

(9.5) *ikki-tʰixi-ni* *tʰaːn-aː-ŋ* *əmmə-ni* ***ə-ʃi-n*** *ulə-mi* *puː**-r***
iggi-tixi-ni *taan-aa-ŋ* *emme-ni* ***e-si-n*** *ule-mi* *buu**-r***
tail-ABL-3 pull-AOR-3 mother-3 **NEG-AOR-3** go-CONN.CVB give-**CONNEG**
'(The goat lamb) tugged its mother's tail. Its mother **did not move for it**.' (LT15-15)

(9.6) *a.* *suxə* *tʃawa-mi* *pi-ttʃʰi=l* *pʰɔl* *mantaː-sa* *kunəŋ,*
suxe *jawa-mi* *bi-cci=l* *pol* *mandaa-sa* *guneŋ,*
axe catch-CONN.CVB COP-COOR.CVB=PTCL ONOM hit-PST hearsay

məː-ni *tʰixə-tʃʰi* *nəː-sə*
moo-ni *tixe-ci* *nee-se*
tree-3 fall-COOR.CVB put-PST
'Having caught an axe, (he) chopped (the tree). The tree felt' (LT08-69)

b. *suxə* *tʃawa-mi* *pi-ttʃʰi=l* *pʰɔl* *mantaː-sa* *kunəŋ,*
suxe *jawa-mi* *bi-cci=l* *pol* *mandaa-sa* *guneŋ,*
axe catch-CONN.CVB COP-COOR.CVB=PTCL ONOM hit-PST hearsay

məː-ni ***ə-sə*** *tʰixə-tʃʰi* *nəː**-r***
moo-ni ***e-se*** *tixe-ci* *nee**-r***
tree-3 **NEG-PST** fall-COOR.CVB put-**CONNEG**
'Having caught an axe, (he) chopped (the tree). The tree **didn't fall**.' (elicitation based on 9.6a, LT08-69)

(9.7) a. *pi* *par-tʃi* *tʰəmtʃʰi-m* *iʃi-ktʰe!*
bi *bar-ji* *temci-m* *isi-gte!*
1SG tiger-INS fight-CONN.CVB see-HORT
'Let me try to fight with a tiger.' (LT41-42)

b. *pi* *par-tʃi* ***ə-kitʰə*** *tʰəmtʃʰi-m* *iʃi**-r***
bi *bar-ji* ***e-gite*** *temci-m* *isi**-r***
1SG tiger-INS **NEG-HORT** fight-CONN.CVB see-**CONNEG**
'Let me **not try to fight** with a tiger.' (elicitation based on 9.7a, LT41-42)

(9.8) a. *[...]* *əjjə* *kaːlaːsʊn-ni* *təkliː-tʃʰi* *ulə-sə*
[...] *eyye* *gaalaasʊn-ni* *deglii-ci* *ule-se*
PROX swallow-3 fly-COOR.CVB go-PST
'The swallow flew away.' (LT02-11)

b. *[...]* *əjjə* *kaːlaːsʊn-ni* ***ə-sə*** *təkliː-tʃʰi* *ulə-**r***
[...] *eyye* *gaalaasʊn-ni* ***e-se*** *deglii-ci* *ule-**r***
PROX swallow-3 **NEG-PST** fly-COOR.CVB go-**CONNEG**
'The swallow **didn't fly away**.' (elicitation based on 9.8a, LT02-11)

9.1.1.1.2.2 Pattern 2: NEG-CVB V_1-CONNEG V_2-finite

The second pattern occurs primarily when the auxiliary denotes posture verbs such as SIT or LIE (9.9), and in certain symmetric VCPs in which the first verb expresses manner (9.10). In this construction, the negative auxiliary precedes both verbs, while the first verb appears in the connegative form. This configuration may seem to involve negation of the entire complex predicate. Structurally, however, this interpretation is misleading.

Rather than negating the complex predicate as a whole, the negation targets only one internal component of the predicate. The construction therefore represents a complex predicate containing an internally negated verb component, not a negated complex predicate. In other words, the scope of negation is local rather than clausal. For example, in (9.9b) the complex predicate is best analyzed as 'sit not drinking', where 'not drinking' forms a single unit with 'sit'. Similarly, in (9.10b) the predicate expresses 'come back unhappily', where the manner component is negated within the complex predicate. In both cases, the clausal predicate itself remains affirmative, while one of its components carries inherent negation. For this reason, these constructions are not treated here as instances of complex-predicate negation, but rather as complex predicates with an internally negated element.

(9.9) a. *ʊlʊr-ʧi-wi* *ʧuːr-i* *arxi* *mʊxʊ-m*
ʊlʊr-ji-wi *juur-i* *arxi* *mʊxʊ-m*
people-INS-REFL.SG two-COLL liquor drink-CONN.CVB

tʰəkə-ʃiː-ʧi-sə
tege-sii-ji-se
sit.down-STAT-PROG-PST
'(He) was sitting drinking with his wife.' (LT38-29)

b. *ʊlʊr-ʧi-wi* *ʧuːr-i* *arxi* ***ə-ʃi-n*** *mʊxʊ-**r***
ʊlʊr-ji-wi *juur-i* *arxi* ***e-si-n*** *mʊxʊ-**r***
people-INS-REFL.SG two-COLL liquor **NEG-AOR-3** drink-**CONNEG**

tʰəkə-ʃiː-ʧi-sə
tege-sii-ji-se
sit.down-STAT-PROG-PST
'(He) was **sitting not drinking** with his wife.' (elicited based 9.9a, LT38-29)

(9.10) a. *[…]* *atta-mi* *əmki-su.*
[…] *adda-mi* *emgi-su.*
be.happy-CONN.CVB come.back-PST.1SG
'I came back happily.' (LT25-13)

b. *[…]* ***ə-mi*** *atta-**r*** *əmki-su.*
[…] ***e-mi*** *adda-**r*** *emgi-su.*
NEG-CONN.CVB be.happy-**CONNEG** come.back-PST.1SG
'I came back **unhappily**.' (elicitation based on 9.10a, LT25-13)

9.1.1.1.2.3 Pattern 3: V_1-CVB NEG-finite V_2-CONNEG

Pattern 3 represents the least prototypical strategy for negating verbal complex predicates. In this configuration, the negative auxiliary occurs between V1 and V2, while V2 bears the connegative marker (9.11). At first glance, this word order suggests that only V2 falls within the scope of negation and that V1 remains outside it. Under such an interpretation, the construction would be analyzed as biclausal, with V1 functioning as the subordinate predicate and V2 as the main clause predicate, see the biclausal interpretation (b) in (9.11).

(9.11) *[...]* *mukkulə:-m* ***ə-ʃi-n*** ***ətʰə-r***
[...] *muggulee-m* ***e-si-n*** ***ete-r***
crush-CONN.CVB **NEG-AOR-3** **finish-CONNEG**
(a) '(The fox) **is not able** to crush (down the tree).'
(b) '(The fox) **didn't finish** to crush (down the tree).' (LT01-41)

However, a biclausal analysis is problematic on semantic grounds. In the relevant constructions, the verb FINISH are no longer lexical predicates but have undergone grammaticalization, expressing ability modal and modifying the subordinate clause predicate 'crush' rather than its original lexical meaning. If the structure was truly biclausal, 'finish' would have to function as an independent matrix predicate selecting a complement clause. Yet its grammaticalized modal meaning shows that it no longer behaves as an autonomous lexical verb. It is therefore unlikely that the construction consists of two syntactically independent clauses.

For this reason, analyzing examples such as (9.11) as biclausal solely on the basis of negative placement is not convincing. Instead, these cases demonstrate that the position of the negative auxiliary is not a strict structural diagnostic for distinguishing complex predicates from biclausal constructions in Solon. Semantic cohesion and degree of grammaticalization must also be taken into account. Pattern 3 is thus best treated as a marginal but genuine strategy for negating verbal complex predicates. Diachronically, this pattern likely reflects the origin of these predicates in complement-clause constructions, which may explain the retention of certain morphosyntactic properties associated with subordination.

The distribution of this pattern is highly restricted. It is consistently attested in the FINISH → ability construction (9.11) above, where it appears to be obligatory, strongly preferred in the START → inchoative construction (9.12), and only partly accepted in the GET → resultative construction (9.13).

(9.12) *nisxuŋ* *nɔnɔː* *tʰəliŋ* *ʧaxʊn* *peː* *pɔŋkɔŋ,* *uk-iː*
nisxuŋ *nonoo* *teliŋ* *jaxʊn* *bee* *boŋgoŋ,* *ug-ii*
small baby only eight month big word-ACC.MN

ʧintʃi-m ***ə-sə*** *əːkʰə**-r.***
jinji-m ***e-se*** *eeke**-r.***
tell-CONN.CVB **NEG-PST** start-**CONNEG**
'The baby is only eight months big; she **hasn't started speaking**.' (elicited)

(9.13) *a.* *[...]* *pəjə* *əjjə* *ulikər-wə-ni* *pɔtɔ-m* *paxa-ra-ŋ*
[...] *beye* *eyye* *uliger-we-ni* *bodo-m* *baxa-ra-ŋ*
person PROX story-DEF.ACC think-CONN.CVB get-CONNEG
'People recall (lit. think of) this story.' (LT19-55)

b. *[...]* *pəjə* *əjjə* *ulikər-wə-ni* *pɔtɔ-m* ***ə-ʃi-n***
[...] *beye* *eyye* *uliger-we-ni* *bodo-m* ***e-si-n***
person PROX story-DEF.ACC think-CONN.CVB **NEG-AOR-3**

*paxa**-r***
*baxa**-r***
get-**CONNEG**
'People **don't recall** (lit. think of) this story.' (elicitation based on 9.13a, LT19-55)

9.1.1.2 Negation of non-verbal predicate constructions

As outlined above, non-verbal predicate constructions in Solon are divided into two semantic classes with different negation strategies. The first class includes inclusion, identity, and quantification predicates. The second comprises locational-existential and possessive-predicative clauses. The distribution of negative markers aligns with this semantic division.

9.1.1.2.1 Inclusion, quantification and identity

Inclusion, quantification and identity predicates are negated by the particle *ənt^{h}ə ~ ont^{h}o* (9.14-9.15). In the corpus data, copula *pi-* does not co-occur with the negative particle *ənt^{h}ə ~ ont^{h}o*,

however the elicited judgments confirm that such co-occurrence is acceptable with an explicit past tense (9.16b). In contrast, the copula *ɔ:-* 'become' cannot be omitted under negation and must be overtly expressed (9.17).

(9.14) *ajja* *əjjə=ʃi* *pəjə* ***ənt^{h}ə*** *ʃikk^{h}ul*
ayya *eyye=si* *beye* ***ente*** *sikkul*
INTERJ PROX=2SG human **NEG** ghost
'Oh, this **is not** a person, it's a ghost.' (LT40-26)

(9.15) *[...]* *əjjə* *t^{h}u:kə* *k^{h}i* *law* *əŋki:n* *t^{h}u:kə* ***ənt^{h}ə*** *k^{h}uŋ* *[...]*
[...] *eyye* *tuuge* *ki* *law* *eŋgiin* *tuuge* ***ente*** *kuŋ* *[...]*
PROX wolf TOP must normal wolf **NEG** MIR
'This wolf must **not be** a normal wolf.' (LT28-56)

(9.16) a. *t^{h}ukku* *sʊnin* *aja* ***ont^{h}o*** *[...]*
tuggu *sʊnin* *aya* ***ɵntɵ*** *[...]*
road very good **NEG**
'The road was very bad (lit. **not good**).' (LT19-27)

b. *t^{h}ukku* *sʊnin* *aja* ***ont^{h}o*** ***pi-****sə* *[...]*
tuggu *sʊnin* *aya* ***ɵntɵ*** ***bi-****se* *[...]*
road very good **NEG** **COP-**PST
'The road was very bad **(**lit. **not good**).' (elicitation based on 9.16a, LT19-27)

(9.17) *ʊrin* *ati* *ani* ***ɔ:-****tʃi-r* ***ənt^{h}i***
ʊrin *adi* *ani* ***oo-****ji-r* ***enti***
twenty several year **become**-PROG-IPFV.PTCP **NEG**
'It **hasn't been** over twenty years.' (LT32-02)

9.1.1.2.2. Locational-existential, possessive predication

9.1.1.2.2.1 Locational-existential constructions

Locational-existential clauses, including inverse locational and plain existential constructions, are negated by *a:ʃin*, as illustrated by the locational-existential (9.18), inverse locational (9.19), and plain existential examples (9.20). If the copula is overt, *a:ʃin* functions as a negative particle. In the absence of an overt copula, *a:ʃin* functions as a negative existential marker.

(9.18) *[...]* *attʃʰa:n* *kʰəŋ* *jə:mə* *tʰul-**təli*** ***a:ʃin*** *[...]*
[...] *accaan* *keŋ* *yeeme* *tul-**deli*** ***aasin*** *[...]*
mouse SAY.CVB thing out-**PROL** **NEG.EXIS**
'There **are no** mice outside.' (LT27-39)

(9.19) *ʧu:-**tu*** *əmun=xətʰə* *pəjə* ***a:ʃin***
*juu-**du*** *emun=xete* *beye* ***aasin***
house-**DAT** one=PTCL person **NEG.EXIS**
'There **is not** a single person in the house.' (EL01-69)

(9.20) *xo:ko-**jə*** ***a:ʃin*** *pi-sə* *[...]*
*xəθgə-**ye*** ***aasin*** *bi-se* *[...]*
bridge-**PTV** **NEG** COP-PST
'There **wasn't** any bridge.' (LT20-174)

9.1.1.2.2.2 Possessive predicate constructions

Possessive predication, expressed by both the possessed-exist and the proprietive constructions, are negated by negative particle/negative existential *a:ʃin*. In possessed-exist clauses, negation does not alter the syntactic configuration: the possessor remains marked by the dative case, while the possessed noun is nominative (or partitive, see §9.1.1.2.2.3), followed by *a:ʃin* (9.21-9.22).

(9.21) *[...]* *mun-**tu*** *xama:-**ja*** ***a:ʃin*** *[...]*
[...] *mun-**du*** *xamaa-**ya*** ***aasin*** *[...]*
1PL.OBL-**DAT** matter-**PTV** **NEG.EXIS**
'Nothing matters with us. (lit. we **don't have** any matter).' (LT40-49)

(9.22) *tʰa-ttʃʰil-**tʊ*** *əmun* *akka* ***a:ʃin***
*ta-ccil-**dʊ*** *emun* *agga* ***aasin***
DIST-PL-**DAT** one method **NEG.EXIS**
'They don't have a solution.' (elicited)

In proprietive constructions, the possessor remains nominative, but the proprietive marker on the possessed noun is dropped under negation (9.23). Therefore, the only structural distinction in negation between these possessed-exist and proprietive construction concerns the case marking of the possessor. If the possessor is marked in the dative case, then it is a negation of the possessed-exist construction. If the possessor is in the unmarked nominative case, then it is a negation of the proprietive construction.

(9.23) ***pətənə*** *kʰi* *uruːŋkʰuŋ* *ikki* ***a:ʃin*** *ɔː-sɔ*
bedene *ki* *uruuŋkuŋ* *iggi* ***aasin*** *oo-so*
quail TOP long tail **NEG** become-PST
'The quail no longer have long tail.' (lit. The quail became with no long tail.' (LT01-78)

9.1.1.2.2.3 Negation combined with partitive case

In the negation of locational-existential and possessive predication, the partitive case *-jA* may combine with the negative particle *a:ʃin*. The partitive case *-jA* attaches to an indefinite possessed noun in plain existential clauses (9.24), proprietive possessive construction (9.25) and possessed-exist construction (9.26).

(9.24) *xoːko-**jə*** ***a:ʃin*** *pi-sə* *[…]*
*xɵɵgɵ-**ye*** ***aasin*** *bi-se* *[…]*
bridge-**PTV** **NEG** COP-PST
'There **wasn't** any bridge.' (LT20-174)

(9.25) *pi* *iː-r* *tʃuː-**jə*** ***a:ʃin***
bi *ii-r* *juu-**ye*** ***aasin***
1SG enter-IPFV.PTCP house-**PTV** **NEG.EXIS**
'I am homeless (lit. I **don't have** any house to enter.)' (LT40-18)

(9.26) *[…]* ***mun-tu*** *xamaː-**ja*** ***aːʃin*** *[…]*
[…] ***mun-du*** *xamaa-**ya*** ***aasin*** *[…]*
1PL.OBL-**DAT** matter-**PTV** **NEG.EXIS**
'Nothing matters with us. (lit. we **don't have** any matter).' (LT40-49)

However, the indefinite possessed nouns are not always marked by the partitive case in Solon. Shown by the comparison in (9.27a-b), both negate a plain existential clause with an indefinite noun 'person', where only the former includes the privative marker, the latter lacks the privative marker, but there are no distinct semantic differences.

(9.27) a. *[...]* *əːltʃiləː-r* *pəjə-**jə*** ***aːʃin***
[...] *eeljilee-r* *beye-**ye*** ***aasin***
alternate-IPFV.PTCP person-**PTV** **NEG.EXIS**
'There is **no one** to alternate.' (LT11-74)

b. *mʊrin-paj* *pʊltʊxlaː-r* *pəjə* ***aːʃin***
mʊrin-bay *bʊldʊxlaa-r* *beye* ***aasin***
horse-DEF.ACC.1SG ride-IPFV.PTCP person **NEG.EXIS**
'There is **no one** to ride my horse.' (LT09-15)

9.1.1.2.2.4 The presence of copula verb pi- 'be'

The copula *pi-* is obligatorily present in affirmative locational-existential and possessive-predicative constructions (§8.5.2.2.1). Under negation, however, the appearance of *pi-* becomes optional, and corpus frequency shows that it is rarely expressed in negative contexts (7.6%, 7/92 tokens in Solon corpus). All the sentences with the overt copula *pi-* are not third person aorist tense, they are either non-third person (9.28), or third person but not aorist tense (9.24 above and 9.29).

(9.28) *ʃi* *mitʃ* *tʃuːr-iː-ni* *emtaral-tʰi* *xutʃʰir* *ʊxʊn=kʰatʰa* ***aːʃin***
si *mij* *juur-ii-ni* *emdaral-ti* *xucir* *ʊxʊn=kata* ***aasin***
2SG 1PL.INCL two-COLL-GEN life-1PL.INCL difficult what=PTCL **NEG**

pi-*ʃi-tʰe*
bi-*si-te*
COP-AOR-1PL.INCL
'Me and you, our life is tough; we **don't have** anything.' (LT08-11)

(9.29) *kanmɔː* *ʃiŋkʰiːŋ* *aːʃin* ***pi-sə,*** *tʰari* *ərin-ni* *kɔjɔ* *pi-sə* *ta.*
ganmoo *siŋkiiŋ* *aasin* ***bi-se,*** *tari* *erin-ni* *goyo* *bi-se* *da.*
flu cough NEG **COP-PST** DIST time-3 beautiful COP-PST PTCL
'There **were** no flu and coughing, that period was beautiful.' (LT29-37)

9.1.1.3 Negation of subordinate clauses

Negation in subordinate clauses is structurally more complex than in main clauses, primarily due to the restricted inflectional behavior of the negative auxiliary verb. Because negation interacts with the structural properties of subordination types, the discussion below is organized according to subordinate clause types.

9.1.1.3.1 Converb-marked subordinate clauses

Several converb markers serve to form subordinate clauses in Solon, including the conditional converb *-kʰi*, the perfective converb *-tʰAːn*, the simultaneous converb *-t(A)li*, and the temporal converb *-tʃʰixi* (§6.4.2). However, the negative auxiliary verb is only compatible with the conditional converb *-kʰi*, other subordinate clauses marked by converbs are negated by analytical way. Even in conditional context, the converb marker cannot attach directly to the negative auxiliary; instead, an intervening morpheme formally identical to the aorist marker *-ʃi-* must appear between them. In the present study, this morpheme is glossed as 'AOR', although its precise status requires further investigation.

(9.30) *tʰajja uril-tu satʰaŋ* ***ə-ʃi-xi*** *puː-rə sɔŋ-rɔ-ŋ*
tayya uril-du sataŋ ***e-si-xi*** *buu-re soŋ-ro-ŋ*
DIST child-DAT candy **NEG-AOR-COND.CVB** give-CONNEG cry-AOR-3
'**If** one does **not** give a candy to that child, he would cry.' (EL01-22)

9.1.1.3.2 Participle-marked subordinate clauses

In the negation of subordinate clauses marked by participles, the negative auxiliary verb does not inflect into participles, it is always third person finite form, even though syntactically the subordinate clause is an embedded clause to the main clause. And the connegative marked lexical verbs will take all the syntactic markers associated with the participle marked predicates in subordinate clauses, such as case markers ad person makers.

Below is negation of complement clauses (9.31-9.32). The (9.31) complement clause is present tense, the negative auxiliary is in third person finite form, the lexical verb which is taking the connegative followed by the accusative case governed by the main clause and the third person marker cross reference to the complement clause subject. In (9.32a), the complement clause is second person past tense, however the negative auxiliary verb still stays in third person finite, the lexical verb marked by connegative takes the case and person marker, which here the person marker is second person cross reference to the subordinate clause subject. I tried the elicitation exchanging the third person finite negative auxiliary verb as a second person finite form *ə-sə-ʃi* 'NEG-PST-2SG', but the speaker rejected (9.32b).

(9.31) ***ə-ʃi-n*** *ətʰə-**r-wə-ni*** *kə* *pakʃi-tʰxiː-wal*
e-si-n *ete-**r-we-ni*** *ge* *bagsi-txii-wal*
NEG-AOR-3 can-**CONNEG-DEF.ACC-3** PTCL teacher-ABL-REFL.PL

məːŋkʰəːŋ aŋɔː-ra-ŋ
meeŋkeeŋ aŋɔɔ-ra-ŋ
REFL ask-AOR-3
'(The students) ask their teachers by themselves that they **can't work out**.' (LT11-39)

(9.32) a. *pi* *ʃin-i* ***ə-sə*** *əmə**-r-wə-ʃi*** *ə-ʃi-m*
bi *sin-i* ***e-se*** *eme**-r-we-si*** *e-si-m*
1SG 2SG.OBL-GEN **NEG-PST** come-**CONNEG-DEF.ACC-2SG** NEG-AOR-1SG

saː-r
saa-r
know-CONNEG
'I didn't know that you **didn't** come.' (elicited)

b. **pi* *ʃin-i* ***ə-sə-ʃi*** *əmə**-r-wə-ʃi***
bi *sin-i* ***e-se-si*** *eme**-r-we-si***
1SG 2SG.OBL-GEN **NEG-PST-2SG** come-**CONNEG-DEF.ACC-2SG**

ə-ʃi-m *saː-r*
e-si-m *saa-r*
NEG-AOR-1SG know-CONNEG
'*I didn't know that you **didn't** come.' (elicited)

Below are illustrative examples with negated adnominal clauses (9.34-9.35). In both examples, the adnominal clause is negated, the negative auxiliary verb takes third person finite form, and the lexical verb takes connegative.

(9.33) *[...]* *əmun* ***ə-ʃi-n*** ***tʰaː-lti-r*** *tʃalʊː* *iː-tʃʰi*
[...] *emun* ***e-si-n*** ***taa-ldi-r*** *jalʊʊ* *ii-ci*
one **NEG-AOR-3** **know-RECP-CONNEG** young.man enter-COOR.CVB

əm-sə
em-se
come-PST
'One unknown (lit. **didn't meet**) young man entered.' (LT28-68)

(9.34) *pi* *pikkʰi* *sʊrkʊːl-tʊ* *na* ***ə-sə*** *ulə**-r*** *pəjə*
bi *bikki* *sʊrgʊʊl-dʊ* *na* ***e-se*** *ule**-r*** *beye*
1SG TOP school-DAT also **NEG-PST** go-**CONNEG** person
'I am a person who **didn't** even **go** to school.' (LT34-58)

9.1.2 Negative imperative (prohibitive)

Negative imperatives (prohibitives) express commands to refrain from performing an action and thus function as the negative counterparts of affirmative imperatives. In Solon, prohibitive constructions employ the negative auxiliary verb as the locus for imperative, hortative, and jussive marking, while the lexical verb obligatorily appears in the connegative form (see Table 9-2). A dedicated prohibitive suffix occurs in the second-person: instead of the regular imperative *-xA*, the negative auxiliary takes the suffix *-tʃi*. In the corpus, only the 2SG and 1SG prohibitives are attested; other forms are supported by elicited data.

Table 9-2 The prohibitive in Solon

	person	affirmative forms	negative forms
1st person (hortative)	1SG	*V-ktʰe*	*ə-kəːtʰ(ə) V-CONNEG*
	1PL.EXCL	*V-ktʰe-mun*	*ə-kəːtʰə-mun*
	1PL.INCL	*V-kAː-ri*	*ə-kəː-r*
2nd person (imperative)	2SG	*V-xA*	***ə-tʃi***
	2PL	*V-xA-ltun*	***ə-tʃi**-tʃʰun~ətʃʰun*
3rd person (jussive)	3SG	*V-kin*	*ə-kin*
	3PL		

(9.35) *ʃi* *ɔsxɔːŋ* ***ə-tʃi*** *kuxiːtəː**-r*** *[...]*
si *osxooŋ* ***e-ji*** *guxiidee**-r*** *[...]*
2SG fish **NEG-PROH** hook**-CONNEG**
'**Don't** you fish!' (LT07-22)

(9.36) *[...]* *mukun-pi* ***ə-kətʰ*** *təttʰə-kəː**-r*** *kuŋ-kʰəːŋ*
[...] *mugun-bi* ***e-get*** *dette-gee**-r*** *guŋ-keeŋ*
money-REFL.SG **NEG-HORT** be.wet-VL**-CONNEG** SAY-SAY.CVB
xantʰaːs-i *uː-ʃxi* *uːriː-su [...]*
xantaas-i *uu-sxi* *uurii-su [...]*
jacket-REFL.SG up-ADV.ALL raise-PST.1SG
'In order not to get the money wet (=saying let me **not get** the money wet), I lifted my jacket.' (LT09-10)

(9.37) ***ə-kin*** *iː-tʃʰi* *əmə-**r***
e-gin *ii-ci* *eme-**r***
NEG-JUSS enter-COOR.CVB come-**CONNEG**
'Let him **not enter**!' (elicited)

9.1.3 Negative indefiniteness

Negative indefinites encode both negation and an unspecified referent (e.g.'nobody', 'nothing', 'nowhere'). Solon lacks dedicated negative indefinite pronouns. Instead, negative indefiniteness is expressed analytically: interrogative pronouns combine with an emphatic particle/clitic, and the clause is negated either by a negative particle or negative auxiliary verb (with connegative). The same strategy forms non-negative indefinites (§4.2.5), with the presence of negation determining whether the interpretation is indefinite or negative-indefinite.

(9.38) *[...]* ***awʊ=xatʰa*** *xɔrikla-m* ***ə-ʃi-n*** *ətʰə-r* *[...]*
[...] ***awʊ=xata*** *xorigla-m* ***e-si-n*** *ete-r* *[...]*
who=PTCL stop-CONN.CVB **NEG**-AOR-3 finish-CONNEG
'**Nobody** can stop (me).' (LT19-25)

(9.39) *əm-kʰəːŋ* *kə* *untʃʰirəː-tʃʰi* ***ʊxʊn=kʰɔ=l*** ***ə-ʃi-n***
em-keeŋ *ge* *unciree-ci* ***ʊxʊn=ko=l*** ***e-si-n***
one-INTS PTCL be.alone-COOR.CVB **what=PTCL=PTCL** **NEG**-AOR-3

ɔː-r
oo-r
make-CONNEG
'(The boy) was alone, and he doesn't do **anything**.' (LT41-37)

(9.40) *ʃi* *mitʃ* *tʃuːr-iː-ni* *emtaral-tʰi* *xutʃʰir* ***ɔxɔn=kʰatʰa*** ***aːʃin***
si *mij* *juur-ii-ni* *emdaral-ti* *xucir* ***ɔxɔn=kata*** ***aasin***
2SG 1PL.INCL two-COLL-GEN life-1PL.INCL difficult **what=PTCL** **NEG**

pi-ʃi-tʰe
bi-si-te
COP-AOR-1PL.INCL
'Me and you, our life is tough; we **don't have** anything.' (LT08-11)

9.2 Questions

Solon features a range of interrogative constructions, including polar questions (§9.2.1), tag questions (§9.2.2), alternative questions (§9.2.3), content questions (§9.2.4), and rhetorical questions (§9.2.5). In the case of interrogative sentences in Solon, a structural symmetry with declarative sentences is evident. The core structure remains unchanged, with the addition of an interrogative particle at the end of polar questions and tag questions. In terms of content questions, the interrogative pronouns substitute for arguments or adjuncts. The following Table 9-3 offers an overview of the interrogative system in Solon.

Table 9-3: The interrogative strategies of Solon

question type	**forms**
polar questions	interrogative particle *ki~ke*
tag questions	particle *pa*
alternative questions	declarative particle *jum* + particle *ku*
content questions	interrogative pronouns, can co-occur with interrogative particle *kʰə*, but with a semantic change
rhetorical questions	1. negation + interrogative particle *ki~kikə~kə* 2. interrogative pronouns *ɔːnti* "what", optionally with interrogative particle *ki~kikə* 3. a question form identical to ordinary questions

9.2.1 Polar questions

Polar questions are questions that expect a 'yes' or 'no' response (Dryer 2013b; Payne 1997: 295). In Solon, the primary marker of polar questions is the interrogative particle *ki~ke*, which appears at the end of a sentence that is otherwise identical in structure to its declarative sentence, see example (9.41-9.42).

(9.41) *tʃuː-wəl* *tʃɔːn-ɔ-ŋ* ***ki****?*
juu-wel *joon-o-ŋ* ***gi****?*
house-REFL.PL miss-AOR-3 **Q**
'Do they miss their home?' (LT11-51)

(9.42) *[...]* *tʃəːn-ku* *xaːltʰa-wi* *naŋŋiː-m* *puː-nti* ***ke****?*
[...] *jeen-gu* *xaalta-wi* *naŋŋii-m* *buu-ndi* ***ge****?*
left-ADJZ gate-REFL.SG open-CONN.CVB give-2SG **Q**
'Will you open the left gate for me?' (LT38-16)

In 8/49 cases of polar questions observed, the interrogative particle is absent (9.43), potentially followed by prosodic strategies such as sentence-final intonation.

(9.43) *tʃuː-tu* *iː-wuː-tʃi-nti* *əniːxəŋ ?*
juu-du *ii-wuu-ji-ndi* *eniixeŋ ?*
house-DAT enter-CAUS-PROG-2SG aunt.VOC
'Aunty, are you letting (the cat) enter the house?' (LT27-29)

9.2.2 Tag questions

Tag questions prompt the addressee to confirm or disconfirm the statement uttered by the speaker. Tag questions play a prominent role in discourse. From a pragmatic viewpoint, they can also be labelled confirmation questions. They do not necessarily expect an answer from the addressee, but carry a pragmatic expectation of agreement, thus effectively expressing the speaker's a priori bias towards a certain answer.

In Solon, the tag questions are marked by the interrogative particle *pa* (9.44-9.45), borrowed from Chinese '*ba* 吧' (9.46).

(9.44) *ʃi* *məːŋkʰəŋ* *pasa* *ʧuː-t-i* *pasa* *atsʊŋ*
si *meeŋkeŋ* *basa* *juu-d-i* *basa* *adsʊŋ*
2SG REFL also house-DAT-REFL.SG also livestock

ikki-ʧi-nti ***pa****?*
iggi-ji-ndi ***ba****?*
maintain-PROG-2SG **TAG**
'You are also keeping livestocks at your home, **right**?' (LT11-142)

(9.45) *xeːn-a-sun* *iʃi-rə-ŋ* ***pa****?*
xeen-a-sun *isi-re-ŋ* ***ba****?*
hay-EP-2PL reach-AOR-3 **TAG**
'Your hay is sufficient (until spring), **right?**' (lit. Your hay reaches (the end of spring), **right**?' (LT27-71)

(9.46) Chinese
shíjiān *hái* *gòu* ***ba****?*
time still enough **TAG**
'The time is still enough, **right**?'

Considering that this particle is also widely used in Mongolian as spoken in Inner Mongolia (9.47) and that Solon speakers who don't speak Chinese also use this particle, it might be an old borrowing and potentially an indirect contact influence that first occurred in Mongolian from Chinese, with later borrowing into Solon from Mongolian.

(9.47) Mongolian (Chingeltei 1991:446, translation and glossing adapted)
tan-u *ner-e-čini* *möngke* *ge-ǰi* ***ba****?*
2SG.OBL-GEN name-2SG PN SAY-CVB **TAG**
'Your name is Mongkhe, **right?**'

9.2.3 Alternative questions

An alternative question presents a choice between two or more options. In Solon corpus, only the alternative questions that involve two options are attested. Solon alternative questions can involve either nominal elements or full clauses, but the structure remains consistent: the declarative particle *jum* + interrogative particle *ku* follows all the alternative components (9.48-9.49). The particle *ku* seems to be dedicated to alternative questions and nominal disjunctions. However, in Solon, its disjunctive use is not optimal, as it always results in the elicitation of alternative questions. In the corpus, the alternative questions are all marked by declarative particle *jum* + interrogative particle *ku*, though the elicitation shows the interrogative particle *ku* can also mark the alternative question alone (9.50).

(9.48) *tʰɔːtʃʰi* *ətʰxəːŋ* *məːn-i* *pəjə-wi* *pʊkkʰʊŋ* *ɔː-tʃi-mi*
tooci *etxeeŋ* *meen-i* *beye-wi* *bʊkkʊŋ* *oo-ji-mi*
DIS.CONN old.man REFL-GEN body-REFL.SG Buddha become-PROG-1SG

kʰə ***jum*** ***kuː*** *ʊxʊn* *ɔː-tʃi-mi* *kʰɔ* ***jum*** ***kuː?***
ke ***yum*** ***guu*** *ʊxʊn* *oo-ji-mi* *ko* ***yum*** ***guu****?*
PTCL **DECL.PTCL** **Q** what become-PROG-1SG PTCL **DECL.PTCL** **Q**
'Then the old man (thought) am I becoming a Buddha **or** am what am I becoming?' (LT07-09)

(9.49) *[...]* *əri-ni* *əʃi* *min-ə-wə* *ələ̀ː-ʃiː-tʃi-rə-n=tʰə*
[...] *eri-ni* *esi* *min-e-we* *elee-sii-ji-re-n=te*
PROX-3 now 1SG.OBL-EP-DEF.ACC lie-STAT-AOR-3=PTCL

jəm ***ku*** *unə=tʰə* ***jəm*** ***ku*** *[...]*
yem ***gu*** *une=te* ***yem*** ***gu*** *[...]*
DECL.PTCL **Q** true=PTCL **DECL.PTCL** **Q**
'Is it lying to me **or** is it true?' (LT01-14)

(9.50) *mitʰi* *kʊril* *tʃìtʰ-ə-tʰi* ***ku*** *peŋtʃʰi* *tʃìtʰ-ə-tʰi* ***ku****?*
miti *gʊril* *jit-e-ti* ***gu*** *beŋci* *jit-e-ti* ***gu****?*
1PL.INCL noodle eat-EP-1PL.INCL **Q** dumpling eat-EP-1PL.INCL **Q**
'Do we eat noodles **or** dumplings?' (elicited)

9.2.4 Content questions

Content questions are employed to request that the addressee provide missing information. In Solon, the interrogative pronouns take the syntactic position of the questioned elements, which indicates they are not obligatory initial, and interrogative particles are not required, see example (9.51-9.52). The complete inventory of interrogative pronouns is given in §4.2.4.

(9.51) *əʃi* ***ilə*** *ul-tʃʰə* *tʰari* *pəjə?*
esi ***ile*** *ul-ce* *tari* *beye?*
now **where** go-PST DIST person
'Now, **where** did this person go?' (LT18-91)

(9.52) *tʰukkəŋ-tu-wi* ***ati:-ja*** *xaiʃila:-ra-ŋ?*
tuggeŋ-du-wi ***adii-ya*** *xaisilaa-ra-ŋ?*
fast-DAT-REFL.SG **how.many-PTV** cut-AOR-3
'When people are fast, **how many (sheep)** do they shear?' (LT17-40)

An additional interrogative particle *kʰə* can co-occur with the interrogative pronoun, when the speaker has a vague idea of the answer but is seeking the precise answer from the addressee, see example (9.53-9.54).

(9.53) *əxun-ni* *məkun* *tʰari* *ərin-tu* ***ati*** ***kʰə****?*
exun-ni *megun* *tari* *erin-du* ***adi*** ***ke****?*
milk-GEN money DIST time-DAT **how.many** **Q**
'**How much was** the price of milk at that time? (it was cheaper than now, but **I forgot how much exactly.**)' (LT20-49)

(9.54) *toutʃiao=l* *tʰari-tʃi-mun* *xɔŋkɔː* *ʊxʊn* *ʃiːs*
dəujiaə=l *tari-ji-mun* *xoŋgoo* *ʊxʊn* *siis*
string.bean=PTCL plant-PROG-1PL.EXCL cucumber PH tomato

taxi ***ʊxʊn*** *pi-sə* ***kʰə?*** *tʃaːn* *ati*
daxi ***ʊxʊn*** *bi-se* ***ke?*** *jaan* *adi*
also **what** COP-PST **Q** ten several

'We are planting string beans, cucumbers and ... tomatoes, and **what else**? There is a dozen (kinds of vegetables).' (**I can't recall exactly all of them**.) (LT27-57)

The questioned elements in content questions can be core arguments, adjuncts, or an attribute modifier. The interrogative pronoun takes case-marking in accordance with its semantic role in the clause (§8.2). For example, it can be marked with the accusative case when filling the patient/direct object slot (9.53 above) or with the instrumental case when filling the instrument slot (9.55).

(9.55) ***ʊxʊn-tʃi*** *xati-tʃʰaː-sʊn* *xiːna=ja?*
ʊxʊn-ji *xadi-caa-sʊn* *xiina=ya?*
what-INS cut(grass)-PST-2PL hay-PTV
'**Wha**t did you use for mowing hay?' (LT17-15)

However, some interrogative pronouns have inherent spatial-temporal meaning, thus they don't need an additional case, these include: *aːl* 'when' and *iləː* 'where'. It is evident that *iləː* 'where' is derived from the root of the interrogative pronoun *i-*, to which the locative case *-lAː* is attached (*i-ləː* INT-LOC) (9.56). Nevertheless, the source of *aːl* 'when' remains unclear (9.57). Besides, *ʊxʊn* 'what' is always in the unmarked nominative case when filling the patient/direct object slot (9.58).

(9.56) *əʃi* ***ilə*** *ul-tʃʰə* *tʰari* *pəjə?*
esi ***ile*** *ul-ce* *tari* *beye?*
now **where** go-PST DIST person
'Now where did that person go?' (LT18-91)

(9.57) *[...] ʃi **aːl** min-tʃi xʊtaː-ja ɔː-nti [...]*
*[...] si **aal** min-ji xʊdaa-ya oo-ndi [...]*
2SG **when** 1SG.OBL-INS wedding-PTV make-2SG
'**When** will you marry me?' (LT19-38)

(9.58) ***ʊxʊn** pakkiː-tʃʰun [...]*
***ʊxʊn** baggii-cun [...]*
what prepare-2PL
'**What** do you prepare?' (LT20-220)

9.2.5 Rhetorical questions

A rhetorical question is an interrogative clause whose answer is already known to both the speaker and the addressee, and each knows that the other knows it as well. An answer is not required, but it may be provided by either the speaker or the addressee (Caponigro & Sprouse 2019). Solon has various strategies to express rhetorical questions, see the list below and the table showing the frequency of each strategy in Solon.

Strategy 1: negation + interrogative particle *=ki~=kikə~=kə*

Strategy 2: interrogative pronouns *ɔːnti* 'what', optionally with interrogative particle *=ki~=kikə*

Strategy 3: a question form identical to ordinary questions

Table 9-4 shows that all three strategies are frequently used in Solon. The rhetorical meaning is strongest with Strategy 2, second strongest with Strategy 1, while Strategy 3 is the least strong. Meanwhile, Strategy 2 often involves a tone of blaming the addressee.

Table 9-4: The frequency of different strategies to express rhetorical questions (full corpus)

	Strategy 1		**Strategy 2**		**Strategy 3**
frequency	38.5% (30/78)		23% (18/78)		38.5% (30/78)
	ki	53.3% (16/30)	with Q particle	38.9% (7/18)	-
	kikə	40% (12/30)	without Q particle	61.1% (11/18)	
	kə	6.7% (2/30)			

9.2.5.1 Strategy 1: Negation + interrogative particle

A negative polarity item is a useful diagnostic for distinguishing rhetorical questions from ordinary ones (Caponigro & Sprouse 2019:3). In Solon, rhetorical questions are frequently marked by negation combined with the interrogative particle *ki~kikə~kə*, and these three forms don't differ semantically (9.59-9.61). The form *kikə* likely results from the combination of the interrogative particle *ki* and the particle *kə*, both of which often co-occur in rhetorical questions.

The negation of the sentence can be either negating the verbal predicate in the sentence (9.59), or negating the statement indicating in the sentence as an identity clause, expressing the meaning 'isn't it X?', in this construction the negative particle *ənt^{h}ə~ont^{h}o* is involved (9.62).

(9.59) *əmki-mi* *ətt^{h}ə-tʃ^{h}i=l* *naːtʃil*
emgi-mi *ette-ci=l* *naajil*
come.back-CONN.CVB finish-COOR.CVB=PTCL maternal

jəjə-t-i ***ə-ʃi-m*** *tʃintʃi-**r*** ***ki**?*
yeye-d-i ***e-si-m*** *jinji-**r*** ***gi**?*
grandfather-DAT-REFL.SG **NEG**-AOR-1SG tell-**CONNEG** **Q**
'Once I came back, **won't** I tell my maternal grandfather?' (LT25-14)

(9.60) *ʊrin* *ati* *ani* *ɔː-tʃi-r* ***ənt^{h}i*** ***kə**?*
ʊrin *adi* *ani* *oo-ji-r* ***enti*** ***ge**?*
twenty several year become-PROG-IPFV.PTCP **NEG** **Q**
'**Isn't** it being over twenty years?' (LT32-02)

(9.61) *əʃi* *pikkʰi* *kə* *xɔkkʰɔ* *ʃoutʃi* *ɔrɔːn-tʊ* ***əntʰə*** ***ki=kə****?*
esi *bikki* *ge* *xokko* *sʊuji* *oroon-dʊ* ***ente*** ***gi=ge****?*
now TOP PTCL all mobile.phone above-DAT **NEG** **Q=PTCL**
'Nowadays the things are all on the mobile phone, **aren't they**?' (LT30-18)

(9.62) *pi* *ʃin-i* *pʊxa-wi* *uki-xə* *kun-tʃʰu* ***əntʰə*** ***ki****?*
bi *sin-i* *bʊxa-wi* *ugi-xe* *gun-cu* ***ente*** ***gi****?*
1SG 2SG.OBL-GEN bull-REFL.SG tether-IMP say-PST.1SG **NEG** **Q**
'I told you "Tether your bull", **didn't I**?' (LT35-18)

9.2.5.2 *Strategy 2: ɔːnti* 'what' (+interrogative particle)

Solon distinguishes between two different pronouns for 'what'. The pronoun *ʊxʊn* is used for filling an argument slot in the sentence The pronoun *ɔːnti* is used to inquire about options of given nouns (§4.2.4). The *ɔːnti* 'what' is used to express rhetorical questions in Solon. In these contexts, it no longer functions as a true pronoun and cannot be directly translated into English as 'what'. Instead, it serves as a rhetorical marker (9.63). When *ɔːnti* 'what' expresses a rhetorical question, it can co-occur with the interrogative particle *ki* (9.64).

(9.63) *nɔːkʊ* ***ɔːnti*** *paraːŋ-tʃʊl* *paxa-lti-tʃʰi* *naŋ* *ətʰə-rə-ŋ?*
noogʊ ***oondi*** *baraaŋ-jʊl* *baxa-ldi-ci* *naŋ* *ete-re-ŋ?*
old.time **what** all-COLL get-RECP-COOR.CVB also finish-AOR-3
'In the past, **how could** people meet all together?!' (LT29-86)

(9.64) *muni* *ʊniː-sal-mʊn* ***ɔːnti*** *sʊliː-ʃi* *ɔː-sɔ* ***ki****?*
muni *ʊnii-sal-mʊn* ***oondi*** *sʊlii-si* *oo-so* ***gi****?*
1PL.EXCL daughter-PL-1PL.EXCL **what** insanity-PROP become-PST **Q**
'Were our daughters being insane?!' (LT35-41)

The negative element, interrogative particle, and the interrogative pronoun *ɔːnti* 'what', these three elements can co-occur to express a single rhetorical question (9.65), this pattern is rare, with only two instances found in the entire corpus. Potentially this construction can intensify the rhetorical meaning.

(9.65) *pi* ***ɔːnti*** ***ə-ʃi-m*** *saːr* ***ki*** *tʰari?*
bi ***oondi*** ***e-si-m*** *saar* ***gi*** *tari?*
1SG **what** **NEG**-AOR-1SG know-CONNEG **Q** DIST
'**Don't I** know that?!' (LT18-66)

9.2.5.3 Strategy 3: Forms identical to ordinary questions

As Caponigro & Sprouse (2019:9-11) have noted, rhetorical questions and ordinary questions can be semantically and syntactically indistinguishable. The primary distinction between a rhetorical question and an ordinary question is pragmatic. That is to say, the determination of whether a question is a rhetorical question hinges on whether the speaker and the addressee already hold a shared agreement on the true complete answer. This concept is referred to as 'common ground' in the terminology of Stalnaker (1978). Consequently, an interrogative form that is indistinguishable from a standard question can also express a rhetorical inquiry, the interpretation is based on the common ground of the speaker and the addressee. This type of rhetorical question frequently occurs in Solon. The prosody of this use may be different from the ordinary question; however, this is beyond the current study.

(9.66) *ʃi* ***ittʰu*** *əru* *sana-ʃi* *pəjə* *jumə* *kun-tʃʰə* *kunəŋ.*
si ***ittu*** *eru* *sana-si* *beye* *yume* *gun-ce* *guneŋ.*
2SG **how** bad mind-PROP person DECL.PTCL say-CVB hearsay
'The girl said, '**How** bad you are**?! (look what did you do to me)**" (LT28-29)

(9.67) *əʃiː-tʰi* *ʊlʊr* *kʰi* *na* *tʰari-pa* *kuːruː-tʃikə* ***ki****?*
esii-ti *ʊlʊr* *ki* *na* *tari-ba* *guuruu-jige* ***gi****?*
now-ADJZ people TOP also DIST-DEF.ACC understand-FUT **Q**
'Will people nowadays understand that**?! (that was a tool used in the old days)**' (LT22-33)

(9.68) *kə* *tʰajja* *ərin-tu* *mitʰi-tʊ* ***ʊxʊn*** *pi-sə* *pi-tʃikə*

ge *tayya* *erin-du* *miti-dʊ* ***ʊxʊn*** *bi-se* *bi-jige*

PTCL DIST time-DAT 1PL.INCL-DAT **what** COP-PFV.PTCP COP-FUT

nɔːnɔː

noonoo

daughter.VOC

'At that time, what would we have, daughter**?! (we both know we had nothing)**' (LT32-06)

10 Clause linkage

10.1 Introduction

Clause linkage is traditionally divided into subordination and coordination (non-subordination), yet the boundary between the two is often unclear. Two notions commonly invoked in distinguishing these relations are dependency and embedding.

- **Dependency** refers to a clause's inability to stand alone as a complete sentence. Van Valin and LaPolla (1997:454) distinguish two types of dependency: operator dependency, where the verb is fully inflected, but the clause is not independent due to conjunctions linking it to another clause; and structural dependency, which involves reduced (non-finite) verb forms.
- **Embedding** is a notion whether a clause functions as a constituent of another clause, to provide background, explanation, or description to another clause. Embedding can be ascertained by a number of syntactic tests, such as clause internal order, clause extraposition, and cataphoric reference (Cristofaro 2005:17, citing Roberts 1988, Haspelmath 1995).

The continuum approach treats coordination and subordination as gradient categories defined by clusters of structural features (Foley and Van Valin 1984; Lehmann 1988; Haiman and Thompson 1984). Under Foley and Van Valin's model, clause-combining strategies are characterized by the features ±dependent and ±embedded, yielding the typology presented below, See (10.1) below. Foley and Van Valin (1984:393) consider that "the fourth possibility, +embedded -dependent, does not occur, as there are no constructions in which one clause is embedded in another but is totally independent of it in terms of constituents and operators."

(10.1) Clause-combining strategies

-embedded	-dependent	->	coordination
+embedded	+dependent	->	subordination
-embedded	+dependent	->	cosubordination

(Foley and Van Valin 1984:241-242)

In this study, I will only use the terms “coordination” and “subordination” based on whether one clause is embedded within another. Consequently, “cosubordination” in the sense of Foley and Van Valin (1984) is treated here as coordination, since the linked clauses are not embedded, although they are structurally dependent on one another.

In Solon, the first two types: coordination and subordination are clearly attested. See (10.2) for coordination, (10.3) for subordination. In (10.2), the two sentences are in an independent finite form and have equal status; thus, they are coordinated. In example (10.3), the dependent clause marked by a participle taking the accusative case is embedded as the direct object of the main clause, thus demonstrating subordination.

(10.2) *xʊni-mun* *palti-tʃi-ra-ŋ* *ilan* *peː* *ʊrin* *atin-tʰixi* *xʊnin*
xʊni-mun *baldi-ji-ra-ŋ* *ilan* *bee* *ʊrin* *adin-tixi* *xʊnin*
sheep-1PL.EXCL give.birth-PROG-AOR-3 three month twenty several-ABL sheep

pal-tʃʰa.
bal-ca.
give.birth-PST
‘Our sheep are lambing. They started lambing from the twenties of March.’ (LT27-03)

(10.3) *[...]* *tʰɔːkʰi* *ʃi* *tʰajja-tʃi* *xʊtaː* *ɔː**-r-**pɔ-ʃi*
[...] *tooki* *si* *tayya-ji* *xʊdaa* *oo**-r-**bo-si*
DIS.CONN 2SG DIST-INS wedding make-**IPFV.PTCP**-DEF.ACC-2SG

pi *iʃi-kte* *[...]*
bi *isi-gde* *[...]*
1SG see-HORT
‘Then let me see **you marrying him**!’ (LT19-39)

Subordinate clauses may be either finite or non-finite. Non-finite subordinate clauses are marked by converbs or participles and show morphological dependency (10.3), whereas finite subordinate clauses are analytically dependent with a subordinator. The following example (10.4) illustrates a finite embedded clause in Solon; the embedded clause is a first-person finite form derived from internal speech. The speech verb *kun-* ‘say’ functions as a

complementiser of the cognitive verb *pɔtɔ-* ‘think’, and a dependent marker of the finite subordinate clause.

(10.4) *ʧuː-tuː=l naː əmun ulxə əmun aːŋa-**mi** **kuŋ-kʰəːŋ** pɔtɔ-rɔ-ŋ.*
*juu-duu=l naa emun ulxe emun aaŋa-**mi** **guŋ-keeŋ** bodo-ro-ŋ.*
home-DAT=PTCL and one more one sleep-**1SG** **SAY-CVB** think-AOR-3
‘(The students) think of (=saying I will) sleeping one more day at their home.’ (LT11-57)

The third strategy: “-embedded +dependent” expressing coordination (or cosubordination) is also attested in Solon, although its status requires further clarification. In practice, a dependent clause that is not embedded can be difficult to distinguish from either coordination or subordination. This issue arises particularly in Solon converbial constructions headed by the coordinative converb and the connective converb, where the relationship between the linked clauses may be ambiguous, as illustrated in (10.5).

(10.5) *xaiʃi-tʊ-ni naːpʊː-**ʧʰi** ʊxʊn-ni təttʰəliː-ni xɔntʃʰɔk-sɔ kunəŋ*
xaisi-dʊ-ni naa-bʊʊ-ci ʊxʊn-ni dettelii-ni xoncog-so guneŋ
scissors-DAT-3 touch-PASS-**COOR.CVB** PH-3 wing-3 cut.off-PST hearsay
(a) ‘(The bird) was touched by the scissors **and** its wings were cut off.’
(b) ‘**Having** been touched by the scissors, (the bird)’s wings were cut off.’ (LT02-08)

To demonstrate that these converbial constructions express coordination rather than subordination, two morphosyntactic tests are employed. The first test concerns the insertion of the conjunctive adverb *taxi* ‘again, then’. Between clauses linked by coordinative and connective converbs, *taxi* can be freely inserted, indicating that the two clauses are coordinated. In (10.6), for example, five clauses are linked by the coordinative converb, and *taxi* occurs twice between adjacent clauses to explicitly mark their coordinating relationship. If the linked clauses were in a subordinating relation, such an insertion would not be expected. Indeed, in the Solon corpus, *taxi* never occurs between clauses linked by subordinating converbs. This observation is further supported by elicitation data: consultants judged the insertion of *taxi* between clauses linked by a subordinating converb to be unnatural. Example (10.7), in which a conjunctive word is inserted between clauses linked by the perfective converb, illustrates this unacceptability.

(10.6) *taxi* *tʰa-tʊːxi* *jəːmə* *ikkitʃʰi-jə* ***ka-ttʃʰi*** ***taxi*** *əri* *jəːmə=xəːl*
daxi *ta-dʊxi* *yeeme* *iggici-ye* ***ga-cci*** ***daxi*** *eri* *yeeme=xeel*
then DIST-ABL thing food-PTV get-**COOR.CVB** **then** PROX thing=PTCL

ka-ttʃʰi *əmkiː-**tʃʰi*** ***taxi*** *əkki-tʃʰi* *sun-tuːlə*
ga-cci *emgii-**ci*** ***daxi*** *eggi-ci* *sun-duule*
get-COOR.CVB return-**COOR.CVB** **then** turn-COOR.CVB 2PL.OBL-LOC

aːŋa-tʃʰi *ul-kʰiʃi* *pi-səː-mun* *ʃintʃə* *puːː*
aaŋa-ci *ul-kisi* *bi-see-mun* *sinje* *buu*
sleep-COOR.CVB go-HAB COP-PST-1PL.EXCL PTCL 1PL.EXCL

'Then we used to get the food and things from there, **then** we get these things, and return, **then** turn, sleep over at your house, and we leave.' (LT20-158)

(10.7) ***pəltir-wi*** *juː-kuː-**tʰəːn*** ***taxi*** *məːn-in* *pasa=l* *ukkʰə-tu*
beldir-wi *yuu-guu-**teen*** ***daxi*** *meen-in* *basa=l* *ukke-du*
foot-REFL.SG exit-CAUS-**PRF.CVB** **then** REFL-3 also=PTCL door-DAT

xuləː-ʃi-tʃi-rə-ŋ *kunəŋ*
xulee-si-ji-re-ŋ *guneŋ*
lie-STAT-PROG-AOR-3 hearsay

'***Having shown** its paw, **then** (the tiger) was still lying at the door.' (elicitation based on LT41-54)

The second test is based on negation. If two linked clauses are coordinated rather than subordinated, they can be negated independently, particularly in clause coordinations expressing temporal sequences. This property is also found in converbial constructions with the coordinative converb. In (10.8), the two clauses are linked by the coordinative converb, and only the finite clause is negated, demonstrating that the two clauses are coordinated.

(10.8) *tʰɔːtʃʰi* *ittʰu* *mukkulə:**-tʃʰi**=ttʰə* *tʰajja-pa* *pʰɔl*
tooci *ittu* *muggulee**-ci**-tte* *tayya-ba* *pol*
DIS.CONN how crush**-COOR.CVB**=PTCL DIST-DEF.ACC (break).off

mukkulə:-m ***ə**-ʃi-n* *ətʰə**-r*** *tʃaxa*
muggulee-m ***e**-si-n* *ete**-r*** *jaxa*
crush-CONN.CVB **NEG**-AOR-3 finish**-CONNEG** PTCL
'(The fox) hit that (tree), and he **wasn't able to** crush it down.' (LT01-41)

By contrast, this pattern is not possible in subordinate constructions expressing anterior relations. The analytical construction V-CONN.CVB COP-COOR.CVB represents a typical strategy for expressing anterior subordination (§8.3.2.6). In this construction, the main clause cannot be negated while leaving the anterior clause unchanged; otherwise, the subordinate clause cannot stand independently and the resulting sentence is judged ungrammatical, as illustrated in (10.9).

(10.9) *ukkʰə-niː-n* *tʰa-tʊ* *xulə:**-m*** ***pi-tʃtʃʰi**=l* ***ə**-ʃi-n*
ukke-nii-n *ta-dʊ* *xulee**-m*** ***bi-cci**=l* ***e**-si-n*
door-GEN-3 DIST-DAT lie**-CONN.CVB** **COP-COOR.CVB**=PTCL **NEG**-AOR-3

*ʊkkʰira:**-r*** *kunəŋ*
*ʊkkiraa**-r*** *guneŋ*
shout**-CONNEG** hearsay
'***Having** lie down at the door, (the tiger) **didn't shout**.' (elicitation based on LT41-10)

The connective converb *-mi* is primarily used to form complex predicates, although it can also function in clause coordination. The Solon corpus contains no examples suitable for applying either the conjunctive-adverb test or the negation test discussed above. Nevertheless, elicitation data show that the connective converb is fully compatible with the conjunctive adverb *taxi* 'again, then', as illustrated in (10.10).

(10.10) *ɔttʃʰilɔŋ* *attʰiti-tʊ* *tʰir-uː-**m*** ***taxi*** *pʊttʰiti-tʊ* *kəttʰi-tʃi-rə-ŋ*
occiloŋ *attidi-dʊ* *tir-uu-**m*** ***daxi*** *bʊttidi-tʊ* *getti-ji-re-ŋ*
universe dark-DAT press-PASS-**CONN.CVB** **then** cold-DAT freeze-PROG-AOR-3
'The universe was covered by dark, **then** is freezing by cold.' (elicitation based on LT38-15)

Thus, the remainder of the chapter is organized as follows. Section 10.2 examines coordination, Section 10.3-10.7 address subordination (including non-finite and finite types), and subsequent sections discuss the structural and functional properties of each construction.

10.2 Clause coordination

Clause coordination is a clause-linkage relation in which each clause makes an independent assertion and stands in a symmetric, non-dependent relationship with the others, with no clause functioning as conceptually subordinate or backgrounded. The clauses in coordination can be either dependent or independent. Dependent clause coordination is also called cosubordination (Foley and Van Valin 1984:241–2).

Solon has both independent and dependent clause coordination. Independent coordination is marked either juxtaposition or by coordinators, but it is not commonly used. The dependent clause coordination is dominant in Solon, where the coordinated clauses are linked by converbs. The dependent coordination is not only used in the coordination of two clauses, but also coordination of more than two clauses, a sentence type that is called clause chaining. Givón (2001: 356-357) contrasts clause chaining in SOV and SVO languages: in the former, the finite clause is chain-final; in the latter, the finite clause is chain-initial. Although chain-initial finiteness has been described as rare (Payne 1997: 321) or non-existent (Longacre 1985: 264), it is a widespread feature in the Niger-Congo phylum and various Chadic languages, such as Bambara (Creissels & Good 2018: 204).

Solon, as an SOV language, exhibits SOV-type clause chaining. A sequence of events is expressed through juxtaposed clauses whose predicates are marked with converbs, with only the final verb appearing in a finite form, the clauses in a chain are dependent but not embedded.

This section first introduces the semantic types of clause coordination and their manifestation in Solon (§10.2.1). Then, it describes clause coordination structurally, dividing it into independent clause coordination (expressed through juxtaposition and coordinators) (§10.2.2) and dependent clause coordination (clause chaining, expressed through converbs) (§10.2.3).

10.2.1 The semantics of coordination

Semantically, there are three types of coordination (Haspelmath 2004:3): conjunction (and' coordination) (§10.2.1.1), disjunction ('or' coordination) (§10.2.1.2), and adversative coordination (but' coordination) (§10.2.1.3). Another semantic relation is 'otherwise' relation, with the coordinator *əʃikʰi* 'otherwise' combining two clauses (§10.2.1.4)

10.2.1.1 Conjunctive relation

In the Solon, the conjunctive relation can be expressed by juxtaposition (§10.2.2.1), coordinators (§10.2.2.2), or converbs (§10.2.3). See example (10.11), which illustrates coordination through juxtaposition.

(10.11) *[...] pɔŋkɔŋ mɔkɔi əmun amisxaːra-ŋ əmun ərkəːrə-ŋ.*
[...] boŋgoŋ mogoi emun amisxaa-ra-ŋ emun ergee-re-ŋ.
big snake one inhale-AOR-3 one exhale-AOR-3
'The python inhaled once **and** exhaled once.' (LT07-16)

10.2.1.2 Disjunctive relation

Solon lacks a dedicated disjunctive coordinator. It can be expressed through alternative questions, see example (10.12). The discussion of alternative questions is addressed in detail in §9.2.3.

(10.12) *[...]* *pʊkkʰʊŋ* *ɔː-tʃi-mi* *kʰə* *jum* ***kuː*** *ʊxʊn*
[...] *bʊkkʊŋ* *oo-ji-mi* *ke* *yum* ***guu*** *ʊxʊn*
buddha become-PROG-1SG PTCL DECL.PTCL **Q** what

ɔː-tʃi-mi *kʰɔ* *jum* ***kuː****?*
oo-ji-mi *ko* *yum* ***guu****?*
become-PROG-1SG PTCL DECL.PTCL **Q**
'Am I becoming a Buddha **or** am what am I becoming?' (LT07-09)

10.2.1.3 Adversative relation

Adversative coordination is not universal, and its grammaticalization and expression vary significantly across languages (Haspelmath 2007: 49). In Solon, one adversative coordinator, *kəjə*, appears to convey the meaning 'but'. However, this form appears to be a borrowing from Mongolian *kətʰəl/kəjə/kəpətʃʰ* 'but', and this adversative coordinator occurs only twice in the text of a single speaker (no example is provided because neither of the two examples is ideal). Therefore, I analyze that Solon lacks a dedicated adversative coordinator. Adversative relations are usually inferred from context, as in (10.13), where juxtaposed clauses receive an adversative interpretation, while in (10.14) coordination is overtly marked by *taxi* 'again', which nevertheless conveys an adversative meaning.

(10.13) *ɔː* *ʃi* *suxə-wi* *əppu-nti* *amakkʰʊn* *ʧawal* *min-i*
oo *si* *suxe-wi* *ebbu-ndi* *amakkʊn* *jawal* *min-i*
INTERJ 2SG axe-REFL.SG take.away-2SG easy must 1SG.OBL-GEN

əmun *ʊtʃʰiriː-wə* *puttʰə-mi* *puː-mi* *xərək-tʃʰeː*
emun *ʊcirii-we* *butte-mi* *buu-mi* *xereg-cee*
one affair-DEF.ACC complete-CONN.CVB give-CONN.CVB needs-PROP
'It is easy for you to take away your axe, **but** you must accomplish one thing for me.' (LT28-07)

(10.14) *innəkəːŋ atta-mi,* ***taxi*** *ɔltʃi ʊxʊn pi-ʃi-n xui.*
innegeeŋ adda-mi, ***daxi*** *olji ʊxʊn bi-si-n xui.*
INT.QLT be.happy-1SG **again** profit what COP-AOR-3 MIR
'(I was) so happy, **and then/but** what are the profits there?' (LT29-103)

10.2.1.4 Otherwise relation

The coordinator *əʃikʰi* 'otherwise' introduces a special type of relation between clauses, referred to here as the otherwise relation, see example (10.15-10.16). The form of coordinator *əʃikʰi* appears to be historically derived from the negative auxiliary plus a conditional converb, i.e., NEG-AOR-COND.CVB, literally means 'if not'. Note that the form *-ʃi-* occurs with the conditional converb only in conjunction with the negative auxiliary. Since *-ʃi-* is identical to the aorist tense form of the negative auxiliary it is analyzed as such here, even though its precise status requires more investigation (9.1.1.3.1).

(10.15) *karki-ni tʃittən-təli-ni na əmun ʊta mʊsʊː-ra-ŋ,* ***əʃikʰi***
gargi-ni jidden-deli-ni na emun ʊda mʊsʊʊ-ra-ŋ, ***esiki***
week-GEN middle-PROL-3 also one time return-AOR-3 **otherwise**

sɔŋɔ-rɔ-ŋ iː-ra-ŋ.
soŋo-ro-ŋ ii-ra-ŋ.
cry-AOR-3 INT-AOR-3
'(The students) return (home) once during the weekdays, **otherwise** they would cry or something like that.' (LT11-53)

(10.16) *ʊtʃikiː-tʊ-ni puː əmun ʊtaː ɔː-mʊn taxi,* ***əʃikʰi***
ʊjigii-dʊ-ni buu emun ʊdaa oo-mʊn daxi, ***esiki***
afterwards-DAT-3 1PL.EXCL one time do-1PL.EXCL again **otherwise**

ə-ʃi-n ɔː-tɔ.
e-si-n oo-do.
NEG-AOR-3 become-CONNEG
'Afterwards, we do (the cleaning) again one more (for the students), **otherwise** it is not acceptable.' (LT11-91)

10.2.2. Independent clause coordination

10.2.2.1 Asyndetic: Juxtaposition

In Solon, clause coordination can be expressed through simple juxtaposition, a strategy also referred to as asyndetic coordination (Haspelmath 2000: 7; 2004: 4). In such constructions, two finite clauses appear sequentially without an overt coordinator, and their relationship is often inferred through intonation, pause, or contextual cues. This type of coordination typically indicates either temporal succession (10.17-10.18) or event overlaps (10.19). In (10.18), the latter clause is a non-verbal predicate without an over copula verb.

(10.17) *ilan-xin* *ʊtaː* *əm-səː* *əʃi* *nɛːnxin* *aliː-sa*
ilan-xin *ʊdaa* *em-see* *esi* *nɛːnxin* *alii-sa*
three-ORD time come-PST now dog be.angry-PST
'(The bird) came for the third time, **and** now the dog was angry.' (LT05-27)

(10.18) *əjjə* *amma-wəjə* *əttu* *tʰuːpʰ* *mʊnta-sa,* *əʃi* *tʰari-n*
eyye *amma-weye* *eddu* *tuup* *mʊnda-sa,* *esi* *tari-n*
PROX mouth-DEF.ACC.1SG PROX.ADV ONOM hit-PST now DIST-3

jantʃi-ʃi.
yanji-si.
appearance-PROP
(They) hit my lips here, **and** (my lips) still have that look now.' (LT34-70)

(10.19) *tʰari* *ərin-tu* *katʃʰa-ja* *aːʃin* *pi-sə,* *paka* *ɔː-sɔː* *pi-sə.*
tari *erin-du* *gaca-ya* *aasin* *bi-se,* *baga* *oo-soo* *bi-se.*
DIST time-DAT village-PTV NEG COP-PST group become-PFV.PTCP COP-PST
'At that time, there were no villages, **and** (people) gathered in groups.' (LT30-12)

10.2.2.2 Syndetic: coordinating with conjunctive words

Solon also employs syndetic coordination, where one or more coordinating elements (e.g., conjunctive adverbs) explicitly mark the relationship between clauses (Haspelmath 2004: 4; 2007: 7). However, such coordinators are relatively rare in Solon. There are two coordinators: the conjunctive coordinators *taxi* 'again, then' and *əʃikʰi* 'otherwise', which expresses an otherwise relation. The coordinator *əʃikʰi* 'otherwise' is already discussed in semantic relation section (§10.2.1.4), it won't be repeated here.

The coordinator *taxi* 'again, then' functions to indicate a coordinate relationship between clauses. The function of *taxi* 'again, then' expressing coordination is difficult to distinguish from its use as a discourse connector, tentatively I analyze *taxi* 'again, then' as coordinator, but establishing the basic distinction between conjunctive function and discourse connector function is needed[14].

It is important to note that the presence of the coordinator *taxi* 'again, then' is not obligatory, the coordinating relation is still established without it as juxtaposition in Solon can also express coordination (as juxtaposition §10.2.2.1). Its presence may clarify the temporal or additive relation between events.

(10.20) *tʰukə* *ɔː-sɔː=l* ***taxi*** *mitʰə* *ʊxʊn-pal* *əkkəː_tʃuː-wəl*
tuge *oo-soo=l* ***daxi*** *mite* *ʊxʊn-bal* *eggee_juu-wel*
winter become-PST=PTCL **again** 1PL.INCL PH-REFL.PL yurt-REFL.PL

namat-laː-ra-ŋ
namad-laa-ra-ŋ
warm-VBZ-AOR-3[15]
'It became winter, **and** we would warm up our yurts.' (LT20-110)

(10.21) *innəkəːŋ* *atta-mi,* ***taxi*** *ɔltʃi* *ʊxʊn* *pi-ʃi-n* *xui.*
innegeeŋ *adda-mi,* ***daxi*** *olji* *ʊxʊn* *bi-si-n* *xui.*
INT.QLT be.happy-1SG **again** profit what COP-AOR-3 PTCL
'(I was) so happy, **and then/but** what are the profits there?' (LT29-103)

[14] I would like to express my acknowledgement to Denis Creissels for pointing out the use of the discourse connector *taxi* 'again, then'.

[15] In this example there is a mismatch between the first-person plural subject and the third-person verbal agreement.

10.2.3 Dependent clause coordination (Clause chaining)

Dependent clause coordination is more dominantly used in Solon than independent coordination. Two converbs are used in clause coordination: the coordinative converb *-tʃʰi* and the connective converb *-mi*. However, an analysis of their frequency in the narrative data (from the reduced corpus) reveals a functional differentiation (Table 10-1). The clause coordination is predominantly marked by the coordinative converb *-tʃʰi*, with a frequency of 78.2%. The connective converb *-mi* can be used as a coordinating device, but its main usage is in forming complex predicates, which the portion of 63.7% complex predicates is marked by connective converb. For a detailed comparison of these two converbs refer to §6.5.1.3.

Table 10-1 The frequency of coordinating and complex predicate functions of the coordinative converb *-tʃʰi* and the connective converb *-mi* (in the reduced corpus)

	coordinative converb *-tʃʰi*	connective converb *-mi*
coordination	**78.2%** (294)	21.8% (82)
complex predicates	36.3% (118)	**63.7%** (207)

10.2.3.1 Coordinative converb *-tʃʰi* expressing coordination

The coordinative converb *-tʃʰi* is thus the main strategy in Solon for expressing dependent clause coordination. Semantically, coordination marked by *-tʃʰi* most commonly indicates temporal succession (10.22-10.23). The dependent coordination in Solon is not restricted to same-subject clauses, but clauses with different subjects can also be coordinated (10.24).

(10.22) *tʰimaːʃin əttə-ni əʃi juː-**tʃʰi**=l əjjə ultə-wi*
*timaasin edde-ni esi yuu-**ci**=l eyye ulde-wi*
tomorrow morning-3 now exit-**COOR.CVB**=PTCL PROX meat-REFL.SG

iʃi-nəː-sə kunəŋ.
isi-nee-se guneŋ.
see-AM-PST hearsay
'The next morning, (the boy) went outside **and** went to see his meat.' (LT08-61)

(10.23) *kə* *ʃaŋnal-wi* ***ka-ttʃʰi*** *kə* *əmkiː-su*
ge *saŋnal-wi* ***ga-cci*** *ge* *emgii-su*
PTCL award-REFL.SG take-**COOR.CVB** PTCL go.back-PST.1SG

tʃuː-t-i.
juu-d-i.
home-DAT-REFL.SG
'I took my award, **and** I went back home.' (LT09-40)

(10.24) *tʰɔːtʃʰi=l* *əmun* *inək-niː=l* *tʃuːr* *xitʃʰəːl* *ɔː-**tʃʰi***
tooci=l *emun* *ineg-nii=l* *juur* *xiceel* *oo-**ci***
DIS.CONN=PTCL one day-3=PTCL two class make-**COOR.CVB**

oːntʰo *oːntʰo* *xitʃʰəːl* *ʃilpa-mi* *puː-ra-ŋ* *mun-tu.*
өөntө *өөntө* *xiceel* *silba-mi* *buu-ra-ŋ* *mun-du.*
other other class teach-COOR.CVB give-AOR-3 1PL.EXCL-DAT
'Then we have two classes a day **and** (the teacher) teaches us different lessons.' (LT23-08)

The coordinative converb *-tʃʰi* also plays a central role in clause chaining, where a sequence of events is presented in narrative flow. While clause chaining typically represents a series of temporally ordered events (10.25-10.26), it can also serve different semantic meanings, such as presenting simultaneous actions to describe one event from different aspects: in (10.27) the second coordinative converb links the two clauses '…(she) terribly longed and dropped her drool…' to describe one events from both an emotional and a physiological perspective.

(10.25) *tʰɔː-tʃʰi* *ətʰxəːŋ-ni* *satti-tʃi-wi* *tʃuːr-i* *ultə-wi*
too-ci *etxeeŋ-ni* *saddi-ji-wi* *juur-i* *ulde-wi*
DIST-COOR.CVB old.man-3 old.lady-INS-REFL.SG two-COLL meat-REFL.SG

*əppu-**tʃʰi*** *satti-wi* *tʰul-ləː-ʃixi* *ana-**tʃʰi*** *tʃuː-tu*
*ebbu-**ci*** *saddi-wi* *tul-lee-sixi* *ana-**ci*** *juu-du*
bring-**COOR.CVB** old.lady-REFL.SG out-LOC-ADV.ALL push-**COOR.CVB** house-DAT

ə-mi	*iː-kuː-r*	*ukkʰə-wi*	*əxutʃʰi-tʃi-ni*
e-mi	*ii-guu-r*	*ukke-wi*	*exuci-ji-ni*
NEG-CONN.CVB	enter-CAUS-CONNEG	door-REFL.SG	cow.leather-INS-3

*utə-**tʃʰi***	*satti-wi*	*ə-mi*	*iː-kuː-r*
*ude-**ci***	*saddi-wi*	*e-mi*	*ii-guu-r*
sew.leather-**COOR.CVB**	old.lady-REFL.SG	NEG-CONN.CVB	enter-CAUS-CONNEG

satti-wi	*ukʰ-kʰəːn-tʃʰə*	*kunəŋ.*
saddi-wi	*uk-keen-ce*	*guneŋ.*
old.lady-REFL.SG	go-CAUS-PST	hearsay

'Then the old man brought his meat with his wife, **and** he pushed his wife outside, and he didn't let his wife enter the door, **and** he sewed the door with cow leather, and didn't let his wife enter, **and** made her go.' (LT04-06)

(10.26)

[...]	*tʰɔkɔ-ni*	*ɔrɔːn-tʊ-ni*	*mɔː-jɔ*	*eːwa-**tʃʰi***	*uku-**tʃʰi***
[...]	*togo-ni*	*oroon-dʊ-ni*	*moo-yo*	*eewa-**ci***	*ugu-**ci***
	pot-GEN	top-DAT-3	log-PTV	add-**COOR.CVB**	blow-**COOR.CVB**

*tʰəŋkʰiː-**tʃʰi***	*kɔːlin*	*ʊtʊrʊː-wi*	*nʊnʊm*	*sʊːŋiː-**tʃʰi***
*teŋkii-**ci***	*goolin*	*ʊdʊrʊʊ-wi*	*nʊnʊm*	*sʊʊŋii-**ci***
make.fire-**COOR.CVB**	brass	lips-REFL.SG	long	extend-**COOR.CVB**

ʊtrʊː-wi	*ʊliː-kaː-sa*	*kunəŋ.*
ʊdrʊʊ-wi	*ʊlii-gaa-sa*	*guneŋ.*
lips-REFL.SG	turn.red-CAUS-PST	hearsay

'(The ghost) added logs to the fire (lit. pot), blew **and** made fire, **and** she extended her lips long (towards the fire), **and** made her lips turned red.' (LT40-38)

(10.27)

əmun	*ərin*	*xarin*	*tʰɔːl*	*xakki*	*axaː-niː-wi*		*ɔsxɔːŋ*
emun	*erin*	*xarin*	*tool*	*xaggi*	*axaa-nii-wi*		*osxooŋ*
one	time	MIR	rabbit	pheasant	elder.brother-GEN-REFL.SG		fish

tʃitʃ-tʃi-r-wə-ni	*iʃi-**tʃʰi***	*turun_aːʃin*	*əjəːʃi-**tʃʰi***
jij-ji-r-we-ni	*isi-**ci***	*durun_aasin*	*eyeesi-**ci***
eat-PROG-IPFV.PTCP-DEF.ACC-3	see-**COOR.CVB**	very	long.for-**COOR.CVB**

ʃilsuː-nin	*sʊkki-**tʃʰi***	*xakki*	*axaː-tʰxiː-wi* *[...]*
silsuu-nin	*sʊggi-**ci***	*xaggi*	*axaa-txii-wi* *[...]*
saliva-3	drop-**COOR.CVB**	pheasant	elder.brother-ALL-REFL.SG

'Once the rabbit saw her pheasant brother's eating fish, **(she) terribly longed and dropped her drool** and (said) to her pheasant brother…' (LT06-03)

In Solon, clause coordination marked by converb is also used for reformulation or addition of supplementary information, technically this case there is only one event. The (10.28) illustrates self-correction expressed with a coordinative converb in the coordination of two clauses. The preceding clause describes people making buns, while the following clause specifies 'rather many buns.'

(10.28)

əmun	*pɔːtʃi*	*ɔː-**tʃʰi***		*əmun*	*nilәːŋ*	*pɔːtʃi*	*ɔː-rɔ-ŋ*
emun	*booji*	*oo-**ci***		*emun*	*nileeŋ*	*booji*	*oo-ro-ŋ*
one	bun	make-**COOR.CVB**		one	rather	bun	make-AOR-3

'People used to make buns (during New Year), **make rather many buns**.' (LT02-12)

Also, in example (10.29), the final coordinative converb *-tʃʰi* (bold and underlined in the example) is used for reformulation. The speaker initially intended to say 'let (the patient) go out from the operating table nicely,' but at first omitted (likely forgot) to mention 'operating table.' The sentence was stopped at the coordinative converb, after which the speaker rephrased the entire sentence, this time including 'operating table.'

(10.29) *tʰɔːtʃʰi* *ulti-**tʃʰi*** *xɔkkʰɔ* *ətʰə-**tʃʰi*** *xɔkkʰɔ* *tɔːn-pɔ-ni*
tooci *uldi-**ci*** *xokko* *ete-**ci*** *xokko* *doon-bo-ni*
DIS.CONN sew-**COOR.CVB** all finish-**COOR.CVB** all wound-DEF.ACC-3

*lattʰʊ-kaː-**tʃʰi*** *kɔjɔ-tʃi* *juː-kuː-**tʃʰi*** *kɔjɔ-tʃi*
*lattʊ-gaa-**ci*** *goyo-ji* *yuu-guu-**ci*** *goyo-ji*
be.wrap-VL-**COOR.CVB** beautiful-INS exit-CAUS-**COOR.CVB** beautiful-INS

ʃəwʃutʰai-tʰxi *juː-kuː-mun.*
sewsutai-txi *yuu-guu-mun.*
operating.table-ABL exit-CAUS-1PL.EXCL

'Then we suture, finish, and bandage all the wounds, **and let (the patient) go out nicely… let (the patient) out of the operating table nicely**.' (LT39-24)

10.2.3.2. Connective converb *-mi* expressing coordination

Although the connective converb *-mi* can express coordination and clause chaining, its usage is less widespread and exhibits speaker-specific tendencies. In particular, nearly half of all occurrences (44/82) of *-mi* in coordination (including clause chaining, from the reduced corpus) contexts come from a single speaker. Despite this skewed distribution, the construction is grammatically accepted by other Solon speakers, indicating that while its use is idiosyncratic, it is still within the bounds of shared grammar. Clause coordination linked by the connective converb tends to express an overlapping event (10.30-10.31).

(10.30) *[...]* *ɔttʃʰilɔŋ* *attʰita-tʊ* *tʰir-uː-**m*** *pʊttʰita-tʊ*
[...] *occiloŋ* *attida-dʊ* *tir-uu-**m*** *bʊttida-dʊ*
universe darkness-DAT press-PASS-**CONN.CVB** cold-DAT

kəttʰi-tʃi-rə-ŋ *kʰuŋ.*
getti-ji-re-ŋ *kuŋ.*
freeze-PROG-AOR-3 MIR

'The universe is covered by darkness **and** is freezing by cold.' (LT38-15)

(10.31) *tʰuli-li* *tʰəxəːrə-**mi*** *naŋ* *attar-tʃʰi* *ukʰ-kʰəʃi* *əntʰə* *ki=kə?*
tuli-li *texeere-**mi*** *naŋ* *addar-ci* *uk-kesi* *ente* *gi=ge?*
outside-PROL stroll-**CONN.CVB** also box-PROP go-HAB NEG Q=PTCL
'(I) walked around outside **and** also had to hold the (poll) box, didn't I?' (LT31-04)

The connective converb *-mi* can occur in clause chaining, but again it is less frequent than the coordinative converb *-tʃʰi*. Semantically, it can express temporal sequences (10.32) and event overlap (10.33). As the coordinative converb and connective converb both have clause chaining functions, they can be used in a single clause chaining structure (10.34).

(10.32) *xasaŋ* *xaːn* *paran-kʊ* *xaːlt-ʰwə* *tʃatta* *pʰuslaː-**mi***
xasaŋ *xaan* *baran-gʊ* *xaald-ʰwe* *jadda* *puslee-**mi***
PN emperor west-ADJ gate-DEF.ACC OMON kick-**CONN.CVB**

ʊnaːtʃi-wi *xumli-**m*** *məːn-i* *tʃuː-tu-wi*
ʊnaaji-wi *xumli-**m*** *meen-i* *juu-du-wi*
daughter-REFL.SG hug-**CONN.CVB** REFL-GEN house-DAT-REFL.SG

*iː-kuː-**m*** *xulə-xəːn-tʃʰə.*
*ii-guu-**m*** *xule-xeen-ce.*
enter-**CAUS-CONN.CVB** lie-CAUS-PST

'The Hasang emperor kicked (open) the west gate, **and** hugged his daughter, **and** made her enter his room, **and** made her lie down.' (LT38-38)

(10.33) *tʰɔː-tʃʰi=l* *pʊkkʰʊŋ* *tʰəŋkər* *nitʃikinəː-**m*** *ʊtʊn* *tʰʊkkʰʊ-**m***
too-ci=l *bʊkkʊŋ* *teŋger* *nijiginee-**m*** *ʊdʊn* *tʊkkʊ-**m***
DIS.CONN=PTCL buddha sky thunder-**CONN.CVB** rain rain-**CONN.CVB**

talai *ujərləː-tʃʰi* *ur_xataːr-ni* *əttuː-**m*** *turun_aːʃin* *ajʊːl*
dalai *uyerlee-ci* *ur_xadaar-ni* *edduu-**m*** *durun_aasin* *ayʊʊl*
sea surge-COOR.CVB mountains-3 break-**CONN.CVB** very danger

juː-sə *kunəŋ.*
yuu-se *guneŋ.*
exit-PST hearsay

'Then it thundered **and** rained, and the sea surged, **and** the mountains collapsed, a great danger occurred.' (LT42-21)

(10.34)

tʰa-tʊːxi	*ama-sxi*	*tʰɔːl*	*əjjə*	*kɔjɔ*	*ikki-wi*	*taxi*	*ʊtʃiki:ta*
ta-dʊʊxi	*ama-sxi*	*tool*	*eyye*	*goyo*	*iggi-wi*	*daxi*	*ʊjigiida*
DIST-ABL	back-ADV.ALL	rabbit	PROX	beautiful	tail-REFL.SG	again	afterwards

katʃi-kiː-m	*ətʰə-(r)-pi*	*ʊti-**tʃʰi***	*xakki*
gaji-gii-m	*ete-(r)-bi*	*ʊdi-**ci***	*xaggi*
take-ITER-CONN.CVB	finish-IPFV.PTCP-REFL.SG	be.no.more-**COOR.CVB**	pheasant

axaː-ni	*məxə-tə-ni*	*iː-səː-wi*	*saː-**tʃʰi***	*tʰɔːtʃʰi*
axaa-ni	*mexe-de-ni*	*ii-see-wi*	*saa-**ci***	*tooci*
brother-GEN	trick-DAT-3	enter-PFV.PTCP-REFL.SG	know-**COOR.CVB**	DIST.CONN

tʰa-tʊːxi	*ama-ʃxi*	*tʰɔːl-ni*	*kɔjɔ*	*nantaːxaŋ*	*nʊnʊm*	*ikki-ni*
ta-dʊʊxi	*ama-sxi*	*tool-ni*	*goyo*	*nandaaxaŋ*	*nʊnʊm*	*iggi-ni*
DIST-ABL	back-ADV.ALL	rabbit-GEN	beautiful	beautiful	long	tail-3

ʊkkʊ-m	*ə-**mi***	*ətʰə-r*	*taxi*	*tʰannaːŋ*	*ɔttɔːr*
ʊggʊ-m	*e-**mi***	*ete-r*	*daxi*	*tannaaŋ*	*oddoor*
grow-CONN.CVB	NEG-**CONN.CVB**	finish-CONNEG	again	DIST.QLT	short

ikkə-ʃi	*ɔː-sɔ*	*kunəŋ.*
igge-si	*oo-so*	*guneŋ.*
tail-PROP	become-PST	hearsay

'After that, the rabbit was unable to take back her long tail **and** she realized she had been tricked by the pheasant brother, **and** after that, the rabbit's long tail never grew back, **and** she was left with a short tail.' (LT06-11)

10.3 Complement clauses

A complement clause functions to fill an argument position of a predicate with a notional proposition or predication (Noonan 2007: 52). Two principal types of complement clauses are generally distinguished: subject complement clauses and object complement clauses. Complement clauses may be either finite or non-finite; the present section is concerned exclusively with non-finite complement clauses, while finite complement clauses are discussed separately in §10.7.2.2.

In Solon, non-finite complement clauses are characterized by participial predicates. The morphosyntactic marking of the participle reflects the syntactic role of the complement clause in the matrix clause: when the complement clause functions as a direct object, the participial predicate is marked accordingly, whereas when the complement clause functions as a subject, it remains unmarked (nominative).

The embedded subject of the complement clause may be marked either by genitive or nominative case (§10.6.2.1), and the issue of presence or absence of cross-reference markers in complement clauses has already been discussed in §10.6.2.2).

Complement clauses are relatively infrequent in the Solon corpus, and consequently only a limited set of predicates is attested with this construction. All predicates that occur with complement clauses in Solon corpus are discussed in this section. Section §10.4.1 examines subject complement clauses, §10.4.2 addresses non-subject complements clauses.

10.3.1 Subject complement clauses

In Solon, subject complement clauses occur with a small set of non-verbal predicates (10.35), typically expressing evaluative meanings such as ‘good’, ‘difficult’, or ‘beautiful’.

(10.35)

aja	‘good, nice’	*manti*	‘hard’
aya		*mandi*	
əru	‘bad’	*amakkʰʊŋ*	‘easy’
eru		*amakkʊŋ*	
kɔjɔ	‘beautiful’	*namat*	‘warm’
goyo		*namad*	
tʰukkəŋ	‘fast’	*paraaŋ*	‘many’
tuggeŋ		*baraaŋ*	
ʧatʃiŋ	‘nasty’		
jajiŋ			

Subject complement clauses occur only with the *aja* ‘good, nice’, *manti* ‘hard’ and *kɔjɔ* ‘beautiful’ in Solon corpus, rest of the predicates are elicited. In all corpus-attested examples, subject complement clauses are impersonal or involve a non-specified subject, either generic (10.36) or non-referentially personal (10.37). Although the construction permits a personal, specific, and overt embedded subject, such cases are only found in elicited examples (10.38). When an experiencer argument is involved in subject complement constructions, it is marked by the dative case, as illustrated in (10.39).

(10.36) *tʰɔːtʃʰi* *ʃawar* *juː-kuː-**r*** ***manti**.*
tooci *sawar* *yuu-guu-**r*** ***mandi**.*
DIS.CONN mud go.out-CAUS-**IPFV.PTCP** **hard**
‘Then **moving** the mud outside (make the mud go out) is **hard**.’ (LT18-67)

(10.37) *tʰɔːtʃʰi* *nəitʰə-tʃi-wi* *ɔː-**r*** *ittʰu* ***kɔjɔ*** ***pi**-sə.*
tooci *neite-ji-wi* *oo-**r*** *ittu* ***goyo*** ***bi**-se.*
DIS.CONN public-INS-REFL.SG make-**IPFV.PTCP** how **nice** **COP**-PST
‘Then **(our) working** all together was how **nice**!’(LT17-34)

(10.38) *ʃin-iː* *tʰannaːŋ* *tʃintʃi-**r**-ʃi* *unəŋ* ***tʃatʃiŋ***
sin-ii *tannaaŋ* *jinji-**r**-si* *uneŋ* ***jajiŋ***
2SG.OBL-GEN DIS.QLT say-**IPFV.PTCP**-2SG really **nasty**
‘The way you said was really nasty.’ (elicited)

(10.39) *aːtʃʰik* *ɔː-**r*** *ʃin-**tu*** *amakkʰʊŋ*
aacig *oo-**r*** *sin-**du*** *amakkʊŋ*
cheese make-**IPFV.PTCP** 2SG.OBL-**DAT** easy
‘Making cheese is easy for you.’ (elicited)

10.3.2 Non-subject complement clauses

In Solon, complement clauses occur in non-subject argument positions, functioning not only as objects but also as other complements, such as the stimulus of predicates like 'fear'. In this reason, the term non-subject complement clauses are used in this study.

Non-subject complement clauses are more diverse in terms of the predicates that license them. In Solon corpus, object complement clauses occur with the following predicate types:

- cognitive predicates: *saː-* 'know', *pɔtɔ-* 'think', ɔmmɔ- 'forget', *tʰatʰi-* 'learn'
- perceptional predicates: *iʃi-* 'see', *tɔːltɔ-* 'hear'
- emotional verbs/predicates: *nəːli-* 'afraid
- other: *kɔlli-* 'manage', *ala-* 'wait'

In the prototypical pattern, object complement clauses are encoded as accusative case, functioning as the direct object of the matrix predicate (10.40-10.42). This pattern is observed with cognitive, perceptual, and several other predicates.

(10.40) *əm-**sə**-wi* *nənu-**sə**-wi*
*em-**se**-wi* *nenu-**se**-wi*
come-**PFV.PTCP-REFL.SG** **know**-1SG return-**PFV.PTCP**-REFL.SG

ə-ʃi-mi ***saː**-ra.*
e-si-mi ***saa**-ra.*
NEG-AOR-1SG **know**-CONNEG
'I remembered (lit. know) my coming, I don't remember my returning back.' (LT34-06)

(10.41) *(sʊlxi) […]* *əmun* *saːtʃiki* *əjjə* *mɔːn-i* *ɔrɔːn-tʊ-ni* *uːɣi*
(sʊlxi) […] *emun* *saajigi* *eyye* *moon-i* *oroon-dʊ-ni* *uuɣi*
fox one magpie PROX tree-GEN above-DAT-3 nest

*ɔː**-sɔː-wɔ**-ni* ***iʃi**-m* *pax-sa* *kunəŋ*
*oo**-soo-wo**-ni* ***isi**-m* *bax-sa* *guneŋ*
make-**PFV.PTCP-DEF.ACC**-3 **see**-CONN.CVB get-PST hearsay
'The fox saw that one magpie made a nest on this tree.' (LT01-04)

(10.42) *ʃiwuŋ ʊnaːtʃi […] məːn-i ʊsʊna-**r-pi** ə-ʃi-n*
*siwuŋ ʊnaaji […] meen-i ʊsʊna-**r-bi** e-si-n*
sun girl REFL-GEN be.tired-**IPFV.PTCP-REFL.SG** NEG-AOR-3

kɔlli-r […]
golli-r […]
manage-CONNEG

'The sun girl ignored her tiredness.' (lit. 'The sun girl didn't manage her being tired.') (LT38-11)

The emotional predicate *nəːli-* 'afraid' takes different valency pattern: ablative case marked complement clause (10.43).

(10.43) *xasaŋ xaːn ʊnaːtʃi-wi […] pəjə-nin ʊsʊnʊ-m*
xasaŋ xaan ʊnaaji-wi […] beye-nin ʊsʊnʊ-m
PN emperor daughter-REFL.SG body-3 be.tired-CONN.CVB

*kəntʰə-**r-tʰxiː**-n nəːlə-mi […]*
be.killed-**IPFV.PTCP-ABL**-3 afraid-CONN.CVB

'Hasan emperor is **afraid** that his daughter's (body) will get tired, and she will be killed (by an accident).' (LT38-07)

10.4 Adnominal clauses

Adnominal clauses form a constituent with the head noun they modify and correspond to what are widely known as noun-modifying clause constructions (NMCCs) (Matsumoto et al. 2017: 3). In Solon, predicates in adnominal clauses are marked with participial morphology: the imperfective participle-*r(A)* and the past (perfect) participle -*tʃʰAː/-sA*. These two participles are distinguished by tense-related semantics, indicating whether the event encoded in the modifying clause is ongoing or prior to the reference time.

Adnominal clauses exhibit a wide range of grammatical and semantic relationships with the head noun. Matsumoto et al. (2017: 5-7) propose three major construction types: argument

NMCCs, adjunct NMCCs, and extended NMCCs. The first two correspond to canonical relative clauses, and the extended NMCC has three subtypes:

- argument NMCC: the head noun is coreferential with an argument of the modifying clause, '*the student who bought the book*'.
- adjunct NMCC: the head noun is coreferential with an adjunct in the clause, '*the store where the student bought the book*'.
- the extended NMCC involves other semantic relations between the head noun and the clause, including:
    - frame NMCC, the head noun fills a frame-related semantic role other than argument/adjunct, '*the money with which the student bought the book*'.
    - content noun NMCC, the clause expresses the content of the head noun, '*the news that the student bought a book*'.
    - relational/perceptional noun NMCC, the head noun expresses a relational/perceptual notion characterized by the clause, '*the change from buying a book*'.

Creissels (2019) argues that frame NMCCs should be subsumed under relative clauses. Rather than restricting relative clauses to cases where the head noun is an argument or adjunct, he proposes a broader criterion: the relative clause serves to identify the referent of the head noun by providing information sufficient to retrieve its role.

Meanwhile Creissels's (2019) terminology is also different from Matsumoto et al. (2017), see Table 10-2 for a comparison of the adnominal clauses of Matsumoto& al. 2017 and Creissels 2019.

Table 10-2: Comparison of classification and terminology of adnominal clauses

<table>
<tr><th colspan="2">Matsumoto et al. 2017</th><th>Creissels 2019</th></tr>
<tr><td colspan="2">argument noun modifying clause construction (NMCCs)</td><td rowspan="3">participational adnominal clauses (relative clauses in this study)</td></tr>
<tr><td colspan="2">adjunct NMCCs</td></tr>
<tr><td rowspan="3">extended NMCCs</td><td>frame NMCCs</td></tr>
<tr><td>content noun NMCCs</td><td>equative adnominal clauses</td></tr>
<tr><td>relational noun NMCCs</td><td>relational adnominal clause</td></tr>
</table>

In this study, I adopt Creissels's (2019) classification, with the terminological modification of referring to his participational adnominal clauses as relative clauses. In the Solon corpus, relative clauses and equative adnominal clauses are both attested; relational adnominal clauses are not. In addition, adnominal clauses may occur without an overt head noun. In such headless adnominal clauses, the participial clause fills the full argument function that would otherwise be played by the head noun. Accordingly, the types of adnominal clauses recognized in Solon are as follows:

- Relative clauses:
  Argument relative clauses
  Adjunct relative clauses
  Frame relative clauses
- Equative adnominal clauses
- Headless adnominal clauses

The structure of this chapter is organized as follows. §10.4.1 introduces the adnominal participial markers, §10.4.2 compares Solon adnominal clauses with those of other Tungusic languages. §10.4.3 describes the structure and semantics of Solon relative clauses, followed by §10.4.4 on equative adnominal clauses, and §10.4.5 on headless adnominal clauses.

10.4.1 The marker of adnominal clauses

In Solon, adnominal clauses exhibit a uniform structure, regardless of whether the head noun is an argument of the clause, an adjunct, or lies outside its valency frame. The adnominal clause always precedes the head noun, resulting in an externally headed construction. The participial predicate appears clause-finally within the adnominal clause, followed by the head noun, see (10.44)

(10.44) *[(…) Predicate$_{adn}$-PTCP] Head noun]…*

Predicate$_{adn}$: predicate of adnominal clause

In this structure, the marker of the adnominal clause differs depending on whether the head noun is the subject (10.45-10.46) or non-subject (10.47-10.48) in the adnominal clause, as illustrated below. When the head noun in non-subject in the adnominal clause, the embedded subject has genitive and nominative alternation, and the switch reference marker on the head noun is optional, as discussed in §10.6.1.1.

(10.45) Head noun is the subject in the adnominal clause:

[(…) Predicate$_{adn}$-PTCP] Head noun] …

(Predicate$_{adn}$: predicate of adnominal clause)

(10.46)	*əmun*	*siʃiŋtʃʰə*	*ʊkʊ-**sa***	***pəjə***	*mun-tulə:*	*nin-tʃʰə […]*
	emun	*sisiŋce*	*ʊgʊ-**sa***	***beye***	*mun-dulee*	*nin-ce […]*
	one	bike	ride-**PFV.PTCP**	**human**	1PL.EXCL.OBL-LOC	go-PST

'A person who rode bike went to our house.' (LT26-03)

(10.47) Head noun is non-subject in the adnominal clause:

[S$_{adn}$(-GEN) (...) Predicate$_{adn}$-PTCP] Head noun(-PX$_{adn}$)] …

(S$_{adn}$: subject of adnominal clause; Predicate$_{adn}$: predicate of adnominal clause; PX$_{adn}$: personal possessive co-refer to S$_{adn}$).

(10.48)	*satti*	*nɔ:tʃʰi*	*ju:-m*	*pi-sə:-tʃi*	*tʃu:r*
	saddi	*nooci*	*yuu-m*	*bi-see-ji*	*juur*
	old.lady	before	go.out-CONN.CVB	COP-PFV.PTCP-INS	two

*ʊna:tʃi-**ni:**-wi*	*a:ʃin-tʃi-**r***	***tʃu:**-tu-**ni***	*nin-tʃʰə:=ʃi […]*
*ʊnaaji-**nii**-wi*	*aasin-ji-**r***	***juu**-du-**ni***	*nin-cee=si […]*
daughter-**GEN**-REFL.SG	sleep-PROG-**IPFV.PTCP**	**house**-DAT-**3**	go-PFV.PTCP=2SG

'When the old lady first went to **the house where** her two daughters are sleeping…' (LT35-49)

In Solon, it is typical for a generic subject to be used in adnominal clauses. In such cases, the generic subject is often not overt in the clause, and there is no personal marker to cross-reference to the generic subject, see (10.49).

(10.49) *[[(...) Predicate-PTCP] Head noun] ...*

The generic subject often occurs when referring to nouns like 'food (things one eats)' or 'drinks (things one drinks)' (10.50), or 'place (one lives)' (10.51). The adnominal clauses with generic subjects also occurs to introduce names, the participle formed from the speech verb *kunə-r* 'SAY-IPFV.PTCP' serves as a metalinguistic marker to form non-subject relative clauses, as in the construction: a person/place called X (10.52).

(10.50) *[...] tʃittʰə-**r*** *ima-**r*** ***jəːmə*** *xətʰ* *aːʃin* *[...]*
*[...] jitte-**r*** *ima-**r*** ***yeeme*** *xet* *aasin* *[...]*
eat-**IPFV.PTCP** drink-**IPFV.PTCP** **thing** PTCL NEG.EXIS
'There are no food and drinks.' (lit. there are **no things one eats and drinks**) (LT19-30)

(10.51) *pi* *ʃin-tu* *kɔjɔ-tʃi* *ɛmtara-**r*** ***pʊka**-ja*
bi *sin-du* *goyo-ji* *ɛmdara-**r*** ***bʊga**-ya*
1SG 2SG.OBL-DAT beautiful-INS live-**IPFV.PTCP** **place**-PTV

tʃintʃi-m *pʊː-ktʰa=l*
jinji-m *bʊʊ-gta=l*
tell-CONN.CVB give-HORT=PTCL
'Let me tell you about **a place where one lives well**!' (LT40-21)

(10.52) *[...] pi niŋŋuŋ paːr-tʰixi [...] pʊlaːr **kun-ə-r*** ***pʊka**-tʊ*
*[...] bi niŋŋuŋ baar-tixi [...] bʊlaar **gun-e-r*** ***bʊga**-dʊ*
1SG six age-ABL GN **SAY-EP-IPFV.PTCP** **place**-DAT

pi-su [...]
bi-su [...]
COP-PST.1SG
'Since I was six years old, I was at **a place called Bular**.' (lit. I was at a place that people call Bular)' (LT34-01)

10.4.2 Comparison with Tungusic languages

Tungusic languages display considerable diversity in the structure of adnominal clauses[16].The discussion below follows the typological framework proposed in Pakendorf (2012), focusing on the contrast between subject and non-subject adnominal clauses.

10.4.2.1 Subject adnominal clauses in Tungusic languages

Across Tungusic languages, subject adnominal clauses vary with respect to whether and to what extent the participial predicate agrees with the head noun in number and case (Pakendorf 2012: 257–259). Solon represents the extreme end of the spectrum: participles do not show any morphological agreement with their head nouns in subject adnominal clauses. Agreement types observed in Tungusic:

- **Full agreement:** standard Evenki (10.53)
- **Partial agreement**: Eastern Even (+ case, - number), Udihe (- case, + number, 10.54), Kilen (+case, not clear on number) (Zhang 2013: 214-220)
- **Completely lacks agreement:** Western Even, Oroqen (Cong 2019: 345), **Solon** (my data, 10.55)

  (For languages without references, the citation is from Pakendorf 2012:257-259)

(10.53) Evenki (I. Nedjalkov 1997: 38, glossing adapted)

bi	*Turu-du*	*alaguv-**ʤari-l-du***	*asatka-**r-du***	*meŋur-ve*	*buː-m*
1SG	GN-DAT	study-**SIM.PTCP-PL-DAT**	girl-**PL-DAT**	money-ACC	give-1SG

'I gave money to **the girls who study in Tura**.'

[16] Whether other Tungusic languages have equative l adnominal clauses is not studied. Thus, the term 'adnominal clauses' in this section covers the 'relative clauses' in other Tungusic languages, and 'relative clauses + equative adnominal clauses' in Solon.

(10.54) Udihe (Nikolaeva & Tolskaya 2001: 676, glossing adapted)

inixi *osi-gi-**e*** ***getu*** *čawa-**ziga*** *amäixi*

alive become-REP-**IPFV.PTCP** **PL** soldier-**PL** backwards

susa-gi-li-eti.

escape-REP-INCH-PST-3PL

'The **soldiers who remained alive ran back**.'

(10.55) Solon

*əm-**sə*** *tʃalʊ-**sal-tʊ*** *sai* *im-ʊː-xa!*

*em-**se*** *jalʊ-**sal-dʊ*** *sai* *im-ʊʊ-xa!*

come-**PFV.PTCP** young.man-**PL-DAT** tea drink-VL-IMP

'Let **the young men who have arrived** have some tea!' (elicited)

The absence of agreement in Solon aligns closely with patterns found in neighboring Mongolic and Turkic languages (Pakendorf 2012: 257–259). In these families, participial predicates behave like adjectives: they do not agree with the head noun in either case or number. For Solon, and likewise Oroqen and Western Even, this points to language contact as the likely source of structural convergence.

10.4.2.2 Non-subject adnominal clauses in Tungusic languages

10.4.2.2.1 Cross-reference marker

In non-subject adnominal clauses, a personal marker appears to cross-refer with the embedded subject. Tungusic languages are divided into two clear structural types depending on the locus of this marker (Pakendorf 2012: 262):

- **Head noun-marked:** Eastern Evenki (Cheremisina et al. 1986: 243, cited from Pakendorf 2012: 262), Western Even (Malchukov 2006: 129, cited from Pakendorf 2012: 262), Oroqen (Cong 2019: 344-348), **Solon** (my data, 10.56)
- **Participle-marked:** standard Evenki (I. Nedjalkov 1997: 38, 10.57), Eastern Even (Malchukov 1995: 34), Udihe (Nikolaeva & Tolskaya 2001: 677, 10.58), Kilen (Zhang 2013: 214-220)

(10.56) Solon

*[…] saːtʃikiː-ni əjjə tʃitʃʰ-**tʃʰə** **ultə**-niː-**nin** mukun-pə-ni*
*[…] saajigii-ni eyye jic-**ce** **ulde**-nii-**nin** mugun-be-ni*
magpie-GEN PROX eat-**PFV.PTCP** **meat**-GEN-**3** money-DEF.ACC-3

ə-tɕə puː-m puː-r […]
e-dɕe buu-m buu-r […]
NEG-PST give-CONN.CVB give-CONNEG
'(They) didn't pay the money for **meat that magpie ate**.' (LT08-66)

(10.57) Evenki (I. Nedjalkov 1997: 36)

*hunat amin-in ʤuta-**ʤari**-la-**n** ʤu-la iː-re-n*
girl father-3SG live-**SIM.PTCP**-LOC-**3SG** house-LOC enter-NFUT-3SG
'The girl entered **the house in which her father lived**.

(10.58) Udihe (Nikolaeva & Tolskaya 2001: 677)

*bu sa-u su bagdi-**e-u** zugdi-we*
1PL know-1PL.EXCL 2PL live-**PFV.PTCP-2PL** house-ACC
'We know **the house where you lived**.'

Pakendorf (2012: 262) reconstructs participle-marked structures for Proto-Tungusic. The head-noun marked type represented in Solon, Oroqen, Western Even and Eastern Evenki is therefore best understood as secondary, likely induced by long-term contact with Mongolic (Solon, Oroqen) and Sakha (Western Even, Eastern Evenki). This typological split thus reflects clear areal pressures rather than inherited differentiation.

10.4.2.2.2 Genitive-marked embedded subject

Genitive case is only found in Tungusic languages of the Manchurian region: Solon, Oroqen (Cong 2019: 180-182), Khamnigan Evenki (Mandarwa 2023: 13-18), Manchu (Gorelova 2002: 175-182), and Kilen (Zhang 2013: 79-81). As discussed in §4.1.2.4, this case category is likely an areal development connected to intensive contact with Mongolic and, to some extent, Turkic languages.

In Mongolic and Turkic, the embedded subject of an adnominal clause may appear either in the genitive or nominative case (Malchukov & Czerwinski 2020: 633). Among Manchurian Tungusic languages, Solon and Manchu show genitive-marked embedded subjects in non-subject adnominal clauses (10.59-10.60).

(10.59) Solon

pi	*ʃin-**i***	*əjjə*	*pi-tʃi-**r***	*mɔː-wɔ-ʃi*
bi	*sin-**i***	*eyye*	*bi-ji-r*	*moo-wo-si*
1SG	2SG.OBL-**GEN**	PROX	COP-PROG-**IPFV.PTCP**	tree-DEF.ACC-2SG

pʰɔl	*mukkulaː-tʃʰi*	*[...]*
pol	*muggulee-ci*	*[...]*
(break).off	crush-COOR.CVB	

'I will crush down **your tree in which you are living**.' (LT01-05)

(10.60) Manchu (Groleva 2002: 481, glossing adapted)

sikse	*suwen-**i***	*min-de*	*šangna-**ha***	*tere*	*cai*	*abdaha-i*
yesterday	2.OBL-**GEN**	1SG.OBL-DAT	present-**PTCP**	PROX	tea	leaf-GEN

amtan	*umesi*	*sain*
smell	very	good

'The smell of that **tea leaf you presented to me yesterday** is very good.'

Kilen behaves differently: although it possesses a genitive case, its non-subject adnominal clauses follow the cross-reference participle-marked type; the embedded subject therefore does not require a genitive marker (10.61). Oroqen, despite belonging to the same areal group as Solon, displays only nominative embedded subjects (Cong 2019: 346–348; Cong, p.c.) (10.62). For Khamnigan Evenki, data on relative-clause marking remains insufficient to characterize the pattern.

(10.61) Kilen (Zhang 2013: 216, glossing adapted)

bi	*dɔldi-xəi-mi*	***saman***	*dzari-xen-ni*	*jaliŋkɔ-wə*
1SG	hear-PRF-1SG	**Shaman**	sing-PRF.ACT[17].PTCP-3	ballad-ACC

'I listed **the ballad that the shaman sang**.'

[17] I didn't find the abbreviation ACT in Zhang (2013), which could potentially be analysed as 'active'.

(10.62) Oroqen (Cong 2019: 347, translation and glossing adapted)

ŋɔɔwʊ-tʊ	***aʃɪ***	***pəjə***	***ɔɔ-tʃʰa***	*kʰʊŋkɛɛ-kʰaan*	*mantɪ*
past-DAT	**wife**	**person**	make**-PFV.PTCP**	birch.bark.basket-ATT	very
aja	*jaŋʃa-tʃʰɪ*				
good	appearance-PROP				

'In the past, **the birch bark baskets women made** were very beautiful.'

These facts indicate that genitive marking in embedded subjects is not Proto-Tungusic. Instead, its uneven distribution and functional development strongly suggest contact-induced innovation, with individual languages adopting and adapting the genitive construction to different extents.

10.4.3 Relative clauses

Following Andrews (2007: 206), relative clauses are defined as subordinate clauses that restrict the reference of a noun phrase by specifying the semantic role of its referent in the situation expressed by the clause. Based on Creissels (2019), relative clauses in this study are classified into three types, depending on the role of the head noun within the adnominal clause: argument relative clauses, adjunct relative clauses, and frame relative clauses.

This functional classification differs from that employed in §10.4.1-§10.4.2, where adnominal clauses were divided on formal grounds into subject and non-subject types. While those sections focus on syntactic marking strategies, the present section concerns the semantic-syntactic relation between the head noun and the embedded clause.

10.4.3.1 Argument relative clauses

In argument relative clauses, the head noun corresponds to a core argument of the predicate in the embedded clause-typically subject (10.63) or object (10.64). The reference of the head noun is fully determined by the situation encoded by the participial predicate.

(10.63) *ɔltɔːn-tʊliː-ni* *tʰajja* *tʃʊɣaːlaː-m* *təɣliː-m* ***ul-tʃi-r***
oldoon-dʊlii-ni *tayya* *jʊɣaalaa-m* *deɣlii-m* ***ul-ji-r***
next-PROL-3 DIST stroll-CONN.CVB fly-CONN.CVB go-PROG-**IPFV.PTCP**

putənə *[...]* *saːtʃikiː-la* *əm-sə.*
budene *[...]* *saajigii-la* *em-se.*
quail magpie-LOC come-PST
'That **quail who was strolling and flying next to magpie** came to her.' (LT01-21)

(10.64) *əmmə* *apaː-**niː**-tʰi* *ultəː-**sə*** ***kurəŋkə-nin*** *kʰi*
emme *abaa-**nii**-ti* *uldee-**se*** ***gureŋge-nin*** *ki*
mother father-**GEN**-1PL.INCL leave-**PFV.PTCP** **wealth-3** TOP

natan *tʰʊsxaːn-tʃʰi* *unkəŋ* *pi-ʃi-n.*
nadan *tʊsxaan-ci* *ungeŋ* *bi-si-n.*
seven calf-PROP cow COP-AOR-3
'**The wealth which our parents left** is seven cows with calves.' (LT08-17)

10.4.3.2 Adjunct relative clauses

The head noun may also represent an adjunct participant, such as location (10.65), goal (10.66), time (10.67), instrument (10.68), or manner (10.69).

(10.65) *[...]* *(sʊlxi)* *pətən-**ni*** *ʊxʊn* *tʰajja* *pi-tʃi-**r*** *tʰajja*
[...] *(sʊlxi)* *beden-**ni*** *ʊxʊn* *tayya* *bi-ji-**r*** *tayya*
fox quail-**GEN** PH DIST COP-PROG-**IPFV.PTCP** DIST

tʃuː-tu-ni *nənə-m* *[...]*
juu-du-ni *nene-m* *[...]*
house-DAT-**3** go-CONN.CVB
'(The fox) went to **the house where quail is living**.' (LT01-53)

(10.66) *pi* *iː**-r*** ***tʃuː**-jə* *aːʃin.*
bi *ii**-r*** ***juu**-ye* *aasin.*
1SG enter**-IPFV.PTCP** **house**-PTV NEG.EXIS
'I don't have **a house to enter**. (lit. house where one enters)' (LT40-17)

(10.67) *[...]* *əʃi* *mʊrin* *xɔwwɔː**-r*** ***sak*** *ɔː-sɔ.*
[...] *esi* *mʊrin* *xowwoo**-r*** ***sag*** *oo-so.*
now horse run**-IPFV.PTCP** **time** become-PST
'Now, it is **time when horses run.**' (LT90-14)

(10.68) *sʊːpal-wə* *iŋki-me* *tɔːlɔː-ni* *muː* *imi**-r***
sʊʊbal-we *iŋgi-me* *dooloo-ni* *muu* *imi**-r***
backpack-DEF.ACC carry.on.back-1SG inside-3 water drink**-IPFV.PTCP**

***tʃʰɔmɔ**-ʃi* *[...]*
***como**-si* *[...]*
cup-PROP
'I carry the backpack inside (the back bag) there was a water cup... (lit. **a cup which is used for drinking water**)' (LT23-26)

(10.69) *tʰɔːtʃʰi* *tʰajja* *əməktʰi* *ʊtrʊː-wi* *tali**-sa*** ***jantʃi**-tʃi-wi*
tooci *tayya* *emegti* *ʊdrʊʊ-wi* *dali**-sa*** ***yanji**-ji-wi*
DIS.CONN DIST woman lips-REFL.SG cover**-PFV.PTCP** **manner**-INS-REFL.SG

ul-tʃʰə *kunəŋ.*
ul-ce *guneŋ.*
go-PST hearsay
'(It is said that) Then the woman went away **as she covered her mouth**. (lit. the manner that she covers her mouth)' (LT40-31)

In addition, the head noun may function as part of a noun phrase inside the adnominal clause, for example, as a possessor, while the possessed noun acts as the argument of the embedded predicate (10.70). In (10.70) has the negation of adnominal clause, the negative auxiliary verb is in third person finite from, and the connegative marker *-r(A)* functions the role

as participle marked predicate (§9.1.1.3.2). The head noun ‘face’ is the possessed item of the NP in adnominal clauses, which means ‘a person whose face I haven’t seen’.

(10.70)

[…]	***tərəl***-*wə-ni*	***ʃir***-*wa-ni*	*ə-sə*	*iʃi-**r***
[…]	***derel***-*we-ni*	***sir***-*wa-ni*	*e-se*	*isi-**r***
	face-DEF.ACC-3	**face**-DEF.ACC-3	NEG-PST	see-**CONNEG**

pəjə-tu	*jɔːtɔːŋ*	*kʰəːŋ*	*min-u-wə*	*puː-nti ?*
beye-du	*yoodooŋ*	*keeŋ*	*min-u-we*	*buu-ndi ?*
person-DAT	why	SAY.CVB	1SG.OBL-EP-DEF.ACC	give-2SG

‘Why do you give me to a person **whose face I haven’t seen**.’ (LT19-35)

10.4.3.3 Frame relative clauses

Frame relative clauses are a more marginal type in which the head noun forms part of the event frame, without being explicitly coded as an argument or adjunct. In Solon, this construction is rare and is attested almost exclusively with nouns meaning ‘sound’ (10.71-10.72). Although the semantic link between ‘sound’ and the embedded situation is less direct, the head noun still forms a conceptual component of the described event and can therefore be considered internal to the clause frame. That is, in (10.71), the head noun ‘sound’ can still be regarded as fitting the valency frame of the event denoted by the relative clause ‘her son coming from outside’. In other words, the construction can be interpreted as ‘her son coming from outside produces a sound’. Likewise, in (10.72), the construction can be interpreted as ‘the grass rustling produces a sound’. In this sense, the head noun ‘sound’ still bears a semantic role with respect to its relative clause, although this relationship is less explicit than in argument or adjunct relative clauses.

Comparable constructions expressing perception-related framing, e.g. head nouns ‘noise’, ‘smell’, or ‘smoke’ are attested in Japanese (Matsumoto 2017: 35-36) and Korean (Kim & Sells 2017: 66-68).

(10.71) *əmmə-ni* *urəl-ni* *tʰullə:-(tʰi)xi* *i:-tʃʰi* *əm-tʃi-**r***
emme-ni *urel-ni* *tullee-(ti)xi* *ii-ci* *em-ji-**r***
mother-3 child-GEN out-ABL enter-COOR.CVB come-PROG-**IPFV.PTCP**

***tikkan**-pa-ni* *tɔ:lti:-kkʰi* *tʃʰu* *nə:li-rə-ŋ*
***diggan**-ba-ni* *dooldii-kki* *cu* *neeli-re-ŋ*
sound-DEF.ACC-3 hear-COND.CVB PTCL be.afraid-AOR-3

'If the mother hears **the sound of her son coming from outside**, she is frightened.' (LT03-06)

(= **Her son coming from outside produces a sound**)

(10.72) *[…]* *kɔrɔ-ki:tʃi* *[…]* *əpəs* *ʃirtʃʰikna:-**r*** ***tikkan*** *ju:-sə* *kunəŋ.*
[…] *goro-giiji* *[…]* *ebes* *sircignaa-**r*** ***diggan*** *yuu-se* *guneŋ.*
far-ELA grass rustle-**IPFV.PTCP** **sound** exit-PST hearsay

'From far away, **a sound of grass rustling** came out.' (LT40-09)

(= The grass rustling produces a sound)

10.4.4 Equative adnominal clauses

Equative adnominal clauses specify the content or propositional value of a nominal head, as in 'the news that he won a prize or the rumor that he was poisoned' (Creissels 2019). The adnominal clause expresses the state of affairs constituting the meaning of the head noun, thereby establishing an equative relation between the proposition and the nominal.

In Solon, this construction occurs with nouns denoting 'work (of doing something)' (10.73), 'personality' or 'habi (of doing something)' (10.74), 'affair (of something that happened)', 'story (of a particular theme)' (10.75), and 'need (for doing something)' (10.76).

Equative adnominal clauses are treated separately from relative clauses because the head noun cannot be interpreted as filling a semantic role within the valency frame of the event denoted by the adnominal clause. This constitutes the principal distinction between the two constructions. For example, in (10.73), the head noun 'work' cannot be analyzed as an argument or adjunct of the clause 'one manages money'. Likewise, in (10.74), the head noun 'personality' cannot be interpreted as participating in the valency frame of the clause 'one catches cats'.

(10.73) *muŋkuŋ tʃawa**-r*** ***atʃil**-wə* *xɔkkʰɔ* *pi* *ɔː-sʊː.*
*muŋguŋ jawa**-r*** ***ajil**-we* *xokko* *bi* *oo-sʊʊ.*
money catch**-IPFV.PTCP** **work**-DEF.ACC all 1SG do-1SG.PST
'I did all the **work of managing money**.'(LT30-05)
(the work = one manages the money)

(10.74) *mun-i* *ninxin-mun* *jətti* *xəːxəː-jə* *tʃawa**-r***
mun-i *ninxin-mun* *yeddi* *xeexee-ye* *jawa**-r***
1PL.EXCL-GEN dog-1PL.EXCL normally cat-PTV catch**-IPFV.PTCP**

tʃan *aːʃin*
jan *aasin*
personality NEG.EXIS
'Our dog normally doesn't have a **personality to catch cats**.' (LT35-19)
(the personality = dog catches cat)

(10.75) *pi* *əʃi* *amitʊ* *pʊkkʰʊŋ* *ʊntʰa-wi* *pʊrʊ* *tʰitʃ**-tʃʰə*** ***ulikər***
bi *esi* *amidʊ* *bʊkkʊŋ* *ʊnta-wi* *bʊrʊ* *tij**-ce*** ***uliger***
1SG now living Buddha shoes-REFL.SG wrong wear**-PFV.PTCP** **story**

tʃintʃi-m *pʊːktʰe*
jinji-m *bʊʊgte*
tell-CONN.CVB give-HORT
'Now let me tell you **the story of the Living Buddha with the wrong shoes**.' (LT03-01)
(the story = the Living Buddha with the wrong shoes)

(10.76) *ilan* *inək-ni* *taraː* *əmun* *ʊnatʃi* *tʃawal* *ət-tu* *iraː**-r***
ilan *ineg-ni* *daraa* *emun* *ʊnaji* *jawal* *ed-du* *iraa**-r***
three day-GEN after one daughter must PROX-DAT send-**IPFV.PTCP**

xər-tʃʰi
xer-ci
needs-PROP

'In three days, you have **the needs that must sending one daughter here**.' (LT28-14)

(the need = sending one daughter here)

10.4.5 Headless adnominal clauses

Since adnominal clauses fundamentally denote noun modifying clauses, the head noun may be omitted. When this occurs, the participial clause itself assumes the referential function of the head noun. The personal and case markers that would otherwise attach to the head noun instead attach directly to the participial predicate. This parallels the behavior of headless noun phrases (§5.4), reflecting the optionality of the nominal head in modifier-head constructions.

In (10.77), the head noun 'student' is omitted, and the imperfective participle carries third-person marking, with the adnominal clause functioning as the nominal reference. Similarly, in (10.78), the head noun 'distance' is absent, and the clause itself serves as the head.

(10.77) *mun-i* *pair-tʊː=j* *jətti* *aːŋa-tʃi**-r**-ni*
mun-i *bair-dʊʊ=y* *yeddi* *aaŋa-ji**-r**-ni*
1PL.EXCL-GEN dormitory-DAT=PTCL normally sleep-PROG-**IPFV.PTCP**-3

kʰi *tʃaːn* *ati* *[...]*
ki *jaan* *adi* *[...]*
TOP ten several

'At our dormitory, there are normally ten plus **(students) who are staying overnight**.' (LT11-04)

(10.78) *[...] taxi uː-ʃxi xɔwwɔː-**r** pasa naː əmun tʃaːn*
*[...] daxi uu-sxi xowwoo-**r** basa naa emun jaan*
again up-ADV.ALL run-**IPFV.PTCP** also also one ten

iʃi-r pʊka pi-ʃi-n.
isi-r bʊga bi-si-n.
reach-IPFV.PTCP place COP-AOR-3
'Again**, (the distance) of running upward** is still around ten miles.' (LT09-34)

10.4.5.1 Headless adnominal clause and complement clause

Headless adnominal clauses in Solon are structurally identical to complement clauses: the head noun is omitted, the participial predicate bears both co-reference and case marking, this is how the complement clauses are marked (§10.3). As a result, one construction can be either analyzed by a headless adnominal clause, or a complement clause. See example (10.79), it may be a headless adnominal clause which omitted the head noun 'sound' (interpretation a), or it is a complement clause which the perceptional verb taking the object complement clause (interpretation b).

(10.79) *tʰari ʊnaːtʃi-ni-wi tʃaːn-taː-**saː-wa-ni***
*tari ʊnaaji-ni-wi jaan-daa-**saa-wa-ni***
DIST daughter-GEN-REFL.SG song-VBZ-**PFV.PTCP-DEF.ACC-3**

*kɔrɔ-kiːtʃi **tɔːltiː**-m paxa-mi [...]*
*goro-giiji **dooldii**-m baxa-mi [...]*
far-ELA **hear**-CONN.CVB get-CONN.CVB
(a) headless adnominal clause: 'He heard **(the sound of) his daughter's singing from far away**.'
(b) complement clause: 'He heard **his daughter's singing from far away**.' (LT38-37)

10.4.5.2 Headless adnominal clause and adverbial clause

The adnominal clauses expressing the adverbial place, time and manner by keeping the head noun ‘place’, ‘time’ and ‘manner’. When this type of adnominal clause drops the head noun, the participle predicate is case marked to express the adverbial meaning. This construction is identical to that of quasi-converb-marked adverbial clauses. The example (10.80) can be analysed as a headless adnominal clause that has dropped the head noun ‘time’ (interpretation a), or as a quasi-converb-marked temporal adverbial clause (interpretation b).

(10.80)

min-iː	*ʃutʃi*	*juː**-r-tu***	*tʃaːn*	*mukuŋ*	*aːʃin*
min-ii	*suji*	*yuu**-r-du***	*jaan*	*muguŋ*	*aasin*
1SG.OBL-GEN	clerk	go.out**-IPFV.PTCP-DAT**	ten	money	NEG.EXIS

kun-tʃʰə	*parak*	*ərəː-jə*	*aːʃin.*
gun-ce	*barag*	*eree-ye*	*aasin.*
say-PST	maybe	hesitation-PTV	NEG.EXIS

(a) headless adnominal clause: ‘**At (the time) I took up the clerk’s job**, it may be no hesitation to say that there wasn’t (even) ten yuan (in the hamlet office).’

(b) adverbial clause: ‘**When I took up the clerk’s job**, it may be no hesitation to say that there wasn’t (even) ten yuan (in the hamlet office).’ (LT31-11)

10.5 Adverbial clause

Adverbial clauses provide situational context for the event or state described in the main clause. Functionally similar to adverbs, they convey a range of meanings and serve as adjuncts to the main clause (Whaley 1997: 248). In Solon, various types of adverbial clauses are observed, including:

- *temporal clauses* provide a temporal setting for the main clause
- *locative clauses* provide a locational setting for the main clause
- *manner clauses* express the way in which the main clause takes place
- *reason clauses* indicate the reason why the main clause takes place
- *conditional clauses* and *concessive clauses*: present the condition under which the main clause can take place

- *purpose clauses* express the purpose of an action mentioned in the main clause (discussed separately in finite subordination section 10.7.2.3)

Solon has several strategies to express adverbial relations. It primarily relies on nonfinite forms, converbs and quasi-converbs (quasi-converbs: case-marked participles, as termed by Janhunen 2012a: 169-172), to form adverbial clauses. Additionally, postpositions and postpositional analytical constructions are used to mark certain types of adverbial clauses. Moreover, adnominal clauses in which the head nouns have generic meanings like 'time,' 'moment,' 'place,' or 'manner' can also function as temporal, locative, or manner clauses (§10.4.3.2). Table 10-3 shows the adverbial clause forms in Solon. Purpose and reason relations can also be expressed by the grammaticalization of speech verb 'say', but structurally they are finite subordinate clause, thus won't be discussed in this section, see §10.7.2.3.

Table 10-3: The adverbial clause strategies in Solon

	converbs	quasi-converbs	postpositions (including complex form)	other
temporal clauses	simultaneous converb *-t(U)li* and temporal converb *-tʃʰixi*	participle marked DAT/PROL/LOC/ABL	participle marked predicate + relational nouns 'before, after'	adnominal clauses (head noun 'time, moment')
locative clauses				adnominal clauses (head noun 'place')
manner clauses		participle marked INS	similative postposition *nəkəːŋ*	adnominal clauses (head noun 'manner, way')
reason clauses			reason postposition *tʃaxa*	grammaticalization of 'say' (§10.7.2.3)
conditional clauses	conditional converb *-kʰi*			
concessive clauses			concessive postposition *tʃarin*	
purpose clauses				grammaticalization of 'say' (§10.7.2.3)

There are several strategies for expressing temporal and manner relations, and these strategies are closely connected. The adnominal clauses whose head noun is the generic noun 'time' can express temporal or manner clauses (10.81a). The headless form of this adnominal

clause is identical to the quasi-converb forms, which are participles marked for case (10.81b). The quasi-converb forms can develop into true converbs. For example, the prolative case has already developed into a converb (10.81c), and the dative case also shows this tendency. Although these forms are structurally different, they are closely related and do not convey semantic differences.

(10.81) a. *tʰɔːtʃʰi* *pəkkəŋ-pi* *xʊtalaː**-r*** ***ərin-tu*** *kʰi* *[...]*
tooci *beggeŋ-bi* *xʊdalaa**-r*** ***erin-du*** *ki* *[...]*
DIS.CONN sister.in.law-1SG marry-**IPFV.PTCP** **time-DAT** TOP

ə-ləː *xaːlaː-mi* *əmə-mi* *[...]*
PROX-LOC move-CONN.CVB come-CONN.CVB

b. *tʰɔːtʃʰi* *pəkkəŋ-pi* *xʊtalaː**-r-tu*** *kʰi* *[...]*
tooci *beggeŋ-bi* *xʊdalaa**-r -du*** *ki* *[...]*
DIS.CONN sister.in.law-1SG marry-**IPFV.PTCP-DAT** TOP

ə-ləː *xaːlaː-mi* *əmə-mi* *[...]*
e-lee *xaalaa-mi* *eme-mi* *[...]*
PROX-LOC move-CONN.CVB come-CONN.CVB

c. *tʰɔːtʃʰi* *pəkkəŋ-pi* *xʊtalaː**-tli*** *kʰi* *[...]*
tooci *beggeŋ-bi* *xʊdalaa**-dli*** *ki* *[...]*
DIS.CONN sister.in.law-1SG marry-**SIM.CVB** TOP

ə-ləː *xaːlaː-mi* *əmə-mi* *[...]*
e-lee *xaalaa-mi* *eme-mi* *[...]*
PROX-LOC move-CONN.CVB come-CONN.CVB

‘**When my sister-in-law got married**, (we) moved here.’ (a: LT34-04, b and c are elicitation based on LT34-04)

The complex postpositional forms (participle + postposition) are historically rare in Tungusic languages, remaining marginal exceptions in Manchu. In contrast, they are common in Turkic and Mongolic languages (Malchukov & Czerwinski 2020: 630). Complex postpositional constructions marking adverbial subordination attested in Solon may thus reflect influence from neighboring Mongolic languages (§10.5.1.2 and §10.5.1.3.1).

10.5.1 Temporal clauses

Temporal clauses provide a temporal setting for the main clause. There are three types of temporal relations: temporal overlap ('when' relation), temporal posteriority ('before' relation), and temporal anteriority ('after' relation). Temporal overlap implies that the main and subordinate clauses occur simultaneously, although the exact extent of the overlap is unspecified and may vary. Temporal posteriority and anteriority indicate a sequence of events: in temporal posteriority, the event in the subordinate clause occurs after the event in the main clause. In temporal anteriority the event in the subordinate clause occurs before the event in the main clause.

10.5.1.1 Temporal overlap ('when' relation)

To express temporal overlap in Solon, converbs, quasi-converbs and an adnominal clause with a head noun 'time, moment' are used.

10.5.1.1.1 Converbs

Among the converbs, the simultaneous converb *-t(U)li* and the temporal converb *-tʃʰixi* are both used to indicate that the main and subordinate (background) events overlap in time and are often translated as 'when/while', see simultaneous converb in example (10.82) and temporal converb in example (10.83). The origin of these two converbs and their cross reference on the subordinate subject see §6.4.2.1.

(10.82)	*[…]*	*pakʃi-wal*	*əmə-**tuli***	*xɔkkʰɔ-pɔl*	*pələn*
	[…]	*bagsi-wal*	*eme-**duli***	*xokko-bol*	*belen*
		teacher-REFL.PL	come-**SIM.CVB**	all-REFL.PL	be.prepared

alaː-ʃi-ra-ŋ.
wait-STAT-AOR-3[18]
'**When** our teacher arrives, we all get ready and wait.' (LT23-13)

[18] The wrong third person marker on the finite verb 'wait', instead of first-person plural.

(10.83) *[...]* *ati:-ra* *manta:**-tʃʰixi**-ni* *pasa=l* *tʰannaka:ŋ* *pɔŋkɔŋ*
[...] *adii-ra* *mandaa**-cixi**-ni* *basa=l* *tannagaaŋ* *boŋgoŋ*
several-ITER hit-**TEM.CVB**-3 again=PTCL DIST.QLT big

tikkan *ju:-sə* *[...]*
diggan *yuu-se* *[...]*
sound exit-PST

'**When** (the shaman) beats (the drum) several times, it made big sounds again.' (LT42-29)

These two forms have overlapping functions. However, they differ subtly in scope: the simultaneous *-t(U)li* can express not only point overlap (when') (10.82), but also duration (while), indicating an extended period of simultaneous activity, see example (10.84). In contrast, *-tʃʰixi* expresses only point overlap.

(10.84) *tʰəwə**-tli*** *antʰi* *ʊta-tʃʰun* *kə* *ɔ:tʰɔ-wəl*
*tewe**-dli*** *anti* *ʊda-cun* *ge* *ooto-wel*
load-**SIM.CVB** how be.long.time-2PL PTCL manure-REFL.PL
'**While** loading the manure, how long did it take you?' (LT26-81)

10.5.1.1.2 Quasi-converbs

The Quasi-converbs, participles marked with the dative *-tU* and locative case *-tUlA/-lA*, can express temporal overlapping relations. As noted in §4.1.2.6, the dative case is the primary spatial marker for temporal and spatial relations, while the locative case is more restricted in usage. A similar distribution appears in temporal contexts: the dative-marked participle is the dominant form used for temporal overlap, example (10.85), while the locative case-marked participle appears rare (10.86).

(10.85) *min-iː* *ʃutʃi* *juː**-r-tu*** *tʃaːn* *mukuŋ* *aːʃin*
min-ii *suji* *yuu**-r-du*** *jaan* *muguŋ* *aasin*
1SG.OBL-GEN clerk go.out**-IPFV.PTCP-DAT** ten money NEG.EXIS

kun-tʃʰə *parak* *ərəː-jə* *aːʃin.*
gun-ce *barag* *eree-ye* *aasin.*
say-PST maybe hesitation-PTV NEG.EXIS

‘**When** I took up the clerk’s job, it may be no hesitation to say that there wasn’t (even) ten yuan (in the hamlet office).’ (LT31-11)

(10.86) *kə* *əʃi* *ɔː**-sɔː-lɔː***=*l* *mʊrin-tʊ* *xatʰ*
ge *esi* *oo**-soo-loo***=*l* *mʊrin-dʊ* *xat*
PTCL now become**-PFV.PTCP-LOC**=PTCL horse-DAT PTCL

ʊkʊ-r-tʊ *manti* *ɔː-sɔ.*
ʊgʊ-r-dʊ *mandi* *oo-so.*
ride-IPFV.PTCP-DAT difficult become-PST

‘Nowadays (lit. **when** became now), riding a horse became difficult (to me).’ (LT21-19)

10.5.1.1.3 Adnominal clause with a generic head noun

When an adnominal clause has a head noun with a generic meaning of ‘moment, time’, the entire subordinate clause can be the temporal adjunct of the main clause, see example (10.87-10.88).

(10.87) *ɔsxɔn* *tʃaw-tʃi**-r*** ***ʃittən-tu-ni*** *təki* *təkli-tʃʰi*
osxon *jaw-ji**-r*** ***sidden-du-ni*** *degi* *degli-ci*
fish catch-PROG**-IPFV.PTCP** **moment-DAT-3** bird fly-COOR.CVB

əm-səː
em-see
come-PST

‘At the moment **when (the hunter) was fishing** (lit. At the hunter’s fishing moment), a bird flew in. ’ (LT05-02)

(10.88) *tʰɔːtʃʰi* *pəkkəŋ-pi* *xʊta-laː**-r*** ***ərin-tu*** *[...]*
tooci *beggeŋ-bi* *xʊda-laa**-r*** ***erin-du*** *[...]*
DIS.CONN sister.in.law-1SG wedding-VBZ**-IPFV.PTCP** **time-DAT**

ə-laː *xaːlaː-mi* *əmə-mi* *[...]*
e-lee *xaalaa-mi* *eme-mi* *[...]*
PROX-LOC move-CONN.CVB come- CONN.CVB
'Then **at the time when my sister-in-law married**, (we) moved here.' (LT34-04)

10.5.1.2 Temporal posteriority ('before' relation)

Temporal posteriority ('before' relation) in Solon is expressed through complex postpositional construction involving the participle marked verb taking genitive case and followed by postposition derived from relational noun 'front' (10.89-10.90):

(10.89) V-PTCP-GEN front-SIDE-DAT/PROL

(10.90) *tʰɔːtʃʰi* *ɔri* *asa**-r-ni*** ***tʃultəː-tu**-ni*** *əri*
tooci *ori* *asa**-r-ni*** ***juldee-du**-ni*** *eri*
DIS.CONN evening sleep**-IPFV.PTCP-GEN** **front-SIDE-DAT**-3 PROX

ukkʰəːxəːŋ *tʃuː-niː-nin* *ətʃin-tu-ni* *kun-tʃʰə* *[...]*
ukkeexeeŋ *juu-nii-nin* *ejin-du-ni* *gun-ce* *[...]*
boy home-GEN-3 owner-DAT-3 say-PST
'Then **before** they went to sleep, the boy said to the owner of the household.' (LT35-15)

(10.91) *məːŋkʰəːŋ* *tʰa-ttʃʰil-ni* *kukkultə**-r-ni*** ***tʃul-təː-li*** *[...]* *əmun*
meeŋkeeŋ *ta-ccil-ni* *guggulde**-r-ni*** ***jul-dee-li*** *[...]* *emun*
PN DIST-PL-GEN move**-IPFV.PTCP-GEN** **front-SIDE-PROL** one

əmun *kappʰa-tʃʰi* *waː-sa* *[...]*
emun *gappa-ci* *waa-sa* *[...]*
one shoot-COOR.CVB kill-PST
'Meenkeng shoot (the small ghosts) one by one **before** they moved.' (LT40-54)

Variations of this form include replacing the genitive case with the ablative case and substituting the relational noun *tʃul* 'front' with *nɔːkʊ* 'before, at old time, already' (10.92). The form *nɔːkʊ* on its own carries the temporal meaning and thus does not require an additional case marker (10.93). The occurrences of temporal posteriority constructions are relatively rare in the Solon corpus. Consequently, the distinction between the use of the two different constructions remains unclear, the elicitation shows there are no clear semantic differences.

(10.92) V-PTCP-ABL *nɔːkʊ* 'before/at old time/already'

(10.93) *[...] min-ə-wə tʃìtt^{h}**ə-r-t^{h}xi** **nɔːkʊ** ʃi min-i*
*[...] min-e-we jitte**-r-txi** **noogʊ** si min-i*
1SG.OBL-EP-DEF.ACC eat-**IPFV.PTCP-ABL** **befor**e 2SG 1SG.OBL-GEN

taram-ni ɔrɔːn-tʊ ʊkʊ-xa [...]
daram-ni oroon-dʊ ʊgʊ-xa [...]
back-GEN above-DAT ride-IMP
'**Before** you eat me, you ride on my back!' (LT10-16)

10.5.1.3 Temporal anteriority ('after' relation)

Temporal anteriority ('after' relation) in Solon is expressed through two strategies: complex postpositional constructions, and the use of quasi-converbs.

10.5.1.3.1 Complex postposition

The postpositional strategy combines a participle marked verb marked by ablative case and followed by adverbial allative *ama-sxi* 'back-ADV.ALL' (10.94), as in (10.95-10.96):

(10.94) V-PTCP-ABL back-ADV.ALL

(10.95) *kə* *taxi* *xʊtaːja* *ɔː**-sɔː-tʰxi*** ***ama-ʃxi***
ge *daxi* *xʊdaa-ya* *oo**-soo-txi*** ***ama-sxi***
PTCL again marriage-PTV do**-PFV.PTCP-ABL** **back-ADV.ALL**

uril *utʰə-ʃi* *ɔː-sʊ.*
uril *ute-si* *oo-sʊ.*
child child-PROP become-PST.1SG
'Then **after** I married, I had children.' (LT39-35)

(10.96) *tʰɔːtʃʰi* *xaʃir* *aŋtʃʰin* *ʊnaːtʃi-tʃi-wi* *tʃuːr-i* *pikkʰi*
tooci *xasir* *aŋcin* *ʊnaaji-ji-wi* *juur-i* *bikki*
DIS.CONN experienced hunter daughter-INS-REFL.SG two-COLL TOP

əjjə *satʊŋ-tʊlaː-wi* *itʃʰ**-tʃʰaː-tʰʊxi*** ***ama-ʃxi*** *əjjə*
eyye *sadʊŋ-dʊlaa-wi* *ic**-caa-tʊxi*** ***ama-sxi*** *eyye*
PROX relative-LOC-REFL.SG reach**-PFV.PTCP-ABL** **back-ADV.ALL** PROX

tʰʊsxʊŋ-ni *əjjə* *nutəjə_aːʃin* *xuktʃəːn-tʃʰi* *ɔː-sɔ [...]*
tʊsxʊŋ-ni *eyye* *nudeye_aasin* *xugjeen-ci* *oo-so [...]*
village-3 PROX very bustling-PROP become-PST
'**After** the hunter and his daughter went to their relatives' house, the village became very bustling.' (LT19-08)

10.5.1.3.2 Quasi-converb

The quasi-converb strategy uses participles marked with the ablative case without the accompanying postposition, morphologically identical to the complex postposition form but lacking the postpositional element 'back-ADV.ALL' (10.97):

(10.97) V-PTCP-ABL

This form may represent a further grammaticalization of the complex postpositional construction into a more compact quasi-converb form. This strategy is less commonly used than the postpositional form (10.98). Besides, the perfective participle can be dropped, and the ablative case form may directly attached to the verb form (10.99).

(10.98) *[...] əmnəlkə-tu iː-**səː-tʰxiː**=l pi sʊtal-tali əːm*
*[...] emnelge-du ii-**see-txii**=l bi sʊdal-dali eem*
hospital-DAT enter-**PFV.PTCP-ABL**=PTCL 1SG vessel-PROL medicine

tintiː-r-wa kʰi əmun-tu əmun paxa-mi.
dindii-r-wa ki emun-du emun baxa-mi.
inject-IPFV.PTCP-DEF.ACC TOP one-DAT one get-1SG

'**After** I worked in the hospital (lit. entered), I never miss a shot (lit. do one get one) when I do injections.' (LT39-112)

(10.99) *tʰɔːtʃʰi pɔl ɔː**-(sɔː)-tʰixi** əjjə kaːlaːsʊn-ni təkliː-tʃʰi*
*tooci bol oo**-(soo)-tixi** eyye gaalaasʊn-ni deglii-ci*
DIS.CONN autumn become-**PFV.PTCP-ABL** PROX swallow-3 fly-COOR.CVB

ul-tʃʰə kunəŋ.
ul-ce guneŋ.
go-PST hearsay
'Then **after** it became autumn, this swallow flew away.' (LT02-11)

10.5.2 Locative clauses

In Solon, locative clauses are expressed through adnominal clauses with the generic noun *pɔkɔ* 'place' serving as the head noun, see example (10.100-10.101).

(10.100) *lama [...] il-**sa** **pɔkɔ-tʊ**-wi ʃʊːt xulaː-tʃʰi*
*lama [...] il-**sa** **bogo-dʊ**-wi sʊʊd xulee-ci*
lama stand-**PFV.PTCP** **place-DAT**-REFL.SG directly lie-COOR.CVB

nəː-sə [...]
nee-se [...]
put-PST
'The lama lay down directly on **the place where he stood**.' (LT42-30)

(10.101) *[…]* *tʰatʃʰir* *ɔː**-sɔ*** ***pɒka-tʊ*** *əjjə* *alak* *xərijə* *na*
[…] *tacir* *oo**-so*** ***bʊga-dʊ*** *eyye* *alag* *xeriye* *na*
barren become**-PFV.PTCP** **place-DAT** PROX spotty crow also

ə-ʃi-n *tʰəkə-r* *[…]*
e-si-n *tege-r* *[…]*
NEG-AOR-3 sit-CONNEG
'Even a crow will not stay **at a place that has become barren**.[19]' (LT19-34)

10.5.3 Manner clauses

In Solon, manner clauses can be expressed through quasi-converbs (§10.5.3.1), adnominal clauses in which the head noun is a generic noun meaning 'manner/way' (§10.5.3.2), or through the use of a similative postposition (§10.5.3.3).

10.5.3.1 Quasi-converbs

Quasi-converbs formed by perfective participles marked with the instrumental case *-tʃi* can express manner clauses.

(10.102) *[…]* *əʃi* *əmun* *putənə-ni* *tʃintʃi**-saː-tʃi**-ni* *əmun* *ɔː-m*
[…] *esi* *emun* *budene-ni* *jinji**-saa-ji**-ni* *emun* *oo-m*
now one quail-GEN tell**-PFV.PTCP-INS-3** one do-CONN.CVB

*iʃi-kt*ʰ*e* *[…]*
isi-gte *[…]*
see-HORT
'Now let me try to do **as** what quail told.' (LT01-30)

(10.103) *tʰari* *pakʃi-ni-wi* *ʃilpa**-sa-tʃi**-ni* *putʃik-lɔː-sə.*
tari *bagsi-ni-wi* *silba**-sa-ji**-ni* *bujig-lee-se.*
DIST teacher-GEN-REFL.SG teach**-PFV.PTCP-INS**-3 dance-VBZ-PST
'She danced **the way** her teacher taught her.' (elicited)

[19] Corrected by the speaker: mistake in the phrase 'spotty crow'. A crow is black and cannot be spotty, thus it is not translated.

10.5.3.2 Adnominal clauses

Adnominal clauses whose head nouns have a generic meaning such as ‘manner’ or ‘way’ can function as manner adjuncts.

(10.104)

tʰɔːtʃʰi	*tʰajja*	*əməktʰi*	*ʊtrʊː-wi*	*tali-**sa***	***jantʃi-tʃi**-wi*
tooci	*tayya*	*emegti*	*ʊdrʊʊ-wi*	*dali-**sa***	***yanji-ji**-wi*
DIS.CONN	DIST	woman	lips-SG.REFL	cover-**PFV.PTCP**	**manner-INS**-SG.REFL

ul-tʃʰə *kunəŋ.*
ul-ce *guneŋ.*
go-PST hearsay
‘(It is said that) then that woman went away **covering her mouth**.’ (LT40-31)

10.5.3.3 Similative postposition

The similative postposition *nəkəːŋ* can express manner, meaning ‘as if…’. When the manner clause is expressed using the postposition *nəkəːŋ*, the predicate of the clause typically appears in participle form (10.105-10.106).

(10.105)

məːn-i	*tʃuː-t-i*	*pi-tʃi-**r***	***nəːkəŋ***	*sanaː*
meen-i	*juu-d-i*	*bi-ji-**r***	***neegeŋ***	*sanaa*
REFL-GEN	house-DAT-REFL.SG	COP-PROG-**IPFV.PTCP**	**SIMV**	mind

amar *piː-xə!*
amar *bii-xe!*
easy COP-IMP
‘Stay at ease **as if** you are in your own home!’ (elicited)

(10.106) *[…] taskal ɔː-mi pʊː-tʃi-**r** **nəːkəŋ**,*
*[…] dasgal oo-mi bʊʊ-ji-**r** **neegeŋ**,*
homework make-CONN.CVB give-PROG-**IPFV.PTCP** **SIMV**

tʰa-ppi ɔː-mi pu-meː […]
ta-bbi oo-mi bu-mee […]
DIST-REFL.SG make-CONN.CVB give-1SG
'I baked (cake for them) as though I were completing an assignment' (LT23-21)

10.5.4 Reason clauses

Reason clauses in Solon are expressed using the postposition *tʃaxa* (§7.2.2.5), typically following participle predicates or non-verbal predicates (10.107-108). Occasionally, it appears with the second-person marker as *tʃaxa=ʃi* 'RSN=2SG' (10.109), which seems to reflect a pattern borrowed from Mongolian *yum-čin* 'thing-2', a clitic derived from 'thing' that conveys causative semantic coordination in its second-person form (Brosig, Yap & Ahrens 2021: 923).

(10.107) *xɔkkʰɔ ʊxʊn-tʃi uliː-xəːn-tʃi-**r** **tʃaxa** namat.*
*xokko ʊxʊn-ji ulii-xeen-ji-**r** **jaxa** namad.*
all PH-INS run-CAUS-PROG-**IPFV.PTCP** **RSN** warm
'**Because** (the rooms) are all heated by what (heaters), they are warm.' (LT11-70)

(10.108) *ʃi ʊnaːtʃi pəjə **tʃaxa** tʰul-ləː-ʃxi juː-nte […]*
*si ʊnaaji beye **jaxa** tul-lee-sxi yuu-nde […]*
2SG girl person **RSN** out-LOC-ADV.ALL go-2SG
'**Because** you are a girl, you will leave (from the family).' (LT39-03)

(10.109) *par ul-**tʃʰə** **tʃaxa=ʃi** kə əjjə sana amar aːsan-tʃʰa kunəŋ.*
*bar ul-**ce** **jaxa=si** ge eyye sana amar aasan-ca guneŋ.*
tiger go-**PFV.PTCP** **RSN=2SG** PTCL PROX mind easy sleep-PST hearsay
'It is said that because the tiger left, he slept relaxed.' (LT41-65)

Reason clauses can also be a finite clause, expressed by the grammaticalization of speech verb 'say' , as discussed separately in §10.7.2.3.

10.5.5 Conditional clauses

Conditional relations establish a connection between two events, where the occurrence of one event (subordinate clause) serves as the condition for the occurrence of the other event (main clause). According to Givón (1990: 829), Cristofaro (2005: 160), and Thompson, Longacre & Hwang (2007: 255-256), condition clauses can be semantically categorized into reality and unreality (also called realis and irrealis). Reality conditions refer to situations in which the event in the conditional clause is a 'real' occurrence, while unreality conditions describe 'unreal' situations of the conditional clauses, including imaginative, hypothetical, and predictive scenarios.

In Solon, the primary strategy for expressing conditional relations involves the conditional converb *-kʰi*. The conditional converb can convey both reality and unreality semantic relations; however, when expressing unreality conditions, it requires morphosyntactic reinforcement with an analytical form involving past tense. Below is an overview table showing the form of different conditional meanings in Solon:

Table 10-4: Solon conditional clauses and their forms

conditional relations	forms
reality conditions	COND.CVB
unreality conditions	
predictive	COND.CVB (the predictive meaning is based on the context)
imaginative	
hypothetical	V-PFV.PTCP COP-COND.CVB, the main clause is in present tense
counterfactual	V-PFV.PTCP COP-COND.CVB, the main clause is in past tense

10.5.5.1 Reality condition

The core implication of reality condition relations is that if the dependent event A (the conditional clause) occurs, it directly triggers or enables the occurrence of the main event B (Cristofaro 2005: 160, 167). There are 'if-clauses' and 'when-clauses' in reality conditions, both constructions imply that one event takes place, followed by another. According to Cristofaro (2005: 161), there are two key differences: in 'when-clauses', the occurrence of the dependent event is presented as certain, while in 'if-clauses', it is presented as possible. Additionally, the tense relationship differs: 'if-clauses' allow the main clause to relate to the dependent clause in either an anterior or simultaneous manner, whereas in 'when-clauses', the two events are typically interpreted as simultaneous The majority of languages distinguishes 'if-clauses' and 'when-clauses' (Qian 2016:108), but the shifts between 'if-clause' and ' when-clauses' are common in real usage (Creissels p.c.).

In Solon, the 'when-clauses' belong to the are temporal clauses with overlapping relations (§10.5.1.1). The 'if-clauses' discussed here are marked by the conditional converb *-kʰi*. The conditional converb *-kʰi* can express various types of reality conditions, including past reality (10.110), present reality (10.111), and habitual/generic reality (10.112).

(10.110)

[...]	*ɔntʰa*	*mɔntʰa=ja*	*əttuː**-kʰi***	*kə*	*ɔntʰa-ja*
[...]	*ɔnta*	*mɔnta=ya*	*edduu**-ki***	*ge*	*ɔnta-ya*
	shoes	M.RED =PTCL	to.break**-COND.CVB**	PTCL	shoes-PTV

məːnkʰəːŋ	*ulti-tʃʰi=l*	*ɔnaːtʃi-wa*	*kələː-nəː**-sə***	*ʃitʰə.*
meenkeeŋ	*uldi-ci=l*	*ɔnaaji-wa*	*gelee-nee**-se***	*site.*
self	sew-COOR.CVB=PTCL	girl-DEF.ACC	look.for-AM-**PST**	PTCL

'**If** (his) shoes or such things were broken, he sewed them by himself and went to look for the girl.' (LT19-30)

(10.111) *ənnəkəːŋ* *paraːn* *nisxuŋ* *ʃikkʰul-tʃʰil* *pi-tʃi-(r)-tu*
ɛnnegeeŋ baraan nisxuŋ sikkul-cil bi-ji-(r)-du
PROX.QLT many small ghost-PL COP-PROG-IPFV.PTCP-DAT

*pɔtɔ-**kʰi*** *ə-tu* *law* *urə-ni* *ukeː-nin* *pi-**ʃi**-n*
*bodo-**ki*** *e-du* *law* *ure-ni* *ugee-nin* *bi-**si**-n*
think-**COND.CVB** PROX-DAT must mountain-GEN nest-3 COP-**AOR**-3

pa […]
ba […]
TAG

'**If** think about there are such many small ghosts, their mountain nest must be here, isn't it?' (LT40-51)

(10.112) *xɔkkʰɔ* *əwəŋkʰi-tʃi* *xəːrəː-ltiː-mun,* *əwəŋkʰi*
xokko *eweŋki-ji* *xeeree-ldii-mun,* *eweŋki*
all Solon(Evenki)-INS chat-RECP-1PL.EXCL Solon(Evenki)

tɔː-lɔ-ːn *pi-**kkʰi**.*
doo-lo-ːn *bi-**kki**.*
inside-LOC-3 COP-**COND.CVB**
'We all chat in Solon, **if** it is among the Solon people.' (LT11-65)

10.5.5.2 Unreality condition

Unreality conditions express conditional relationships that describe unreal situations. These can be categorized into two main types: predictive and imaginative (Thompson, Longacre & Hwang 2007: 255–256). The imaginative type can be further divided into two subtypes, see the overall classification below.

(10.113) Predictive

Imaginative:

Hypothetical: Refers to situations that did not happen. (irrealis present)

Counterfactual: Refers to situations that could not have happened. (irrealis past)

10.5.5.2.1 Predictive

Predictive relations describe potential situations and their likely outcomes in the future. In Solon, the predictive conditionals are expressed using the conditional converb *-kʰi*. There is no overt morphological distinction from present reality conditions, the predictive interpretation arises only from context.

(10.114)

ʃin-i	*xʊrkaːn-ta*	***iː-kʰi***	*ʃin-i,*	*min-i*
sin-i	*xʊrgaan-da*	***ii-ki***	*sin-i,*	*min-i*
2SG.OBL-GEN	enclosure-DAT	**enter-COND.CVB**	2SG.OBL-GEN	1SG.OBL-GEN

xʊrkaːn-ta	***iː-kʰi***	*min-i*	*ɔː-rɔ-ŋ*	*[...]*
xʊrgaan-da	***ii-ki***	*min-i*	*oo-ro-ŋ*	*[...]*
enclosure-DAT	**enter-COND.CVB**	1SG.OBL-GEN	become-AOR-3	

‘**If** (the cattle) enter your enclosure, it **will** be yours, **if** enter my enclosure, it **will** be mine.’ (LT08-20)

(10.115)

[...] min-tu	*əmun*	*mʊxʊr*	*ʃiltʰa-ja*	
[...] min-du	*emun*	*mʊxʊr*	*silta-ya*	
1SG.OBL-DAT	one	name.of.sausage	sausage-PTV	

*puː**-kkʰiː**-ʃi*	*pi*	*ʃin-tu*	*kɔjɔ*	*pʊka-ja*	*tʃintʃi-m*
*buu**-kkii**-si*	*bi*	*sin-du*	*goyo*	*bʊga-ya*	*jinji-m*
give**-COND.CVB**-2SG	1SG	2SG-DAT	beautiful	place-PTV	tell-CONN.CVB

puː-meː	*[...]*
buu-mee	*[...]*
give-1SG	

‘**If** you give me one muhur sausage, I **will** tell you about a beautiful place.’ (LT04-18)

10.5.5.2.2 Imaginative

Imaginative conditional relations in Solon are expressed analytically and require the inclusion of past tense marking. The structure involves the copula verb *pi* ‘be’:

(10.116) V-PFV.PTCP COP-COND.CVB

There are two semantic differences in imaginative conditional relations: hypothetical and counterfactual. In some languages, hypothetical and counterfactual conditions are expressed using the same morphological strategy, with interpretation depending on context (Qian 2016: 101; Martínez & Lester 2022: 159-160). In Solon, the distinction between hypothetical and counterfactual condition is morphologically marked: in hypothetical clauses, the main clause typically uses an aorist tense (10.117-10.118), whereas in counterfactual clauses, the main clause tends to use the past tense (10.119-10.120). All the examples in this section are elicited, as the imaginative conditions did not occur in the Solon corpus.

(10.117)

ʃi	*tʰiːnuk*	*əjjə*	*sai-wə*	*im-**saː***	***pi-kkʰi***
si	*tiinug*	*eyye*	*sai-we*	*im-**saa***	***bi-kki***
2SG	yesterday	PROX	tea-DEF.ACC	drink-**PFV.PTCP**	**AUX-COND.CVB**

kutək-ʃi *ənuː-nə-ŋ.*
gudeg-si *enuu-ne-ŋ.*
belly-2SG to.hurt-AOR-3
'**If** you **had drunk** this tea yesterday, your stomach **would** have hurt.' (elicited)

(10.118)

tʰəjjə	*min-tuxi*	*aŋʊ-**sa***	***pi-kkʰiː***	*pi*	*xɔkkʰɔ-wa-ni*
teyye	*min-duxi*	*aŋʊ-**sa***	***bi-kkii***	*bi*	*xokko-wa-ni*
DIST	1SG.OBL-ABL	ask-**PFV.PTCP**	**AUX-COND.CVB**	1SG	all-DEF.ACC-3

tʰa-tʊ *tʃintʃi-mi* *puː-mi*
ta-dʊ *jinji-mi* *buu-mi*
DIST-DAT tell-CONN.CVB give-1SG
'**If** he **asked** me, I **would** tell him all.' (elicited)

(10.119) *pi* *kʊtta* *pi-**sə*** ***pi-kkʰi*** *lanqiur* *uki:-r*
bi *gʊdda* *bi-**se*** ***bi-kki*** *lanqiur* *ugii-r*
1SG tall COP-**PFV.PTCP** **AUX-COND.CVB** basketball play-IPFV.PTCP

*pi-**su.***
*bi-**su.***
COP-**PST.1SG**
'**If** I **were** tall, I **would** have played basketball. (elicited)

(10.120) *ʃi* *mukun-wi* *appila-**sa*** ***pi-kkʰi*** *kɔttijɔ* *tʰəkəŋ*
si *mugun-wi* *abbila-**sa*** ***bi-kki*** *goddiyo* *tegeŋ*
2SG money-REFL.SG skimp-**PFV.PTCP** **AUX-COND.CVB** past car

*ka-**sa**-ʃi.*
*ga-**sa**-si.*
take-**PST**-2SG
'**If** you **had** saved money, you would have bought a car a long time ago.' (elicited)

10.5.6 Concessive clauses

Concessive clauses express a contrast proposition in relation to the result of the main clause. They introduce a situation or condition that might make the action or state in the main clause unlikely or surprising. According to Thompson, Longacre & Hwang (2007: 262-263), there are two types of concession: definite and indefinite. The definite concession signals a meaning of 'although…', while the indefinite concession signals a meaning of 'no matter what, whatever'.

10.5.6.1 Definite concession

The subordinator of definite concession in Solon is the postposition *tʃa:rin* (§7.2.2.4). The subordinate predicate appears in the participle form. The grammatical category of *tʃa:rin* varies, it can also function as a discourse focus particle, and it may express the meaning of 'for the sake of'.

(10.121) *[…] xʊtaː kələː-sə **tʃariŋ** xɔkkʰɔ ə-sə tʃupʃəːrə-r.*
*[…] xʊdaa gelee-se **jariŋ** xokko e-se jubseere-r.*
marriage look.for-PFV.PTCP **CONC** all NEG-PST agree-CONNEG
'**Although** (the guys) asked for the marriage, (the girl) didn't accept any of them' (LT19-10)

(10.122) *ʃi min-i ɔntʰɔːn-pɔjɔ əmun tʰal-wa-ni sɔpʰ*
si min-i ontoon-boyo emun tal-wa-ni sop
2SG 1SG.OBL-GEN drum-DEF.ACC.1SG one side-DEF.ACC-3 IDEO

*nəː-sə-ʃi **tʃarin** pi tʰajja əmun tʰal-kiːtʃi-ni pasa=l*
*nee-se-si **jarin** bi tayya emun tal-giiji-ni basa=l*
put-PFV.PTCP-2SG **CONC** 1GS DIST one side-ELT-3 again=PTCL

ʃin-u-wə təilə-mi ətʰə-mi
sin-u-we deile-mi ete-mi
2SG.OBL-EP-DEF.ACC beat-CONN.CVB finish-1SG
'**Although** you have removed one side of my drum, I can still beat you with the other side.' (LT42-29)

10.5.6.2 Indefinite concession

Cross-linguistically, indefinite concessive clauses typically contain unspecified elements, such as question words, indefinite pronouns, or universal quantifiers (e.g., whatever, whoever, whenever) (Thompson, Longacre & Hwang 2007: 263). In Solon, indefinite concessive clauses are also marked by the concessive subordinator *tʃaːrin*, but they must include in interrogative word.

(10.123) *[…] kə pi **ittʰɔː-sɔ** **tʃariŋ** pa tʰajja tʃalʊ-wa*
*[…] ge bi **ittoo-so** **jariŋ** ba tayya jalʊ-wa*
PTCL 1SG **how-PFV.PTCP** **CONC** PTCL DIST young.man-DEF.ACC

kələː-nəː-me […]
gelee-nee-me […]
look.for-AM-1SG
'**No matter how**, I will go and look for that young man.' (LT19-40)

(10.124) *[...]* ***ilə:-xətʰ*** *nə:-sə* ***ʧariŋ*** *tʰʊsa* *ə-sə* *ju:-r* *[...]*
[...] ***ilee-xet*** *nee-se* ***jariŋ*** *tʊsa* *e-se* *yuu-r* *[...]*
where-PTCL put-PFV.PTCP **CONC** benefits NEG-PST go.out-CONNEG
'**No matter where** (the lama) put (the drum), it didn't work out.' (LT42-19)

10.6 Structure of non-finite subordination

This section provides an overview of the structural properties of non-finite clause subordination in Solon. Three types of dependent clauses are considered here: complement clauses, adnominal clauses, and adverbial clauses. Two major parameters are relevant for the analysis of non-finite subordination in Solon. The first concerns differential embedded subject marking, and the second concerns the distribution of cross-reference person markers.

Solon is one of the Tungusic languages that possess a genitive case, a feature widely attributed to contact with Mongolian (for more information on genitive case, see §4.1.2.4). As a consequence, embedded subjects in subordinate clauses exhibit nominative-genitive case alternation. The second parameter involves cross-reference marking: in adnominal clauses, the person marker typically appears on the head noun (with the exception of headless relative clauses, where it attaches to the participial predicate), whereas in complement clauses and adverbial clauses the person marker is realized on the participial predicate of the subordinate clause.

The present section focuses exclusively on subordinate clauses marked by participial predicates. Accordingly, non-finite complement clauses, adnominal clauses and non-finite adverbial clauses only marked by quasi-converb construction. Table 10-5 summarizes the total number of non-finite subordinate clauses included in this analysis.

Table 10-5: The complex clauses involved in this section as found in the reduced Solon corpus

clause type	complement clauses	adnominal clauses	adverbial clauses (quasi-converb)
number	20	138	74
total	232		

Notably, both parameters, embedded subject marking and cross-reference marking, exhibit intermediate and variable behavior in Solon non-finite subordinate clauses: embedded subjects alternate between nominative and genitive marking, and person markers may be present or absent. This section aims to explain this intermediate pattern. Section §10.6.1 addresses differential embedded subject marking, showing how it is shaped by clause type and by inherent semantic properties of the embedded subject. Section §10.6.2 discusses the distribution of cross-reference person markers in subordinate constructions.

10.6.1 The differential embedded subject marking

Differential subject marking (DSM) in Solon is restricted to subordinate clauses. This restriction is typologically well attested in Transeurasian languages. For instance, Turkish exhibits nominative-genitive alternation in embedded subjects (Kornfilt 2008), while Mongolian displays even broader alternations, including nominative, genitive, accusative, and ablative marking (Guntsetseg 2012). Kornfilt (2008) demonstrates that DSM in Turkish is conditioned both by the semantic properties of the subject and by the structural properties of the clause.

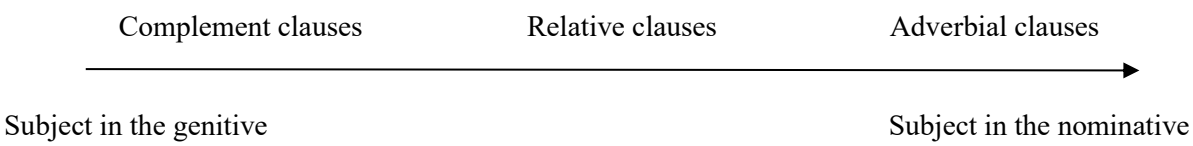
Due to the strong Mongolian influence, Solon likewise shows alternation in embedded subject marking, though this alternation is limited to nominative and genitive cases. A similar system has been reported for Manchu, another Tungusic language heavily influenced by Mongolian (Kao 2024). In Solon, two major factors determine the case marking of embedded subjects are: (i) the type of subordinate clause (§10.6.1.1), and (ii) the inherent semantic properties of the embedded subject (§10.6.1.2).

10.6.1.1 NP-like and finite-clause like subordination

Clause-type-conditioned differential argument marking refers to a pattern in which a particular argument receives one type of case marking in one clause type but a different case marking in another clause type (Witzlack-Makarevich & Seržant 2018: 17). This pattern is also found in Solon, where the most important factor governing nominative–genitive alternation is the type of subordinate clause. Across Transeurasian languages, a robust tendency has been observed

whereby subjects in complement clauses preferentially take the genitive case, subjects in adnominal clauses exhibit mixed behavior, and subjects in adverbial clauses overwhelmingly occur in the nominative case. This distribution reflects deeper structural differences: complement clauses are structurally aligned with possessive noun phrases, whereas adverbial clauses are more similar to sequences of independent clauses (Malchukov & Czerwiński 2020: 633–634; see Figure 10-1).

Figure 10-1: Genitive vs. nominative subject preference across subordinate-clause types (Malchukov & Czerwinski 2020:634)



In this typological framework, clauses whose embedded subjects are genitive-marked are often referred to as nominalized clauses or NP-like clauses, while those with nominative-marked embedded subjects are described as finite-clause-like or genuine clauses (Guntsetseg 2012: 215).

For the statistical analysis of embedded subject marking in Solon, those sentences with non-overt embedded subjects were excluded, as these frequently involve generic subject or contextual ellipsis and constitute a substantial portion of the corpus. In addition, subject adnominal clauses were excluded, since in these constructions the embedded subject corresponds to the head noun and is case-marked according to the valency of the main clause rather than the subordinate clause. Table 10-6 presents the remaining cases with overt embedded subjects; bold numbers indicate the total counts for each clause type, along with the distribution of genitive versus nominative marking.

Table 10-6: The number of overt subject complex clauses (in bold) in the reduced Solon corpus and their case encodings

clause type	complement clauses		adnominal clauses		adverbial clauses (quasi-converb)	
subject adnominal clauses	-		55		-	
overt subject	**5**		**27**		**30**	
	GEN	**NOM**	**GEN**	**NOM**	**GEN**	**NOM**
	4	**1**	**19**	**8**	**1**	**29**
	80.0%	**20.0%**	**70.4%**	**29.6%**	**3.3%**	**96.7%**
non-overt subject	15		56		44	
total	232					

Although the dataset is relatively limited, a clear pattern nevertheless emerges. Complement clauses and adnominal clauses show a stronger preference for genitive-marked embedded subjects, while adverbial clauses overwhelmingly favor nominative marking, with nominative subjects accounting for as much as 96.7% of the attested cases. This distribution confirms that subordinate clause type plays a decisive role in determining embedded subject marking in Solon.

See genitive marked embedded subjects in complement clause (10.125), and in adnominal clause (10.126), and see the nominative embedded subject in adverbial clause (10.127).

(10.125) *tʰari* *ʊnaːtʃi**-ni**-wi* *tʃaːntaː**-saː**-wa-ni* *kɔrɔ-kiːtʃi*
tari *ʊnaaji**-ni**-wi* *jaandaa**-saa**-wa-ni* *goro-giiji*
DIST daughter-**GEN**-REFL.SG sing-**PFV.PTCP**-DEF.ACC-3 far-ELT

tɔːltiː-m *paxa-mi […]*
hear-CONN.CVB get-CONN.CVB
'He heard his daughter's singing from far away…' (LT38-37)

(10.126) *[…]* *tʰari=ʃi* ***mun-i*** ***tʰir-sə*** *tʰuːpʰi.*

[…] *tari=si* ***mun-i*** ***tir-se*** *tuupi.*

DIST=2SG 1PL.EXCL-**GEN** press-**PFV.PTCP** brick

'Those are the bricks we pressed (our pressed bricks)' (LT18-12)

(10.127) *[…]* ***pi*** *ʃin-wə* *pɔtɔ-**sɔ**-t-i* *ətt*ʰ*u*

[…] ***bi*** *sin-we* *bodo-**so**-d-i* *ettu*

1SG 2SG.OBL-DEF.ACC think-**PFV.PTCP**-DAT-REFL.SG PROX.ADV

tʃintʃi-tʃi-m *kʰuŋ* *[…]*

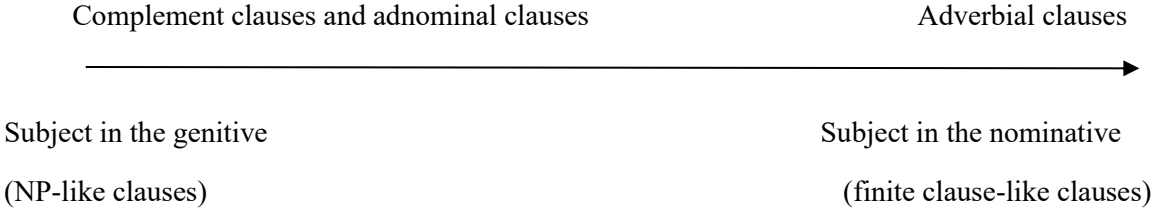
jinji-ji-m *kuŋ* *[…]*

tell-PROG-1SG MIR

'As I am thinking of you, I am saying this.' (LT28-90)

These findings support the view that Solon employs two structurally distinct types of subordinate clauses, despite the uniform use of participial predicates. One type consists of NP-like subordinate clauses, characterized by genitive-marked embedded subjects and typically used to fill argument positions associated with nominal elements, such as subjects, objects, or locative/goal arguments. The other type consists of finite-clause-like subordinate clauses, characterized by nominative-marked embedded subjects and primarily used to express temporal relations, such as sequence or overlap between two events. Genitive-marked embedded subjects tend to occur in complement clauses and adnominal clauses, while nominative-marked embedded subjects preferred in adverbial clauses, see Figure 10-2. Minor differences between complement clauses and adnominal clauses are observable in the data; however, given the limited number of complex clauses in the corpus, these differences are not interpreted as statistically or structurally significant,

Figure 10-2: Genitive vs. nominative subject preference across subordinate-clause types in Solon



10.6.1.2 Specificity of the embedded subject

Definiteness and specificity are non-inherent, discourse-based properties that are well known to influence differential argument marking cross-linguistically (Witzlack-Makarevich & Seržant 2018: 9-11). Although these notions are difficult to define precisely, a common analytical distinction links definiteness to identifiable, whether the hearer can identify the referent, while specificity is determined by the speaker's intention; a nominal is specific if the speaker has a particular referent in mind (Lyons 1999). Given their close interaction, definiteness and specificity are often represented in a hierarchy (10.128) (Comrie 1986; Croft 2003):

(10.128) definite > (indefinite) specific > (indefinite) non-specific

In languages that exhibit nominative-genitive alternation of embedded subjects, genitive marking is typically associated with higher degrees of specificity, while nominative marking correlates with lower specificity (Kornfilt 2008: 83–86). This generalization is also relevant for Solon, but its applicability is constrained by clause type.

First, it must be emphasized that adverbial clauses in Solon are largely insensitive to the specificity of the embedded subject. As shown in §10.6.1.1, adverbial clauses overwhelmingly favor nominative-marked embedded subjects (96.7%), regardless of whether the subject is specific or identifiable in discourse. This strong preference indicates that adverbial clauses in Solon are structurally aligned with finite-clause-like constructions, and that their subject marking is determined primarily by clause type rather than by discourse properties such as specificity. Example (10.129) illustrates this pattern: even though the embedded subject is specific, it remains nominative-marked in an adverbial clause.

(10.129) *[…]* ***pi*** *nin-**tʃʰəː-tʰxiː**=l* *əmnəlkə-tu* *iː-səː-tʰxiː=l* *pi*

[…] ***bi*** *nin-**cee-txii**=l* *emnelge-du* *ii-see-txii=l* *bi*

1SG go-**PFV.PTCP-ABL**=PTCL hospital-DAT enter-PFV.PTCP-ABL=PTCL 1SG

sʊtal-tali *əːm* *tintiː-r-wa* *kʰi* *əmun-tu* *əmun*

sʊdal-dali *eem* *dindii-r-wa* *ki* *emun-du* *emun*

vascular-PROL medicine inject-IPFV.PTCP-DEF.ACC TOP one-DAT one

paxa-mi.

baxa-mi.

get-1SG

'**After I** went to (hospital), after I enrolled in hospital, I don't make mistakes on injections (lit. putting medicine through blood vessels.)' (LT39-32)

For this reason, the role of specificity in embedded subject marking is primarily relevant to complement clauses and adnominal clauses, both of which tend to exhibit an NP-like structural profile. As noted in §10.6.1.1 and Table 10-6, these clause types strongly favor genitive-marked embedded subjects; nevertheless, a non-negligible number of cases show nominative-marked embedded subjects. A portion of these apparent exceptions can be systematically explained by the specificity of the embedded subject. More specifically, when the embedded subject is specific, it tends to be marked with the genitive case, whereas non-specific embedded subjects tend to remain nominative-marked. This contrast is illustrated in the complement clauses in (10.130). In (10.130a), the embedded subject is specific and identifiable to the speaker, and accordingly it is marked with the genitive case. In contrast, in (10.130b) the embedded subject is non-specific, its referential identity is unclear (e.g. it is unknown what kind of ghost is being referred to), and the embedded subject therefore appears in the nominative case.

(10.130) a. *[…]* *tʰɔːl* *xakki* *axaː-**niː**-wi* *ɔsxɔːŋ*

[…] *tool* *xaggi* *axaa-**nii**-wi* *osxooŋ*

rabbit pheasant elder.brother-**GEN**-REFL.SG fish

*tʃɨtʃ-tʃi-**r**-wə-ni* *iʃɨtʃʰi […]*

*jij-ji-**r**-we-ni* *isici […]*

eat-PROG-**IPFV.PTCP**-3 see-COOR.CVB

'The rabbit saw **her pheasant brother's eating fish**.' (LT06-03)

b. *[…]* *məːŋkʰəːŋ* *ɔltɔːn-tʊ-ni* ***ʃikkʰʊl*** *əm-**səː**-wə-ni*
[…] *meeŋkeeŋ* *oldoon-dʊ-ni* ***sikkʊl*** *em-**see**-we-ni*
PN side-DAT-3 **ghost** come-**PFV.PTCP**-DEF.ACC-3

ə-sə *iʃi-r* *nəkəːŋ=l* *jəːmə-jə* *tʃim-mi*
e-se *isi-r* *negeeŋ=l* *yeeme-y* *jim-mi*
NEG-PFV.PTCP see-CONNEG SIMV=PTCL thing-PTV eat-CONN.CVB

tʰəkə-ʃiː-tʃi-sə *[…]*
tege-sii-ji-se *[…]*
sit-STAT-PROG-PST

'Menkeng was sitting with eating something as if he didn't **see a ghost came next to him.**' (LT40-13)

A similar pattern is observed in adnominal clauses, as shown in (10.131). In (10.131a), the embedded subject 'the two young people' is specific and mutually identifiable to both speaker and addressee, and it is consequently genitive-marked. By contrast, in (10.131b), the embedded subject 'horses' receives a generic, non-specific interpretation and is marked by the nominative case.

(10.131) a. *[…]* *əjjə* *tʃuːr* *tʃalʊː**-ni*** *pa* *xəmliː-ltiː-tʃʰi* *aːʃin*
[…] *eyye* *juur* *jalʊʊ**-ni*** *ba* *xemlii-ldii-ci* *aasi*
PROX two young.people-**GEN** PTCL hug-RECP-COOR.CVB NEG

ɔː-sɔː-ni *tʰa-tʊː-ni* *pa* *əmun* *əjjə* *saːlpaːn* *mɔː*
oo-soo-ni *ta-dʊʊ-ni* *ba* *emun* *eyye* *saalbaan* *moo*
become-PFV.PTCP-GEN DIST-DAT-3 PTCL one PRXO betula tree

ʊkkʊ-sa *[…]*
ʊggʊ-sa *[…]*
grow-PST

'There the two **young people's** hugging each other and died, a Betula tree grew.' (LT19-56)

b. *[...]* *ɔtɔ* ***mɒrin*** *xɔwwɔː-r* *sak* *itʃʰ-tʃʰa.*
[...] *odo* ***mɒrin*** *xowwoo-r* *sag* *ic-ca.*
now **horse** run-IPFV.PTCP time reach-PFV.PTCP
'Now it is the time of horse racing. (lit. the time that the horses run)' (LT09-25)

10.6.2 Cross-reference marker

In clause linkage constructions, the embedded subject is cross-referenced either on the head noun, on the participial predicate, or on adverbial converbs. When the embedded subject is coreferential with the matrix subject, a reflexive possessive marker is used (10.132); when the embedded subject differs from the matrix subject, a personal possessive marker is employed (10.133).

(10.132) *[...]* *ʃiwuŋ* *ɒnaːtʃi* *xaʃila* *məːn-i* *ulə-**r*** *sak-t-**i***
[...] *siwuŋ* *ɒnaaji* *xasila* *meen-i* *ule-**r*** *sag-d-**i***
sun girl rather REFL-GEN go-**IPFV.PTCP** time-DAT-**REFL.SG**

juː-tʃʰi *ul-tʃʰə*
yuu-ci *ul-ce*
exit-COOR.CVB go-PST
'The sun girl rather went out at **the time when** she leaves (everyday).' (LT38-40)

(10.133) *satti* *nɔːtʃʰi* *juː-m* *pi-səː-tʃi* *tʃuːr*
saddi *nooci* *yuu-m* *bi-see-ji* *juur*
old.lady before go.out-CONN.CVB COP-PFV.PTCP-INS two

ɒnaːtʃi-niː-wi *aːʃin-tʃi-**r*** *tʃuː-tu-**ni*** *nin-tʃʰəː=ʃi [...]*
ɒnaaji-nii-wi *aasin-ji-**r*** *juu-du-**ni*** *nin-cee=si [...]*
daughter-GEN-REFL.SG sleep-PROG-**IPFV.PTCP** house-DAT-**3** go-PFV.PTCP=2SG
'When the old lady first went to **the house where** her two daughters are sleeping…' (LT35-49)

In Solon, however, cross-reference marking in non-finite subordinate clauses is far from systematic. As shown in Table 10-7 (excluding subject adnominal clauses), the distribution of

cross-reference markers varies across subordinate clause types. Meanwhile, across all the subordinate clause types, when the embedded subject is generic, the cross-reference marker is always missing.

Table 10-7: The frequency of presence of cross-reference markers in Solon subordinate clauses (in the reduced corpus)

overt co-reference with…	**complement clauses**	**adnominal clauses**	**adverbial clauses (quasi-converb)**
all subject	14/20 (70.0%)	34/83 (40.1%)	30/74 (40.0%)
all non-generic subject	**14/15 (93.3%)**	**34/48 (70.8%)**	**30/71 (42.3%)**
overt subject (GEN-marked)	5/5 (100.0%)	17/21 (80.2%)	0/1(0.0%)
overt subject (NOM-marked)	1/1 (100.0%)	1/8 (12.5%)	10/29 (34.5%)
non-overt subject (nom-marked)	8/9 (88.9%)	16/21 (76.2%)	20/41 (48.8%)
generic subject	0/5 (0.0%)	0/35 (0.0%)	0/3 (0.0%)

*The adnominal clause in this table excludes the subject adnominal clauses.

Complement clauses constitute the environment in which cross-reference marking is most stable and overt (93.3% of presence in complement clauses with non-generic subjects). When the embedded subject is overt, cross-reference marking is consistently present (see 10.125); notably, it is also retained when the embedded subject is not overt, as illustrated in (10.134).

(10.134) *əm-**sə**-wi* *saː-me,* *nənu-**sə**-wi*
*em-**se**-wi* *saa-me,* *nenu-**se**-wi*
come-**PFV.PTCP-REFL.SG** **know**-1SG return-**PFV.PTCP**-REFL.SG

ə-ʃi-mi *saː-ra.*
e-si-mi *saa-ra.*
NEG-AOR-1SG know-CONNEG

'I remembered (lit. know) my coming, I don't remember my returning back.' (LT34-06)

In adnominal clauses, the distribution of person markers is more uneven and closely correlates with the case marking of the embedded subject. When the embedded subject is genitive-marked, person marking on the clause is relatively frequent (80.2%), as in (10.135a). By contrast, when the embedded subject is nominative-marked, person marking is much less common (12.5%), as shown in (10.135b). This asymmetry suggests that person marking in adnominal clauses is more closely associated with NP-like subordinate clauses than with finite-clause-like subordinate clauses. In such cases, the function of the person marker as a cross-reference device becomes questionable; instead, it appears to behave more like a possessive marker in NPs than a true cross-reference marker targeting the embedded subject. This also aligns with the high frequency of cross-reference marker occurrences in complement clauses as well, as complement clauses also prefer a genitive case marked embedded subject (§10.6.1).

(10.135) a. *əmmə* *apaː**-niː**-tʰi* *ultəː**-sə*** ***kurəŋkə-nin*** *kʰi*
emme *abaa**-nii**-ti* *uldee**-se*** ***gureŋge-nin*** *ki*
mother father**-GEN**-1PL.INCL leave**-PFV.PTCP** **wealth-3** TOP

natan *tʰʊsxaːn-tʃʰi* *unkəŋ* *pi-ʃi-n.*
nadan *tʊsxaan-ci* *ungeŋ* *bi-si-n.*
seven calf-PROP cow COP-AOR-3
'**The wealth which our parent left** is seven cows with calves.' (LT08-17)

b. *tʰɔːtʃʰi* ***pəkkəŋ-pi*** *xʊtalaːr* ***ərin**-tu* *kʰi* *[…] ə-ləː*
tooci ***beggeŋ-bi*** *xʊdalaa-r* ***erin**-du* *ki* *[…] e-lee*
DIS.CONN **sister.in.law-1SG** marry-IPFV.PTCP ***time**-DAT* TOP PROX-LOC

xaːlaː-mi *əmə-mi* *[…]*
xaalaa-mi *eme-mi* *[…]*
move-CONN.CVB come-CONN.CVB
'Then, **at the time when my sister-in-law married**, we moved here.' (LT34-04)

The analysis is further complicated by adnominal clauses without an overt embedded subject. In the reduced corpus, 21 cases lack an overt embedded subject, and an additional 35 cases involve a generic embedded subject. In practice, it is often difficult to distinguish between these two types. One diagnostic for identifying generic subjects is conventionalization: for

example, in (10.136), expressions such as ‘food’ and ‘drink’ are conventionalized in Solon as ‘things one eats’ and ‘things one drinks’, and therefore clearly involve generic subjects. Even with this criterion, however, the distinction cannot always be drawn unambiguously. In (10.137), the adnominal clause lacks an overt embedded subject and permits two interpretations. Under interpretation (a), the clause is analyzed as having a non-overt embedded subject, with the person marker referring back to ‘the hunter’. Under interpretation (b), the clause is analyzed as involving a generic embedded subject, with the person marker instead marking possession of ‘the hunter’. Since there is no morphosyntactic distinction between these two readings, the function of the person marker in such cases remains highly ambiguous. For this reason, the person markers in clauses with non-overt or potentially generic embedded subjects are not examined in further detail in this study.

(10.136) *[...]* *tʃittʰə-**r*** *ima-**r*** ***jəːmə*** *xətʰ* *aːʃin* *[...]*
[...] *jitte-**r*** *ima-**r*** ***yeeme*** *xet* *aasin* *[...]*
eat-**IPFV.PTCP** drink-**IPFV.PTCP** **thing** PTCL NEG.EXIS
‘There is no food and drinks.’ (lit. there are **no things one eats and drink**) (LT19-30)

(10.137) *[...]* *tʰijja* *ɔsxɔn-tʊ* *puː-**r*** ***jəːmə-tʰxi-**n*** *tʰijja* *təki* *tʃitʰ-ə-m*
[...] *tiyya* *osxon-dʊ* *buu-**r*** ***yeeme-txi-**n*** *tiyya* *degi* *jit-e-m*
DIST fish-DAT give-**IPFV.PTCP** **thing**-ABL-**3** DIST bird eat-EP-1SG
kun-tʃʰə *ʃitə*
gun-ce *side*
SAY-PST PTCL
(a) ‘The bird wanted to eat **the thing that (the hunter) gives to fish**.’
(b) ‘The bird wanted to eat **the hunter’s thing that one gives to fish**.’ (LT05-04)

In adverbial clauses, the overall frequency of cross-reference marking is relatively low (42.3% of presence in adverbial clauses with non-generic subjects). As noted in §10.6.1, adverbial clauses in Solon overwhelmingly take nominative-marked embedded subjects and thus pattern structurally as finite-clause-like subordinate clauses. In this context, the occurrence of cross-reference marking appears largely unsystematic. This is illustrated in (10.138): in both (10.138a) and (10.138b), the embedded subject is a human noun. However, in (10.138a) the

cross-reference marker is present, whereas in (10.138b) it is absent. Especially considering that the subjects in the adverbial and main clauses are different in (10.138b), a cross-reference marker is expected but lacking.

(10.138) a. *tʰɔːtʃʰi* ***tʰari*** *aliː-r-**tʊ-wi*** *talai-tʊ*
tooci ***tari*** *alii-r-**dʊ-wi*** *dalai-dʊ*
DIS.CONN **DIST** be.angry-**IPFV.PTCP**-DAT-**REFL.SG** sea-DAT

nʊːtaː-m *pi-ttʃʰi* *[...]*
throw-CONN.CVB COP-COOR.CVB
'Then, **as he was angry**, he throws (the drum) into the see…' (LT42-16)

b. ***ʃiwuŋ*** ***ʊnaːtʃi*** *xaːltʰ-ni* *tʃakkʰa-li* *tɔː-ʃxi*
siwuŋ ***ʊnaaji*** *xaalt-ni* *jakka-li* *doo-sxi*
sun **girl** gate-GEN gap-PROL inside-ADV.ALL

*mənti-**səː-tu*** *məktəŋ* *xarin* *ʃirə* *tʃalʊŋ* *arxi* *nəː-m* *[...]*
*mendi-**see-du*** *megdeŋ* *xarin* *sire* *jalʊŋ* *arxi* *nee-m* *[...]*
look.at-**PFV.PTCP**-DAT PN MIR table full liquor put-CONN.CVB
'**When the sun girl looked in through the door crack**, the Megdeng set out a table full of liquor.' (LT38-26)

In conclusion, the cross-reference marking in Solon non-finite subordinate clauses varies substantially by clause type. Complement clauses strongly favor genitive-marked embedded subjects and consistently exhibit cross-reference marking. Adnominal clauses, those with genitive-marked embedded subjects tend to take person marking, whereas other cases remain unclear. In adverbial clauses, the presence of cross-reference marking is intermediate and does not show a clear conditioning factor. Overall, Solon exhibits an attenuated and clause-type-sensitive cross-reference system rather than the robust and uniform pattern typically associated with Tungusic languages.

10.7 Finite subordinate clauses

Finite subordinate clauses are clauses with a finite predicate that can nevertheless be embedded within a main clause. In Solon, this type of clause is uniformly derived from the grammaticalization of a generic verb of speech. Cross-linguistically, generic speech verbs such as 'say' are well known for their tendency to grammaticalize into a wide range of functional elements, including complementizers, conditional conjunctions, hearsay evidentials, and topic markers (Güldemann 2008; Chappell 2008).

The cognate form of the speech verb 'say' in Northern Tungusic languages is *gun-/kun-*. Across the family, however, the degree to which this verb has undergone grammaticalization varies considerably and correlates closely with contact influence from neighboring dominant languages. In the Siberian Tungusic languages, such as Western Evenki, Negidal, and Eastern Even, grammaticalized uses of the speech verb are generally rare. Matić and Pakendorf (2013: 365) show that the frequency of grammaticalized 'say' is close to zero in most Siberian varieties, while Western Even and Eastern Evenki show moderately higher frequencies (32.5% and 12.5%, respectively). This increase has been attributed to contact with Sakha (Turkic), a dominant regional language that has an inherited and highly productive grammaticalization of 'say', reaching a frequency of 55.1%.

Solon, although genetically a Northern Tungusic language, shows an exceptionally high frequency of grammaticalized uses of 'say', a pattern that is best understood as contact-induced change under strong influence from Mongolian. Mongolian has an inherited speech verb that is extensively grammaticalized into a variety of clause-linking and discourse-structuring functions (Chinggeltei 1999: 301–308; Janhunen 2012a: 283–286; Tumenjirgal 2009: 254–256; Brosig 2021). The Solon data closely mirror this Mongolian pattern, suggesting intense structural borrowing rather than independent internal development.

For clarity, the capitalized form SAY is used throughout this chapter to refer specifically to the grammaticalized uses of *kun-* 'say', as opposed to its lexical meaning 'to say'.

This section first introduces the forms of SAY in Solon (§10.7.1). §10.7.2 then examines the functional range of SAY. §10.7.3 discusses the further grammaticalized developments of SAY in Solon.

10.7.1 Forms of SAY

Although SAY represents a grammaticalized use of the speech verb, it remains morphologically productive in Solon. It can inflect into a wide range of finite forms, as well as into converbs and participles, paralleling the inflectional behavior of lexical verbs. The full range of attested forms is presented in Table 10-8.

Table 10-8: The forms of say verb *kun-*

	finite forms	**converbs**	**participles**	**particle**
kun-* *'say'	productive	SAY.CVB *kun-kʰəŋ (kʰəŋ)* COOR.CVB *kun-tʃʰi* COND.CVB *kun-kʰi* SIM.CVB *kun-tli* TEM.CVB *kun-tʃʰixi*	IPFV.PTCP *kun-ə-r* PFV.PTCP *kun-tʃʰə*	hearsay particle *kunəŋ* (derived from 'say'-AOR-3)

One form that deserves special attention is the converb form *kun-kʰəŋ*, the converb *-kʰəŋ* only attaches to the speech verb 'say' and glossed here as SAY.CVB. In this study, it is treated as a converb because it frequently precedes another verb and functions in clause-linking contexts. However, this classification is not unproblematic, since participles in Solon can also co-occur with verbs, blurring the formal distinction between converbs and participles.

In addition, the third-person aorist form *kun-ə-ŋ* has developed into a hearsay particle. In this function, it no longer behaves as a predicate but instead serves as an evidential marker, indicating that the information conveyed is reported rather than directly witnessed. This further illustrates the advanced degree of grammaticalization of SAY in Solon and its functional diversification under Mongolian influence.

10.7.2 Functions

Depending on the degree of grammaticalization, SAY in Solon fulfills a wide range of functions. These include: (1) quotation of direct speech; (2) use as a complementizer with cognition, perception, and emotion verbs; (3) marking of adjunct clauses; (4) expression of prospectivity

and intention; (5) hearsay evidentiality; (6) metalinguistic functions; and (7) discourse-pragmatic uses. Each of these functions is discussed in turn in the following subsections.

10.7.2.1 Quotation of direct speech

In Solon, manner-of-speech verbs cannot independently introduce direct quotations. Instead, the generic speech verb *kun-* 'say' is required to mark quoted speech. In this construction, a finite clause encoding the quoted content precedes SAY, while the matrix predicate is typically a more semantically specific verb of speech, such as 'tell', 'shout', 'ask', 'sing', or 'threaten'. The role of SAY in this context is thus not to contribute lexical meaning but to function as a quotative marker licensing direct speech.

(10.139)

[...]	*pi*	*ərkuna*	*kɔl-ni*	*xuwəː-tu*	*nənə-tʃʰi*	*pa*
[...]	*bi*	*erguna*	*gol-ni*	*xuwee-du*	*nene-ci*	*ba*
	1SG	GN	river-GEN	edge-DAT	go-COOR.CVB	PTCL

ʃin-ə-wə	*alaː-ʃi-me*	***kuŋ**-kʰəːŋ*	***tʃintʃi**-sa*
sin-e-we	*alaa-si-me*	***guŋ**-keeŋ*	***jinji**-sa*
2SG.OBL-EP-DEF.ACC	wait-STAT-1SG	**SAY**-SAY.CVB	**tell**-PST

'(The boy) said (lit. **saying told**) I will go to the Erguna river side and wait for you.'' (LT19-18)

(10.140)

[...]	*ə-tʃi*	*talka-ra*	***kun**-kʰəŋ*	***ɔkkʰira**-sa*	*kunəŋ*
[...]	*e-ji*	*dalga-ra*	***gun**-keŋ*	***ɔkkira**-sa*	*guneŋ*
	NEG-PROH	burn-CONNEG	**SAY**-SAY.CVB	**shout**-PST	hearsay

'(The boy) **shouted** (**saying**) 'don't burn it!'' (LT28-120)

10.7.2.2 Complementizer

Complementation in Solon is primarily expressed by participial clauses (§10.3). A second major strategy involves finite subordinate clauses introduced by grammaticalized SAY, which functions as a complementizer with verbs of cognition, emotion, and perception. This use is

plausibly derived from internal monologue constructions, allowing SAY to encode states of internal awareness and mental representation. In the corpus, no naturally occurring examples were found in which perception verbs take SAY-marked complements; the relevant examples are therefore elicited.

(10.141) *tʃuː-tuː=l* *naː* *əmun* *ulxə* *əmun* *aːŋa-mi* ***kuŋ-kʰəːŋ*** ***pɔtɔ-rɔ-ŋ.***
juu-duu=l *naa* *emun* *ulxe* *emun* *aaŋa-mi* ***guŋ-keeŋ*** ***bodo-ro-ŋ.***
home-DAT=PTCL and one more one sleep-1SG **SAY**-CVB **think**-AOR-3
'(The students) **think of (=saying** I will) sleeping one more day at their home.' (LT11-57)

(10.142) *samaːn* *kʰatʰ* *lama-wa* *[...]* *məːn-i* *naːl-t-i*
samaan *kat* *lama-wa* *[...]* *meen-i* *naal-d-i*
Shaman PTCL lama-DEF.ACC REFL-GEN hand-DAT-REFL.SG

iː-sə ***kuŋ-kʰəːŋ*** ***atta-m*** *[...]*
ii-se ***guŋ-keeŋ*** ***adda-m*** *[...]*
enter-PST **SAY**-CVB **be.happy**-CONN.CVB
'Shaman was also **happy (=saying) that** the lama is under the control of him (lit. enter his hand).' (42-14)

(10.143) *nantʰʊn-tʊ* *xʊta-ja* *ɔː-rɔ-ŋ* ***kun-kʰəŋ*** ***tɔːlti-sʊ***
nantʊn-dʊ *xʊda-ya* *oo-ro-ŋ* ***gun-keŋ*** ***dooldi-sʊ***
GN-DAT wedding-PTV make-AOR-3 **SAY**-SAY.CVB **hear**-PST.1SG
'I **heard that** she is marring in Nantun.' (elicited)

With cognition and perception verbs, the choice between SAY-marked finite complements and case-marked participial complements is optional. Both strategies may even co-occur within a single clause, as shown in example (10.144), where a cognition verb selects both types of complement simultaneously.

(10.144) *məːŋkʰəːŋ əjjə emitʰʊŋ taxi əkki-m əmə-rə-ŋ*
meeŋkeeŋ eyye emitʊŋ daxi eggi-m eme-re-ŋ
PN PROX animal again return-CONN.CVB come-AOR-3

***kuŋ**-kʰəːŋ əkki-tʃʰi əmə**-r-wə**-ni saː-tʃʰi […]*
***guŋ**-keeŋ eggi-ci eme**-r-we**-ni saa-ci […]*
SAY-SAY.CVB return-COOR.CVB come-**IPFV.PTCP-DEF.ACC**-3 know-COOR.CVB

'Meenkeng **knows (=saying)** this animal will come back, he **knows that** (this animal's) coming back.' (LT40-32)

Skribnik (2024b), in her study of Buryat, Kalmyk, and Khalkha Mongolian, observes that the functional contrast between these complement types is not straightforward. She argues that SAY-based complementation tends to encode cognitive perception, whereas case-marked participial complements may express both immediate (direct) and cognitive perception.

10.7.2.3 Marker of adjunct clauses

Adjunct clauses in Solon are typically formed by non-finite verb forms. However, SAY may also introduce finite adjunct clauses expressing purpose (10.145-10.146) and reason (10.147).

(10.145) *ɔwɔː-tʊ ninə**-m** **kun**-tʃʰi kəː ɔri kukkəl-tʃʰəː-mune.*
*owoo-dʊ nine**-m** **gun**-ci gee ori guggel-cee-mune.*
oboo-DAT go-**1SG** **SAY**-COOR.CVB PTCL evening move-PST-1PL.EXCL

'**In order to (=saying we)** go the oboo, we moved in the evening.' (LT09-05)

(10.146) *tʰɔːtʃʰi tʃuːr kaːlaːsʊn […] palti**-m** **kuŋ**-kʰəŋ uːɣi tʃawa**-m***
*tooci juur gaalaasʊn […] baldi**-m** **guŋ**-keŋ uuɣi jawa**-m***
DIS.CONN two swallow lay.eggs-**1SG** **SAY**-SAY.CVB nest catch-**1SG**

***kuŋ**-kʰəŋ ul-tʃi-rə-ŋ kunəŋ*
***guŋ**-keŋ ul-ji-re-ŋ guneŋ*
SAY-SAY.CVB go-PROG-AOR-3 hearsay

'Then two swallows fly around, **in order to (=saying I)** lay eggs and build a nest.' (LT02-05)

(10.147) *xasaŋ xaːn ʊnaːtʃi-wi nan niskʰuŋ pi-ʈʃi-rə-**ŋ***
*xasaŋ xaan ʊnaaji-wi nan niskuŋ bi-ji-re-**ŋ***
PN emperor daughter-REFL.SG also small COP-PROG-AOR-**3**

***kuŋ**-kʰəːŋ […] ə-ʃi-n uliː-xəːn-ə-r pi-sə kunəŋ*
***guŋ**-keeŋ […] e-si-n ulii-xeen-e-r bi-se guneŋ*
SAY-SAY.CVB NEG-AOR-3 go-CAUS-EP-CONNEG COP-PST hearsay
'The Hasang emperor didn't let his daughter go **because (=saying)** she was small.' (LT38-07)

These constructions, again derivable from internal monologue structures, encode the subject's internal awareness or motivation. In this function, SAY marks clauses that present the intended outcome or causal justification of an action, thus extending its scope beyond complementation into adverbial modification.

10.7.2.4 Prospectivity and intention

Grammaticalized SAY is also used to express prospectivity (also referred to as proximative), indicating that the event described by the main predicate is imminent. Closely related is the expression of intention, which encodes the subject's planned or deliberate future action. Both meanings can be traced back to internal speech constructions, in which anticipated action is conceptualized through inner discourse.

The interpretation depends on the animacy of the subject. With animate subjects, SAY typically conveys intention (10.148), while with inanimate subjects it yields a purely prospective reading (10.149).

(10.148) *[…] tʰijja ɔsxɔn-tʊ puː-r jəːmə-tʰxi-n tʰijja təki tʃîtʰə-**m***

*[…] tiyya osxon-dʊ buu-r yeeme-txi-n tiyya degi jite-**m***

DIST fish-DAT give-IPFV.PTCP thing-ABL-3 DIST bird eat-**1SG**

***kun**-tʃʰə ʃitə*

***gun**-ce side*

SAY-PST PTCL

'The bird **wanted to (=saying I)** eat (lit. from) the thing which (the hunter) gives to fish' (LT05-04)

(10.149) *tʃalʊ-niː tʰajja tʰuːkə-ni nanta-wə-ni […] talka-sa kunəŋ*

jalʊ-nii tayya tuuge-ni nanda-we-ni […] dalga-sa guneŋ

young.man-GEN DIST wolf-GEN fur-DEF.ACC-3 burn-PST hearsay

*jak ətʰtʰu tʰəŋkʰə-tʃʰi manʊː-**mi** **kun**-təli-ni […]*

*yag ettu teŋke-ci manʊʊ-**mi** **gun**-deli-ni […]*

just.right PROX.ADV to.burn-COOR.CVB run.out-**1SG** **SAY**-SIM.CVB-3

'(The girl) burned the young man's wolf fur, when (the fur) **is about to (=saying I)** burn away.' (LT28-119,120)

In many cases involving animate subjects, the distinction between prospectivity and intention is subtle and context-dependent, and the two readings may remain ambiguous (10.150-10.151).

(10.150) *əjjə saːtʃikiː-sal min-i ultə-wəj kata-**m***

*eyye saajigii-sal min-i ulde-wey gada-**m***

PROX magpie-PL 1SG.OBL-GEN meat-DEF.ACC.1SG take-**1SG**

***kun**-tʃî-rə-ŋ xuŋ tʃim-**mi** **kun**-tʃî-rə-ŋ*

***gun**-ji-re-ŋ xuŋ jim-**mi** **gun**-ji-re-ŋ*

SAY-PROG-AOR-3 MIR eat-**1SG** **SAY**-PROG-AOR-3

'These magpies **are going to/want to (=saying I)** take my meat and eat it.' (LT08-47)

(10.151) *əjəlsək* *kəppi* *puː**-mi*** ***kun-****tʃʰu.*
eyelseg *gebbi* *buu**-mi*** ***gun-****cu.*
PN name give**-1SG** **SAY**-PST.1SG
'I **was about to/wanted to (=saying I)** give a name (called) Eyelseg.' (LT32-18)

10.7.2.5 Hearsay evidentiality

The development of evidential markers from quotative SAY is well attested cross-linguistically (Aikhenvald 2004: 132). In Solon, this function is closely related to the use of SAY in introducing quotations without an overt matrix clause. In such constructions, an independent finite clause is followed directly by SAY, with no higher predicate of speech. SAY no longer functions as a verb but as an evidential particle indicating that the information is reported or second-hand. The particle form *kunəŋ* is predominantly used for hearsay evidentiality. This usage is particularly frequent in fairy-tale texts, where nearly all full sentences end with the hearsay particle.

(10.152) *əmun-ni* *atʰaː-ʃi* ***kunəŋ*** *pəjə-tu* *sɔnin* *atʰaː-ʃi* *satti*
emun-ni *ataa-si* ***guneŋ*** *beye-du* *sonin* *ataa-si* *saddi*
one-3 jealousy-PROP **hearsay** person-DAT weird jealousy-PROP old.lady

kunəŋ *əmun-nin* *kʰi* *aja* *sanaː-ʃi* *satti* ***kunəŋ***
guneŋ *emun-nin* *ki* *aya* *sanaa-si* *saddi* ***guneŋ***
hearsay one-3 TOP good mind-PROP old.lady **hearsay**
'**It is said that** one (old lady) is jealous, **it is said that** (the old lady) is very jealous of others, as for the other, **it is said that** she is a warm-hearted old lady.' (LT02-03)

(10.153)

tʰɔːtʃʰi	*satti-ni*	*ətʰxəŋ-pi*	*tʰaː-tʃʰa*	***kunəŋ,***	*ətʰxəŋ-ni*
tooci	*saddi-ni*	*etxeŋ-bi*	*taa-ca*	***guneŋ,***	*etxeŋ-ni*
DIS.CONN	old.lady-3	old.man-REFL.SG	recognize-PST	**hearsay**	old.man-3

satti-wi	*tʰaː-tʃʰa*	***kunəŋ***.
saddi-wi	*taa-ca*	***guneŋ***.
old.lady-REFL.SG	recognize-PST	**hearsay**

‘**It is said that** the old lady recognized her husband (lit. old man), **it is said that** the old man recognized his wife (lit. old lady).’ (LT33-66)

10.7.2.6 Metalinguistic use

SAY also exhibits metalinguistic functions in Solon, most notably in constructions involving naming and terming. These uses are historically derived from the quotative function and involve “mentioning entities of the linguistic world instead of referring to phenomena in the object world” (Güldemann 2008: 399). In such constructions, SAY no longer reports speech events but introduces linguistic expressions as objects of reference.

10.7.2.6.1 Naming

In naming constructions, SAY introduces the name of a referent, such as a person, place, or object (10.154). Although these constructions are not finite subordinate clauses rather they are adnominal clauses, they are included in this section, because they represent a clear outcome of the grammaticalization of the speech verb.

(10.154)

piər	***kun-tʃʰə***	*pas*	*əːm*	*tʰari-tʃi-m,*	*kainiː*	*əːm.*
bier	***gun-ce***	*bas*	*eem*	*tari-ji-m,*	*gainii*	*eem.*
PN	**SAY**-PFV.PTCP	also	medicine	inject-PROG-1SG	calcium-GEN	medicine

‘I am injecting **a medicine called bi’er**, it is a medicine of calcium.’ (LT27-17)

Structurally, SAY appears in non-finite forms, including participles and the say-verb converb, and the entire construction functions as an adnominal clause modifying the head noun.

A typical example is the pattern ‘a person/place called X’, where SAY serves as a metalinguistic marker rather than a predicate of speech (10.155-10.156).

(10.155) *səŋkə* ***kun***-*kʰəŋ* *pəjə* *pi-sə.*
seŋge ***gun***-*keŋ* *beye* *bi-se.*
PN **SAY**-SAY.CVB person COP-PST
‘There was **a person called Sengge**.’ (LT34-24)

(10.156) *[...]* *ilaltʰa* *katʃʰa* ***kun***-*ə-r* *pʊka-tʊ* *nintʃʰə* *tʃaxa* *kʰi.*
[...] *ilalta* *gaca* ***gun***-*e-r* *bʊga-dʊ* *nince* *jaxa* *ki.*
GN village **SAY**-EP-IPFV.PTCP place-DAT go-PST RSN TOP
‘Because we went to **a place called Ilalta village**.’ (LT34-74)

10.7.2.6.2 Terming

While naming introduces the proper name of a specific referent, terming constructions introduce a lexical item or conceptual label. In terming, SAY may introduce a word/phrase (10.157-10.158), or even a full clause as a linguistic term or concept (10.159-10.160). The SAY verb appears exclusively in non-finite forms, including participles, the say-verb converb, coordinative converb, and habitual forms. Unlike naming, terming does not necessarily modify a concrete referent but instead highlights the conceptual status of the introduced expression.

(10.157) *[...]* *kanmɔː* ***kun***-*ə-r-wə* *ə-ʃi-n* *saː-ra* *kʰuŋ.*
[...] *ganmoo* ***gun***-*e-r-we* *e-si-n* *saa-ra* *kuŋ.*
flu **SAY**-EP-IPFV.PTCP-DEF.ACC NEG-AOR-3 know-CONNEG MIR
‘(People) didn’t know **what flu is**.’(LT29-39)

(10.158) *talaŋ-tʊ* *nin-kʰiʃi* *pi-sə:-mun,* *tʰari* *ərin-tu* *kʰi* *talaŋ*
dalaŋ-dʊ *nin-kisi* *bi-see-mun,* *tari* *erin-du* *ki* *dalaŋ*
GN-DAT go-HAB COP-PST-1PL.EXCL DIST time-DAT TOP GN

kun-*kʰiʃi* *pi-sə*
gun-*kisi* *bi-se*
SAY-HAB COP-PST
'We used to go Dalang, at that time **there was a Dalang**.' (LT20-161)

(10.159) *tʰa-tʊ* *kʰi* *xʊltʃʰin-ni* *tʰalpai-ja* *saxi-ra-**ŋ*** ***kuŋ-****kʰəŋ*
ta-dʊ *ki* *xʊlcin-ni* *talbai-ya* *saxi-ra-**ŋ*** ***guŋ-****keŋ*
DIST-DAT TOP reed-GEN square-PTV guard-AOR-**3** **SAY**-SAY.CVB

pi-sə.
bi-se.
COP-PST
'There, there was **guarding the reed square**.' (LT17-02)

(10.160) *utʰə-jə* *ikkə-rə-**ŋ*** ***kun-****tʃʰi=l,* *para:n* *tʃu:-ni*
ute-ye *igge-re-**ŋ*** ***gun-****ci=l,* *baraan* *juu-ni*
son-PTV maintain-AOR-**3** **SAY**-COOR.CVB=PTCL many house-GEN

atʃil *pikkʰi* *manʊ:-ra-ŋ* *ki.*
ajil *bikki* *manʊʊ-ra-ŋ* *gi.*
work TOP ran.out-AOR-3 Q
'**Taking care of the children**, would so many chores run out?' (LT22-11)

10.7.2.7 Discourse particle

The discourse-pragmatic use of SAY in Solon is relatively rare but nevertheless attested. This function appears to be an extension of the naming and terming uses, in which SAY no longer introduces new lexical or conceptual information but serves pragmatic purposes such as emphasis or generalization.

Although the structure in example (10.161) resembles a metalinguistic terming construction: apparently introducing the terms 'clothes' and 'jewelry', the function cannot be

interpreted as genuine terming, since these concepts are already universally known to the speakers and addressee. Instead, SAY contributes an emphatic discourse effect, highlighting the speaker's evaluation that people do not even care about what clothes they wear or what jewelry they use.

(10.161)

tʰəkkətʃʰi	***kuŋ-****kʰəŋ*	*ə-ʃi-n*	*kɔlli-r.*	*tʃasal*	*tʃʰimə=ktʰə*
teggeci	***guŋ-****keŋ*	*e-si-n*	*golli-r.*	*jasal*	*cime=gte*
clothes	**SAY**-SAY.CVB	NEG-AOR-3	care-CONNEG	jewelry	decoration=PTCL

kuŋ-*kʰəŋ*	*ilə*	*pi-ʃi-n,*	*sanaːn-tʊ*	*aːʃin.*
guŋ-*keŋ*	*ile*	*bi-si-n,*	*sanaan-dʊ*	*aasin.*
SAY-SAY.CVB	where	COP-AOR-3	mind-DAT	NEG.EXIS

'(People) don't care about the clothes, where is the jewely? No one thinks about them.' (LT21-08,09)

Another discourse function attested of SAY is to signal a generalized extension of meaning, as illustrated in example (10.162). Given the low frequency of discourse uses in the available corpus, further investigation is required to fully understand the pragmatic range and constraints of SAY in this function

(10.162)

sʊlxi-ni	*nanta*	*[…]*	*tʃəkərəːŋ-ni*	*iːkə*	***kun-****tʃʰi*	*əmun*	*paraːn*
sʊlxi-ni	*nanda*	*[…]*	*jegereeŋ-ni*	*iige*	***gun-****ci*	*emun*	*baraan*
fox-GEN	fur		deer-GEN	horn	**SAY**-COOR.CVB	one	many

jəːmə-jə	*əmu-mi*	*puː-rə-ŋ*	*kunəŋ*
yeeme-ye	*emu-mi*	*buu-re-ŋ*	*guneŋ*
thing-PTV	bring-CONN.CVB	give-AOR-3	hearsay

'Fox fur, **deer antlers and such things**, (the tiger) brings many things (to the boy).' (LT41-72)

10.7.3 Further internal development of SAY

Beyond contact-induced grammaticalization, SAY in Solon also shows signs of further internal development. In particular, the say-verb converb *kun-kʰəŋ* is highly versatile and participates in multiple grammatical functions. But the historical origin of the suffix *-kʰəŋ* itself remains unclear.

An especially noteworthy development is the gradual erosion of the verb root *kun-* 'say' in this construction. In a number of corpus examples, the converb suffix *-kʰəŋ* appears to function independently, effectively taking over the grammatical roles of SAY. For instance, in example (10.163), *-kʰəŋ* functions as a complementizer with cognition verbs, while in example (10.164) it serves a naming function, despite the absence of an overt speech verb root.

(10.163) *əʃikʰiʃi ʃi suxə-wi kata-mi* ***kʰəŋ*** *ə-tʃi pɔtɔ-rɔː […]*
esikisi si suxe-wi gada-mi ***keŋ*** *e-ji bodo-roo […]*
otherwise 2SG axe-REFL.SG take-1SG **SAY.CVB** NEG-PROH think-CONNEG
'Otherwise, you don't think (=**saying**) about taking back your axe!' (LT28-10)

(10.164) *[…] attʃʰaːn* ***kʰəŋ*** *jəːmə tʰul-təli aːʃin […]*
[…] accaan ***keŋ*** *yeeme tul-deli aasin […]*
mouse **SAY.CVB** thing out-PROL NEG.EXIS
'There is no such thing **called** mouse outside.' (LT27-39)

This pattern is not marginal: 26 out of 157 occurrences of *kun-kʰəŋ* in the corpus show reduced or absent verbal form *kun-*. This suggests an ongoing reanalysis in which *-kʰəŋ* is developing into a particle or clitic, rather than remaining a purely verbal converb suffix. Given this development, the current gloss SAY.CVB remains provisional. A more accurate analysis of *-kʰəŋ* requires further investigation into its diachronic origin and its synchronic distribution across constructions.

11 Varia

This chapter brings together several grammatical topics that do not warrant separate chapters but nevertheless contribute important insights into the structure of Solon grammar. Each section addresses one topic independently, providing a focused descriptive account rather than a full-scale treatment. The scope of these topics is relatively limited, and the available data allows for preliminary or targeted analyses rather than comprehensive, systematic discussion. Grouping them into a single chapter therefore allows these constructions to be documented and analyzed without interrupting the organization of the major grammatical domains presented elsewhere in the dissertation.

The topics covered in this chapter include topicalization (§11.1), mirativity (§11.2), bridging-linkage constructions (§11.3), and associated motion (§11.4).

11.1 Topicalization

The topic of a sentence is defined as the element to which the proposition expressed by the sentence refers (Lambrecht 1994:118). Mongolian is recognized as both a 'topic-prominent' and 'subject-prominent' language, where the topic-comment (theme-rheme) structure coexists with the subject-predicate structure (Janhunen 2012: 235). It might be that Solon has been influenced by this pattern, as the topic-comment structure plays a significant role in the language, as evidenced by the heavy use of topic markers, also one of its sister languages Evenki is not considered as a topic-prominent language (I. Nedjalkov 1997:136).

The clause-initial position is considered the default locus of the sentence topic. Since Solon is an SOV language, the subject typically occupies this position and therefore commonly functions as the topic (11.1). When scene-setting elements are present, they instead naturally occur clause-initially and function as external topics (11.2). The presence of an external topic, however, does not eliminate the internal topic of the clause, a single sentence may thus contain more than one topic (11.3).

(11.1) ***pɔr*** *mʊrin-paj* *xut^{h}lə:-sə*
bor *mʊrin-bay* *xutlee-se*
PN horse-DEF.ACC.1SG hold-PST
'**Bor** held my horse.' (LT09-09)

(11.2) *kə* ***t^{h}a-tʊ*** *tʃ^{h}u:tʃuŋ-pi* *t^{h}at^{h}i-tʃ^{h}i*
ge ***ta-dʊ*** *cuujuŋ-bi* *tati-ci*
PTCL **DIST-DAT** secondary.school-REFL.SG study-COOR.CVB

kɔʊtʃuŋ-pi *naŋ* *t^{h}at^{h}i-tʃ^{h}i* *ət^{h}ə-su.*
goʊjuŋ-bi *naŋ* *tati-ci* *ete-su.*
high.schoo-REFL.SG also study-COOR.CVB finish-PST.1SG
'**There**, I finished studying my secondary school and finished studying my high school.' (LT39-37)

(11.3) *taxi:=l* *əpxəi* ***nataŋŋe*** ***ati*** ***ani:-tʊ=l*** *t^{h}umər* *xu:xəŋ*
daxii=l *ebxei* ***nadaŋŋe*** ***adi*** ***anii-dʊ=l*** *tumer* *xuuxeŋ*
again=PTCL INTERJ **seventy** **several** **year-DAT**=PTCL iron girl

kuŋ-k^{h}ə:ŋ *ju:-sə:=ʃi* ***k^{h}i*** *jəx* *jawtal.*
guŋ-keeŋ *yuu-see=si* ***ki*** *yex* *yawdal.*
SAY-SAY.CVB exit-PRF.PTCP=2SG **TOP** big affair
'Then, oh god, **in the 1970s**, **a thing called 'Iron Girl' occurred**, which was a big deal.' (LT22-16)

Topic fronting is also attested in Solon, whereby a clause constituent that would normally appear in a non-initial position is moved to clause-initial position and functions as the topic. As shown in (11.4), the direct object occurs clause-initially and serves as the sentence topic.

(11.4) ***ʃin-u-wə*** *pi* *ənnəːŋ* *aja-tʃi* *ʊxʊn*
sin-u-we *bi* *enneeŋ* *aya-ji* *ʊxʊn*
2SG.OBL-EP-DEF.ACC 1SG QLT.PROX good-INS HES

tʃɔtʃʰɔːlɔː-r-tʊ-wi *ʃi* *xarin* *ətʰtʰu* *ɔː-nti* *kun-kʰəŋ.*
jocooloo-r-dʊ-wi *si* *xarin* *ettu* *oo-ndi* *gun-keŋ.*
host-IMPF.PTCP-DAT-REFL.SG 2SG MIR PROX.ADV do-2SG SAY-SAY.CVB
'I hosted **you** so nicely, how can you do this (to me)?' (LT28-79)

In addition, Solon has topic particles to mark the sentence topic. The topic particle *pikʰkʰi* originates from the conditional converb form of the copular verb 'COP-COND.CVB' (11.5). Over time, this particle developed further, leading to the reduced form *kʰi* (bare conditional converb form) (11.6), which functions as a topic marker and occurs more frequently than the full form *pikʰkʰi*. In the Solon corpus, *pikʰkʰi* appears 140 times, while *kʰi* occurs 270 times. Conditional-marked copulas as topic markers are also attested in other Tungusic languages (Matić 2016: 349, Malchukov 20244: 283).

(11.5) *pi* ***pikʰkʰi*** *sʊrkʊːl-tʊ* *na* *ə-sə* *ulə-r* *pəjə.*
bi ***bikki*** *sʊrgʊʊl-dʊ* *na* *e-se* *ule-r* *beye.*
1SG **TOP** school-DAT also NEG-PST go-CONNEG person
'**As for me,** I am a person who didn't even go to school.' (LT21-03)

(11.6) *pɔːtʃi-tʊ* *tʊra-ʃi,* *pɔːtʃi-ja* ***kʰi*** *jətti* *natan* *tʃaxʊn-tʰxi*
booji-dʊ *dʊra-si,* *booji-ya* ***ki*** *yeddi* *nadan* *jaxʊn-txi*
bun-DAT favor-PROP bun-PTV **TOP** normally seven eight-ABL

jəkin *tʃaːn* *tʃakʰkʰa* *tʃitʰ-tʰə-ŋ.*
yegin *jaan* *jakka* *jit-te-ŋ.*
nine ten until eat-AOR-3
'(The students) like buns, **as for buns**, (the students) normally eat from seven eight to nine ten.' (LT11-24)

Another topic particle in Solon is *pa* (11.7), which is less frequently used; furthermore, it can co-occur with the topic marker *pikʰkʰi* ~ *kʰi* (11.8). In addition, in clauses involving

mirativity, the second person singular suffix (2SG) may also function as a topic marker (§11.2.2.2).

(11.7) *jak* *pi* *xʊtaː-ja* *ɔː-m* *kun-ə-(r)-tu*
yag *bi* *xʊdaa-ya* *oo-m* *gun-e-(r)-du*
exact.duration 1SG marriage-PTV make-1SG SAY-EP-IMPF.PTCP-DAT

pa *xɔja-tʊkaːr* *nəxun-pi* *na* *xʊtaː-ja*
ba *xoya-dʊgaar* *nexun-bi* *na* *xʊdaa-ya*
TOP two-ORD younger.brother-REFL.SG also marriage-PTV

ɔː-xɔːn-tʃʰʊ
oo-xoon-cʊ
make-CAUS-PST.1SG

'**Just when I was about to get married**, I made my second little brother get married too.' (LT39-71)

(11.8) *tʰajja* *tʃalʊ* ***pikʰkʰi*** ***pa*** *atʃil-tʊ-wi* *pasa* *nutəjə_aːʃin* *aja*
tayya *jalʊ* ***bikki*** ***ba*** *ajil-dʊ-wi* *basa* *nudeye_aasin* *aya*
DIST young.man **TOP** **TOP** work-DAT-REFL.SG also very good
'That **young man** was also very good at his work.' (LT19-13)

The presence of the topic particle is not obligatory, since clause-initial position is by default associated with topical function. Non-verbal predicative constructions involving identity relations constitute an exception to this, since here the topic particle is always required (11.9) (§8.5.2.1). The topic particle is also preferred in inclusion predications, where the predicate is nominal and provides more elaborate descriptive information (11.10), thereby narrowing the scope of reference (§8.5.2.1). Semantically, such constructions are closely related to identity predications.

(11.9) *aija* *əri* *uriːləŋ* ***kʰi*** *min-iː* *ʊnatʃi-ni-wi* *tʃuː-ni*
aiya *eri* *uriileŋ* ***ki*** *min-ii* *ʊnaji-ni-wi* *juu-ni*
INTERJ PROX house **TOP** 1SG.OBL-GEN daughter-GEN-REFL.SG house-3
'Oh, this house is my daughter's home.' (LT28-143)

(11.10) *pi* ***pikʰkʰi*** *sʊrkʊːl-tʊ* *na* *ə-sə* *ulə-r* *pəjə.*
bi ***bikki*** *sʊrgʊʊl-dʊ* *na* *e-se* *ule-r* *beye.*
1SG **TOP** school-DAT also NEG-PST go-CONNEG person
'I **am** a person who didn't even go to school' (LT21-03)

11.2 Mirativity

Mirativity refers to a cluster of meanings that encode the speaker's, addressee's, or main character's reaction to information presented as a sudden discovery or realization. Such meanings typically involve surprise, counterexpectation, unpreparedness, or the presentation of information as new or unexpected (Aikhenvald 2012: 437). Cross-linguistically, mirativity may be expressed through a variety of grammatical strategies, including dedicated verbal constructions, special affixes or particles, and, in some cases, pronominal or other morphological devices (Aikhenvald 2012: 438).

In Solon, mirativity is expressed by two main devices. First, there are dedicated particles, *xUŋ ~ kʰUŋ* and *xarin*, the latter borrowed from Mongolian. Second, mirative meaning can be conveyed through the non-possessive use of the second person singular possessive suffix (2SG), which marks the sentence topic rather than possession. These strategies are described in turn below.

11.2.1 Mirative particles

Solon has two particles that function as markers of mirativity: *xUŋ ~ kʰUŋ* and *xarin*. While both particles express mirative meanings, a comprehensive account of their distribution and functional differences is beyond the scope of the present study. In particular, their positional variation within the clause and the semantic contrast between them remain unclear. This section therefore focuses on their basic mirative uses.

11.2.1.1 *xUŋ ~ kʰUŋ*

The mirative particle *xUŋ ~ kʰUŋ* is also discussed in the section dealing with particles (§7.3.3.2.2). It typically occurs in sentence-final position, but it may also appear clause-internally. At present, no clear functional distinction can be established between these positional variants.

In (11.11), *xUŋ ~ kʰUŋ* occurs sentence-finally and expresses counterexpectation directed toward the addressee. In (11.12), the same particle conveys surprise from the speaker's perspective. In (11.13), the particle appears clause-internally and conveys the unprepared mind of the speaker.

(11.11)

əjjə	*sun-i*		*ultə-sun*	*əntʰə*	***xuŋ***	*[...]*	*min-i*	***xuŋ***
eyye	*sun-i*		*ulde-sun*	*ente*	***xuŋ***	*[...]*	*min-i*	***xuŋ***
PROX	2PL.OBL-GEN		meat-2PL	NEG	**MIR**		1SG.OBL-GEN	**MIR**

'This is not your meat … it is mine.' (you thought this was your meat, but it is mine = counterexpectation of the addressee) (LT08-37,38)

(11.12)

tʰajja	*tʰuːpʰiː-ni*	*sʊnin*	*paraːŋ*	*tʰuːpʰi*	*tʰirə-sə-sun*	***xuŋ***
tayya	*tuupii-ni*	*sʊnin*	*baraaŋ*	*tuupi*	*tire-se-sun*	***xuŋ***
DIST	brick-3	very	many	brick	press-PST-2PL	**MIR**

'Those bricks, you pressed so many bricks.' (surprise of the speaker) (LT18-20)

(11.13)

əʃi	*ɔwɔː*	***xʊŋ***	*əʃi*	*niləːn*	*takʰkʰiː-laː-tʃi-ra-ŋ*
esi	*owoo*	***xʊŋ***	*esi*	*nileen*	*dakkii-laa-ji-ra-ŋ*
now	GN	**MIR**	now	rather	close-VBZ-PROG-AOR-3

'Now, it is getting rather close to (the Oboo).' (unprepared mind of the speaker) (LT09-31)

11.2.1.2 *xarin*

The particle *xarin*, borrowed from Mongolian (Chinggeltei 1999: 361), also expresses mirativity. Unlike *xUŋ ~ kʰUŋ*, it tends to occur near the beginning of the clause, either

preceding the entire sentence (11.14, immediately following a discourse connector), after the subject (11.15), or following a framing topic (11.16).

(11.14)

tʰɔːtʃʰi	***xarin***	*tʰajja*	*tʃalɔː*	*kʰi*	*pasa=l*	*əm-sə*	*kunəŋ*
tooci	***xarin***	*tayya*	*jalɔɔ*	*ki*	*basa=l*	*em-se*	*guneŋ*
DIS.CONN	**MIR**	DIST	young.man	TOP	again=PTCL	come-PST	hearsay

'Then, the young man came again.' (surprise/counterexpectation of the main character) (LT28-85)

(11.15)

tʰajja	*əməktʰi*	***xarin***	*əːtʰələ-wə*	*kiranta-tʰeː-n*	*niŋə-tʃi-sə*	*kunəŋ*
tayya	*emegti*	***xarin***	*eetele-we*	*giranda-tee-n*	*niŋe-ji-se*	*guneŋ*
DIST	woman	**MIR**	rib-DEF.ACC	bone-COM.MN-3	swallow-PROG-PST	hearsay

'That woman was swallowing the ribs along with the bones.' (surprise of the main character) (LT40-25)

(11.16)

əmun	*ərin*	***xarin***	*tʰɔːl*	*xakki*	*axaː-niː-wi*	*ɔsxɔːŋ*
emun	*erin*	***xarin***	*tool*	*xaggi*	*axaa-nii-wi*	*osxooŋ*
one	time	**MIR**	rabbit	pheasant	elder.brother-GEN-REFL.SG	fish

tʃitʃ-tʃi-r-wə-ni	*iʃi-tʃʰi […]*
jij-ji-r-we-ni	*isi-ci […]*
eat-PROG-IMPF.PTCP-DEF.ACC-3	see-COOR.CVB

'Once, the rabbit saw her pheasant brother's eating fish.' (Surprise of the main character) (LT06-03)

The two particles may co-occur, as shown in (11.17), where *xarin* and *xUŋ ~ kʰUŋ* appear together within the same mirative construction. This co-occurrence suggests that their functional distinction is potentially not categorical, and their precise semantic differences remain unclear.

(11.17) *[...] min-i pɔxa-wa waː-kʰi pi sun-tuːxi pɔxa-wi*
[...] min-i bɔxa-wa waa-ki bi sun-duuxi bɔxa-wi
1SG.OBL-GEN bull-DEF.ACC kill-COND.CVB 1SG 2PL.OBL-ABL bull-REFL.SG

ə-ʃi-m ka-ta ***kʰuŋ, xarin*** *pɔŋkɔŋ ɔnaːtʃi-wa-ʃi*
e-si-m ga-da ***kuŋ, xarin*** *boŋgoŋ ɔnaaji-wa-si*
NEG-AOR-1SG take-CONNEG **MIR** **MIR** big daughter-DEF.ACC-2SG

əppuː-tʃʰi ul-me [...]
ebbuu-ci ul-me [...]
take.away-COOR.CVB go-1SG

'If (someone) kills my bull, I won't take a bull from you (as compensation), I will take away your big daughter. (counterexpectation/surprise of the addressee) (LT35-44)

11.2.2 Mirative use of 2SG

11.2.2.1 Preliminaries

In several Uralic, Tungusic, and Turkic languages, possessive suffixes may attach to non-possessable nouns, such as personal pronouns, demonstratives, proper names, natural phenomena, or temporal expressions, without expressing possession. Instead, these suffixes convey functions such as identifiability, particularization, emphasis, or contrast (Nikolaeva and Tolskaya 2001: 135-141, Nikolaeva 2003, Pakendorf 2007b, Aralova & Pakendorf 2023, Mikhailov 2024). A similar phenomenon is attested in Solon. One important function of the non-possessive use of the second person singular possessive suffix (2SG) is the expression of mirativity.

As shown in Table 11-1, the 2SG occurs 165 times in Solon corpus, among them the frequency of mirative uses of 2SG is 50.1%, more than its proper possessive use within possessive noun phrases (23.4%), suggesting that mirativity has become the predominant function of this suffix in Solon[20].

[20] I admit that the Solon corpus comprises many fairy tales and autobiographical narratives and fewer conversations, this may be a factor in the low frequency of the proper possessive use of 2SG. However, the personal possessive suffix in possessive noun phrase is not explicitly overt §5.2.1.2.1.

Table 11-1: The function of the second person singular possessive suffix in Solon

functions	**number of occurrences**	**frequency**
possessive noun phrase	47	23.4%
mirative use	**84**	**50.1%**
fixed form (with reason postposition and coordinator)	27	16.4%
unclear	7	10.1%
total	165	100%

11.2.2.2 Mirative function of 2SG

The mirative use of 2SG in Solon occurs in topic-comment constructions. The suffix attaches to the sentence topic and functions as a topic marker rather than as a possessive marker; in this study, such topics are referred to as mirative topics. 2SG may be attached regardless of whether the topic is semantically possessable. For instance, in (11.18), the proximal demonstrative is not a possessable item, yet it takes 2SG. In this case, the suffix does not express possession but marks the topic as mirative, conveying counterexpectation on the part of the speaker. Similarly, in (11.19), the non-possessable second person pronoun takes 2SG; since a possessive interpretation is impossible, the suffix signals mirativity, specifically the speaker's sudden realization.

(11.18) *[...]* *ajja* ***əjjə=ʃi*** *pəjə* *ənt^{h}ə* *ʃikk^{h}ul! [...]*
[...] *ayya* ***eyye=si*** *beye* *ente* *sikkul! [...]*
INTRJ **PROX=2SG** person NEG ghost
'Oh, **she** is not a human, she is a ghost!' (counterexpectation of the speaker) (LT40-26)

(11.19) *ɔŋ* *tʰɔkkʰi* ***ʃi=ʃi*** *tʰuːkə-ni* *tʰiː-mi* *əm-sə*

oŋ *tokki* ***si=si*** *tuuge-ni* *tii-mi* *em-se*

INTERJ DIS.CONN **2SG=2SG** wolf-GEN rob-CONN.CVB come-PRF.PTCP

əməktʰe-ni *ʃitə*

emegte-ni *side*

woman-3 PTCL

'Oh well, then **you** are the woman that the wolf robbed.' (sudden realization of the speaker) (LT28-72)

As a topic marker, 2SG may also attach to adjuncts. In (11.20), the suffix marks a temporal adjunct, and the clause conveys mirativity directed toward the addressee, introducing new and unexpected information.

(11.20) *əʃiː-tʰi-tu=**ʃi*** *kʰi* *sʊmʊ-ni* *tʰup.*

*esii-ti-du=**si*** *ki* *sʊmʊ-ni* *tub.*

now-ADJZ-DAT=**2SG** TOP village-GEN center

'**Now** (Dalang) is the center of the village.' (New information for the addressee: you are young, you don't know that Dalang nowadays became the center of the village.) (LT20-201)

Notably, entire temporal clauses may likewise be marked as mirative topics. Quasi-converb adverbial clauses typically require case marking on the participial predicate (§10.6.1, e.g. dative, locative, or ablative). However, when such clauses function as mirative topics, no case marking is required to form a quasiconverb: 2SG attaches directly to the perfective participle. In this construction, the whole adverbial clause is interpreted as a temporal topic, yielding a mirative meaning comparable to 'when X happened, Y (suddenly/unexpectedly…) occurred'. As illustrated in (11.21), the temporal clause is marked by 2SG as sentence topic, and the main clause conveys the mirative event, here expressing surprise or sudden discovery on the part of the main character.

(11.21) *[...] pʊtʰʊŋ-pa-ni naŋiː-tʃʰi iʃi-**saː=ʃi** xui*
*[...] bʊtʊŋ-ba-ni naŋii-ci isi-**see=si** xui*
jar-DEF.ACC-3 open-COOR.CVB see-**PRF.PTCP=2SG** INTERJ

tɔː-lɔː-tʊ-ni tʃaːlʊŋ altʰan mukun pi-ʃi-n [...]
doo-loo-dʊ-ni jaalʊŋ altan mugun bi-si-n [...]
inside-LOC-DAT-3 full gold silver COP-AOR-3

'**When (the old lady) opened the jar and had a look**, hey! inside, it is full of gold and silver.' (surprise/sudden discovery of the main character) (LT08-33)

See also (11.22), where the temporal clause 'when a big bear came' is marked by a perfective participle followed by 2SG. This clause functions as a mirative topic, while the main clause 'the gun ran out of bullets' conveys counterexpectation from the perspective of the main character.

(11.22) *taxin pɔŋkɔn paːpkai əmə-**saː=ʃi** miːsa-tʊ-ni tʃəmu aːʃin*
*daxin boŋgon baabgai eme-**see=si** miisa-dʊ-ni jemu aasin*
again big bear come-**PRF.PTCP=2SG** gun-DAT-3 bullet NEG.EXIS

'Then, **when a big bear came**, the (hunter's) gun ran out of bullets.
(counterexpectation/sudden discovery of the main character) (LT12-08)

The use of 2SG to mark temporal clauses as mirative topics in complex constructions is particularly noteworthy, since temporal clauses are not nominal in nature and cannot bear possessive marking. Nevertheless, this construction is common in Solon corpus.

The examples above further demonstrate that the mirative use of 2SG is versatile. It may encode mirativity from the perspective of the speaker (11.18-11.19), the addressee (11.20), or a main character (11.21-11.22), and it covers a range of meanings, including sudden discovery, sudden realization or surprise, and counterexpectation. Moreover, it operates not only at the level of simple clauses but also in complex clause structures. Taken together, these facts suggest that the mirative function of 2SG is highly grammaticalized and well productive in Solon.

11.2.2.3 Mongolian influence

The mirative use of 2SG in Solon also appears to be influenced by contact with Mongolic languages. Mirativity in Tungusic languages has not been extensively described. Some Northern Tungusic languages exhibit mirative extensions of participial past constructions (Skribnik & Aikhenvald 2024:1019-1020), and Udihe employs mirative particles such as *bese* and *bubu* (Nikolaeva & Tolskaya 2001:461-464). However, the use of second-person possessive morphology as a mirative marker has not been reported for Tungusic languages.

Even has a contrastive-adversative particle *=Si* (Malchukov 2024:276), which is formally identical to the 2SG suffix *-Si*, but it is not analyzed as a possessive suffix nor described as having mirative function. In contrast, Solon speakers clearly identify *-ʃi* occurring in sentences with a mirative reading as the second-person possessive 'yours', even when it appears on non-possessable elements, despite the fact that they cannot explain the reason for its presence.

By comparison, Mongolic languages display a strikingly similar mirative use of 2SG morphology. This function is attested in Khalkha Mongolian (Janhunen 2012:237), where it has been analyzed as a topic marker, and is also observable in Buryat (my observation). In Buryat (11.23), a first-person pronoun takes 2SG marking and conveys counterexpectation or surprise ('I can't believe I did that'). In Mongolian (11.24), a temporal clause is marked by 2SG, paralleling the Solon constructions in (11.21–11.22), where the marked adverbial clause serves as a mirative topic and the matrix clause expresses the mirative event.

(11.23) Buryat (Skribnik & Aikhenvald 2024: 1025, glossing adapted)

bi=š	*xürš-in-göö*	*üüde*	*nyeerge-gen*	*bai-gaa=l-bi*
1SG=2SG	neighbour-GEN-REFL	door	bang-PRF.PTCP	AUX-PST=PTCL-1SG

'(I was so drunk yesterday, they say,) **I** was **even** banging at the neighbor's door.'
(counterexpectation/surprise of the speaker)

(11.24) Mongolian (Leipzig Corpora Collection, my glossing, transcription and translation)

mašin_terge-tai	*bolo-**ɤson=čini***	*qiyiu*	*toson-o*	*ün-e*	
vehicle-PROP	become-**PFV.PTCP=2**	petrol	oil-GEN	price	
üs-čü	*ǰam*	*büglere-ǰü*	*aɤar*	*boqirdu-ba*	
increase-CVB	road	block-CVB	air	pollute-PST	

'**When (he) got a vehicle**, (he suddenly found) the petrol price is high, there are traffic jams, the air is polluted.' (counterexpectation of the 3rd person)

Given these close functional and structural parallels, Mongolian influence is likely to have played a major role in the development of the mirative use of 2SG in Solon. Even if Solon inherited a formally contrastive-adversative particle *=Si* as that found in Even, the full grammaticalization of 2SG as a mirative marker is more plausibly attributed to contact-induced change under Mongolic influence.

11.2.2.4 Semantic shift of 2SG to mirative marker

The semantic pathway by which 2SG developed a mirative function in Solon is not entirely clear. The hypothesis proposed here relates this development to the intersubjective meanings associated with personal possessives. As noted by Creissels (1979:154-157), first-person possessives commonly express emotional closeness, emphasis, or speaker involvement, whereas second-person possessives tend to convey emotional or intellectual distancing from the speaker's perspective.

For example, consider a young parent with a small son. When the son performs well at school, the mother may hug him and say, '**My son** is wonderful!' Although the addressee is the son himself, the use of the first-person possessive (*my*) expresses emotional closeness and pride. By contrast, when the son does something wrong, such as breaking a window, the mother may say to the father, "See what **your son** did!" Even though the child is equally her son, the use of the second-person possessive (*your*) creates emotional and evaluative distancing from the referent.

From this perspective, the extension from possession to distancing is typologically plausible. Mirative meanings such as counterexpectation, surprise, and sudden discovery inherently involve information that lies outside the speaker's immediate epistemic domain and

can therefore be conceptualized as cognitively or emotionally distant. In Solon, this distancing function appears to have undergone further grammaticalization, yielding a dedicated mirative use of 2SG (11.25).

(11.25) *addressee-oriented possession → intersubjective distancing → speaker-oriented mirativity*

The remaining question concerns why 2SG can express mirativity directed toward the addressee. Mirativity oriented towards the speaker or a main character is functionally straightforward, since it reflects the speaker's emotional or cognitive distancing from the event, either directly or indirectly. By contrast, when the experiencer is the addressee, such a distancing interpretation is less intuitive, as the second person is canonically associated with distancing rather than proximity. This apparent mismatch suggests that the original participant-based meaning of 2SG has undergone grammaticalization. As a result, the suffix has extended beyond marking mirativity anchored specifically to the speaker or main character and now functions as a more general, participant-neutral marker of mirative meaning (11.26).

(11.26) *addressee-oriented possession → intersubjective distancing → speaker-oriented mirativity → general mirativity*

11.3 Bridging-linkage constructions

11.3.1 Preliminaries

The Bridging Linkage Construction (BLC) (Guérin & Aiton 2019) is also known as tail-head linkage (de Vries 2005; Olguín Martínez 2023) or anaphoric pro-verbs (McKenzie 2015). The function of BLCs contributes to discourse cohesion by linking clauses or paragraphs through the repetition or summary of a preceding predicate (Thurman 1975: 342, Guérin & Aiton 2019:2, Olguín Martínez 2023: 403).

A BLC typically facilitates the linkage of sequential discourse segments. In its complete form, it involves a sequence where the first clause (the Reference Clause) serves as the final element of a discourse unit. The subsequent clause (the Bridging Clause) recapitulates or summarizes the reference clause. While the bridging clause usually follows the reference clause immediately, it functions as the initial (albeit non-main) clause of a new discourse unit (Guérin & Aiton 2019:3).

Two major types of BLCs are commonly distinguished (de Vries 2005; Guérin & Aiton 2019; Olguín Martínez 2023). The first type, recapitulative constructions, repeats the predicate of the preceding clause (e.g. I crossed well. **After crossing**, I ate the food.). The second type, summary constructions, employ anaphoric, light, or demonstrative verbs rather than direct repetition (e.g. 'I crossed well. **After having done so**, I ate the food.'). Some languages exhibit both strategies within the same system.

Transeurasian languages predominantly employ the summary type of BLCs, in which demonstrative verbs serve bridging functions. This pattern is attested in Evenki (Grenoble 2012), Negidal (Pakendorf & Aralova 2017), Buryat (Skribnik 2024), Mongolian (personal knowledge), and Tuvan (Skribnik 2024). Solon likewise makes use of the summary type of BLCs.

Structurally, a typical discourse segment in Solon consists of one or more chains of non-finite clauses followed by a single finite clause. Semantically, such a segment forms a coherent unit or building block within the narrative. BLCs occur at the beginning of the following unit, where they both mark the boundary between segments and maintain continuity by referring back to the preceding event.

To perform this bridging function, the reference clauses of BLCs in Solon employ two elements: a demonstrative verb *tʰɔː*-, derived from the distal demonstrative *tʰari*; and a non-finite verbal connector. The resulting structure can be represented as (11.27).

(11.27) demonstrative verb *tʰɔː*- + non-finite verbal connector.

In (11.28), two BLCs occur, both formed with the distal demonstrative verb combined with an coordinative converb. Each construction refers back to the preceding event by summarizing it.

(11.28) *xɔkkʰɔ* *maixaːn* *tɔː-lɔː-n* *nəː-m* *puː-rə-ŋ* *kunəŋ*
xokko *maixaan* *doo-loo-n* *nee-m* *buu-re-ŋ* *guneŋ*
all tent inside-LOC-3 put-CONN.CVB give-AOR-3 hearsay

tʰɔː-tʃʰi=*l* *ul-tʃʰi* *nəː-rə-ŋ* *kunəŋ*
too-ci=*l* *ul-ci* *nee-re-ŋ* *guneŋ*
DIST.V-COOR.CVB=PTCL go-COOR.CVB put-AOR-3 hearsay

tʰɔː-tʃʰi *əmun* *inək* *kə* *maixaːn-nin* *xɔkkʰɔ* *tʃala-tʃʰa*
too-ci *emun* *ineg* *ge* *maixaan-nin* *xokko* *jala-ca*
DIST.V-COOR.CVB one day PTCL tent-3 all be.full-PST

'(The tiger) put (many things) inside the boy's tent. **(The tiger) did that**, and it leaves. (**The tiger) did that**, and one day the tent was full.' (LT41-73,74,75)

Note that the markers of summary BLCs, consisting of the distal demonstrative verb plus a verbal connector, are glossed elsewhere in this dissertation simply as DIS.CONN (discourse connector) and translated as 'then'. Because BLCs primarily serve a discourse-cohesive function, their internal semantic contribution is not analyzed in detail in those chapters, and both glossing and translation are correspondingly simplified. In the present section, however, I provide more detailed glosses and a more precise interpretation of these discourse connectors.

This section first examines the forms and frequencies of the different non-finite verbal connectors used in Solon BLCs (§11.3.1). It then turns to the coordinating (§11.3.2) and subordinating (§11.3.3) relations expressed by these constructions.

11.3.1 Non-finite verbal connectors

The distal demonstrative verb *tʰɔː-* may combine with a range of non-finite verbal connectors. In the Solon corpus, BLCs occur 614 times out of a total of 3,126 sentences. The forms and frequencies of the verbal connectors attested in the corpus are presented in Table 11-2 below.

Table 11-2: Forms and frequencies of BLC summary connectors in Solon

	form	glossing	clause relation	tokens	frequency
1	*tʰɔː-tʃʰi*	DIST.V-COOR.CVB	COOR	514	83.7%
2	*tʰɔː-kʰi*	DIST.V-COND.CVB	SUBR	39	6.4%
3	*tʰɔː-mi pi-sə-ʈʃi*	DIST.V-CONN.CVB COP-PRF.PTCP-INS	SUBR	15	2.4%
4	*tʰɔː-tɔli*	DIST.V-SIM.CVB	SUBR	12	2.0%
5	*tʰɔː-tʃʰxiː(-ni)*	DIST.V-TEM.CVB(-3)	SUBR	10	1.6%
6	*tʰɔː-mi pi-ttʃʰi*	DIST.V-CONN.CVB COP-COOR.CVB	SUBR	8	1.3%
7	*tʰɔː-tʰɔːn*	DIST.V-PRF.CVB	SUBR	7	1.1%
8	*tʰɔː-tʃʰi kʰi*	DIST.V-COOR.CVB TOP	COOR	6	1.0%
9	*tʰɔː-mi*	DIST.V-CONN.CVB	COOR	1	0.2%
10	*tʰɔː-mi ətʰə-ʈʃʰi*	DIST.V-CONN.CVB finish-COOR.CVB	SUBR	1	0.2%
11	*tʰɔː-tʃʰxi*	DIST.V-TEM.CVB	SUBR	1	0.2%
	total			614	100.00%

*COOR: coordination; SUBR: subordination

The combination of the distal demonstrative verb with the coordinative converb, expressing a coordinating relation is the predominant strategy for summary BLCs, accounting for 83.7% of the total tokens. While subordinating relations are statistically less frequent, they exhibit significant formal and semantic variation. This high degree of structural productivity suggests that while Solon favors coordinating relation of reference clause and bridging clause in BLCs to keep the discourse cohesion for narrative flow, the construction remains a highly flexible tool for encoding complex clausal relations.

11.3.2 BLCs with coordinating relations

The majority of BLCs in Solon express coordinating relations and involve the coordinative converb *-tʃʰi*. As discussed in §6.5.1, the coordinative converb may receive either a coordinating or subordinating interpretation, although the coordinating reading is generally more likely. Accordingly, in this section it is analyzed as expressing coordination, which best reflects its predominant function in the corpus.

In these constructions, the summary connector, consisting of the distal demonstrative verb combined with the coordinative converb, refers back to the preceding event and is coordinated with the following finite clause. In other words, the summarized prior event and the subsequent event are linked as sequential or coordinate actions, see (11.28) above and (11.29) below.

(11.29) *kə* *tʰatʰtʰʊ* *paxa-sa* *atʃil.*
ge *tattʊ* *baxa-sa* *ajil.*
PTCL DIST.ADV take-PRF.PTCP work

tʰɔː-tʃʰi *kə* *pi* *atʃil-laː-sʊ.*
too-ci *ge* *bi* *ajil-laa-sʊ.*
DIST.V-COOR.CVB PTCL 1SG work-VBZ-PST.1SG
'That's how I got the job. **I did that**, and I worked.' (LT39-89-90)

Interestingly, a topic particle *kʰi* may directly follow the demonstrative verb plus coordinative converb (see form 8 in Table 11-2). In such cases, the preceding event is not only coordinated with the following clause but is also marked as a discourse topic, even though the preceding summarized event is not fully repeated in the sentence.

(11.30) *[...]* *ʊrin* *ati=l* *uriːləŋ* *pi-sə-tʰi* *jumə* *ta,*
[...] *ʊrin* *adi=l* *uriileŋ* *bi-se-ti* *yume* *da,*
twenty several=PTCL household COP-PST-1PL.EXCL PTCL PTCL

tʰari *ərin-tu.* ***tʰɔː-tʃʰi*** ***kʰi*** *kə* *tʰa-tʊxi-wil*
tari *erin-du.* ***too-ci*** ***ki*** *ge* *ta-dʊxi-wil*
DIST time-DAT **DIST.V-COOR.CVB** **TOP** PTCL DIST-ABL-REFL.PL

parikata *ɔː-tʃʰi=l* *[...]*
barigada *oo-ci=l* *[...]*
group become-COOR.CVB=PTCL
'At that time, we were twenty plus households. **We were being like that**, and we became one group from that.' (LT34-40,41)

11.3.3 BLCs with subordinating relations

BLCs expressing subordinating relations are less common than coordinating BLCs; however, the range of subordinating forms attested in Solon is considerable. Although the primary function of BLCs is to maintain discourse cohesion, the use of diverse subordinating relations within this construction is noteworthy. Each subordinating form encodes a distinct clausal relationship between the preceding event and the following event. In the present discussion, constructions with extremely low frequencies (i.e. only a single attestation) are not treated in detail. Table 11-3 summarizes the subordinating relations found in Solon BLCs.

Table 11-3: BLCs with subordinating relations

subordinating relation of BLCs	forms	tokens
conditional relation (If X happens/ If X does Y, …)	DIST.V-COND.CVB	39
anterior or perfective relations (After X/Having done X, …)	DIST.V-CONN.CVB COP-PRF.PTCP-INS	15
	DIST.V-CONN.CVB COP-COOR.CVB	8
	DIST.V-PRF.CVB	7
temporal relation (When X happen, …)	DIST.V-SIM.CVB	12
	DIST.V-TEM.CVB	10

Several constructions may express the same type of subordinating relation, but the functional differences among them remain unclear in the current dataset. Moreover, my observations suggest that the choice of discourse connector may also be influenced by individual speaker preferences or stylistic factors.

Conditional relations constitute the most common type of subordinating relation in BLCs (11.31). In these constructions, the preceding event functions as the condition for the event expressed in the following clause.

(11.31) *taxin* *əmun* *kʊtʰin* *ati* *xʊnin* *palti-ra-ŋ.*
daxin *emun* *gʊtin* *adi* *xʊnin* *baldi-ra-ŋ.*
again one thirty several sheep give.birth-AOR-3

tʰɔː-kʰi *kʰə* *xʊnin* *tʰul* *ʃʊrtʰʊrkan-tʊ* *iː-rə-ŋ.*
too-ki *ke* *xʊnin* *tul* *sʊrtʊrgan-dʊ* *ii-re-ŋ.*
DIST.V-COND.CVB PTCL sheep delivery.of.livestock final.stage-DAT enter-AOR-3

'There are thirty-plus sheep left to lamb. **If the thirty-plus sheep do that**, the lambing season will enter its final stage.' (LT27-08,09)

Anterior or perfective relations constitute another type of subordinating relation in BLCs, indicating that the preceding event occurs prior to and forms the temporal background for the following event. Three constructions may express this anterior or perfective relation (see Table 11-3). Two of these are analytic forms involving the copula verb *pi-*, as illustrated in (11.32) and (11.33). In addition, the distal demonstrative verb marked with a perfective converb can likewise encode an anterior or perfective relationship between the preceding and following events (11.34).

(11.32) *tʰɔː-tʃʰi* *[...]* *əʃiː=ʃi* *kʰi* *sɔnin_turun* *sʊntʃʰi-m* *ul-tʃi-rə-ŋ.*
too-ci *[...]* *esii=si* *ki* *sonin_durun* *sʊnci-m* *ul-ji-re-ŋ.*
DIST.V-COOR.CVB now=2SG TOP very trot-CONN.CVB go-PROG-AOR-3

tʰɔː-m ***pi-səː-tʃi*** *ʊxʊn* *pətənə* *kun-tʃʰə* *kunəŋ*
too-m ***bi-see-ji*** *ʊxʊn* *bedene* *gun-ce* *guneŋ*
DEM.V-CONN.CVB **COP-PRF.PTCP-INS** HES quail say-PST hearsay

'Then … (the fox) was trotting. **After (the fox) did that/ (The fox) having done that**, the quail said…' (LT01-63,64)

(11.33)

nami:n_xut^{h}ul-ni	*ikki-t^{h}ixi-ni*	*t^{h}a-la:-xi*	*mʊrin*	*t^{h}i:nə:-sə*	
namiin_xutul-ni	*iggi-tixi-ni*	*ta-laa-xi*	*mʊrin*	*tiinee-se*	
GN-GEN	tail-ABL-3	DIST-LOC-ABL	horse	release-PST	

kə	***t^{h}ɔ:-m***	***pi-ttʃ^{h}i***=*l*	*kə*	*əmun*	*mi:kan*
ge	***too-m***	***bi-cci***=*l*	*ge*	*emun*	*miigan*
PTCL	**DEM.V-CONN.CVB**	**COP-COOR.CVB**=PTCL	PTCL	one	heart

alta-tʃi-me	*kə*
alda-ji-me	*ge*
drop-PROG-1SG	PTCL

'The horses started running (at a horse race) (lit. the horses were released) from the back of (lit. tail of) Namin Hutul. **After the horses did that / The horses having done that**, I was nervous (lit. dropping my heart).' (LT09-22,23)

(11.34)

mit^{h}i-ni	*tɔ:-lə*	*law*	*əmun*	*pəjə*	*əjjə*	*par-wa*
miti-ni	*doo-lo*	*law*	*emun*	*beye*	*eyye*	*bar-wa*
1PL.EXCL-GEN	inside-LOC	must	one	person	PROX	tiger-DEF.ACC

ali:-xa:n-tʃ^{h}a.	***t^{h}ɔ:-t^{h}ɔ:n***	*law*	*t^{h}ari*	*pəjə-wə*
alii-xaan-ca.	***too-toon***	*law*	*tari*	*beye-we*
be.angry-CAUS-PST	**DIST.V-PRF.CVB**	must	DIST	person-DEF.ACC

tʃit-t^{h}ə-mi	*kun-tʃi-rə-ŋ.*
jid-te-mi	*gun-ji-re-ŋ.*
eat-AOR-1SG	SAY-PROG-AOR-3

'Among us, there must be a person who made this tiger angry. **After that person did that/ That person having done that,** (the tiger) must want to eat that person.' (LT41-14,15)

Another subordinating relation attested in BLCs is the temporal 'when' relation. In this construction, the distal demonstrative verb typically takes either a simultaneous converb (11.35) or a temporal converb (11.36). When the temporal converb is used with the distal demonstrative, a third-person possessive suffix frequently attaches to it. The status of this possessive marker, however, remains unclear. It is unlikely to function as a cross-reference marker to the subject of the preceding event, since subordinating converbs in Solon do not actively take cross-

reference marking (§6.5.2.1), with the temporal converb being the apparent exception. It is therefore uncertain whether this marker represents a cross-reference form or whether the temporal converb plus third-person possessive has become a fixed morphological form.

(11.35)

[…]	*əjjə*	*par*	*pasa*	*əm-sə*	*kunəŋ.*
[…]	*eyye*	*bar*	*basa*	*em-se*	*guneŋ.*
	PROX	tiger	again	come-PST	hearsay

tʰɔː-tɔli	*amma-t-i*	*əmun*	*kiːsəːŋ*	*amma-naː-tʃʰi*
too-doli	*amma-d-i*	*emun*	*giiseeŋ*	*amma-naa-ci*
DIST.V-SIM.CVB	mouth-DAT-REFL.SG	one	roe.deer	mouth-VBZ-COOR.CVB

əm-sə *kunəŋ*
em-se *guneŋ*
come-PST hearsay

‘The tiger came again. **When the tiger did that**, it came holding a roe deer in its mouth.’ (LT41-66,67)

(11.36)

əmun	*ʃikkaːtʃʰin*	*kəː*	*ʃiwar-tʊ*	*ʃiwar-ta-tʰaːŋ*	*pi-tʃi-sə*	*kunəŋ*
emun	*siggaacin*	*gee*	*siwar-dʊ*	*siwar-da-taaŋ*	*bi-ji-se*	*guneŋ*
one	yellow	mare	mud-DAT	mud-VBZ-PRF.CVB	COP-PROG-PST	hearsay

tʰɔː-tʃʰixi-ni	*əmun*	*tʃəmuːxiŋ*	*tʰuːkə*	*ɔltɔːn-tɔliː-ni*
too-cixi-ni	*emun*	*jemuuxiŋ*	*tuuge*	*oldoon-dolii-ni*
DIST.V-TEM.CVB-3	one	hungry	wolf	side-PROL-3

nuttʃʰi-səː-tʃi […]
nucci-see-ji […]
pass.through-PRF.PTCP-INS

‘A yellow mare had got stuck in the mud. **When the yellow mare was being like that**, a hungry wolf passed by.’ (LT10-03,04)

In summary, the preliminary analysis yields two main findings. First, the high frequency use of BLCs in Solon (614 occurrences) demonstrates that a systematic investigation of these constructions is both feasible and likely to provide significant insights into their structural and functional properties. Second, while Solon shows a strong preference for coordinating strategies

in linking reference clauses and bridging clauses, the wide range of subordinating forms attest indicates that the construction remains highly productive and structurally flexible.

11.4 Associated motion

According to Guillaume and Koch (2021:3), associated motion (AM) is "a verbal grammatical category, separate from tense, aspect, mood, and direction, whose function is to associate, in different ways, different kinds of translational motion (spatial displacement/change of location) to a (generally non-motion) verb event."

This chapter first introduces the background of AM constructions in the Tungusic family, focusing on their structural types and argument structure, drawing on Pakendorf & Stoynova (2021) and Alonso de la Fuente & Jacques (2018) (§11.4.1). Section §11.4.2 then describes AM in Solon, including its construction types and their frequencies in the Solon corpus. Section §11.4.3 provides a brief overview of the semantic parameters of AM, such as direction, temporal relations, and purposive interpretations. Finally, §11.4.4 examines the argument structure of AM constructions in Solon.

11.4.1 Associated motion in Tungusic languages

The Tungusic languages have an AM suffix that expresses meanings such as 'to go/come and V' or 'to go/come in order to V' and which typically appears as *-ndA* or *-nA* (Pakendorf & Stoynova 2021:855-861). Manchu is exceptional in having two AM suffixes: *-nA*: 'go and V' and *-ŋji-* 'come and V' (Alonso de la Fuente & Jacques 2018:505).

Pakendorf & Stoynova (2021:858-859) identify three structural types of constructions which involve the AM suffix in Tungusic languages, listed below as Type 1, Type 2, Type 3. Type 4, which does not have any AM suffixes and expresses AM meanings through a motion verb construction, can be recognized in Classical Manchu (Alonso de la Fuente & Jacques 2018:505):

Type 1: the *independent construction*, where AM is marked on a single independent verb (11.37).

Type 2: the *pleonastic converbial construction*, where AM marks the converb in a biverbal construction consisting of a simultaneous converb plus a finite motion verb (11.38).

Type 3: the *echo construction,* a term following Guillaume (2006:424, 432), where AM marks a finite base verb that follows (or, in rare cases, precedes) a finite motion verb (11.39).

Type 4: *the motion verb construction*, where the motion is expressed by a separate motion verb "come" or "go" and the lexical verbs and motions verbs are linked by converbs, e,g. in Manchu, V-CVB *ji-* "come and V", V-CVB *gene-* "go and V". This construction is only found in Manchu (11.40).

(11.37) Ulch (Pakendorf & Stoynova 2021: 870)
mənə *sụkdata* *waː**-ŋda**-sụ-j*
self fish kill-**AM**-IPFV-PRS
'She herself **goes fishing**.'

(11.38) Nanai (Pakendorf & Stoynova 2021: 866)
Sogdata-wa *waː**-nda**-mi* ***ene**-xə-či*
fish-ACC kill-**AM**-SIM.CVB.SG **go**-PST-3PL
'They **went to fish** (lit. they went while going to kill fish)'

(11.39) Udihe (Pakendorf & Stoynova 2021: 859)
zeu-ŋi-na-mie *zawa-mie* ***ŋene-**li-e-ni*
food-AL-DEST-REFL take-COND.CVB **go**-INCEP-PST-3SG
*geː**-ne**-gi-li-e-ni*
bring-**AM**-REP-INCEP-PST-3SG
'(She) took some food with her and **set out to bring** her granddaughter back.'

(11.40) Classical Manchu (Alonso de la Fuente & Jacques 2018: 505, glossing adapted)
*ala**-me*** ***ji-**mbi*
tell-**IPFV.CVB** **come**-PRS
'**Come to tell**.'

It is important to distinguish between two types of arguments in Tungusic AM constructions. The first is the verbal argument, which is governed by the lexical verb carrying the AM marker or the lexical verb in a motion verb construction. The second is the AM argument, governed by the AM marker or by the motion verb in a motion verb construction. The AM argument is not always expressed. Pakendorf & Stoynova (2021) considered the presence of the AM argument as an applicative-like function of the associated motion construction, as it allows the addition of an argument that is not independently licensed by the lexical verb (Pakendorf & Stoynova 2021:877). Example (11.41) shows the verbal argument of the AM construction in Nanai, while example (11.42) shows the verbal argument 'axe' and the AM argument (goal argument 'house') in Udihe.

(11.41) Nanai (Pakendorf & Stoynova 2021: 875)
mi *ag-**bi*** *gələ-**ndə**-ku-əm-bi*
1SG elder.brother-**REFL.SG** search-**AM**-REP-ASSERT-1SG
'I'll go to search for my brother.'

(11.42) Udihe (Pakendorf & Stoynova 2021: 876)
*zugdi-**tigi*** *geː-**ne**-gie* *suese-**we*** *moː-wo* *xua-ŋni-laga-mi*
house-**ALL** take-**AM**-REP.IMP axe-**ACC** tree-ACC cut-AM-PURP-REFL
'Go **home** to get **an axe** to cut down the tree.'

11.4.2 Associated motion in Solon

11.4.2.1 AM constructions and their frequency of use

In Solon, the associated motion suffix is *-nAː* 'go/come and/to V'. Solon exhibits the independent associated motion construction (11.43) (Type 1) and the pleonastic converbial construction (Type 2)[21] (11.44).

[21] Solon has a similar construction as directional serial verb constructions (directional SVCs) (a term from Lovestrand & Ross 2021: 97), that combines a path-of-motion verb with another motion verb. But in Solon the two verbs are linked by a converb, and this type is excluded from this section, because these constructions only modify the direction of the motion verbs. Directional SVC-like constructions are discussed separately in the complex predicate section (§8.3.2.2).

(11.43) *əmun ani əmun natan tʃaxʊn pəjə aŋ ɔː**-nɔː**-sɔ kunəŋ.*
*emun ani emun nadan jaxʊn beye aŋ oo**-noo**-so guneŋ.*
one year one seven eight person hunting make-**AM**-PST hearsay
'One year ago, seven or eight people **went to hunt**.' (LT41-02)

(11.44) *maːsaːn par məːn-pə-ni tʃikkʰ-u**-nəː**-m **əmə-**tʃi-rə-ŋ.*
*maasaan bar meen-be-ni jikk-u**-nee**-m **eme-**ji-re-ŋ.*
soon tiger REFL-DEF.ACC-3 eat-EP-**AM**-CONN.CVB **come**-PROG-AOR-3
'The tiger is **coming to eat** him soon.' (LT41-38)

In addition, Solon exhibits a fifth construction type (Type 5) not reported for other Tungusic languages, which I call the motion-cum-purpose adverbial construction. Structurally, this type takes the form of a purpose adverbial clause: the lexical verb first bears the AM suffix with a first-person finite form; the grammaticalized verb 'say' then marks purposive meaning; this is followed by a motion verb introducing the intended movement (11.45). Type 5 is discussed in detail in §11.4.2.4 further below.

(11.45) *tʰɔːtʃʰi tʃuːr-i alaːr pʊxa-wal im-ʊ**-naː-mi** **kuŋ-kʰəŋ***
*tooci juur-i alaar bʊxa-wal im-ʊ**-naa-mi** **guŋ-keŋ***
DIS.CONN two-COLL spotty bull-REFL.PL drink-VL-**AM-1SG** **SAY-SAY.CVB**

***ul-**tʃʰə kunəŋ.*
***ul-**ce guneŋ.*
go-PST hearsay
'Then two of them went **in order to make** their spotty bull **drink** water.' (LT04-03)

Table 11-4 presents the total occurrences and relative frequencies of the different AM construction types in the Solon corpus. Overall, independent AM construction is the predominant pattern, accounting for 71% of all tokens.

Table 11-4: Number of occurrences and frequency of different types of AM constructions in Solon

type of AM	number of occurrences	frequency in the AM construction
independent AM	44	71.0%
pleonastic converbial AM	12	19.4%
motion-cum-purpose adverbial AM	6	9.7%

Lexical verbs in AM constructions are overwhelmingly transitive (58/62, 93.5%), with only four instances involving intransitive verbs (two tokens of 'sleep', and one each of 'jump' and 'enter'). Given this strong skew toward transitive predicates, the following analysis focuses primarily on transitive verbs. Consequently, transitivity is not treated as a major conditioning factor in the distribution of AM constructions in Solon.

11.4.2.2 Independent AM construction

In independent constructions, the associated motion meaning is conveyed solely through the AM suffix attaching to the lexical verb. It primarily attaches to non-motion verbs (11.46-11.47).

(11.46) *tʰɔːtʃʰi* *ukkʰəːxəːŋ* *par-ni* *pəltir-wə-ni* *iʃi-**nəː**-sə* *kunəŋ.*
tooci *ukkeexeeŋ* *bar-ni* *beldir-we-ni* *isi-**nee**-se* *guneŋ.*
DIS.CONN boy tiger-GEN foot-DEF.ACC-3 see-**AM**-PST hearsay
'Then the boy **went to see** tiger's paw.' (LT41-56)

(11.47) *[...]* *pi* *tʰul-lə* *juː-tʃʰi* *ʊxʊn* *xaliːr-ja*
[...] *bi* *tul-le* *yuu-ci* *ʊxʊn* *xaliir-ya*
1SG outside-LOC go.out-COOR.CVB what leek-PTV

*tʰuː-**nəː**-ktʰe* *[...]*
*tuu-**nee**-gte* *[...]*
pick-**AM**-HORT
'Let me go out and **go and pick** some leeks!' (LT19-41)

11.4.2.3 Pleonastic converbial AM construction

Pakendorf & Stoynova (2021:865) define the pleonastic converbial AM construction in Tungusic languages as "a finite motion verb and a lexical verb marked with *-ndA* in a non-finite converbial form." In the present section, a broader definition is adopted, referring to any construction in which the AM marker attaches to the lexical verb and an additional motion verb is present, regardless of which verb bears finite or non-finite morphology. This broader definition is necessary because in Solon the relative order of the lexical and motion verbs is flexible: the first element typically appears in a non-finite converbial form, while the second is finite.

In Solon, the lexical and motion verbs are linked either by the coordinative converb *-tʃʰi* or by the coordinate converb *-mi*, with the converb attached to the first verb in the sequence. The choice of converb does not appear to determine the interpretation of the construction, which is also observed in complex predicates (§8.3).

The motion verbs attested in this construction include *əmə-* 'come', *ninə-* 'go', and *uli-* 'go (ambulative). The verbs 'come' and 'go' may occur either before or after the lexical verb, whereas 'go around' is restricted to the post-verbal position, see Table 11-5 and the following examples.

Table 11-5: The motion verbs and the verb order in the pleonastic converbial construction

'come' *əmə-*	V-AM-CVB come- (11.48)	come-CVB V-AM- (11.49)	
'go' *ninə-*	V-AM-CVB go- (11.50)	go-CVB V-AM- (11.51)	
'go' *uli-*	V-AM-CVB go- (11.52)	-	

(11.48)

maːsaːn	*par*	*məːn-pə-ni*	*tʃikkʰ-u-**nəː-m***	***əmə-**tʃi-rə-ŋ.*
maasaan	*bar*	*meen-be-ni*	*jikk-u-**nee-m***	***eme-**ji-re-ŋ.*
soon	tiger	REFL-DEF.ACC-3	eat-EP-**AM-CONN.CVB**	**come**-PROG-AOR-3

'The tiger is **coming to eat** him soon.'(LT41-38)

(11.49) *tʰɔːtʃʰi* *tʰɔːl* *[...]* *tɔː-ni* *xupəː-tə* ***əmə-tʃʰi*** *aːsa-**na**-r*
tooci *tool* *[...]* *doo-ni* *xubee-de* ***eme-ci*** *aasa-**na**-r*
DIS.CONN rabbit river-GEN edge-DAT **come-COOR.CVB** sleep-**AM**-IPFV.PTCP

ɔː-sɔ
oo-so
become-PST

'Then the rabbit decided to **come to the riverside and sleep**.' (LT06-08)

(11.50) *talaŋ-tʊ* *nɔːkʊ* *ikkitʃʰi* *mikkitʃʰi-jə* *pakkiː**-naː-m***
dalaŋ-dʊ *noogʊ* *iggici* *miggici-ye* *baggii**-naa-m***
GN-DAT past food M.REDP-PTV prepare-**AM-CONN.CVB**

***nənə**-(r)-tu* *[...]*
***nene**-(r)-du* *[...]*
go-IPFV.PTCP-DAT

'In the past, when people **went to Dalang to prepare** the food and such things …' (LT20-138)

(11.51) *tʃuːn-iːn* *ətʃin-nin* ***nin-tʃʰi*** *iʃi**-nəː**-sə**ː=ʃi* *[...]*
juun-iin *ejin-nin* ***nin-ci*** *isi**-nee**-see=si* *[...]*
house-GEN.MN owner-3 **go-COOR.CVB** see-**AM**-PFV.PTCP=2SG

'When the house owner **went to see**...' (LT35-23)

(11.52) *patʰʊ* *tʰʊjaː* *tʃuː-riː* *kʰinʊ* *iʃi**-nə**-m* ***ul-**tʃʰəː*
batʊ *tʊyaa* *juu-rii* *kinʊ* *isi**-ne**-m* ***ul-**cee*
PN PN two-COLL movie see-**AM**-CONN.CVB **go**-PST

'Batu and Tuya **went to see** movie together.' (EL01-26)

When the motion verb is *ninə-* 'go', the motion and directional meanings are stronger than with *uli-* 'go (ambulative)'. Furthermore, when the motion verb precedes the lexical verb, the directional interpretation tends to be more prominent than when it follows the lexical verb. These conclusions are based on the judgement elicitation from the speakers. Other semantic or functional distinctions among these subtypes remain unclear, as the pleonastic converbial construction is relatively infrequent in the corpus, with only 12 attested tokens.

11.4.2.4 Motion-cum-purpose adverbial AM construction

The motion-cum-purpose adverbial AM construction represents a highly redundant pattern, combining multiple markers of both motion and purpose. The purposive relation is expressed by a purpose adverbial clause formed through the grammaticalization of the verb ‘say’ (§10.7.2.3). See (11.53) below (repeated from 11.45). In this construction, the lexical verb ‘drink’ takes the AM suffix and appears in a first-person finite form. The grammaticalized verb ‘say’ functions as a subordinating conjunction introducing a purpose clause, while the matrix predicate is a motion verb ‘go’. A literal rendering of (11.45) would therefore be: ‘the two of them **went in order to (=saying I will) go in order to make** their spotted bull **drink** water.’ Structurally, both motion and purpose are expressed twice. The AM marker encodes motion-cum-purpose (§11.4.3.3), the grammaticalized ‘say’ adds an additional purposive meaning, and the matrix motion verb contributes an additional motion component. Despite this apparent double marking, the clause denotes a single purposive motion event. For this reason, Type 5 is treated here as a distinct AM construction in Solon, although the motivation for this redundancy remains unclear.

(11.53)	*tʰɔːtʃʰi*	*tʃuːr-i*	*alaːr*	*pʊxa-wal*	*im-ʊ-**naː-mi***	***kuŋ-kʰəŋ***
	tooci	*juur-i*	*alaar*	*bʊxa-wal*	*im-ʊ-**naa-mi***	***guŋ-keŋ***
	DIS.CONN	two-COLL	spotty	bull-REFL.PL	drink-VL-**AM-1SG**	**SAY-SAY.CVB**

***ul-**tʃʰə*	*kunəŋ.*
***ul-**ce*	*guneŋ.*
go-PST	hearsay

‘Then the two of them went **in order to make** their spotty bull **drink** water.’ (LT04-03)

A similar pattern is found in (11.54), whose complete translation is ‘Once, the old man also **went in order to (=saying I will) go in order to fish** as before.’

(11.54) *əmun* *ʊtaː* *ətʰxəːŋ-nin* *pasa=l* *ajatʰiː* *nəkəːŋ* *ɔsxɔːŋ* *koxotʰ-**nə-m***
emun *ʊdaa* *etxeeŋ-nin* *basa=l* *ayatii* *negeeŋ* *osxooŋ* *gɵxɵt-**ne-m***
one time old.man-3 again=PTCL past SIMV fish hook-**AM-1SG**

kʰəːŋ ***ul-**tʃʰə*** *kunəŋ.*
keeŋ ***ul-**ce*** *guneŋ.*
SAY.CVB **go-**PST hearsay
'Once, the old man also **went in order to fish** as before.' (LT07-03)

11.4.3 Semantic parameters of the AM construction

11.4.3.1 Direction of the motion

Cross-linguistically, the associated motion construction has been shown to express different directional meanings, such as, for instance, itive (away from the speaker) go and/to V', ventive (towards the speaker) 'come and/to V', or neutral (no specific direction) (Guillaume & Koch 2021: 9-10).

In Solon, the suffix *-nAː* is deictically neutral in all attested examples, and the direction of motion is determined by the context. In (11.55), the motion may be interpreted as either itive or ventive depending on the discourse setting, whereas in (11.56) the itive interpretation is favored by contextual cues.

(11.55) *ʊxʊn* *jəːmə,* *kəntʰxəː=l* *pi-ttʃʰi* *tɔː* *ɔː**-nɔː**-xɔː*
ʊxʊn *yeeme,* *gentxee=l* *bi-cci* *doo* *oo**-noo**-xoo*
what thing suddenly=PTCL COP-COOR.CVB intestine make-**AM**-IMP

kun-tʃʰə=ʃiː=l.
gun-ce=sii=l.
say-PRF.PTCP=2SG=PTCL
'What? Suddenly ask me to **go/come to cook** the intestine.' (LT33-11)

(11.56) *ɔsxɔːŋ* *koxotə**-nəː**-(r)-təli* *ətʰxəːŋ-nin* *tʃuː-tʰxi* *kɔr-sɔlɔ* *ul-tʃʰə*
osxooŋ *gɵxɵde**-nee**-(r)-deli* *etxeeŋ-nin* *juu-txi* *gor-solo* *ul-ce*
fish hook-**AM**-IPFV.PTCP-PROL old.man-3 home-ABL far-ATT go-PST
'While **go to fish**, the old man went rather far from home.' (LT07-04)

In pleonastic converbial constructions, in contrast, directionality is specified lexically by the choice of motion verb. The verbs *ninə-* 'go' and *uli-* 'go (ambulative)' indicate itive motion (away from the deictic center) (11.52 above and 11.57), while *əmə-* 'come' expresses venitive motion (toward the deictic center) (11.48 above).

(11.57) *ʃi* *keː**-tu*** *ʊxʊn* *ɔː**-nɔ**-mi* ***nin**-tʃi-nteː*
si *gee**-du*** *ʊxʊn* *oo**-no**-mi* ***nin**-ji-ndee*
2SG town-**DAT** what do-**AM**-CONN.CVB **go**-PROG-2SG
'What do you **go to do** in the town?' (EL01-33)

11.4.3.2 Temporal relation of the motion

An important typological parameter of AM systems is the temporal relation which "distinguish[es] the time of motion relative to the main activity – whether the motion is prior to, subsequent to, or concurrent with the time of the main activity" (Koch 1984: 26). The prior relation is the most widespread type of AM cross-linguistically (Ross 2021: 46-50). The AM suffix *-nAː* in Solon is typically used to convey prior motion, given that the motion event precedes the verbal event. Prior motion is illustrated in (11.58) and is consistent with the majority of examples discussed above.

(11.58) *əmun* *inək* *ətʰxəŋ-ni* *alaːr* *pʊxa-wi* *muː* *im-ʊː-**naː**-sa.*
emun *ineg* *etxeŋ-ni* *alaar* *bʊxa-wi* *muu* *im-ʊʊ-**naa**-sa.*
one day old.man-3 spotty bull-REFL.SG water drink-CAUS-**AM**-PST
'One day, the old man **went to make** the spotty bull drink water.' (LT33-05)

However, Solon AM constructions may also express a concurrent temporal relation. In (11.59), the AM event and the lexical event 'look for' occur simultaneously, particularly in

combination with the progressive aspect marker. The construction therefore denotes ‘going while looking for’, with the two events unfolding in parallel. The speaker further confirms that this is a concurrent event because the subject is ‘looking for a place to live’ while ‘going’. The motion event ‘going’ will stop once the subject has ‘found the place to live’, and vice versa.

(11.59) *inək palti-r pɔkɔ-tu kələː-**nə-ʧi**-me […]*
*ineg baldi-r bogo-du gelee-**ne-ji**-me […]*
day give.birth-IPFV.PTCP place-DAT look.for-**AM-PROG**-1SG
‘I am **going and looking for** a place where I can live (lit. a place give birth to days).’ (LT33-32)

11.4.3.3 Purpose and AM constructions

Prior AM can be difficult to distinguish from motion-with-purpose constructions (Lovestrand & Ross 2021: 98), which convey meanings like ‘go/come in order to do,’ without necessarily implying that the action is completed. In Solon, the AM construction can also be interpreted as motion-cum-purpose.

Evidence for this reading comes from a video-elicitation stimulus in which a boy takes a ball, brings a dog outside, and is expected to play. In the stimulus, however, the event stops once the boy goes out with the dog, and the intended activity ‘play’ does not actually occur. Despite this, speakers describe the situation using the lexical verb ‘play’ marked with the AM suffix. This usage indicates that only the AM event ‘go’ takes place, while the lexical event ‘play’ expresses the intended purpose rather than an accomplished action. The example therefore shows that the AM marker in Solon can encode purposive meaning in addition to motion (11.60).

(11.60) *[…] tʰɔːʧʰi ʧuːr-i pompok-wə tʰukʰkʰu-ləː-ʧʰi*
[…] tooci juur-i bəmbəg-we tukku-lee-ci
DIS.CONN two-COLL ball-DEF.ACC pocket-VBZ-COOR.CVB

*tʰul-lə ukiː-**nəː**-sə*
*tul-le ugii-**nee**-se*
outside-LOC play-**AM**-PST
‘Then two of them put the ball into the pocket and went outside to play.’ (LT13-10)

11.4.4 The argument structure of the AM Construction

The argument structure of the AM construction in Solon is mixed; there are three types of arguments:

Verbal arguments are governed by the lexical verb and follow its valency pattern (e.g., direct object and other adjuncts). These arguments may also be non-overt, due to contextual ellipsis.

AM arguments are governed by the AM marker. The argument governed by the AM marker can be a spatial argument marked by a spatial case, or any arguments related to the motion, such as transport. They are marked with a spatial case and may be optional, introduced by the applicative-like function of the AM marker.

Verbal-AM mixed arguments are a very special argument type found in Solon, where the direct object of the verbal event is marked as a spatial case. In this study I tentatively analyze the spatial case-marked direct object as being influenced by the AM marker as a 'goal' argument.

Given that only 62 tokens of the AM marker are attested in the Solon corpus, the argument structure is analyzed collectively across all AM constructions rather than separately for each subtype[22]. The verbal arguments straightforwardly follow the lexical verb's valency, see in (11.61), the verbal argument is 'tiger's paw'.

(11.61)

tʰɔːtʃʰi	*ukʰkʰəːxəːŋ*	*par-ni*	*pəltir-wə-ni*	*iʃi-**nəː**-sə*	*kunəŋ.*
tooci	*ukkeexeeŋ*	*bar-ni*	*beldir-we-ni*	*isi-**nee**-se*	*guneŋ.*
DIS.CONN	boy	tiger-GEN	foot-DEF.ACC-3	see-**AM**-PST	hearsay

'Then the boy **went to see** tiger's paw.' (LT41-56)

The AM arguments are less expected, since they may introduce participants that are not compatible with the verb's inherent argument structure (e.g. goal or source roles). Especially, in Solon, the dative case is the primary marker of both goal and locative functions (§4.1.2.6). This overlap creates ambiguity in some AM constructions, as a spatial argument marked with the dative case may be interpreted either as the location of the verbal event or as the goal of the

[22] The first draft of the AM argument structure was completed for each type of AM construction, but the result was not ideal due to insufficient data.

motion event. For example, in (11.62), the spatial argument ‘household’ marked with the dative case may denote either (a) the location where the boy sleeps or (b) the goal to which the boy goes in order to sleep. Speakers accept both interpretations and generally do not perceive a meaningful distinction, since both readings imply the same overall outcome: the boy goes to and sleeps at a household.

(11.62) *əjjə* *ukʰkʰəːxəːŋ* *əʃi* *pʊxa-ʃi* *uriːləŋ-**tu*** *aːŋa-**naː**-m* *kuŋ-kʰəːŋ* *[...]*
eyye *ukkeexeeŋ* *esi* *bʊxa-si* *uriileŋ-**du*** *aaŋa-**naa**-m* *guŋ-keeŋ* *[...]*
PROX boy now bull-PROP house-**DAT** sleep-**AM**-1SG SAY-SAY.CVB
(a) ‘This boy went to **sleep at a household that kept a bull**.’
(b) ‘This boy **went to a household that kept a bull** to sleep.’ (LT35-25)

Apart from goal arguments, whose interpretation may remain ambiguous, the applicative-like function of the AM marker is clearer with other roles, such as source (11.63) and transport (11.64). In both examples, the spatial argument marked by the dative case is translated as a goal (e.g. ‘went to Dalang’ in (11.63) and ‘go there’ in (11.64)). However, these same arguments can also be interpreted as location of the lexical event (e.g. ‘prepare food at Dalang’ or ‘prepare food there’). The source argument in (11.63) and the transport in (11.64) are more clearly licensed by the AM marker itself, since they denote participants directly associated with the motion event rather than with the lexical predicate. These cases therefore provide stronger evidence for the applicative function of the AM marker. In (11.63), the source is right dislocated after the finite verb marked by ablative case. And in (11.64) the transport is marked by instrumental case.

(11.63) *talaŋ-tʊ* *nɔːkʊ* *ikkitʃʰi* *mikkitʃʰi-jə* *pakkiː**-naː**-m* ***nənə**-tu*
dalaŋ-dʊ *noogʊ* *iggici* *miggici-ye* *baggii**-naa**-m* ***nene**-du*
GN-DAT before food M.REDP-PTV prepare-**AM**-CONN.CVB **go**-DAT

kʰi *pa* *tʃuːr* *xɔnɔːr* *iː-kʰiʃi* *pi-sə* *ə-**tuːxi**.*
ki *ba* *juur* *xonoor* *ii-kisi* *bi-se* *e-**duuxi**.*
TOP TOP two night enter-HAB COP-PST PROX-**ABL**
‘Before, when people went to Dalang to prepare food, it would take (lit. enter) two days **from here**.’(LT20-168)

(11.64) *[...] tʰa-ttu əxur tʰəkkəŋ-**tʃi** ikkitʃʰi pakki-**na**-nti.*
*[...] ta-ddu exur teggeŋ-**ji** iggici baggi-**na**-ndi.*
DIST-DAT cow car-**INS** food prepare-**AM**-2SG
'You go there **by cow cart** to prepare food.' (LT29-94)

Another argument type involves what I term verbal-AM mixed arguments. In these constructions, an argument that would normally function as the direct object and take accusative case is instead marked with the dative case. Notably, this pattern occurs only in clauses containing the AM marker, suggesting that the unusual case-marking is triggered by the AM construction. I therefore tentatively analyze these arguments as verbal-AM mixed arguments. In translation, they still function semantically as direct objects. For example, 'fish' in (11.64) and 'place' in (11.65) serve as the direct objects of the lexical verb, yet they bear the unexpected dative case, which is best explained as an effect of the AM marker.

(11.65) *[...] ətʰxaːŋ-nin əmun inək pasa ɔsxɔːŋ-**tɔ** kuxiːtəː-**nəː**-m*
*[...] etxeeŋ-nin emun ineg basa osxooŋ-**do** guxiidee-**nee**-m*
old.man-3 one day again fish-**DAT** hook-VBZ-**AM**-CONN.CVB

***ul**-təli [...]*
***ul**-deli [...]*
go-SIM.CVB
'One day, when the old man **goes fishing** again…' (LT07-12)

(11.66) *inək palti-r pɔkɔ-**tu** kələː-**nə**-tʃi-me [...]*
*ineg baldi-r bogo-**du** gelee-**ne**-ji-me [...]*
day give.birth-IPFV.PTCP place-**DAT** look.for-**AM**-PROG-1SG
'I am **going and looking for a place** where one can live…' (LT33-32)

12 Language contact and conclusion

Solon differs from other Tungusic languages due to its distinctive contact history and sociolinguistic environment. In particular, it has been subject to strong and sustained influence from Mongolic languages: contact with Dagur already began in the Amur and Zeya River basins, and over the past several decades Solon has been dominated by Mongolian as the primary regional lingua franca. As a result, any grammatical description of Solon must take Mongolic influence into account. Throughout this dissertation, contact-induced change emerges as a recurrent theme, and many structural features of Solon can only be adequately explained with reference to long-term language contact.

Contact-induced changes have been addressed throughout the dissertation in the discussion of individual grammatical domains. In this final chapter, I bring these observations together and provide an overview of the major contact-induced changes in Solon. It should be noted that the analysis of contact-induced changes presented here is not intended to be exhaustive or fully systematic; rather, it aims to highlight the most salient patterns observable in the available data. A more comprehensive and theory-driven study of contact-induced change in Solon remains a task for future research.

Also, given my background as a native Mongolian speaker from Inner Mongolia, where Solon is spoken, the influence of Mongolian on Solon receives particular attention in this dissertation. By contrast, Dagur influence cannot be systematically assessed due to the lack of available Dagur data. Since Dagur is likewise a Mongolic language, it remains uncertain whether its impact differs substantially from that of Mongolian, and this question is also left for future research.

This chapter is structured as follows. First, I outline the language contact situation in Western Hulunbuir, providing the sociolinguistic background necessary for understanding Solon's current position (§12.1). Further details on the language ecology of Solon are discussed in Chapter 2. I then summarize the main contact-induced changes observed in Solon (§12.2). Finally, in §12.3, I argue that it can be characterized as a mixed language.

12.1 Language contact in Western Hulunbuir

Hulunbuir is a highly multilingual region. The languages spoken there belong primarily to three families: Sinitic (Mandarin), Mongolic (including Buryat, Bargut, Dagur, Khamnigan Mongol, Khorchin and Öölöd), and Tungusic (including Solon, Oroqen, Khamnigan Evenki, Aoluguya Evenki, Hezhe, and Manchu). The distribution and functional domains of these languages are closely tied to geography, subsistence patterns, and historical migration.

The modern administrative region of Hulunbuir can be divided into Western and Eastern ecological zones that differ markedly in natural conditions and, consequently, in the dominant lifestyles and language ecologies of their inhabitants (Zikmundová, Kapišovská & Khabtagaeva 2019:21, Urugshilt 2017: 191-192). Western Hulunbuir consists largely of steppe, characterized by an arid climate and relatively flat terrain. These conditions are well suited to nomadic pastoralism. Languages spoken in this area include Mandarin, Mongolian, Buryat, Bargut, Dagur, Solon (Hailar variety), Khamnigan (Evenki and Mongol), and Öölöd. Eastern Hulunbuir is dominated by the forested Greater Khingan Mountains, which traditionally supported hunting, fishing, and small-scale agriculture. The linguistic landscape there includes Mandarin, Dagur, Oroqen, Solon (Nonni variety), Aoluguya Evenki, Hezhe and Manchu.

The present study focuses on Western Hulunbuir, as Hailar Solon, the Solon variety discussed in this dissertation, is spoken in this area.

12.1.1 Demographic processes

All ethnic groups currently inhabiting Western Hulunbuir arrived relatively late, with permanent settlement beginning only after the seventeenth century (Atwood 2005: 9). According to Zikmundová, Kapišovská & Khabtagaeva (2019:23), early settlers included the Solons, Dagurs, Old (Chipchin) Bargut, and the Öölöd, these groups were followed by the New Bargut in the eighteenth century, and the early twentieth century brought further demographic change with the arrival of Buryat and Khamnigan populations, as well as limited Russian in-migration. Migration of Khorchin Mongols intensified throughout the twentieth century, particularly after the 1950s. In contrast, large-scale settlement of Mandarin-speaking Han Chinese became a decisive factor only after the 1970s, with rural penetration accelerating in the 1990s.

12.1.2 Language hierarchy

According to Zikmundová, Kapišovská & Khabtagaeva (2019), prior to the 1990s, Mongolian functioned as the dominant language of Western Hulunbuir and served as the principal medium of interethnic communication. Different ethnic groups interacted using a conventionalized Mongolian interdialect rather than strictly ethnic varieties. One such variety is the so-called 'Khorchin-type standard Mongol', in which distinctive Khorchin lexical and grammatical features are largely replaced by Mongolian. This interdialect has become the main Mongolian variety used by younger speakers, while older generations still employ more ethno-specific varieties, such as New Bargut or traditional Khorchin. Other ethnic groups similarly developed their own interdialectal varieties, such as Dagur-type or Khamnigan-type Mongolian. The authors further note, however, that since the 1990s Mandarin has rapidly overtaken Mongolian as the dominant language in Western Hulunbuir. They observe that today, Mandarin is the primary means of interethnic communication. Virtually all residents have at least passive competence in Mandarin, and among younger generations, Mandarin fluency is universal (Nargil 2025b:18). Code-switching into Mandarin is common even within intra-ethnic interactions, and initial encounters between strangers almost invariably take place in Mandarin. In this sense, Mandarin has replaced Mongolian as the region's dominant lingua franca.

Except for Mongolian and Mandarin, the other languages now occupy much more restricted functional domains. Some ethnic languages, such as Solon in Bayan Tohoi and surrounding rural areas or Dagur and Buryat in specific communities, may still be understood or spoken to a limited extent by members of other ethnic groups. However, full multilingual competence is rare, and intergenerational transmission of minority languages is weakening rapidly.

Overall, the linguistic hierarchy in western Hulunbuir can be summarized as follows:

- *Level 1*: Mandarin, the dominant language, spoken by all ethnic groups and used in nearly all public and interethnic domains.
- *Level 2*: Mongolian, functioning as a regional lingua franca, spoken by most non-Han populations, but no longer universally used across all contexts.
- *Level 3*: Ethnic languages (including **Solon**, Dagur, Buryat, Bargut, and Khamnigan), largely confined to intra-group communication and increasingly restricted to older speakers.

The Level 3 languages, including Solon, are subject to sustained pressure from both Mongolian and Mandarin. Mandarin influence represents a relatively recent development, whereas Mongolian influence has been continuous over several centuries. Solon provides an especially clear case of long-term contact-induced change: extensive Mongolian influence has restructured key domains of Solon grammar, leading to patterns that differ markedly from those reconstructed for Proto-Tungusic and from other Tungusic languages.

12.2 Summary of contact-induced changes

12.2.1 Phonological change: consonant devoicing

In many Northern Tungusic languages of Siberia, bilabial, velar, alveolar, and postalveolar consonants are typically organized according to a voiced versus voiceless opposition (Pakendorf & Aralova 2020: 290). In Solon, however, this contrast is realized as a voiceless versus unaspirated voiceless opposition. A similar pattern has been reported for Oroqen (Cong 2019: 31).

Table 12-1: The voiced versus voiceless consonants in Solon and Negidal

	bilabial	velar	alveolar	postalveolar
Even, Negidal, Evenki	*b p*	*g k*	*d t*	*ɟ c*
Solon, Oroqen	*p pʰ*	*k kʰ*	*t tʰ*	*tʃ tʃʰ*

The devoicing pattern observed in Solon (and Oroqen) is likely the result of areal influence. Both Mongolian and Standard Mandarin Chinese lack a voiced–voiceless contrast in these obstruents and instead employ voiceless or aspirated series (Svantesson et al. 2005:25–30; Duanmu 2007:24). Contact with these languages may therefore have contributed to the restructuring of the consonant system in Solon[23].

[23] The conclusion that this change is an areal feature was confirmed through personal communication with Ian Maddieson during his stay at Dynamique Du Langage in 2022. I gratefully acknowledge his insights.

Figure 12-1 illustrates this contrast through a comparison of the cognate word ‘house’ in Negidal and Solon. In Negidal (data provided by Pakendorf), the form *ɟo* contains the voiced consonant /ɟ/ (Figure 12-1a) with a vocal-fold vibration (red circle), whereas the corresponding Solon form *ʧu:* exhibits the voiceless affricate /tʃ/ (Figure 12-1b), with no vocal-fold vibration (red square)[24].

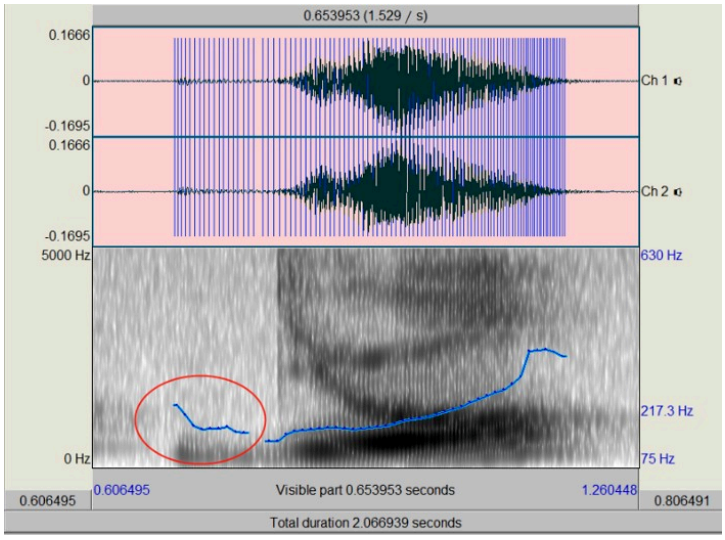


Figure 12-1(a) Pronunciation of *ɟo* ‘house’ in Negidal

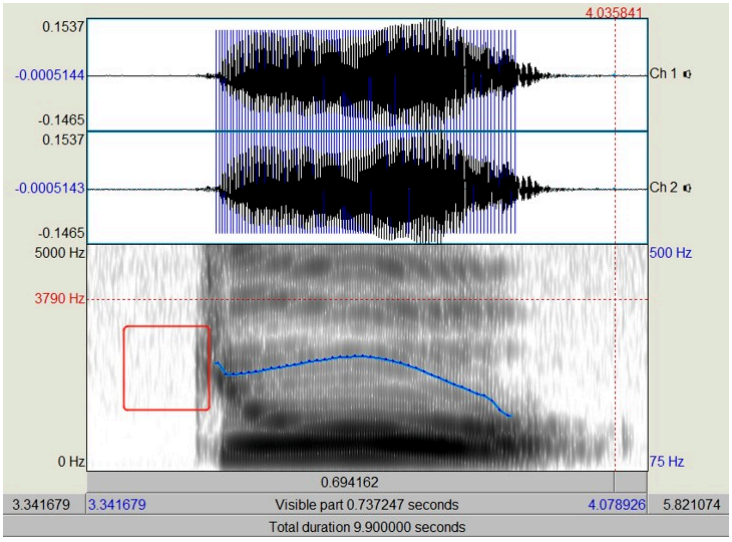


Figure 12-1(b) Pronunciation of *ʧu:* ‘house’ in Solon

[24] I am grateful to Rémi Anselme for his assistance with the Praat analysis.

12.2.2 Loanwords

Solon exhibits a substantial number of loanwords from both Mongolian and Chinese, with Mongolian being the dominant source of borrowing. A comprehensive identification of all borrowed lexical items falls beyond the scope of the present study; however, the extent of borrowing can be illustrated through the verbal lexicon.

The Solon corpus contains 492 verb entries, of which 127 are identified as borrowings. Among these, 123 originate from Mongolian and 4 from Chinese. Borrowed verbs therefore account for approximately 25.8% of the verbal lexicon, indicating a significant degree of contact-induced lexical influence, particularly from Mongolian. See (12.1) for selected borrowed verbs from Mongolian and Chinese.

(12.1) *sɔŋkɔ-* ‘pick.MN’
soŋgo-

xiʃə- ‘be.careful.MN’
xise-

amisxaː- ‘inhale.MN’
amisxaa-

ʧuwʃəːr- ‘agree.MN’
juwseer-

kəmʃi- ‘regret.MN’
gemsi-

itʰəxə- ‘believe.MN’

emtar- ‘live.MN’
emdar-

kərtʃʰiləː- ‘prove.MN’
gercilee-

ampʰai- ‘arrange.CN’
ampai-

tʃaː- ‘explode.CN’

jaa-

Further study of loanwords is needed, particularly to determine whether borrowed forms coexist with native Solon forms. Basic vocabulary items attested only in Mongolian form may be considered entrenched and potentially older borrowings. Where native Solon forms coexist with loanwords, analysis of usage frequency and speaker distribution could help determine whether these forms are an indication that they are due more to code-switching than real borrowing and may be more recent[25].

12.2.3 Structural changes

This section summarizes the principal structural changes in Solon that appear to result from contact-induced influence, primarily from Mongolian. Rather than providing detailed analyses of each change, the discussion offers a concise overview and cross-references the relevant chapters where these phenomena are described more fully. For ease of presentation, the changes are listed sequentially following the overall organization of the dissertation rather than treated as separate subsections.

The identification of contact-related structural change is based primarily on comparison with other Tungusic languages and with Mongolic languages, especially Mongolian. Dagur influence cannot be systematically assessed due to the lack of available data. Some comparative observations also draw on my native-speaker intuition, particularly with respect to Mongolian (as spoken in Inner Mongolia).

Solon exhibits a number of morphological simplifications, which are tentatively attributed here to prolonged contact with Mongolian and Chinese, although the precise historical pathways remain unclear. Given that the Mongolian varieties spoken in Inner Mongolia have themselves been in contact with Sinitic languages, such contact may have further reinforced these simplification processes.

[25] I am grateful to my supervisor, Brigitte Pakendorf, for her insights into whether loanwords co-exist with Solon native forms.

Not all structural features that distinguish Solon from other Tungusic languages can be clearly attributed to contact influence. For instance, Northern Tungusic languages typically exhibit two series of subject agreement markers: a nominal series identical to possessive suffixes on nouns, and a verbal series (Malchukov 1995: 16; I. Nedjalkov 1997: 259; Pakendorf, forthcoming: 27–28). Solon also shows two subject agreement series, but neither corresponds to nominal possessive suffixes. The reason of this structural change remains unclear, as neither Mongolic nor Chinese languages possess subject agreement systems. Such unclear changes of are therefore not discussed in this section.

The following list presents structural changes attested in Solon:

1. ***Only human nouns take plural markers***: In Solon, general number and singular number are unmarked. Non-human nouns are unmarked even if they are plural (§4.1.1). Only plural human nouns are marked by plural markers in Solon corpus. This pattern differs from other Northern Tungusic languages, where plural marking typically extends to non-human nouns as well. For example, number marking of non-human nouns is still productive in Negidal (Pakendorf & Aralova 2017), Oroqen (Cong 2019:157-163), Evenki (I. Nedjalkov 1997:141-142), and Even (Malchukov 1995:8). This development may reflect Mongolian influence. In Mongolian, nominal number marking is largely optional and often described as an unspecified or explicit plural system (Janhunen 2012a:99, 102; Brosig 2021:7), with plural marking more commonly associated with human nouns due to their higher referential specificity. Although these descriptions are based primarily on Khalkha Mongolian, and detailed studies of Inner Mongolian varieties are lacking, the limited and non-obligatory use of plural marking in Solon is consistent with a contact-induced convergence toward Mongolian patterns.

2. ***Borrowed genitive case***: Solon has borrowed a genitive case from Mongolian, a development likewise reported for other Tungusic languages spoken (or formerly spoken) in Manchuria (§4.1.2.4). This borrowed genitive has had substantial structural consequences for Solon grammar. First, possessive noun phrases regularly employ genitive marking on the possessor. At the same time, the personal possessive suffix on the possessed noun has become optional, indicating that the genitive has assumed the primary role in encoding possessive relations (§5.2.1). Second, genitive marking has extended beyond nominal possession to clause structure. In subordinate clauses, embedded subjects participate in a genitive-nominative alternation. In

complement and adnominal clauses in particular, genitive-marked embedded subjects are more frequent than nominative-marked ones (§10.6.1).

3. ***Predominant use of dative case***: Although Solon retains distinct locative and allative case markers, the dative case has become the primary marker for a wide range of spatial and participant roles. This development appears to reflect influence from Mongolian, which exhibits a locative-dative syncretic suffix (*-t/d ~ du*) and lacks a dedicated allative case (Creissels 2009:622; Chinggeltei 1991:158–163; Janhunen 2012:106–108). As a consequence, the dative in Solon now predominantly encodes recipients, addressees, locations, and goals. By contrast, the locative and allative cases are used only marginally and their distribution has become highly restricted. See §4.1.2.6 for further details.

4. ***Loss of alienable possessive suffix -ni/ŋi***: Solon has completely lost the Tungusic alienable possessive suffix *-ni/ŋi*, which remains attested in many other Tungusic languages (§4.1.3.3).

5. ***The emphatic particle marking indefinite pronouns:*** Several Tungusic languages employ interrogative pronouns marked by several particles to form indefinite pronouns, these particles include *=ka*, *=βal*, and *=da* (Aralova & Pakendorf 2020). Neither these particle forms nor comparable functional equivalents are attested in Solon. Instead, Solon forms indefinite pronouns analytically through a combination of an interrogative pronoun and an emphatic particle *=xatʰa~=kʰatʰa*, expresses free-choice meanings (§4.2.5) and closely parallels the corresponding pattern found in Mongolian (personal knowledge).

6. ***Comparative adverbs in comparative construction***: In comparative constructions, Solon employs comparative adverbs, such as *kəŋ* ‘more.CN’ (borrowed from Chinese 更 *gèng*) and the Tungusic adverb *ulxə* ‘more’, to modify adjectives (§4.4.2.1). This strategy contrasts with the typical Tungusic pattern, in which adjectives are either left unmarked or take dedicated comparative suffixes (e.g. *-tmAr/-dymAr* in Evenki) (Pakendorf 2007a:204).

7. ***Summary conjunction (conjoined noun phrase)***: Solon uses summary conjunction to express noun phrase conjunction (§5.3.3), which is very similar to the Mongolic style (Haspelmath 2007 :36).

8. ***Simplification of mood morphology***: Solon exhibits a reduced mood morphological system, retaining only imperative suffixes, including immediate and remote future imperatives (§6.3). In contrast, other Northern Tungusic languages such as Evenki, Negidal, and Even maintain dedicated morphological categories for subjunctive, presumptive, and necessitive moods (Pakendorf & Aralova 2020:297). These categories are absent in Solon. Instead, comparable meanings are expressed analytically, typically through adverbs or periphrastic constructions, many of which appear to be calqued or borrowed from Mongolian or Chinese (§7.1.1.4).

9. ***Simplification of aspect/aktionsart marking and increased analyticity***: Morphological marking of aspect and Aktionsart in Solon is considerably reduced, and only a limited set of dedicated suffixes remains. Many aspectual/Aktionsart distinctions are instead expressed analytically (§6.4), most notably through complex predicate constructions. These complex predicates, discussed in §8.3.4, appear to have developed under Mongolian influence.

10. ***Changes in the converb system***: The converb system in Solon has undergone substantial restructuring, likely due to prolonged contact with neighboring Mongolic languages. Several developments can be identified.

First, Solon has lost a number of inherited converbal forms, including the purposive and terminative converbs that are still attested in other Tungusic languages (Pakendorf & Aralova 2020:299).

Second, converbs in Solon have developed a prominent coordinating function. While coordination through converbs is not clearly studied for other Northern Tungusic languages, it is highly productive in Solon, particularly with the coordinative converb *-tʃʰi* and the connective converb *-mi* (the latter described elsewhere as a same-subject conditional converb). On the basis of this coordinating function, clause chaining is widespread in Solon. Such patterns are not commonly reported for other Tungusic languages but are well known in Mongolic languages (e.g. Buryat; Skribnik 2024), suggesting possible Mongolian influence.

Third, converbs in Solon participate extensively in complex predicate constructions, another feature that parallels Mongolic structures (§8.3.4).

Finally, cross-reference marking on converbs is weakly expressed. Even in variable-subject constructions, person markers indexing the embedded subject are frequently omitted. This reduced cross-referencing contrasts with typical Tungusic patterns and may reflect Mongolian influence, since Mongolic languages generally lack dedicated cross-reference morphology on converbs (§6.5.2.1).

11. ***Borrowed adverbs from Mongolian and Chinese***: Solon has borrowed a number of adverbs from Mongolian and Chinese. These forms increasingly replace inherited morphological strategies, particularly in the domain of mood. As discussed in the modal adverb section (§7.1.1.4), borrowed adverbs are used to express presumption, deontic, and epistemic meanings.

12. ***Topic particle pikkʰi ~ kʰi***: One of the principal topic markers, *pikkʰi ~ kʰi*, historically derives from the copular verb 'be/become' marked by a conditional converb. Cognate constructions formed from conditional converbs of copular verbs are also attested in other Tungusic languages (Matić 2016:349; Malchukov 2024:283), suggesting that the grammaticalization of copular forms into discourse markers is not unique to Solon.

However, these topic-marking forms show a clear areal distribution. In Manchu and Sibe, the topic marker appears as *o-ci* 'become-COND.CVB' (Gorelova 2002:410; Zikmundová 2013[26]). In Even, Evenki, and Udihe, the corresponding form is *bi-mi* 'be-SS.COND.CVB' (Malchukov 2024:283; Däbritz et al. 2024; Nikolaeva & Tolskaya 2001:865). In Solon and Oroqen, the marker appears as *pi-kkʰi* 'be-(DS).COND.CVB'. This geographical clustering suggests an areal pattern rather than independent parallel developments.

A comparable development is found in Mongolian, where the topic marker *bol* is diachronically identical to the conditional converb of 'become' (Janhunen 2012a:236). Thus, the fact that in Manchu and Sibe the copula 'become' marked with the conditional converb functions as a topic marker is likely an early influence from Mongolian. The topic marker *pikkʰi ~ kʰi* in Solon and Oroqen should also be considered as Mongolian influence, because in these

[26] While Zikmundová (2013) does not explicitly identify the topic marker as being derived from the conditional form of the copula 'become', this conclusion is drawn from my own analysis of Sibe data, such as example 7 (Zikmundová 2013: 61) and example 1 in (Zikmundová 2013: 118).

two languages the same-subject conditional converb *-mi* no longer expresses condition, thus they use the different-subject conditional converb as topic marker.

13. ***Complex predicates***: Complex predicate formation represents one of the most striking contact-induced developments in Solon and appears to have arisen under strong Mongolian influence (§8.3.4). This construction has had far-reaching consequences for the grammatical structure of the language. In particular, the converb *-mi* has grammaticalized into a primary marker of complex predicate formation. Through this strategy, Solon expresses a wide range of functional categories analytically, including aspectual, modal, benefactive, and temporal meanings.

14. ***Reanalysis of the sociative suffix -lti as the primary reciprocal marker***: Tungusic languages generally possess two reciprocal-related suffixes: the reciprocal *-mAt* and the sociative *-ldV*, the latter of which is typically marginal or non-productive (I. Nedjalkov 1997:217-235; Pakendorf & Aralova 2020:299-300; Cong 2019:282). In Solon, however, the sociative form *-lti* has developed into the primary and productive marker of reciprocal meaning, effectively replacing the inherited reciprocal morphology (§8.4.4.1). This functional shift likely reflects Mongolian influence, since Mongolian employs a formally similar suffix *-lti* as a productive reciprocal marker. The Solon pattern therefore represents both morphological reanalysis and contact-induced convergence with Mongolic structure.

15. ***Tag question particle***: Solon has adopted the tag-question particle *pa*, which appears to have been borrowed, directly or indirectly vis Mongolian, from Chinese (§9.2.2). This particle functions as a clause-final interrogative tag and represents a discourse-pragmatic borrowing at the level of clause structure.

16. ***Genitive-nominative alternation of the embedded subject***: With the borrowing and grammaticalization of the genitive case from Mongolian, Solon has developed a genitive-nominative alternation in the marking of embedded subjects in subordinate clauses (§10.6.1). This alternation extends the use of the genitive beyond nominal possession into clause-level syntax, further illustrating the structural integration of the borrowed case marker.

17. ***Optional cross-reference marking in subordinate clauses***: Tungusic languages typically exhibit obligatory cross-reference of embedded subjects on the subordinate predicate through personal possessive suffixes in complex clauses. In Solon, however, such cross-reference marking is optional and frequently omitted (§10.6.2). This pattern aligns more closely with Mongolian, where cross-reference is likewise optional, and may therefore reflect contact-induced weakening of the inherited Tungusic agreement system.

18. ***Frame relative clauses and equative adnominal clauses (tentative)***: Solon exhibits two types of adnominal constructions: frame relative clauses (§10.4.3.3) and equative adnominal clauses (§10.4.4), these two adnominal clauses do not appear to be widely attested in other described Tungusic languages. However, the available comparative data does not allow a definitive conclusion regarding their absence elsewhere in the Tungusic family. By contrast, both clause types are attested in Mongolian (personal knowledge) and Chinese (LaPolla 2017). Their presence in Solon may therefore reflect contact-induced influence from these neighboring languages.

19. ***Complex postpositional constructions marking adverbial relations***: The complex postpositional forms (participle + postposition derived from relational nouns) are historically rare in Tungusic languages, remaining marginal exceptions in Manchu. In contrast, they are common in Turkic and Mongolic languages (Malchukov & Czerwinski 2020: 630). Complex postpositional constructions marking adverbial subordination attested in Solon may thus reflect influence from neighboring Mongolic languages (§10.5.1.2 and §10.5.1.3.1).

20. ***Grammaticalization of the speech verb 'say'***: The generic speech verb 'say' in Solon has undergone extensive grammaticalization and now serves a wide range of functions, including quotation of direct speech, use as a complementizer with cognition, perception, and emotion predicates, marking of adjunct clauses, expression of prospectivity and intention, hearsay evidentiality, as well as various metalinguistic and discourse-pragmatic uses (§10.7.2). Such multifunctional grammaticalization of 'say' is not widely reported in Tungusic languages that lack intensive contact with languages exhibiting similar developments. The Solon pattern

therefore reflects contact-induced influence from Mongolian, where the speech verb shows comparable grammaticalized uses.

21. ***Mirative use of 2SG possessive***: In Solon, the second-person singular possessive suffix (2SG) frequently loses its possessive meaning and instead functions as a marker of mirativity, indexing the speaker, addressee or main character's reaction to unexpected or newly discovered information (§11.2.2). This use is particularly evident when the suffix attaches to non-possessable nouns, where a possessive interpretation is semantically impossible. A similar mirative function of the second-person possessive is attested in Mongolian, and the Solon pattern is therefore likely attributable to contact-induced borrowing or functional extension (§11.2.2.3).

12.2.4 Solon as a mixed language

Mixed languages constitute a distinct type of contact language that typically emerge in bilingual settings where a shared language already exists, but where substantial social change is underway. Such languages often serve as markers of new or maintained group identities (Meakins & Stewart 2022:310). Thomason & Kaufman (1988) and Bakker (2015) argue that mixed languages cannot be straightforwardly classified genetically, as they combine material from more than one source language. Because they arise in diverse socio-historical contexts, mixed languages are also difficult to characterize typologically (Meakins & Stewart 2022:311).

Nevertheless, several broad types have been identified. These include: (i) lexicon–grammar mixed languages, in which one language provides the grammatical framework while another contributes a substantial portion of the lexicon; (ii) structural mixes, where both languages contribute significant grammatical and lexical material; and (iii) converted languages, which retain their original lexicon but undergo extensive structural convergence with another language (Bakker 2017).

Mixed languages are cross-linguistically rare, and relatively few have been documented, particularly in Northeast Asia, where many contact varieties are now obsolete or severely endangered (Grant 2024). Solon developed in a multilingual environment. Spoken in Western Hulunbuir, it has long been in close contact with dominant Mongolic and Sinitic languages,

including Dagur for approximately three centuries (Khabtagaeva 2012). This prolonged contact has resulted in extensive structural change. As shown in §12.2.3, Solon has undergone substantial restructuring and morphological simplification, making it typologically distinct from other Tungusic languages. At the same time, however, its lexical core remains largely Tungusic: approximately 75% of the verbal lexicon is inherited (§12.2.2), while borrowing is concentrated in less basic vocabulary. Morphologically, many forms are still Tungusic in origin, yet their functional organization frequently converges with Mongolic patterns. This combination of lexical retention and structural convergence suggests that Solon may be analyzed as a lexicon-grammar mixed language in the sense of Bakker (2017)[27]. However, further careful and systematic analysis is required to reach this conclusion. Whether Solon will continue along this path of convergence or instead undergo rapid language shift and attrition remains uncertain. Given the ongoing shift toward dominant regional languages (Nargil 2025a), further borrowing may be limited, and language loss may ultimately prevail.

[27] I would like to thank my supervisor, Brigitte Pakendorf, who first identified Solon as a mixed language during my initial analysis of the Solon data. Her insight was instrumental to this study.

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Résumé en français

Cette thèse décrit la grammaire du solon, une langue toungouse en danger parlée à Hulunbuir, en Chine. Elle comprend douze chapitres, chacun abordant la langue solon sous un angle différent. Dans ce résumé en français, le contenu de chaque chapitre est présenté de manière concise.

Chapitre 1 : Introduction

Ce chapitre présente la langue solon, les recherches antérieures, les estimations du nombre de locuteurs et les données de terrain utilisées dans cette étude. Le solon appartient à la famille des langues toungouses, réparties en Sibérie, dans le nord-est de la Chine et au Xinjiang. Les langues toungouses sont généralement divisées en quatre groupes principaux : le jurchénique, le nanaïque, l'udéguéique et l'événique (Ikegami 1974 ; Georg 2004 ; Janhunen 2012). Le solon appartient au groupe événique et est étroitement apparenté à l'evenki, l'even, le négidal et l'oroqen. En Chine, le solon est parlé par un sous-groupe de la minorité ethnique officiellement reconnue des Ewenke et est souvent classé administrativement comme un dialecte de l' «ewenke », appelé dialecte de Hailar (Hu & Chaoke 1986 : 2) ou dialecte solon de l'ewenke (Sirenbatu 2011 : 14).

On distingue trois variétés : le solon de Hailar, le solon du Nonni et le solon d'Ongkor, aujourd'hui éteint. Le solon de Hailar, variété décrite dans cette thèse, est parlé dans les bassins des rivières Hui et Imin, en particulier dans la Bannière autonome ewenke. Le solon du Nonni est parlé dans la région de la rivière Nonni, tandis que le solon d'Ongkor était autrefois parlé au Xinjiang, où le dernier locuteur serait décédé dans les années 1990 (Janhunen 1996 ; Janhunen 2005).

Historiquement, les Solon habitaient les bassins supérieur et moyen de l'Amour, notamment celui de la rivière Zeya, jusqu'au XVIIe siècle (Janhunen 1996 : 2). Durant cette période, ils coexistaient avec les populations mongoles dagur, entretenant des liens économiques et sociaux étroits, y compris des mariages mixtes. En conséquence, le solon présente une forte influence dagur, avec des centaines d'emprunts lexicaux (Khabtagaeva 2012 : 335–346). À la suite des politiques de réinstallation menées par les Qing au XVIIe siècle, les populations solon et dagur furent déplacées vers le bassin du Nonni, puis se dispersèrent vers

l'ouest jusqu'aux régions des rivières Imin et Hui, où des communautés solon subsistent encore aujourd'hui (Janhunen 1996 : 106–108). Un petit nombre fut également relocalisé au Xinjiang au XVIIIe siècle.

Le nombre de locuteurs actifs est estimé à environ 11 917, et le déplacement linguistique en cours classe le solon parmi les langues menacées.

Les données utilisées dans cette étude proviennent d'une année de terrain à distance et de trois mois et demi de recherche sur place dans la Bannière autonome ewenke. Ce travail a permis de constituer un corpus de sept heures d'enregistrements, dont six heures sont entièrement annotées et partiellement archivées sur la plateforme Pangloss (https://pangloss.cnrs.fr/corpus/Solon). Le terrain a été financé par le LabEx ASLAN (Université de Lyon) dans le cadre des projets *The Syntax of Solon Evenki (Northern Tungusic) in Typological Perspective*[28] et *Solon (Northern Tungusic) Multilingualism – Sociolinguistics and Contact Effects*[29]. Outre les données de parole spontanée, l'étude s'appuie également sur des données d'élicitation ainsi que sur des tâches basées sur des vidéos et des images.

Chapitre 2 : Profil sociolinguistique

Ce chapitre présente principalement les résultats de l'étude sociolinguistique que j'ai menée sur le solon. Les données et analyses exposées s'appuient sur mon article publié en 2025, intitulé « *The Language Ecology and Endangerment of Solon, a Tungusic Language Spoken in China* » (Nargil 2025b). Ce chapitre met particulièrement l'accent sur l'écologie linguistique du solon de Hailar. Il convient de noter que faute d'enquête de terrain personnelle sur le solon du Nonni, les contextes linguistiques présentés ici reposent sur les conclusions d'études antérieures.

Les Solon de Hailar sont concentrés dans la Bannière autonome ewenke, une région autonome établie en 1958 (Commission nationale des affaires ethniques de la RPC 2023). Malgré cette reconnaissance officielle, le solon est soumis à une forte pression exercée par le mongol et le mandarin : les Solon ne représentent qu'environ 7 % de la population, contre 60 % de Han et 22 % de Mongols (Bureau national des statistiques de la RPC 2021), tandis que l'éducation et la vie publique sont dominées par ces langues. Le multilinguisme est donc

[28] URL: https://aslan.universite-lyon.fr/projet-synsolon-257907.kjsp
[29] URL: https://aslan.universite-lyon.fr/projet-synsolon-257907.kjsp

généralisé, impliquant le plus souvent le solon, le mongol et le mandarin, tandis que l'absence d'un système d'écriture standardisé restreint les domaines d'usage du solon. Les tendances générationnelles montrent des répertoires multilingues plus étendus chez les locuteurs âgés et une dépendance croissante aux langues dominantes chez les jeunes générations, indiquant un retrait progressif des langues minoritaires.

Bien que la maîtrise du solon demeure élevée chez les locuteurs âgés et d'âge moyen, la fluidité diminue fortement chez les jeunes générations (48,6 % de locuteurs actifs chez les 13–25 ans), ce qui reflète un affaiblissement de la transmission intergénérationnelle. La compétence en mongol reste élevée mais semble occuper une place moins centrale chez les jeunes, tandis que la maîtrise du mandarin progresse rapidement sous l'effet de la scolarisation, de l'urbanisation et de la mobilité socioéconomique (environ 90 % de locuteurs actifs en mandarin parmi les 13–25 ans et les 26–40 ans). Le solon continue de jouer un rôle important dans les interactions familiales et communautaires, en particulier dans les contextes informels, mais les langues dominantes pénètrent de plus en plus les sphères domestique et publique, contribuant à la réduction de son domaine fonctionnel. Les données attitudinales montrent que l'identité solon conserve une forte valeur symbolique, notamment chez les locuteurs âgés ; toutefois, les jeunes générations manifestent un engagement proactif plus faible, ce qui suggère que les pressions sociolinguistiques et l'évolution des valeurs pourraient accélérer le changement linguistique malgré la persistance d'une forte identité ethnique.

Chapitre 3 : Phonologie

La description phonologique présentée dans ce chapitre s'appuie sur la thèse de doctorat d'Urugshilt (2020), qui propose une étude comparative et expérimentale de phonétique du solon, de l'evenki khamnigan et de l'evenki d'Aoluguya. Dans ce résumé, je présente de manière succincte l'inventaire phonémique du solon.

Le système vocalique du solon comprend les voyelles brèves /a (ɐ), ə, i, ɪ, ɔ, o, ʊ, u/ ainsi que leurs correspondantes longues /aː (ɐː), əː, iː, ɪː, ɔː, oː, ʊː, uː/. La langue possède également plusieurs diphtongues : /ai/, /ei/, /ʊe/ et /ui/. L'inventaire consonantique comprend /p, t, k, pʰ, tʰ, kʰ, tʃ, tʃʰ, s, ʃ, x, j, w, n, m, ŋ, ɲ, l, r/.

À l'instar des autres langues toungouses, et plus largement, de nombreuses langues associées au profil typologique altaïque, le solon présente une harmonie vocalique contrôlée

par la racine. Les voyelles se répartissent en deux ensembles harmoniques : l'ensemble 1 regroupe les voyelles postérieures (vélaires) /a, ʊ, ɔ, ɪ/, tandis que l'ensemble 2 comprend les voyelles antérieures (palatales) /ə, o, u/. Cette opposition harmonique joue un rôle central dans la sélection des suffixes et les alternances morphophonologiques.

Chapitre 4 : Nominaux

Ce chapitre présente une vue d'ensemble du système nominal du solon, en mettant l'accent sur les propriétés morphologiques des noms, des pronoms, des numéraux et des adjectifs. Il décrit le nombre nominal, le marquage casuel et la flexion possessive. Le système des cas et leurs fonctions sont exposés en détail : outre les distinctions entre nominatif et accusatif sensibles à la définitude, le solon utilise le génitif pour marquer la possession et un cas instrumental exprimant à la fois les valeurs instrumentale et comitative. Un ensemble de cas spatiaux et relationnels encode la localisation, la direction, la source, l'origine interne et la trajectoire, tandis que l'interaction entre les formes datif-essif, locatif et allatif reflète des contrastes systématiques entre significations statives et directionnelles.

Le chapitre analyse ensuite le système pronominal, en distinguant cinq types : les pronoms personnels, les pronoms intensifs-réfléchis, les démonstratifs, les pronoms interrogatifs et les pronoms indéfinis. En ce qui concerne les numéraux, les nombres cardinaux constituent les formes de base et peuvent donner lieu à des valeurs ordinales, collectives, distributives, itératives et approximatives. L'étude des adjectifs porte sur leurs fonctions syntaxiques, le marquage du degré et la morphologie évaluative, et le chapitre se conclut par un aperçu des processus dérivationnels affectant les noms et les adjectifs. L'ensemble de ces éléments témoigne d'un système nominal à la fois morphologiquement riche et fonctionnellement intégré.

Chapitre 5 : Syntagme nominal

Ce chapitre examine la structure interne et les schémas de modification du syntagme nominal. Il distingue les stratégies de modification simples et complexes et montre comment les différents types de modifieurs contribuent à la référence, à la quantification et à la spécification descriptive.

Le chapitre décrit d'abord les modifieurs simples, constitués d'un seul mot. Ceux-ci comprennent les démonstratifs, les numéraux, les adjectifs, les quantifieurs, les déterminants indéfinis et les pronoms interrogatifs, chacun contribuant à la deixis, à la quantification et à la qualification. Il analyse ensuite la modification complexe, qui implique des modifieurs structurellement plus élaborés tels que les syntagmes possessifs, les syntagmes postpositionnels et les propositions adnominales. Une attention particulière est accordée aux syntagmes possessifs, dans lesquels le possesseur est marqué par le cas génitif et le nom possédé peut, facultativement, porter un marquage personnel renvoyant au possesseur. Les constructions possessives expriment un large éventail de relations sémantiques, notamment la possession, la parenté et les relations partie-tout, ainsi que les associations temporelles et locatives et les relations de matière ou de finalité. Le chapitre examine également les stratégies de marquage possessif, y compris le marquage dépendant, le double marquage et la distribution des possesseurs au génitif par rapport au nominatif.

En outre, le chapitre explore la coordination au sein du syntagme nominal. Les syntagmes nominaux coordonnés peuvent être formés par conjonction, juxtaposition, conjonction récapitulative et conjonction comitative, chacune remplissant des fonctions sémantiques et discursives distinctes. Enfin, le chapitre aborde les syntagmes nominaux sans tête, montrant comment la référence peut être maintenue en l'absence d'un nom exprimé.

Chapitre 6 : Verbes

Ce chapitre propose une description détaillée de la morphologie verbale du solon, en mettant l'accent sur l'accord sujet-verbe, les distinctions de temps, de mode et d'aspect/Aktionsart, ainsi que sur les formes verbales non finies, notamment les converbes et les participes.

Il commence par l'accord du sujet et les schémas de conjugaison, montrant comment la morphologie verbale indexe les relations grammaticales et la référence au sujet. Le système temporel de l'indicatif distingue l'aoriste, le passé et le futur, tandis que le mode impératif oppose les ordres immédiats à ceux projetés dans un futur plus lointain. Le chapitre examine ensuite l'aspect et l'Aktionsart, en présentant un éventail riche de distinctions, notamment les valeurs progressive, durative, stative, habituelle, itérative, complétive, continue, résultative, inchoative et conative.

Les formes verbales non finies jouent un rôle central dans la liaison des propositions, et le chapitre accorde une attention particulière aux converbes. En solon, ces derniers servent à la coordination et à la subordination des propositions ainsi qu'à la formation de prédicats complexes. Ils sont classés en converbes coordonnants et subordonnants. Les converbes coordonnants comprennent le converbe antérieur *-tʃʰi* et le converbe connectif *-mi*. Les converbes subordonnants comprennent le perfectif *-tʰAn*, le duratif *-ki*, le conditionnel *-kʰi~-kkʰi*, le simultané *-t(A)li* et le temporel *-tʃʰixi*. Ces formes sont décrites en tenant compte du marquage de coréférence et de leurs contrastes fonctionnels. Le chapitre présente également les participes : l'imperfectif *-r(A)* et le perfectif *-tʃʰA/-sA*, en mettant l'accent sur leurs formes morphologiques et leur flexion en cas et en marques possessives. Leurs fonctions syntaxiques principales sont examinées au chapitre 10, dans le cadre des propositions complétives dépendantes, des propositions adnominales et des propositions adverbiales.

Chapitre 7 : Adverbes, postpositions et particules

Ce chapitre examine trois catégories de mots en solon : les adverbes, les postpositions et les particules.

Les adverbes fonctionnent comme modifieurs des verbes, des adjectifs ou de l'ensemble de la proposition. En tant que classe lexicale, ils ne subissent pas de flexion morphologique en solon. On distingue plusieurs types d'adverbes : les adverbes de degré, de manière, de temps et de modalité. Chacun joue un rôle spécifique dans la modification des événements et dans l'expression du point de vue du locuteur.

Le chapitre analyse ensuite les constructions postpositionnelles, y compris les constructions postpositionnelles complexes et circonstancielles. Dans les constructions complexes de base, le nom régi peut apparaître au nominatif ou au génitif, et la postposition peut porter un marquage possessif. Les postpositions dérivées de noms relationnels sont également examinées, ainsi que leur rôle dans l'expression des relations spatiales, temporelles et autres relations sémantiques. Le solon possède un ensemble de postpositions circonstancielles qui se combinent avec des nominaux (et occasionnellement avec des formes verbales) pour exprimer des significations contextuelles telles que les relations distributives, terminatives et similatives.

Enfin, le chapitre explore le système des particules et leurs fonctions discursives et pragmatiques. Celles-ci comprennent les particules thématiques, additives et focalisatrices. Les particules discursives apparaissent en position initiale ou finale de phrase et expriment des valeurs telles que l'évidentialité (ouï-dire) et la mirativité, contribuant ainsi à l'expression de l'attitude du locuteur et à la structure de l'information.

Chapitre 8 : Propositions simples

Ce chapitre examine la structure des propositions simples en solon, en mettant l'accent sur l'ordre des mots, les rôles sémantiques et leur codage casuel, les prédicats verbaux complexes, les opérations de changement de valence et la prédication non verbale.

Il commence par la structure propositionnelle, identifiant l'ordre SOV comme ordre de base, tout en soulignant des variations pragmatiques telles que les éléments introducteurs de cadre (scene-setting), la topicalisation en position initiale, le focus préverbal et la dislocation à droite.

Le chapitre examine ensuite l'alignement entre les rôles sémantiques et le marquage casuel, montrant comment des rôles tels que agents, expérimentateurs, possesseurs, patients, destinataires, bénéficiaires, allocutaires, instruments, trajetoires, sources, localisations, buts, expressions temporelle et accompagnement sont codés grammaticalement par les cas.

Il analyse également les prédicats verbaux complexes (VCP), dont les composants sont reliés par le converbe antérieur, le converbe connectif et les participes. Sur le plan sémantique, ces prédicats se divisent en constructions auxiliaires (asymétriques) et constructions symétriques. Les constructions auxiliaires expriment des valeurs aspectuelles, directionnelles, de continuité posturale, modales et bénéfactives, tandis que les verbes copulatifs « être » et « devenir » fonctionnent comme des verbes mineurs grammaticalisés exprimant des périphrases temporelles et des significations associées. Les VCP symétriques expriment des actions concomitantes, des relations de cause à effet, la spécification de manière et des combinaisons prédicatives synonymiques. L'usage intensif des VCP en solon reflète probablement une influence mongole, et le chapitre propose une perspective comparative.

Les mécanismes de changement de valence comprennent les constructions causatives, anticausatives, passives et réciproques, avec une attention particulière portée au marquage morphologique. Les verbes intransitifs et transitifs peuvent apparaître dans des constructions

causatives, mais le marquage casuel du causé varie : avec une base intransitive, le causé est marqué à l'accusatif ; avec une base transitive, il peut être marqué par l'accusatif, le datif-essif ou l'instrumental, chacun étant associé à des nuances sémantiques distinctes. Les constructions réciproques présentent également des extensions sémantiques vers des valeurs sociatives, comitatives et assistives.

Enfin, le chapitre explore la prédication non verbale et ses sous-types sémantiques. Les constructions prédicatives comprennent des structures copulatives et juxtaposées ; la juxtaposition est conditionnée par des propositions exprimant une valeur temporelle générale, sans marquage explicite du mode ni de l'aspect. Les types sémantiques examinés incluent l'inclusion, la quantification, l'identité, les propositions locatives-existentielles et la prédication possessive. Les propositions locatives-existentielles sont analysées du point de vue de leur comportement syntaxique et du choix entre constructions directe et inverse. La prédication possessive est examinée à travers les constructions propriétives et existentielles du possédé, y compris leur concurrence et leurs usages mixtes.

Chapitre 9 : Négation et interrogation

Ce chapitre examine les stratégies grammaticales employées pour exprimer la négation et l'interrogation en solon. La première partie est consacrée à la négation. Elle commence par la négation propositionnelle et décrit la négation des prédicats verbaux dans des constructions simples et complexes. Dans les propositions à prédicat verbal, la négation est exprimée par l'auxiliaire négatif *ə-*, qui porte les catégories flexionnelles, tandis que le verbe lexical apparaît sous la forme conégative *-rA*, historiquement issue du participe imperfectif (Janhunen 2024 : 15). Le chapitre examine également la négation des prédicats non verbaux, y compris les constructions d'inclusion, d'identité, et de quantification, les propositions locatives-existentielles et la prédication possessive, ainsi que l'emploi du marquage privatif et le rôle du verbe copule « être ». La négation dans les propositions subordonnées marquées par des converbes et des participes est également analysée, de même que les formes prohibitives (impératif négatif) et l'usage des indéfinis négatifs.

La seconde partie du chapitre porte sur les constructions interrogatives. Elle distingue les questions polaires, les questions à balise (*tag questions*), les questions alternatives et les questions partielles, en décrivant leurs propriétés formelles et leurs fonctions pragmatiques. Une attention particulière est accordée aux questions rhétoriques, qui peuvent être formées par

la combinaison de la négation avec des particules interrogatives, par l'emploi de mots interrogatifs tels que « quoi », accompagnés de particules, ou par des structures formellement identiques aux questions ordinaires, mais interprétées pragmatiquement.

Chapitre 10 : Liaison des propositions

Ce chapitre examine les stratégies de liaison des propositions en solon, incluant la coordination et la subordination (non finie et finie). L'analyse s'appuie sur le cadre proposé par Foley et Van Valin (1984) pour la classification structurelle de la liaison des propositions et sur la définition fonctionnelle de la subordination proposée par Cristofaro (2005).

Le chapitre commence par l'étude de la coordination des propositions. Sur le plan sémantique, la coordination exprime des relations conjonctives, disjonctives, adversatives et de type « autrement ». Sur le plan structurel, elle se divise en coordination indépendante et en coordination dépendante. La coordination indépendante consiste en des propositions juxtaposées (coordination asyndétique) ou en des propositions finies reliées par des conjonctions explicites (coordination syndétique). En solon, la coordination dépendante est marquée par l'emploi du converbe antérieur et du converbe connectif.

Le chapitre examine ensuite la subordination non finie. Il en décrit d'abord sa structure, y compris le marquage différentiel des sujets enchâssés et le marquage de la coréférence. Les constructions subordonnées non finies comprennent les propositions complétives, adnominales et adverbiales. En solon, les propositions complétives non finies se caractérisent par des prédicats participiaux dont le marquage morphosyntaxique reflète le rôle syntaxique de la proposition complétive dans la proposition matrice. La discussion des propositions adnominales non finies couvre les relatives (argumentales, circonstancielles et de cadre), les constructions adnominales équatives, ainsi que les relatives sans tête, qui peuvent fonctionner de manière autonome ou se chevaucher avec les propositions complétives et adverbiales.

Les propositions adverbiales non finies expriment des relations temporelles (simultanéité, antériorité, postériorité), la localisation, la manière, la cause, la condition (réelle et irréelle) et la concession. Elles recourent à diverses stratégies, notamment les converbes, les quasi-converbes, les postpositions et les constructions adnominales. Enfin, le chapitre examine la subordination finie impliquant des formes du verbe « dire », lesquelles servent à marquer la

citation, la complémentation, les propositions circonstancielles, la prospection, l'évidentialité de ouï-dire, la référence métalinguistique ainsi que certaines fonctions discursives.

Chapitre 11 : Varia

Ce chapitre rassemble plusieurs constructions qui ne s'intègrent pas aisément dans les domaines grammaticaux précédemment décrits, mais qui jouent un rôle important dans la structure grammaticale du solon. Il commence par la topicalisation et la mirativité. La section consacrée à la mirativité examine les particules miratives ainsi que l'emploi miratif des formes de deuxième personne du singulier. La discussion retrace le développement historique de ces formes, en évoquant une possible influence mongole et le glissement sémantique par lequel les formes de deuxième personne du singulier ont évolué vers un marqueur miratif.

Le chapitre analyse ensuite les constructions de liaison relais (*bridging-linkage*) et le mouvement associé. Les constructions de liaison relais utilisent des connecteurs verbaux non finis pour relier des propositions dans des relations de coordination ou de subordination, contribuant ainsi à la cohésion discursive. La section consacrée au mouvement associé présente son arrière-plan typologique dans les langues toungouses et sa réalisation en solon, notamment à travers des constructions de mouvement associé indépendantes, des constructions converbales pléonastiques et des constructions exprimant le mouvement à valeur de but. L'analyse prend également en compte des paramètres sémantiques tels que la directionnalité, les relations temporelles et la valeur finalisée, ainsi que la structure argumentale, montrant comment ces constructions intègrent le mouvement et la structure événementielle dans un cadre grammatical unifié.

Chapitre 12 : Contact linguistique et conclusion

Ce chapitre situe le solon dans son environnement sociolinguistique à l'ouest de Hulunbuir et examine le rôle du contact des langues dans la formation de son état actuel. Ce contexte fournit une base permettant de comprendre à la fois l'intensité et l'orientation des influences issues du contact linguistique.

Le chapitre résume ensuite les changements induits par le contact dans la grammaire du solon. Il aborde des évolutions phonologiques, telles que le dévoisement des consonnes et l'intégration d'emprunts lexicaux, et présente une synthèse des changements grammaticaux

attribuables au contact. Les effets cumulés de ces processus sont évalués à la lumière de l'hypothèse selon laquelle le solon présente les caractéristiques d'une langue mixte.