SUBJECT AND OBJECT IN TURKISH

by

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ABSTRACT

This dissertation is a study of rules in Turkish which change grammatical relations or are sensitive to them. It addresses issues of interest to descriptive Turkish grammar and to general linguistic theory. Two chapters are devoted to questions about intransitive clauses. Chapter 2 examines the claim that impersonal passivization, like personal passivization, involves the advancement of a direct object to subject. Evidence is presented that this is not the case in Turkish. Chapter 4 is an investigation of the Unaccusative Hypothesis, the proposal that some intransitive clauses have an initial direct object but no initial subject. It has been argued that there is one construction in Turkish which provides evidence for the Unaccusative Hypothesis. The control rule that operates in this construction is shown to be sensitive to thematic roles rather than to initial grammatical relations; it cannot, therefore, serve as a diagnostic for initial unaccusativity.

The topic of Chapter 3 is non-referential direct objects and subjects. Evidence is presented that a subset of such nominals, i.e., those that occur without the indefinite article, undergo incorporation with the verb, which accounts in part for the observation that sentences with non-referential subjects behave as if they were subjectless and that those with non-referential direct objects behave as if they were intransitive. I propose that incorporees are not final chomeurs, as has been claimed, but instead bear the final-stratum relation INC(orporated). Furthermore, I argue that sentences with incorporated subjects lack a final subject and, consequently, that the Final 1 Law is too strong.

The causative construction is the subject of the final chapter, and the central question addressed is whether causative formation in Turkish is a lexical process which derives one verb from another or a syntactic process which collapses clauses together (Clause Union). While the lexical account explains a class of rule interaction phenomena, I present evidence that causatives must be analyzed as underlyingly complex. A general condition is proposed which blocks syntactic rules of a particular kind from applying on the embedded clause prior to Clause Union. The discussion of causatives includes an analysis of quirky casemarking in Turkish.

Dissertation Supervisor: Dr. Kenneth Hale, Professor of Linguistics

For My Parents

Acknowledgments

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INTRODUCTORY REMARKS

This work deals with a variety of problems in Turkish syntax, many of which bear on issues in universal grammar, and it focusses almost entirely on rules which change grammatical relations or are sensitive to them. The framework I have employed is Relational Grammar (Perlmutter 1983b, Perlmutter and Rosen 1984), but both Arc Pair Grammar (Johnson and Postal 1980) and Lexical Functional Grammar (Bresnan 1982) have influenced my thoughts about, and my analyses of, certain phenomena.

My basic plan throughout has been to establish what the central properties of a construction are, citing a considerable amount of data drawn from a variety of sources, and to evaluate analyses of the construction on the basis of their empirical adequacy, their insightfulness, and their compatibility with current Relational Grammar claims about the content of universal grammar. Tensions arise when a promising analysis of some phenomenon in Turkish is not countenanced by universal grammar. In some cases I propose that universal theory must bend to the demands of Turkish; in others I advance an alternative account of the data which is in line with universal laws.

I presuppose no familiarity with Turkish and very little with Relational Grammar. Chapter 1 is an overview of the basic properties of the former and the central notions of the latter, including an introduction to Relational Grammar terminology, representations of clause structure, rule typology, and laws.

Chapter 2 deals with Turkish passives, both personal and impersonal. Personal passives are shown to have quite unexceptional properties, which are fully accounted for if Passive is assumed to involve the advancement of a direct object to subject (2-1

Advancement), as Relational Grammar claims. Impersonal passives are a different story.
A collection of laws and hypotheses predicts that there will be no well-formed passives
of two kinds of intransitive verbs: so-called 'unaccusative' verbs, whose surface subjects
are initial direct obj cts, and passive verbs. In Turkish, a subset of predicates which
would be classified as unaccusatives on semantic grounds do impersonally passivize, as
do personal passive verbs (Özkaragöz 1982). I propose that 2-1 Advancement is not
involved in impersonal passivization and, thus, that the impersonal passive construction
in Turkish is not a genuine passive construction.

In Chapter 3, I investigate direct objects and subjects in Turkish which do not have
the full range of properties, whether morphological or syntactic, associated with final
direct objecthood and subjecthood. Various proposals have been made about unusual
subjects and objects: they undergo demotion, or incorporation, or both (or neither).
Adducing evidence from word order constraints, the position and interpretation of non-
derived adverbs, and the assignment of sentential stress, I show that a subset of subjects
and direct objects undergo incorporation. I also argue that there is no stratum in
which incorporees bear the chomeur-relation and that sentences with incorporated
subjects do not have a final-stratum 1, thereby challenging the Final 1 Law.

The subject of Chapter 4 is the Unaccusative Hypothesis, the claim that, in addition
to verbs which occur with an initial subject but no direct object, there are verbs which
take an initial direct object but no initial subject (Perlmutter 1978). The bulk of the
chapter is devoted to an examination of one kind of non-finite adverbial clause in
Turkish, the subject of which is controlled. Özkaragöz (1980) has argued that an
adequate account of the properties of this construction requires two things: reference
to the initial grammatical relations of controller and controllee, and recognition of two
classes of intransitive verbs in Turkish, in accordance with the Unaccusative Hypothesis.
I present a number of counterexamples to her account and explore an alternative which
makes reference to the semantic role of controller and controllee, and only that. I

propose that while the semantic roles of these nominals do not have to match, they must not be too remote. Specifically, the control rule cannot involve an agent and a patient.

Chapter 5 is an examination of the causative construction. Relational Grammar analyzes Turkish causatives as underlyingly bisentential; a syntactic rule of Clause Union creates a simplex clause by making all the dependents of the lower clause into dependents of the matrix. A different analysis is proposed by Aissen and Hankamer (1980): causative verbs are derived from their non-causative counterparts by a lexical rule. On the assumption that Passive is a syntactic rule in Turkish, the lexical account of causative formation explains why there are no causatives of passive verbs in Turkish; in the syntactic account, however, it must be stipulated that Passive cannot apply before Clause Union. Although positing that causatives are simplex everywhere in the syntax solves some problems, I argue that causatives must, in fact, be analyzed as underlyingly complex. I state a general condition on Clause Union in Turkish that has the effect of giving some syntactic rules access to the clause embedded under a Clause Union trigger and denying access to others. One of the consequences of my framework is that I am compelled to claim that a rule which has elsewhere been characterized as syntactic is actually lexical; since the rule only applies to a restricted set of verbs, this consequence is not unwelcome. In the course of examining these verbs and their unusual objects, I propose that there are quirky-casemarked objects and subjects in Turkish, and I explore the circumstances in which quirky casemarking stays on and comes off.

PHONEMIC INVENTORY

Vowel Phonemes

	FRONT		BACK	
	i(:)	ü	ɨ	u(:)
	e(:)	ö	a(:)	o

Notes:

(1) All of the symbols used above are Turkish graphemes with the exception of ɨ, which is represented as i in the spelling system.

(2) Underlying long vowels occur only in loan words. In the spelling system, a circumflex sometimes marks vowel length.

Consonant Phonemes

	LAB	DEN	ALV	ALV-PAL	PAL	VEL	GLO
	p	t		ç	k̭	k	(')
	b	d		c	g̭	g	
	f		s		ş		
	v		z		j	ǧ	
	m	n					
			r				
			l	ḽ			
					y		h

Notes:

(1) With the exception of 'ḽ', 'k̭', 'g̭', all the other symbols are used in the Turkish spelling system. Of these, the only ones that require comment are 'ç', which represents /č/; 'c', which represents /ǰ/; 'ş', which represents /š/; and 'j', which represents /ž/ (and occurs mostly in loan words). For a discussion of /ǧ/, see Note (4) below.

(2) The glottal stop only has to be set up in some Arabic borrowings in the lexicons of educated speakers. It is not always pronounced, but even when unpronounced, it affects syllable structure and it accounts for the fact that a number of apparent vowel-final stems behave as if they were consonant-final when suffixes are added. For instance, the third singular possessive ending occurs with an initial /s/ after vowels; thus one finds [araba-sɨ] (his car) but [ev-i] (his house). However, for some speakers, 'his mosque' is [cami-i] rather than (the more common) [cami-si]. In the former case, 'mosque' is underlyingly /cami'/ while in the latter case it is /cami/.

(3) The palatalized consonants /ḽ k̭ g̭/ usually occur in syllables with front vowels while /l k g/ usually occur in syllables with back vowels. Nevertheless, there are environments in which the two sets contrast, i.e., in syllables with back vowels. So,

one finds [mal̜ olmak] (to cost) and [mal] (goods), [gǎvur] (infidel) and [gaz] (kerosene), [k̜abus] (nightmare) and [kaç] (how much?). In the spelling system, a circumflex accent over a vowel indicates that the preceding consonant is palatalized.

(4) In Anatolian dialects (and in Old Turkish), /ǧ/ is a voiced velar fricative; however, in Standard Turkish, it deletes (and compensatorily lengthens the preceding vowel when syllable-final). Not everyone sets up /ǧ/ as a phoneme, but there is evidence that this is the right move. Lees (1961) discusses an apparent irregularity concerning the shape of the third person singular possessive suffix with certain stems. Recall that this suffix is typically /s/-initial after vowels (see Note (2) above). However, one does find forms such as [da-i] (his mountain), [çi-i] (its dew), and [si̵-i] (its shoal). By setting up a final /ǧ/ in these stems, Lees can explain not only the shape of the possessive suffix but also the fact that the stems have short vowels when inflected and long vowels when uninflected ([da:], [çi:], [si̵:]). That is, /ǧ/ deletes intervocalically and is realized as length on the preceding vowel in final position or before a consonant.

/ǧ/ also plays a role in Lees's explanation of the final k/∅ alternation exemplified by pairs such as [inek̜] (cow) and [ine-i] (his cow) or [ayak] (foot) and [aya-i] (his foot). The stems are analyzed as having final voiced palatal and velar stops underlyingly. In final position and before consonants, these stops (in general, all voiced stops) devoice; in intervocalic position, they become /ǧ/, which in turn deletes.

In the orthography, the grapheme 'ǧ' (called *yumuşak ge*, i.e., soft 'g') spells the phoneme /ǧ/ as well as /y/. It may also be used to indicate that the preceding vowel is long.

LIST OF ABBREVIATIONS

1, 2, 3	the 1-relation (subject), 2-relation (direct object), and 3-relation (indirect object)
1s, 2s, 3s	first, second, third person singular
1p, 2p, 3p	first, second, third person plural
ABL	ablative (-dEn)
ACC	accusative (-yI)
ADV	adverbial clause marker
BEN	benefactive
CAUS	causative (-dIr, -t)
CHO	chomeur
COMP	comparative
COND	conditional (-sE)
DAT	dative (-yE)
DER:ADJ	adjective derivation
DER:ADV	adverb derivation
DER:N	noun derivation
DER:V	verb derivation
DUB	dubitative (-mIş)
D	dummy
F	final grammatical relation

FUT	future (*-yEcEg*)
GEN	genitive
I	initial grammatical relation
IMP	imperative
INFIN	infinitive (*-mEg*)
LOC	locative (*-dE*)
MID	middle (*-In*)
NAR	narrative past (*-mIş*)
NEC	necessitative (*-mElI*)
NEG	verbal negative (*-mE*)
OBL	oblique
OP	object participle, relative clauses (*-dIg*)
PART	participle
PASS	passive (*-In*, *-Il*)
PLU	noun plural (*-lEr*)
POSS	possessive
POT	positive potential (*-yEbIl*)
POT:NEG	negative potential (*-yEmE*)
PRED	predicative (*-dIr*)
PRG	progressive (*-Iyor*)
PRS	present (positive: *-Er* and *-Ir*; negative: *-z*)
PST	past (*-dI*)
Q	yes/no question (*mI*)
RC	relative clause

RECIP   reciprocal (-*Iş*)

SP   subject participle, relative clauses (-*yEn*)

U   union-relation (assigned to a verb in a Clause Union construction)

CHAPTER 1

PRELIMINARIES

1.1. An Overview of Turkish

1.1.1. Morphological and Syntactic Properties

Turkish is a canonical Greenbergian SOV language. It has postpositions rather than prepositions, e.g., *Walter gibi*[1] (like Walter) and *Walter ile* (with Walter). Relative clauses, demonstratives, numerals, and adjectives precede the nouns they modify (and when they co-occur, they typically line up in the order in which they have been listed here, as (1) below illustrates).[2]

(1) Amerika-ya   gid-en bu   üç   genç kız
     America-DAT[3] go-RC these three   young girl

     'these three young girls who went to America'

In possessive phrases, the possessor (marked genitive) precedes the head (marked possessive).

---

[1] I will be using standard Turkish orthography throughout, with one exception. See pages 10–12.

[2] The indefinite article *bir*, which is related to the numeral *bir* (one), also appears before the noun. (The indefinite article is unstressed while the numeral is stressed.) There is no definite article in Turkish.

[3] A list of abbreviations appears on pages 13–15.

    (2)   Cihan-in   baba-si
                 GEN:3s father-POSS:3s

          'Cihan's father'

Turkish morphology is highly agglutinative and exclusively suffixing.

    (3)a.   arkadaş-lar-im-a
            friend-PLU-POSS:1s-DAT

            'to my friends'

        b.   avrupa-li-laş-tir-il-ami-yan-lar-dan-siniz⁴
            Europe-DER:ADJ-DER:V-CAUS-PASS-POT:NEG-RC-PLU-ABL-2p

            'you are one of those who cannot be Europeanized'

Nouns are inflected for number (the singular is unmarked; -/Eɾ[5] marks the plural) as well as for case. There are six cases: the nominative (unmarked)[6], accusative (-yI), dative (-yE), locative (-dE), ablative (-dEn), and genitive. Finite verbs are inflected for, among other things, tense and agreement with their subjects in person and number. There are two sets of verbal agreement suffixes, which I have presented in (4) below.[7]

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⁴This example is taken from Lewis (1967).

⁵The use of the archiphonemes E and I in the citation forms of suffixes is explained in Section 1.1.2.

⁶Nouns which are unmarked for case will not be glossed 'nominative' in the examples.

⁷With the exception of the first person plural and the third person suffixes, all of the other Set B affixes could be analyzed as having an initial high vowel underlyingly. This vowel would delete when preceded by a vowel. Such an analysis brings out the similarities between Set B endings and the possessive endings which are suffixed to nouns. In any event, the Set B endings never surface with an initial vowel because they always follow vowel-final tense markers; so, for the convenience of the reader, I have presented them without initial vowels in (4).

(4)   <u>Personal Endings for Verbs</u>

	Set A	Set B
1s	-Im	-m
2s	-sIn	-n
3s[8]	-	-
1p	-Iz	-k
2p	-sInIz	-nIz
3p	(-lEr)	(-lEr)

Set B endings are used with the past tense (-dI) and the conditional (-sE). Set A endings are used elsewhere, e.g., with the progressive (-Iyor), the present (-Er and -Ir in the affirmative and -z in the negative), the future (-yEcEg), and the narrative past (-mIş). They are also suffixed to non-verbal predicates.

The third person plural suffix -lEr deserves some comment. It is not suffixed to the predicate when the subject is inanimate and it is typically omitted when an animate plural subject occurs in surface structure. Thus, (a) below is better than (b).

(5)a.   Bebek-ler   ağlı-yor.
        baby-PLU   cry-PRG

        'The babies are crying.'

   b.   Bebek-ler   ağlı-yor-lar.
        baby-PLU   cry-PRG-3p

        'The babies are crying.'

On the other hand, when the plural subject is covert, -lEr is suffixed.

(6)   Ağlı-yor-lar.
      cry-PRG-3p

      'They are crying.'

---

[8] I will not explicitly gloss unmarked third person singular agreement in the examples.

Sentences such as (6) bring us to the subject of Pro Drop in Turkish. Non-emphatic subject pronouns delete freely, as do non-emphatic genitive-casemarked pronouns (see (7) below).

```
(7)a.  ben-im     kedi-m
        1s-GEN:1s  cat-POSS:1s

        'my cat'
   b.   kedi-m
        cat-POSS:1s

        'my cat'
```

A non-subject pronoun may be unrealized if its referent is predictable or recoverable from discourse.

```
(8)   A:  Bu     sabah    al-diğ-im       ekmek nerede?
          this morning buy-OP-POSS:1s bread where

          'Where is the bread that I bought this morning?'

      B:  Ye-di-m.
          eat-PST-1s

          'I ate it.'
```

The set of nominative pronouns appears in (8). Note that there are no gender distinctions in the third person. In fact, as is typical of Altaic languages, Turkish lacks grammatical gender distinctions in all grammatical categories.

(9) Pronouns[9]

1s	ben	1p	biz
2s	sen	2p	siz
3s	o	3p	onlar

---

[9] We would expect the dative of *ben* and *sen* to be *bene* and *sene* but the forms are actually *bana* and *sana*. Additionally, there are two allomorphs of the third person pronoun base: *o* when no suffix follows and *on* when one does.

1.1.2. Phonological Properties

Turkish, as is well known, has a rule of progressive vowel harmony. In suffixes and in stems of native origin, a low vowel assimilates to the preceding vowel in terms of frontness while a high vowel assimilates in terms of frontness and rounding.[10]

    (10)a.   adam-a,   adam-da,   adam-dan, adam-lar
              man-DAT   man-LOC   man-ABL   man-PLU

         b.   göz-e,   göz-de,   göz-den,   göz-ler
              eye-DAT   eye-LOC   eye-ABL   eye-PLU

    (11)a.   adam-ɨ,   adam-ɨn,   adam-sɨz
              man-ACC   man-GEN   man-without

         b.   göz-ü,   göz-ün,   göz-süz
              eye-ACC   eye-GEN   eye-without

In line with standard Turcological practice, a low suffix vowel, realized either as [e] or [a], will be represented by the symbol 'E' while a high suffix vowel, realized as [i], [ü], [ɨ], or [u], will be represented by 'I'.

Stops devoice in final position or when followed by a consonant.

    (12)a.   /armud/ (pear)

              armut, armut-lar, armut-ta, armud-u
              pear   pear-PLU   pear-LOC   pear-ACC

         b.   /-yEcEg/ (future)

              çalɨş-acak, çalɨş-acak-sɨn, çalɨş-acağ-ɨm
              work-FUT   work-FUT-2s   work-FUT-1s

Initial stops in suffixes assimilate to the preceding segment with respect to voicing.

    (13) /-cI/ (noun derivation)

          yol-cu,   su-cu,   süt-çü,   ekmek-çi
          traveler water seller   milk seller   baker

---

[10]Some suffix vowels are invariant. For instance, in the progressive suffix -Iyor, the second vowel does not harmonize with a preceding vowel although it does condition harmony in a following vowel, e.g., gel-iyor-um (gel + Iyor + Im: I am coming).

Sequences of vowels are broken up at affix boundaries through deletion of the second vowel.

(14)a. /-Im/ (1s possessive)

        at-ɨm,   kedi-m
        horse-POSS:1s cat-POSS:1s

    b. /-Iyor/ (progressive)

        kes-iyor, oku-yor
        cut-PRG   read-PRG

The glide /y/, when initial in suffixes, deletes after a consonant.

(15)a. /-yE/ (dative)

        İstanbul-a, Ankara-ya
             -DAT   -DAT

    b. /-yI/ (accusative)

        İstanbul-u, Ankara-yɨ
             -ACC   -ACC

Low vowels raise when followed by a suffix beginning with /yE/ or the /y/ of the progressive ending -/yor/. Raising does not occur in nouns and it is not always indicated in writing.

(16)a. /gel + me + yen/

        gel-mi-yen
        come-NEG-SP

    b. /başla + Iyor/

        başlɨ-yor
        begin-PRG

1.1.3. Word Order

For sentences of Turkish which contain no indefinite NPs, Lewis (1967, pp. 240-241) proposes that the unmarked order of constituents is the following.

(17)   SUBJ - TIME - PLACE - IO - DO - MOD of VERB - V

Various refinements are required here. For instance, under 'modifier of verb' Lewis includes nouns casemarked dative, locative, or ablative as well as adverbs (but not time and place adverbs) and particles. However, as Erguvanlı (1979a) points out, Lewis's formula says nothing about the order of an oblique NP relative to an adverb when both occur in a clause. However, in spite of the fact that (17) requires some modification, it will suffice for present purposes.

(17) specifically gives the unmarked positions of elements in sentences which contain no indefinite NPs. But even for such sentences, the unmarked position of a constituent is not the only position it can occupy. Turkish is not a rigid SOV language. Thus, in addition to (17), we need an account of marked word orders in Turkish. Additionally, the unmarked positions of indefinite NPs require comment.

Hankamer (1971), Underhill (1972), and Erguvanlı (1979a) have all investigated word order in Turkish. The discussion below is based heavily on the work of the last author. She argues that an NP's animacy, referentiality, pragmatic role (and, of course, definiteness) all play a role in determining what positions it may or must occupy. Three positions are of particular importance: sentence-initial, immediate pre-verbal, and post-predicate. Each of the three serves a distinct pragmatic function in Turkish.

Sentence-initial position in Turkish is topic position, and this fact accounts for one kind of variation from the unmarked SOV word order. That is, the subject will not be in initial position when a non-subject is the topic of the sentence.

```
(18)   Yeni hali-yi Murat al-di.
       new  rug-ACC        buy-PST
```

'Murat bought the new rug.'

A topic such as *yeni hali* in (15) is not contrastive; it "merely sets the framework within which the predication holds" (Erguvanli, p.50). Note that topics in Turkish are arguments of the verb.

```
(19)   *Yeni hali-yi Murat on-u    al-di.
        new  rug-ACC       3s-ACC buy-PST
```

'The new rug, Murat bought it.'

Immediate pre-verbal position is focus position. "The constituent in focus is the most information bearing element in that context" (Erguvanli, p.44). Thus, WH-question words regularly appear immediately before the verb.

```
(20)   Erguvanli's (85), p. 45

       Para-yi    kim çal-di?
       money-ACC who steal-PST
```

'Who stole the money?'

A definite NP whose unmarked position is something other than immediate pre-verbal position is interpreted as contrastive when focused.

```
(21)   Antalya-ya dün         Yakut git-ti.
               DAT yesterday       go-PST
```

'Yakut went to Antalya yesterday.'

Given that indefinite NP's typically carry new information, it is not surprising that their unmarked position is immediate pre-verbal position. There are no constraints on where else indefinite, animate subjects may occur. However, for other types of

indefinite NPs, pre-verbal position may be preferred or obligatory.[11]

    (22)   animate, indefinite subject
          Erguvanli's (41b) and (41a), p. 22

       a. Ağaç-tan bir çocuk düş-tü.
          tree-ABL a   child fall-PST

          'A child fell out of the tree.'

       b. Bir çocuk ağaç-tan düş-tü.

    (23)   inanimate, indefinite subject
          Erguvanli's (42b) and (42a), p. 22

       a. Ağaç-tan bir elma düş-tü.
         tree-ABL a   apple fall-PST

         'An apple fell out of the tree.'

       b. *Bir elma ağaç-tan düş-tü.

    (24)   animate, indefinite indirect object
          Erguvanli's (77a), (77e), and (77c), p. 38

       a. Murat para-yı   bir adam-a ver-di.
          money-ACC a   man-DAT give-PST

         'Murat gave the money to a man.'

       b. ?Murat bir adam-a para-yı ver-di.

       c. *Bir adam-a Murat para-yı ver-di.

In addition to sentence-initial and immediate pre-verbal position, the position after the predicate also has a pragmatic function in Turkish, a function which Erguvanli calls 'backgrounding'. In general, a constituent (whether an NP, a PP, an adverb, or an S) may be backgrounded if it is predictable, recoverable from discourse, given, or an after-thought.

---

[11]The constraints on the positioning of such NPs are too complicated to go into here, but they are discussed at length in Erguvanli. Additionally, the speakers I have consulted did not agree with all of her judgments on the sentences below. For example, many found (23b) acceptable.

```
(25)  A:  Televizyon nerede?
          television where

          'Where is the television?'

      B:  Baba-n          bir    komşu-ya      ver-di    on-u.
          father-POSS:2s  a      neighbor-DAT  give-PST  3s-ACC

          'Your father gave it to a neighbor.'
```

Backgrounding may also serve to emphasize the predicate: all the clause material is shifted to the right of the predicate, isolating it in initial position, as in the following imperative.

```
(26)  Ye-me    et-i.
      eat-NEG  meat-ACC

      'Don't eat the meat!'
```

While marked word orders created by topicalizing, focussing, and backgrounding constituents are not pragmatically neutral, there are some variations from the unmarked order which appear to be just that. For instance, though there is evidence that the unmarked position of a definite indirect object is before a definite direct object, the opposite order seems to be just as neutral. Thus, at the inception of a discourse, one could say either (a) or (b) below.

```
(27)a.  Ben Ayşe-ye  fotograf-ı    gönder-di-m.
        1s       DAT photograph-ACC send-PST-1s

        'I sent the photograph to Ayşe.'

    b.  Ben fotograf-ı Ayşe-ye gönder-di-m.
```

In fact, Lewis (1967) claims that the order in (a) is the typical one while Underhill (1976) claims that (b) is.

1.2. An Overview of Relational Grammar

1.2.1. Representation of Sentence Structure

In the chapters that follow, I will be investigating a variety of proposals which have grown out of work in the Relational Grammar framework, the basic ideas of which were articulated by Perlmutter and Postal in the early 1970s. One of the central claims of Relational Grammar is that grammatical relations are primitives of linguistic theory. Another is that grammatical relations play a critical role in formulating universals, in characterizing the grammatical constructions found in natural language, and in constructing insightful grammars of particular languages (Perlmutter 1980).

The set of grammatical relations borne by nominals includes the central relations, which are further subdivided into the following:

> (a)   term relations: subject (1), direct object (2), and indirect object (3). The set of term relations has two partially overlapping subsets: the 1-relation and 2-relation are nuclear term relations while the 2-relation and 3-relation are object relations.

> (b)   oblique relations: an incompletely specified set including benefactive (BEN), locative (LOC), temporal (TEMP), instrumental (INSTR), directional (DIR), etc.

> (c)   retirement relations: notably, the chomeur-relation (CHO).

If a nominal bears a central relation, it may also bear an overlay relation such as Topic, Overweight, Rel, etc. Finally, predicates bear the P-relation (and in Clause Union constructions, the U(nion)-relation).

A sentence is represented as a **relational network** which consists of objects called

arcs.[12] An arc is said to have a head node and a tail node, each of which is labelled with the name of a linguistic element; the arc is labelled both with the name of the grammatical relation wh'-h the element at the head bears to the element at the tail and with a coordinate c_n which stipulates the linguistic level at which that relation holds. For instance, the arc below specifies tha' .he *wolverines* bears the 3-relation to X at level 1.

(28)   X

                        ¦
                        ¦
                        ¦
                    3   ¦   c
                        ¦   1
                        ¦
                        ¦
                        ¦
                        ↓

        the wolverines
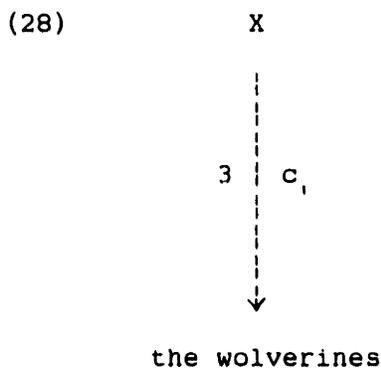
Typically, the tail label (the name of a clause or phrase) is omitted from representations.

The arc in (28) occurs in the relational network presented in (29), which represents

---

[12]While Arc Pair Grammar (Johnson and Postal 1980) shares many of the basic assumptions of Relational Grammar, it incorporates concepts not found in the latter (most notably the notion that the relations 'sponsor' and 'erase' hold between arcs) and it denies that sentence structure can be represented in a single relational network. Arc Pair Grammar represents sentences as pair networks, where each pair network is associated with three graphs, an R-graph, an L-graph, and an S-graph. The first corresponds most closely to a Relational Grammer relational network; the L-graph represents the meaning of the sentence and the S-graph represents its surface form (though phonology is ignored).

Arc Pair Grammar is a more formal and explicit system than Relational Grammar, and in many respects, it has been more ambitious. Nevertheless, Relational Grammar has familiarity on its side, and that is the primary reason why I have chosen it over Arc Pair Grammar for this dissertation. In any event, most of the Relational Grammar proposals that I evaluate have equivalents in Arc Pair Grammar.

the structur. of the sentence, *I offered meat to the wolverines.* The order in which the arcs are displayed is irrelevant.[13]

(29)
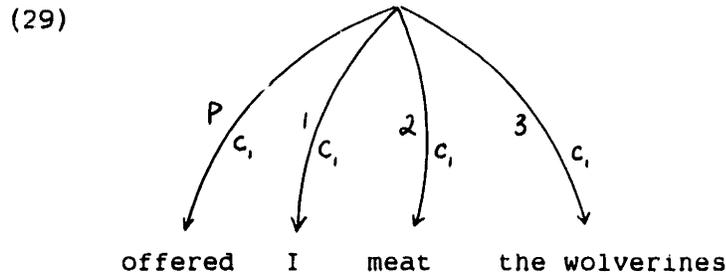
It also occurs in the representation of the related sentence, *I offered the wolverines meat,* in which 3-2 Advancement has applied. This rule permits a nominal heading a 3-arc at the c_n level to head a 2-arc at the c_{n+1} level.

(30)
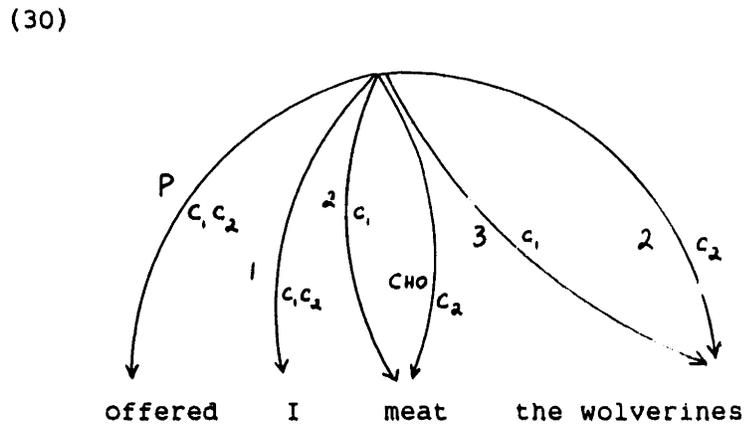
If *the wolverines* advanced to 2 and nothing else happened, there would be two nominals heading 2-arcs with the same coordinate, and the relational network would violate the Stratal Uniqueness Law, which states that no more than one dependent of a clause can bear a particular term relation at a particular level. In order to satisfy the Stratal Uniqueness Law, and in accordance with the Chomeur Law (see below), *meat* comes to head a CHO-arc at the level where *the wolverines* heads a 2-arc.

---

[13]It is common practice to present oversimplified relational networks which ignore the internal structure of phrases (and words) as well as auxiliaries, particles, prepositions, etc.

Relational networks are difficult to take in as arcs multiply. For this reason, **stratal diagrams** are frequently used in place of relational networks to represent sentence structure. The following is equivalent to (30).

(31)

offered   I   wolverines   meat
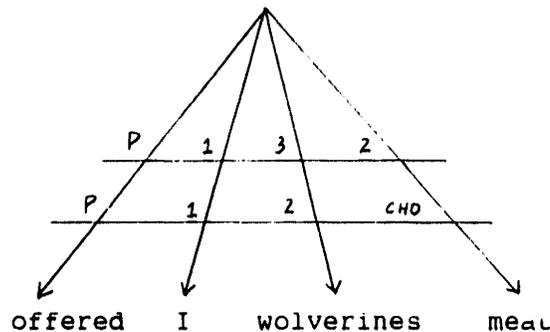
Each line which intersects the array of arcs represents a particular linguistic level, also know as a **stratum.** If there is a stratum c_n and no stratum c_{n-1}, c_n is the initial stratum; similarly, if there is a stratum c_n and no stratum c_{n+1}, then c_n is the final stratum.

1.2.2. Rules and Laws

In Relational Grammar, rules are "thought of as well-formedness conditions on [relational networks] formed arbitrarily and 'presented' to the rules for evaluation" (Perlmutter and Postal 1983b, p. 18). Among the types of rules recognized in the framework are the following:

(32)

a.   revaluations: a nominal bears GR_x in one stratum and GR_y in the immediately succeeding stratum. Given the hierarchy of grammatical relations, 1 2 3 nonterm, where 1 has the highest ranking, a revaluation is termed an advancement if GR_y is higher on the hierarchy than GR_x and a retreat if GR_y is lower on the hierarchy than GR_x.

b.   births: the first arc a nominal heads is a non-initial arc. Births typically involve dummies, which never head initial

arcs.[14]

c. ascensions: a nominal dependent of clause X becomes a dependent of clause Y in some non-initial stratum of Y, where X is itself initially a dependent of Y. Raising rules are ascensions.

d. clause union: all the dependents of clause X become dependents of clause Y in some non-initial stratum, where X is initially a dependent of Y.

Laws are universal well-formedness conditions on relational networks. Below are informal descriptions of the laws that I will refer to in the chapters that follow.

(33)

a. Chomeur Law: A nominal must bear the chomeur-relation in stratum c_n if it bear" a term relation in c_{n-1} and another nominal bears the same term relation in c_n.

b. Final 1 Law: A clause must have a final 1. (It does not, however, have to have a surface 1.)

c. Motivated Chomage Law: A nominal may only bear the chomeur-relation in stratum c_n if it bears a term relation in c_{n-1} and another nominal bears the same term relation in c_n. (The chomeur-relation can only be assigned if the conditions described in the Chomeur Law are met.)

d. Nuclear Dummy Law: A dummy may bear only the 1-relation or the 2-relation.

e. Oblique Law: If a nominal bears an oblique relation in some non-initial stratum, it also bears that relation in the initial stratum.

f. 1-Advancement Exclusiveness Law: There may only be a single advancement to 1 in a clause.

---

[14]The term 'birth' is due to Rosen (1981).

g.   Stratal Uniqueness: There can be no more than one 1, one 2, or one 3 in a particular stratum.

CHAPTER 2

PERSONAL AND IMPERSONAL PASSIVES IN TURKISH

2.1. Personal Passives

There are passive sentences in Turkish which are related to active sentences containing accusative-casemarked direct objects. In these passives, hereafter referred to as personal passives, (i) the NP which corresponds to the direct object of the active functions as subject, (ii) the NP which corresponds to the subject of the active functions as a non-subject (most frequently appearing as the object of the postposition *tarafından*[15]), and (iii) the vero is suffixed with a morpheme. The passive morpheme has two allomorphs: *-In* after vowels and /l/, and *-Il* elsewhere. Personal passives without agent phrases are preferred over those with them.

The passive which is related to the transitive sentences in (1) appears in (2).

(1) Kedi Yakut-u   isir-di.
     cat   -ACC bite-PST

     'The cat bit Yakut.'

(2) Yakut kedi tarafindan isir-il-di.
           cat by   bite-PASS-PST

     'Yakut was bitten by the cat.'

---

[15]Less commonly, the passive agent is suffixed with *-cE*, which derives adverbs from adjectives and nouns, e.g., *güzel* (beautiful), *güzelce* (beautifully); *çocuk* (child), *çocukça* (childishly, like a child).

2.1.1. Properties of the Passive Subject

2.1.1.1. Linear Position and Casemarking

It is easy enough to show that the accusative-casemarked object in an active sentence actually functions as the subject of the corresponding personal passive. For instance, *Yakut* in (2) occupies sentence-initial position, which is the unmarked position for definite subjects in Turkish. If the passive subject is indefinite and inanimate, some speakers require it to appear in immediate pre-verbal position; for these speakers, indefinite, inanimate active subjects must also appear immediately before the verb (see Chapter 1, Section 1.1.3).

(3)a. Park-ta bir anahtar bul-un-du.
        park-LOC a   key   find-PASS-PST

        'A key was found in the park.'

   b. *Bir anahtar park-ta bul-un-du.

Furthermore, a passive subject is caseless and it obligatorily triggers verb agreement; in general, only subject NPs in Turkish have these two properties.[16] Agreement of active and passive verbs with a first person (caseless) subject is illustrated in (4).

(4)a. Ben kedi-yi isir-di-m.
        1s cat- ACC bite-PST-1s

        'I bit the cat.'

   b. Ben kedi tarafindan isir-il-di-m.
        1s cat by   bite-PASS-PST-1s

        'I was bitten by the cat.'

The following complex sentence illustrates another morphosyntactic property which passive subjects share with active subjects.

---

[16]Not all caseless NPs in Turkish are subjects; some objects of postpositions and some direct objects (see Chapter 3) are unmarked for case. But such caseless nominals never control verb agreement. Additionally, I argue in Chapter 5 that some Turkish sentences have non-nominative subjects; they do not control verb agreement either.

(5) Gül [sen-in Çin-e   gönder-il-diğ-in-i]
          2s-GEN China-DAT send-PASS-PART-POSS:2s-ACC

     söyle-di.
     say-PST

     'Gül said that you were sent to China.'

The embedded clause, a passive, has been nominalized: the passive subject is marked genitive (*sen* + *in*); a so-called participle suffix is attached to the passive verb stem (*gönderil* + *diğ*); immediately following this morpheme is a possessive suffix which matches the genitivized nominal in person and number (*gönderildiğ* + *in*).[17] In general, subjects and only subjects are marked genitive and control possessive agreement with the participle in non-root clauses. Thus, the subject of an active clause is assigned the genitive and controls the possessive suffix when the clause is nominalized, as (6) below illustrates.

(6) Gül [sen-in Çin-e   Kemal-i   gönder-diğ-in-i]
          2s-GEN China-DAT   -ACC send-PART-POSS:2s-ACC

     söyle-di.
     say-PST

     'Gul said that you sent Kemal to China.'

2.1.1.2. Access to Syntactic Rules: Pro Drop

A variety of syntactic rules treat a passive subject no differently from an active subject. Consider Pro Drop, which was briefly discussed in Section 1.1.1 of Chapter 1. Of interest here is the fact that first and second person non-emphatic subject pronouns delete freely in 'out-of-the-blue' contexts, e.g., in the first utterance of a discourse. One could say (7) below without any preliminaries.

(7) Ayağ-ım-a   baş-ıyor-sun.
     foot-POSS:1s-DAT stand-PRS-2s

     '(You) are standing on my foot.'

However, a sentence such as (8), where a non-subject is missing,

_____

[17]The nominalized clause is the direct object of the matrix transitive verb *soyledi*, so it is marked accusative (*gönderildiğin* + *i*).

```
(8)   Ersin ziyaret et-ti.
            visit-PST

      'Ersin visited.'
```

must be embedded in a discourse in which the missing NP is presupposed or recoverable, as in (9).

```
(9)   A:  Sen-i  Ayşe mi ziyaret et-ti.
          2s-ACC      Q  visit-PST

          'Did Ayşe visit you?'

      B:  Hayir, Ersin ziyaret et-ti.
          no           visit-PST

          'No, Ersin visited (me).'
```

Note that the non-third person pronominal subjects of passive sentences undergo Pro Drop in out-of-the-blue contexts just as freely as the subjects of active sentences. (10) below is perfectly acceptable at the inception of a discourse.

```
(10)  Bir denizci tarafindan vur-ul-du-m.
      a    sailor  by          stab/shoot-PASS-PST-1s

      'I was stabbed/shot by a sailor.'
```

2.1.1.3. Control Rules: Equi

Passive subjects also behave no differently from active subjects in the Equi construction.[18] An infinitival clause embedded immediately under verbs such as *istemek* (to want), *ummak* (to hope), *başlamak* (to begin), and *çalışmak* (to try) is a controlled clause, and one of its arguments is left unexpressed under identity with the subject of the higher clause. Equi has applied in (11).

```
(11)  Dilek [Cengiz-i   öp-mek]    isti-yor.
                  -ACC kiss-INFIN  want-PRG

      'Dilek wants to kiss Cengiz.'
```

---

[18]See Kornfilt (1976) for a discussion of Equi in Turkish.

Only final subjects can be Equi victims in Turkish. Compare (11) above, where the subject of an active clause fails to be expressed, with the ungrammatical examples given below; the intended victim is a direct object in (a) and an indirect object in (b).

(12)a. *Dilek [Cengiz öp-mek]   isti-yor.
                kiss-INFIN want-PRG

'Dilek, wants Cengiz to kiss her,.'

b. *Dilek [Cengiz bir mektup yaz-mak]   isti-yor.
            a   letter write-INFIN want-PRG

'Dilek, wants Cengiz to write a letter to her,.'

As expected, a passive subject may be left unexpressed under identity with the matrix subject.

(13)   Dilek [parti-ye davet ed-il-mek] isti-yor.
             party-DAT invite-PASS-INFIN want-PRG

'Dilek wants to be invited to the party.'

2.1.1.4. Control Rules: Adverbial Clauses

Further evidence that the passive subject is a bona fide subject comes from an examination of adverbial clauses in Turkish.[19] In her detailed study of such clauses, Baran (1978) distinguishes between what she calls 'free subject' and 'like subject' adverbials. The final subject of the former type need not be coreferent with the final subject of the matrix; if it is not coreferent, it may appear as a surface term.[20] Consider the following from Baran (1978).

(14)a. [Ahmet vazo-yu at-ınca] ben kaç-tı-m.
             vase-ACC throw-ADV 1s run away-PST-1s

'When Ahmet threw the vase, I ran away.'

---

[19]See Tato (1974), Baran (1978), and Özkaragöz (1979).

[20]When the subject of a free-subject adverbial clause is coreferent with the final subject of the matrix, it may not appear in surface structure. See Baran for discussion.

b. Ben [Ahmet bulaşiǧ-i   yika-ma-dikça] kiz-iyor-um.
   1s   dishes-ACC wash-NEG-ADV   be angry-PRS-1s

'I get (more) angry the more Ahmet doesn't do the
dishes.'

.

On the other hand, like-subject adverbial clauses (suffixed with *-yErEk, -yIp,
-yE,* or *-mEktEnsE*) are controlled clauses. Their subjects cannot appear in surface
structure; furthermore, a missing subject is always interpreted as being identical with the
matrix subject. The following examples are Baran's.

(15)a. Ahmet [vaso-yu   at-arak] kaç-ti.
               vase-ACC throw-ADV run away-PST

     'Ahmet, throwing the vase, ran away.'

  b. *Ahmet [ben vaso-yu   at-arak] kaç-ti.
             1s vase-ACC throw-ADV run away-PST

     'My throwing the vase, Ahmet ran away.'

(16)a. Ahmet [yi-ye   yi-ye] şişmanla-di.
               eat-ADV eat-ADV get fat-PST

     'Ahmet got fat by continually eating.'

  b. *Ahmet [ben on-a   güzel yemekler pişir-e   pişir-e]
             1s 3s-DAT nice   food   cook-ADV cook-ADV

     şişmanla-di.
     get fat-PST

     'Ahmet got fat by my continually cooking him nice
     food.'

The missing nominal in these adverbial clauses must be a final subject, whether the
final subject of an active clause, as in the (a) examples above, or the final subject of a
passive clause, as in the examples presented below.

(17)a. Çocuk [döv-ül-erek] uslan-ir.
        child hit-PASS-ADV become well behaved-AOR

     'The child, being hit, becomes well behaved.'

  b. Kitap [oku-n-up]   beǧen-il-di.
     book   read-PASS-ADV enjoy-PASS-PST

     'The book was read and enjoyed.'

2.1.1.5. Raising

Passive subjects also behave like active subjects in constructions with verbs such as *sanmak* (to think), *zannetmek* (to think), and *bilmek* (to believe). These predicates appear in three distinct types of complex sentences. In one type, the sentential complement of the verb is nominalized:

```
(18)   Demet [sen-in vazo-yu  düşür-düğ-ün-ü]         san-dı.
              2s-GEN vase-ACC drop-PART-POSS:2s-ACC think-PST

       'Demet thought that you dropped the vase.
```

In another type, the embedded clause is a bare complement, i.e., morphologically, it is indistinguishable from a root clause: its subject is caseless and its verb fully finite.

```
(19)   Demet [sen vazo-yu  düşür-dü-n] san-dı.
              2s  vase-ACC drop-PST-2s think-PST

       'Demet thought that you dropped the vase.'
```

An example of the third construction in which these verbs appear is given in (20).

```
(20)   Demet sen-i  İzmir-e   git-ti san-dı.
              2s-ACC        -DAT go-PST think-PST

       'Demet thought you went to Izmir.'
```

Here the NP which corresponds to the subject of the embedded clause is casemarked accusative and the verb is semi-finite, i.e., suffixed for tense but not for agreement.[21]

It has been claimed that Subject-to-Object Raising has applied in (20).[22] Consistent with this claim is the observation that the accusative-casemarked NP in (20) undergoes matrix passivization.

---

[21]Some speakers require that the embedded verb index agreement with the accusative-casemarked NP; thus in (19), *gittin* would occur rather than *gitti*. (There also appear to be speakers for whom agreement is optional.) See Kornfilt (1977) and George and Kornfilt (1981).

[22]Aissen (1974b) argues for a cyclic rule of Raising. Pullum (1975) criticizes her proposals while Kornfilt (1977) provides further support for them.

```
(21)   (Sen) İzmir-e    git-ti san-il-di-n.
       2s         -DAT go-PST think-PASS-PST-2s
```

'You were thought to have gone to Izmir.'

Only the accusative-casemarked nominal which corresponds to the final subject of the complement clause may passivize in the matrix. *Seni*, the final direct object of the complement clause in (22a), cannot undergo upstairs passivization.

```
(22)a.   (Ben) sen-i  Ahmet gör-dü  san-di-m.
         1s    2s-ACC       see-PST think-PST-1s
```

'I thought that Ahmet saw you.'

```
     b. *(Sen) Ahmet gör-dü  san-il-di-n.
         2s          see-PST think-PASS-PST-2s
```

Assuming that Raising is responsible for the casemarking of the complement subject and its ability to passivize in the matrix clause, we can go on to say that only subjects can raise, whether active subjects, as in (20) above, or passive subjects, as in (23) below.

```
(23)   Hikmet sen-i   tevkif ed-il-di san-di.
              2s-ACC arrest-PASS-PST think-PST
```

'Hikmet thought you to have been arrested.'

Note that *seni* in (23) can undergo matrix passivization.

```
(24)   (Sen) tevkif ed-il-di san-il-di-n.
       2s    arrest-PASS-PST think-PASS-PST-2s
```

'You were thought to have been arrested.'

2.1.1.6. Conclusion

From a cross-linguistic perspective, the personal passive construction in Turkish appears to be quite unexceptional. The direct object of a transitive verb advances to become subject of the corresponding passive verb. It is observed to have a set of properties typical of final subjects in Turkish. I will discuss the passive rule in more detail after I describe Turkish impersonal passive clauses.

2.2. Impersonal Passives

Consider the following intransitive sentences.

(25)a. Ben-den kaç-tı-lar.
        1s-ABL   run away-PST-3p

        'They ran away from me.'

     b. Beşiktaş-tan Taksim-e   beş lira-ya gid-er-ler.
                 -ABL   -DAT five lira-DAT go-PRS-3p

        'They go from B. to T. for five lira.'

     c. Harıl harıl çalış-ıyor-lar.
         laboriously work-PRG-3p

        'They are working laboriously.'

There is no overt nominal in any of these sentences which looks like a direct object: in (a) and (b) we find nominals marked for oblique cases while in (c), no object nominal whatsoever appears. Nevertheless, intransitive sentences such as these have related passives.

(26)a. Ben-den kaç-ıl-dı.
        1s-ABL   run away-PASS-PST

        'I was run away from.'

     b. Beşiktaş-tan Taksim-e   beş lira-ya gid-il-ir.
                 ABL   DAT five lira-DAT go-PASS-PRS

        'One goes from B. to T. for five lira.'

     c. Harıl harıl çalış-ıl-ıyor.
         laboriously work-PASS-PRG

        'It is being worked laboriously.'

Passives like (26a-c) have traditionally been called 'impersonal passives' because they do not tolerate the presence of an agent phrase.[23]

---

[23]Some speakers accept *tarafından* phrases in impersonal passives so long as they are indefinite enough, e.g. *kimse tarafından* (by no one).

(27)a. *Ben-den çocuk-lar tarafından kaç-ıl-dı.
     1s-ABL child-PLU by   run away-PASS-PST

    'I was run away from by the children.'

  b. *Beşiktaş-tan Taksim-e öğrenciler tarafından beş
       ABL   DAT students by   five

     lira-ya gid-il-ir.
     lira-DAT go-PASS-PRS

    'It is gone from B. to T. for five lira by students.'

On the other hand, recall that agent phrases are permitted in personal passives, i.e., passives which are related to actives containing accusative-casemarked direct objects.

2.2.1. Properties of Turkish Impersonal Passives

2.2.1.1. Morphosyntactic Properties

Impersonal passives lack not only agent phrases but also any overt NP which has the morphosyntactic properties of a subject. Impersonal passives may contain no nominals, as the examples below illustrate. (See also (26c).)

(28)a. Gir-il-me-z.
     enter-PASS-NEG-PRS[24]

    'Entering is not done.' 'Do not enter.'

  b. Gül-ün-ür-dü.
     laugh-PASS-PRS-PST

    'Laughing used to be done.' 'People used to laugh.'

Nominals which are present are marked for oblique cases.

(29) Mahmut-tan/*Mahmut kaç-ıl-dı.
       -ABL   run away-PASS-PST

    'Mahmut was run away from.'

---

[24]Underhill (1976) characterizes the present tense as follows: in the spoken language, it has a 'voluntative' use, expressing willingness on the part of the speaker to perform the specified action; in the written language, it is used for habitual or repeated actions — or for statements of eternal truth. The negative present of a passive verb often has the force of a negative imperative.

Only third person singular verb agreement, i.e., unmarked agreement, is possible in an impersonal passive, regardless of the person and number of the NPs present.

(30) Ben-den kaç-il-di/*kaç-il-di-m.
      1s-ABL   run away-PASS-PST/run away-PASS-PST-1s

      'I was run away from.'

Furthermore, impersonal passives have a unique appearance when they are embedded and nominalized. Recall that in the typical case, the subject of a nominalized clause is marked genitive and the participle is suffixed with a possessive morpheme which agrees with the subject in person and number. In the nominalization of an impersonal passive no overt NP is assigned the genitive; however, a possessive suffix does appear on the participle, and it is always third person singular.

(31)a. [Siz-den kaç-il-diğ-in-a]
         2p-ABL   run away-PASS-PART-POSS:3s-DAT[25]

         inan-mi-yor-um.
         believe-NEG-PRG-1s

         'I don't believe that you were run away from.'
    b. *[Siz-in   kaç-il-diğ-iniz-a] inan-mi-yor-um.
         2p-GEN   POSS:2p

    c. *[Siz-den kaç-il-diğ-iniz-a] inan-mi-yor-um.
         2p-ABL   POSS:2p

2.2.1.2. Failing Syntactic Tests for Subjecthood

So far, we have two reasons to characterize impersonal passives as subjectless sentences: all of the nominals that occur are marked for oblique cases and none of them trigger agreement with the verb, which is invariantly third person singular. It is possible, however, that subjects are not required to be caseless in Turkish. Moreover, if the verb can only agree with a caseless subject, then the absence of subject/verb agreement in impersonal passives cannot be taken as evidence that there is no subject present.

---

[25]The matrix verb *inan-* (believe) takes a dative object.

Andrews (1976) and Thrainsson (1979) have argued that there are non-nominative subjects in Icelandic. These nominals fail morphosyntactic tests for subjecthood but participate in syntactic rules which are reserved for subjects. For instance, non-nominative subjects occur in the passives related to (a) and (b) below. Note that the verb in (a) governs the dative case on its object and the one in (b) governs the genitive case.

> (32)a. Andrews' (12a)
>
>   Hann   bjargadi mér.
>   he:NOM saved:3s me:DAT
>
>   'He saved me.'
>
>   b. Andrews' (12c)
>
>   Vid   vitjudum   sjúklinganna.
>   we:NOM visited:1p patients:m.p.GEN
>
>   'We visited the patients.'

In the corresponding passives, *mér* and *sjúklinganna* occur in pre-verbal position. Their casemarking is identical to what it was in the active sentences, and neither the first auxiliary nor the participle agrees with them.

> (33)a. Andrews' (13a)
>
>   Mér   var   bjargad.
>   I:DAT was:3s saved:SUPINE
>
>   'I was saved.'
>
>   b. Andrews' (13c)
>
>   Sjúklinganna   var   vitjad.
>   patients:m.p.GEN was:3s visited:SUPINE
>
>   'The patients were visited.'

The position of the nominals is perfectly consistent with their being subjects, but their other properties are not. In general, subjects in Icelandic are casemarked nominative and their verbs agree with them in person and number. Additionally, passive subjects trigger gender, number, and case agreement with the passive participle. The following canonical passive illustrates this.

(34) Andrews' (11)

```
Þussarnir       voru     ekki fundnir.
giants:m.p.NOM were:3p not   found:m.p.NOM
```

'The giants were not found.'

Nevertheless, the dative and genitive NPs in (33a&b) behave like syntactic subjects in a number of respects. According to Andrews, passivized dative objects can be Equi victims.

(35) Andrews' (26d)

```
Ég      vonast til ad verda    bjargad.
I:NOM hope      COMP be:INFIN saved
```

'I hope to be saved.'

And both types of oblique nominals undergo SOR.

(36) Thrainsson's (9), p.468

```
Ég     taldi    Haraldi    í  barnaskap  mínum
I:NOM believed Harold:DAT in foolishness my

hafa verid gefnir   hestarnir.
have been  given:p horses:p.NOM
```

'I believed Harold in my foolishness to have been given horses.'

Though casemarked dative, *Haraldi* has in fact been raised since it precedes the adverbial phrase *í barnaskap minum*, which is unambiguously part of the matrix clause.[26]

Additionally, the oblique NPs, like nominative subjects, invert with the verb when a constituent is preposed.

---

[26]See Thrainsson (1979) for the arguments that adverbials such as *í barnaskap minum* can be used to locate clause boundaries.

(37) Thrainsson's (18), p.471

    Í gær   voru Haraldi   gefnir hestarnir.
    yesterday were Harold:DAT given horses:p.NOM

    'Yesterday Harold was given the horses.'

Thrainsson provides some additional arguments that non-nominative subjects exist in Icelandic, but I will not summarize them here.   Instead, I would like to return to Turkish impersonal passives and show that none of their NPs are non-nominative subjects: in addition to the morphosyntactic tests for subjecthood that they have already failed, they also fail syntactic tests.

To begin with, while an impersonal passive may be embedded as a bare complement under a raising verb (see the (a) examples below), SOR cannot apply (see the (b) examples).

(38)a.   Ali [ben-den kaç-ıl-dı]   san-dı.
                1s-ABL   run away-PASS-PST think-PST

    'Ali thought I was run away from.'

    b. *Ali ben-i kaç-ıl-dı   san-dı.
             1s-ACC run away-PASS-PST think-PST

    'Ali thought me to have been run away from.'

(39)a.   Ali [ev-e   dün   gir-il-di]   san-dı.
              house-DAT yesterday   enter-PASS-PST think-PST

    'Ali thought the house was entered yesterday.'

    b. *Ali ev-i   dün   gir-il-di   san-dı.
             house-ACC yesterday enter-PASS-PST think-PST

    'Ali thought the house to have been entered yesterday.'

Additionally, a nominal in an impersonal passive may not act as the subject of a passivized raising verb.

(40)a. *(Ben) kaç-ıl-dı   san-ıl-dı-m.
        1s   run away-PASS-PST think-PASS-PST-1

'I was thought to have been run away from.'

b. *Ev   dün   gir-il-di   san-ıl-dı.
   house yesterday enter-PASS-PST think-PASS-PST

'The house was thought to have been entered.'

It is possible that the above sentences are ungrammatical simply because oblique casemarking cannot come off nominals in Turkish any more than it can in Icelandic. If this is right, then the investigation should focus on whether the oblique casemarked NPs in sentences such as (38&39a) ever behave like members of the upstairs *san-* clause, not on whether they can be the accusative-casemarked object of an active raising verb or the nominative-casemarked subject of a passivized raising verb. Unfortunately, for a variety of reasons, it is very difficult to ascertain where the clause boundaries are in sentences such as (38&39a). For instance, neither Topicalization nor Backgrounding (see Chapter 1) are clause-bounded. Thus, the fact that *benden* in (38a) and *eve* in (39a) may occur in sentence-initial or post-predicate position does not shed any light on the clause membership of these NPs. The Focus rule turns out to be of no help either, despite the fact that it is clause-bounded. Note that while *benden* in (38a) cannot focus with respect to the matrix verb, neither can the matrix subject, *Ali*:

(41)a. *Ali kaç-ıl-dı   ben-den san-dı.
        run away-PASS-PST 1s-ABL think-PST

b. *Ben-den kaç-ıl-dı Ali san-dı.

In fact, nothing is permitted to intervene between the embedded and matrix verbs.[27]
Given this, the inability of *benden* to Focus in the matrix clause does not rule out the possibility that it is a member of the matrix clause.

While it is hard to establish whether or not any of the nominals in an impersonal

---

[27]Verbs are inseparable in both the bare complement construction and the raising construction. The complement verb is finite in both construction types. Additionally, George and Kornfilt (1977) have shown that clause reduction in Equi constructions (see Chapter 5) is associated with verb inseparability. In this case, the complement verb is non-finite.

(a) George and Kornfilt's (20)

Bu   viski   yazarlar tarafından iç-il-mek
this whiskey writers   by   drink-PASS-INFIN

(*dün)   iste-n-di.
yesterday want-PASS-PST

'Yesterday this whiskey was wanted to be drunk by the writers.'

passive undergo Raising.[28] Raising is not the only syntactic test for subjecthood available

---

[28]Erguvanlı (1979) discusses a number of constraints on Backgrounding in sentences with two levels of embedding which may provide an argument that oblique casemarked nominals in impersonal passives never undergo Raising. According to Erguvanlı, the lowest of two embedded clause may appear after the matrix predicate, but a single constituent of it may not. The facts are just the opposite for the higher embedded clause: one of its constituents can be backgrounded but the clause itself cannot be. (The entire complex expression, consisting of both embedded clauses, may also undergo backgrounding.) With this in mind, consider the following complex sentences. The lower clause in each example contains a raising verb. In (a) the lowest clause is a bare complement, i.e., raising has not applied to its subject, *Kemal*; in (b), raising has applied and *Kemal* is casemarked accusative. The lowest clause in (c) is an impersonal passive.

(a) [Sedef-in [Kemal dün   sabah   tevkif ed-il-di]
        -GEN   yesterday morning arrest-PASS-PST

san-dığ-ın-ı]   duy-du-m.
think-PART-POSS:3s-ACC hear-PST-1s

'I heard that Sedef thinks Kemal was arrested yesterday morning.'

(b) [Sedef-in Kemal-ı   [dün sabah tevkif ed-il-di]
                   -ACC

san-dığ-ın-ı] duy-du-m.

(c) [Sedef-in [Ali-nin ev-in-e   dün   sabah
        -GEN   -GEN house-POSS-DAT yest.   morn.

gir-il-di]   san-dığ-ın-ı]   duy-du-m.
enter-PASS-PST think-PART-POSS:3s-ACC hear-PST-1s

'I heard that Sedef thinks Ali's house (DAT) was entered yesterday morning.'

If Raising cannot apply in (c), then its properties should match those of (a). In particular, we expect to find the following: neither *Kemal* in (a) nor *Alinin evine* in (c) will be able to undergo Backgrounding since each nominal is part of the lowest clause; on the other hand, *Kemalı* in (b) should be able to appear after the matrix verb because Raising has made it a member of the higher clause. Unfortunately, I have had no luck in testing these predictions. My informants have been reluctant to background any embedded nominal in (a), (b), or (c). Surely, this is at least partly due to the fact that they are, in general, very conservative when it comes to Backgrounding and the sentences are very complicated. It is also possible that both the bare complement construction and the raising construction have discourse functions which are not compatible with the discourse function served by Backgrounding.

in Turkish. Let us turn, then, to Equi. Fortunately, the facts are very clear: none of the nominals in an impersonal passive can be an Equi victim. Each of the (a) sentences given below is an impersonal passive; the underlined nominal is the intended target of Equi in the ungrammatical (b) examples.

(42)a. <u>Ben-den</u> kaç-ıl-dı.
         1s-ABL   run away-PASS-PST

         'I was run away from.'

    b. *Kaç-ıl-mak   iste-mi-yor-um.
         run away-PASS-INFIN want-NEG-PRG-1s.

         'I don't want to be run away from.'

(43)a. <u>Biz-e</u>   yardım için gel-in-ir.
         1p-DAT help   for   come-PASS-PRS

         'We are come to for help.'

    b. *Yardim için gel-in-meğ-i   um-uyor-uz.
         help   for   come-PASS-INFIN-ACC hope-PRS-1p

         'We hope to be come to for help.'

(44)a. <u>Ban-a</u>   telefon ed-il-ecek.
         1s-DAT telephone-PASS-FUT

         'I will be telephoned.'

    b. *Telefon ed-il-mek   isti-yor-um.
         telephone-PASS-INFIN want-PRG-1s

         'I want to be telephoned.'

(45)a. <u>Çocuğ-a</u>   bağır-ıl-dı.
         child-DAT shout-PASS-PST

         'The child was shouted at.'

    b. *Çocuk bağır-ıl-mak   iste-m-iyor.
         child shout-PASS-INFIN want-NEG-PRG

         'The child doesn't want to be shouted at.'

Note that there is no prohibition against embedding an impersonal passive under an

Equi predicate. The lower clause is simply nominalized.[29]

(47)a.   [Ben-den kaç-ıl-ma-sın-ı]   iste-mi-yor-um.
        1s-ABL   run away-PASS-PART-POSS:3s-ACC want-NEG-PRG-1s

      'I don't want to be run away from.'

    b.   [Biz-e yardım için gel-in-me-sin-i]
        1p-DAT help   for come-PASS-PART-POSS:3s-ACC

        um-uyor-uz.
        hope-PRG-1p

      'We hope to be come to for help.'

The fact that there is no NP in an impersonal passive which can be controlled by the subject of an Equi verb further supports the claim, which I now take to be established, that impersonal passives are subjectless, at least superficially.

2.3. Passive in Relational Grammar

In Relational Grammar passive is characterized universally as 2-1 advancement (Perlmutter and Postal 1983b). More precisely, a passive clause is represented as having a stratum c_n in which a nominal N_a bears the 1-relation and another nominal N_b bears the 2-relation; in the immediately following stratum c_{n+1}, N_b bears the 1-relation and N_a the chomeur-relation. Thus, every passive clause, whether personal or impersonal, is claimed to contain at least the following arcs.

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[29]In general, the clause embedded under an Equi verb is nominalized when its final subject is not coreferent with the higher subject. Consider the following example.

(a)   Sam [Bill-in resim   çek-me-sin-i]   isti-yor.
           -GEN picture take-PART-POSS:3s-ACC want-PRG

    'Sam wants Bill to take a picture.'

(47)
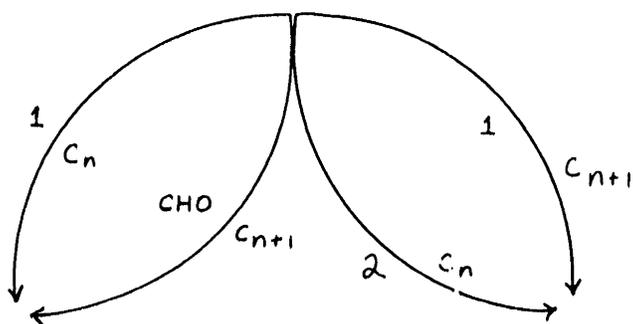
An impersonal passive (henceforth IP) differs from a personal passive (PP) in one important respect: the nominal that undergoes 2-1 advancement is a dummy (D) nominal which does not bear any grammatical relation in the initial stratum.[30] Compare the representation of the PP given in (48) with that of the IP given in (49). (UN is an unspecified nominal.)

(48)a.　Anahtar　bul-un-du.
　　　　key　　　find-PASS-PST

　　　'The key was found.'

　b.
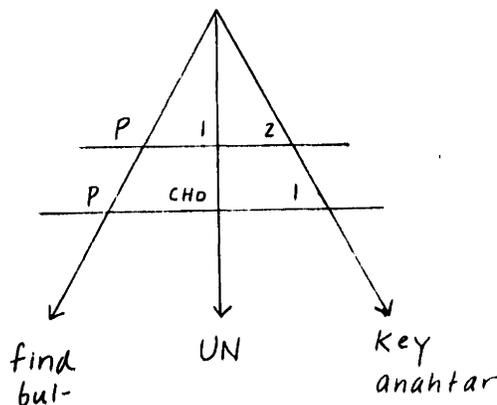
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(49)a.   Almanya-ya   gid-il-di.
         Germany-DAT go-PASS-PST

'Germany was gone to.'

b.

go   UN   Germany   D
git-   Almanya
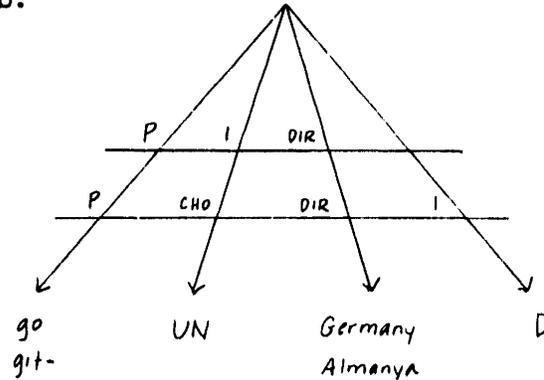
For any language like Turkish in which IPs are superficially subjectless, the dummy must be characterized as phonologically null.

Positing that a silent dummy occurs in a sentence such as (49a) does more than permit the formulation of a uniform account of passive. Given that the dummy serves as the final subject of the clause, there is no violation of the Final 1 Law, stated informally below.

(50)   The Final 1 Law: The final stratum of a clause must contain a
       nominal which bears the 1-relation.

Additionally, because of the advancement of the dummy from 2 to 1, the initial subject is permitted to bear the chomeur-relation. That is, the representation in (49b) satisfies the Motivated Chomage Law, according to which a nominal may bear the chomeur-relation only if another nominal usurps its (term) grammatical relation.

(51)   The Motivated Chomage Law: If a nominal N_a bears the
       chomeur-relation in stratum c_{n+1}, then it bears a term
       grammatical relation R_x in stratum c_n and another nominal N_b
       bears R_x in stratum c_{n+1}.

The two laws mentioned above rule out an account of IPs, modeled on Keenan

(1975) and Comrie (1977), which characterizes impersonal passivization as the spontaneous demotion of the subject of a clause, i.e., the subject simply goes into chomage rather than being put into chomage by another nominal.[31] Now, one might say that it is unfortunate that such an account is not possible in Relational Grammar. After all, it captures the properties of IPs without invoking invisible dummies. Furthermore, it offers a uniform characterization of passive clauses in general: a clause counts as a passive if its subject has spontaneously demoted (a nominal N_u bears the 1-relation in stratum c_n and the chomeur-relation in c_{n+1}, and there is no nominal in c_{n+1} which bears the 1-relation). In IPs, only spontaneous demotion of the subject occurs while in PPs, demotion is followed by advancement of a direct object to subject.[32] Under this approach, (48a) would have the representation in (52) and (49a), the representation in (53).

(52)


```
        P /   I      2 \
      P /  CHO     2   \
    P /   CHO          I \
  find            UN        Key
  bul-                      anahtar
```

---
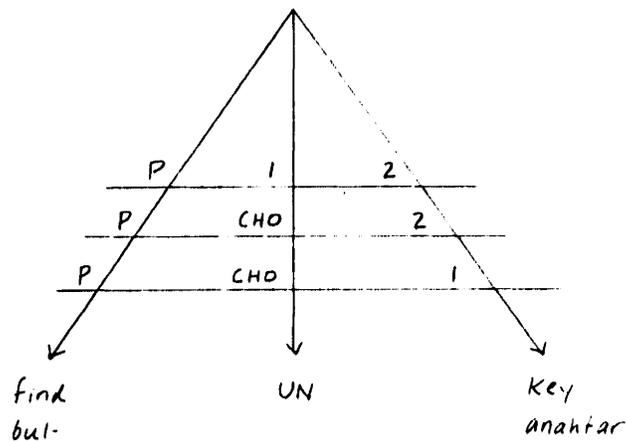
[31]Keenan actually says something different, i.e., that a demoted subject ceases to bear any grammatical relation to the clause. Comrie's position is more difficult to interpret as he merely says that demoted subjects "turn up as oblique objects."

[32]Dissociating subject demotion from object promotion is a tack taken in some analyses of passive presented in the context of Lexical Functional Grammar. See, for instance, Zaenen and Maling (1983).

(53)
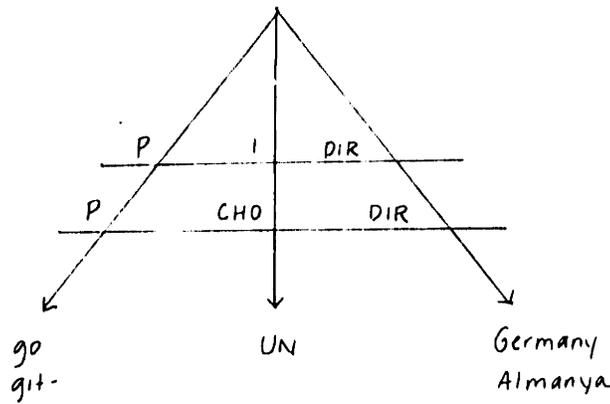
Nevertheless, even if the Final 1 and Motivated Chomage Laws were abandoned, the spontaneous demotion account of passive would still face the challenge of accounting for a set of facts presented in Perlmutter (1978). In this important paper, Perlmutter demonstrates that the analysis of passive as 2-1 advancement, teamed up with a number of assumptions, correctly predicts the existence of a class of ungrammatical IPs. Apparently, the spontaneous demotion analysis of passive makes no such prediction. I review Perlmutter's argument below and then proceed to demonstrate that Turkish impersonal passives do not behave as predicted: there are two kinds of clauses which are unpassivizable on his account that do, in fact, passivize. A relatively minor revision of the framework would be sufficient to iron out one problem, but solution of the other requires major changes.

2.3.1. The Unaccusative Hypothesis and Impersonal Passives

Perlmutter (1978) makes the interesting proposal that the traditional semantic difference between an 'active' intransitive clause such as (54a) and an 'inactive' intransitive clause such as (54b) is reflected by a deep syntactic difference.

(54) a. Donna danced.

b. Donna ached.

The claim is that while *Donna* is the initial 1 of the semantically active **unergative** clause in (a), it is the initial 2 of the semantically inactive **unaccusative** clause in (b).

The direct object of the unaccusative clause is advanced to subject by a rule called Unaccusative Advancement.

(55)a.

dance   Donna

b.

ache   Donna.
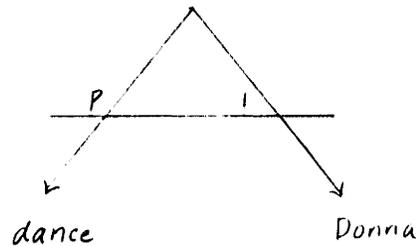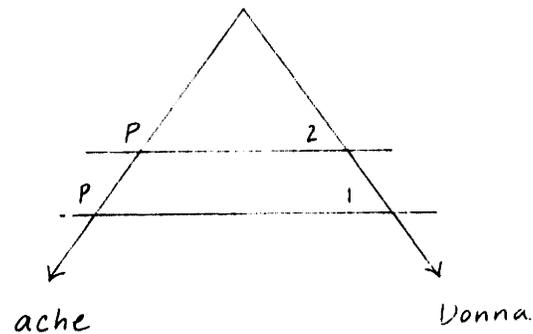
Unaccusative Advancement is not to be confused with Passive even though both rules involve 2-1 advancement. A stratum which contains a 2 but no 1 is subject to Unaccusative Advancement while a stratum which contains both a 1 and a 2 is subject to Passive.

Given this background, we can now state the Unaccusative Hypothesis.

(56)   The Unaccusative Hypothesis: Certain intransitive clauses have an
        initial 2 but no initial 1.

Perlmutter proposes that the initial unergativity or unaccusativity of a clause is predicted by universal semantic principles. His proposal grows out of a more general hypothesis about the assignment of initial grammatical relations which has come to be known as the Universal Alignment Hypothesis. Rosen (1984) formulates it as follows.[33]

---

[33]Incidentally, Rosen (1984) argues against the Universal Alignment Hypothesis.

(57) The Universal Alignment Hypothesis: There exists some set of universal principles on the basis of which, given the representation of a clause, one can predict which initial grammatical relation each nominal bears. (p.40)

The principles that assign initial grammatical relations in intransitive clauses are not explicitly formulated by Perlmutter; nevertheless, the rough idea appear to be that an intransitive clause is initially unergative if its predicate describes an act or event which is controllable, voluntary, or agentive and initially unaccusative otherwise.[34] Thus, for example, surface subjects which are semantic agents bear the 1-relation initially and surface subjects which are semantic patients bear the 2-relation initially.

We can now turn to the prediction about impersonal passives which arises from Perlmutter's framework. Given the Relational Grammar analysis of passive clauses, a pre-passive stratum must contain, among other things, a nominal bearing the 1-relation. An initially unaccusative clause, then, must undergo Unaccusative Advancement before Passive can apply. It follows that the passive of an initially unaccusative clause must

[34]Predicates describing involuntary bodily processes are expected to be unaccusative, but Perlmutter classifies certain of them as unergative, e.g., cough, sneeze, sleep, burp, urinate, etc.

involve two advancements to subject, as illustrated below.[35]

(58)

```
                    P   2
                  P     1
                P       1       2
              P       CHO       1

            X         Y        DUMMY
```
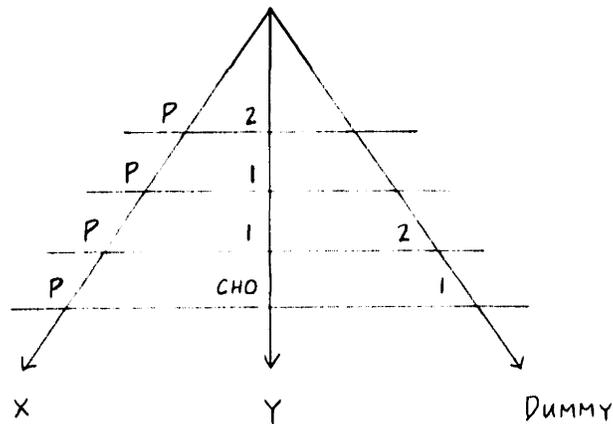
However, given, that the 1-Advancement Exclusiveness Law permits no more than a single advancement to subject in a clause,[36] the passive of an initially unaccusative

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[35]It is worth pointing out that Passive could, in principle, apply to an initially unaccusative clause without a prior application of Unaccusative Advancement. Consider the representation in (a) below.

(a)

```
                  P   2
                P   2       1
              P       1     CHO

            X       Y       DUMMY
```
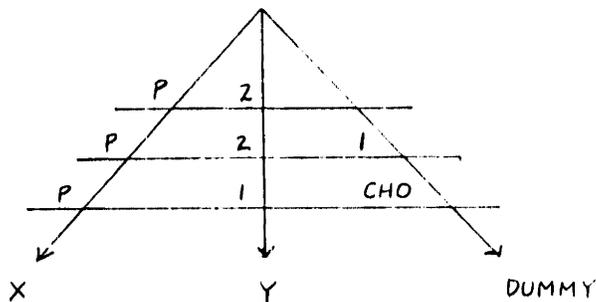
Nevertheless, (a) is ill-formed: the Nuclear Dummy Law permits a dummy to bear only the 1-relation or the 2-relation.

[36]The 1-Advancement Exclusiveness Law is motivated by considerations such as the following: languages do not allow multiple passivization in a single clause and languages (e.g., Cebuano, Tagalog, Malagasy) in which a variety of nominal types (e.g., 2s, 3s, BENs, INSTs) can advance to subject permit only a single advancement to subject in a clause. See Perlmutter and Postal (1984b).

clause is predicted to be ungrammatical.[37] The stratal diagram in (58), therefore, is claimed not to represent a well-formed sentence in any language. On the other hand, the passive of an initially unergative clause is predicted to be well-formed.

In support of these predictions, Perlmutter cites data from Dutch. The impersonal passives of clauses containing predicates which are semantic unergatives are grammatical.

(59) Perlmutter's (33), (37), (38)

    a. Er wordt voor de koning geknield.

      'It is kneeled before the king.'

    b. Door deze mensen wordt er altijd gevochten.

      'By these people it is always fought.'

    c. Er wordt hier veel geskied.

      'It is skied here a lot.'

But, as predicted, the impersonal passives of clauses containing predicates which are semantic unaccusatives are ungrammatical.

---

[37]Consider the following stratal diagram, which appears to represent the passive of an initially unaccusative clause. No law of Relational Grammar has been violated here.

(a)
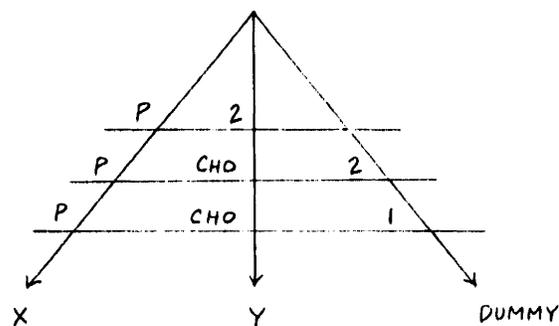
But this is not a passive structure as characterized by Perlmutter: "...in the stratum in which the advancee to 1 bears the 2-relation, there is no 1. Thus [(a)] is an unaccusative structure and not a passive structure. Internal to particular languages, [(a)] will not satisfy the conditions for passive morphology (Perlmutter 1978, p. 167)."

(60) Perlmutter's (51b), (52b), (68b)

    a. *Door de lijken werd al gerot/ontbonden.

      'It has already been rotted/decomposed by the corpses.'

    b. *In dit weeshuis wordt er door de kinderen erg snel
      gegroeid.

      'In this orphanage it is grown very fast by the children.'

    c. *In de zomer wordt er hier vaak verdronken.

      'In the summer it is drowned here frequently.'

In conclusion, Perlmutter writes,

> The constrasts between grammatical and ungrammatical impersonal passives
> presented here follow entirely from principles of universal grammar.... Each
> of these proposed linguistic universals is motivated by data that has nothing
> to do with impersonal passives. The fact that they predict the constrasts
> between grammatical and ungrammatical impersonal passives in Dutch thus
> provides an explanation of those contrasts. At the same time, the Dutch data
> provides empirical support for [these] principles of universal grammar.... (p.
> 175)

It appears that, for the Dutch data at least, the burden of explanation falls on proponents of frameworks which do not incorporate the universal principles alluded to by Perlmutter, in particular, the universal advancement analysis of passive, the Unaccusative Hypothesis, and the 1-Advancement Exclusiveness Law.

2.3.2. Turkish Impersonal Passives and the Unaccusative Hypothesis

Dutch was not the only language Perlmutter used in his 1978 paper to illustrate the predictions about impersonal passives which emerge from his framework; data from Turkish was also cited. The problem is, these data are not entirely correct, and the actual facts do not fall neatly out of the framework he outlined.

Let me begin by presenting the data that appear in Perlmutter (1978).

(61) Impersonal Passives of Unergative Clauses
Perlmutter's (95-100) and (110a)

a. Burada çalış-ıl-ir/oyna-n-ır/bağır-ıl-ır.
here work-PASS-PRS/play-PASS-PRS/shout-PASS-PRS

'It is worked/played/shouted here.'

b. Burada sık sık yüksek ses-le konuş-ul-ur.
here often high voice-with speak-PASS-PRS

'It is often spoken in a high voice here.'

c. Burada sık sık kavga ed-il-ir.
here often fight-PASS-PRS

'It is often fought here.'

d. Burada gece-nin geç saat-ler-in-e kadar
here night-GEN late hour-PLU-POSS-DAT amount

dans ed-il-ir.
dance-PASS-PRS

'It is often danced here until the late hours of
the night.'

e. Burada mızikçilik ed-il-me-z.
here cheat-PASS-NEG-PRS

'It is not cheated here.'

f. Düşman-dan kaç-ıl-ma-z.
enemy-ABL run away-PASS-NEG-PRS

'It is not run away from the enemy.'

g. Bu gibi fıkra-lar-a gül-ün-me-z
this such joke-PLU-DAT laugh-PASS-NEG-PRS

de gülümse-n-ir.
but smile-PASS-PRS

'At such jokes it is laughed not smiled.'

(62) Impersonal Passives of Unaccusative Clauses
Perlmutter's (101-108) and (110b)

a. *Buharlaş-ıl-dı/çür-ün-dü/kok-ul-du.
evaporate-PASS-PST/rot-PASS-PST/smell-PASS-PST

'It was evaporated/rotted/smelled.'

b. *Damla-n-ir/fişkir-il-ir.
   drip-PASS-PRS/gush-PASS-PRS

   'It is dripped/gushed.'

c. *Sonbahar-da sarar-il-ir.
   fall-LOC   yellow-PASS-PRS

   'In the fall it is yellowed.'

d. *Buz-un   üst-ün-de   sik sik düş-ül-ür.
   ice-GEN top-POSS-LOC often   fall-PASS-PRS

   'It is often fallen on the ice.'

e. *Yaz-in   burada boğul-un-ur.
   summer-GEN here   drown-PASS-PRS

   'It is drowned here in the summer.'

f. *Bu   yetimhane-de çabuk büyü-n-ür.
   this orphanage-LOC fast grow-PASS-PRS

   'It is grown quickly in this orphanage.'

g. *Bu   gibi durum-lar-da   öl-ün-ür.
   this such situation-PLU-LOC die-PASS-PRS

   'It is died in such situations.'

h. *Bu   gibi fikra-lar-da kizar-il-ir.
   this such joke-PLU-LOC blush-PASS-PRS

   'It is blushed at such jokes.'

There is no disagreement about the grammaticality of the unergative passives in (61). However, the claim that all the unaccusative passives in (62) are ungrammatical is untenable. Informants consulted by me and by Özkaragöz (1979) judged the sentences in (62d-h) to be grammatical. All of the following are acceptable as well.

(63)a. Bu   sicak-lar-da terle-n-ir.
       this hot-PLU-LOC   sweat-PASS-PRS

       'It is sweated in this hot weather.'

b. Sonbahar-da deniz-den çik-inca   titren-il-ir.
   spring-LOC sea-ABL   come out-ADV shiver-PASS-PRS

   'After one gets out of the sea in the spring, it
   is shivered.'

c. Burada çabuk ihtiyarlan-ıl-ır.
   here fast get old-PASS-PRS

   'It is gotten old quickly here.'

d. Yağmur yağ-ınca Serencebey yokuş-un-da kay-ıl-ır.
   rain   fall-ADV   hill-POSS-LOC slip-PASS-PRS

   'After it rains, it is slipped on S. hill.'

e. Bu   ay-da   hastalan-ıl-ır.
   this month-LOC get sick-PASS-PRS

   'It is gotten sick in this month.'

f. Bu   yetimhane-de akıllan-ıl-ır.
   this orphanage-LOC get smart-PASS-PRS

   'It is gotten smart in this orphanage.'

g. Şu   orman-da sık sık kaybol-un-ur.
   that forest-LOC often   disappear-PASS-PRS

   'It is often disappeared in that forest.'

The predicates in (62d-h) and (63) all describe non-volitional events. Thus, many verbs which, on semantic grounds, are expected to determine initially unaccusative strata prove to be passivizable in Turkish, counter to Perlmutter's prediction. But is this a serious challenge to the framework Perlmutter outlined? Before that question can be taken up, we must take an inventory of the data already presented and consider some additional facts.

2.3.2.1. Taking Stock of the Facts

Intransitive verbs whose surface subjects are agents or actors may impersonally passivize in Turkish. A sample is given below.

(64)   ağlamak (to cry)
       çalişmak (to work)
       dans etmek (to dance)
       gelmek (to come)
       girmek (to enter)
       gitmek (to go)
       giyinmek (to dress oneself)
       gülmek (to laugh)
       kaçmak (to run away, escape)
       kavga etmek (to fight)

konuşmak (to speak)
kosmak (to run)
öksürmek (to cough)
uçmak (to fly)
yıkanmak (to wash oneself)
yürümek (to walk)
yüzmek (to swim)

The same is true of intransitive verbs which take semantic experiencers or cognizers as surface subjects.

(65)   iğrenmek (to be disgusted)
korkmak (to fear)
şaşmak (to be surprised, confused)
usanmak (to be bored)
utanmak (to be ashamed, embarrassed)
üzülmek (to be sorry, worried)

Some intransitive predicates whose surface subjects are semantic patients passivize.

(66)   akıllanmak (to get smart)
arkadaş olmak (to become a friend)
asker olmak (to become a soldier)
büyümek (to grow)
hastalanmak (to get sick)
ihtiyarlanmak (to get old)
iyileşmek (to get well)
ölmek (to die)
terlemek (to sweat)
titremek (to shiver)

Others never do.

(67)   akmak (to flow)
batmak (to set, of a heavenly body)
buharlaşmak (to evaporate)
cızlamak (to burn with a sizzling sound)
çökmek (to collapse)
damlamak (to drip)
doğmak (to rise, of a heavenly body)
erimek (to melt)
eskimek (to become worn out, of inanimates)
fıskırmek (to gush)
kaynamak (to boil)
taşmak (to boil over, overflow)
tutmak (to emit smoke)

An examination of the lists above suggests that the passivizability of an intransitive predicate is linked to the animacy of its surface subject, not to that nominal's semantic role. That is, intransitive predicates which take animate subjects have grammatical impersonal passives while intransitive predicates which take only inanimate subjects do not. Confirmation that animacy is in fact crucial comes from an examination of intransitive predicates which impose no animacy restrictions on their surface subjects. Consider the following pairs of sentences, each of which contains the same (non-volitional) predicate.

(68)a. Bu   gibi haberler-e insanlar sarar-ir.
         this such news-DAT   people   turn yellow-PRS

         'People turn yellow (pale) at such news.'

     b. Sonbahar-da yapraklar sarar-ir.
         fall-LOC   leaves   turn yellow-PRS

         'Leaves turn yellow in the fall.'

(69)a. Bu   gibi fikralar-da insanlar kizar-ir.
         this such jokes-LOC   people   turn red-PRS

         'People turn red (blush) at such jokes.'

     b. Bu   firin-da börek iyi kizar-ir.
         this oven-LOC   well turn red-PRS

         'Börek (a kind of pastry) roasts well in this oven.'

(70)a. Kiş-in   Sibirya-da   insanlar don-du
         winter-GEN Siberia-LOC people   freeze-PST

         'People froze in Siberia in the winter.'

     b. Bu   buz dolabin-da   herşey   don-du.
         this refrigerator-LOC everything freeze-PST

         'Everything froze in this refrigerator.'

All of the (a) sentences have closely related impersonal passives, but none of the (b) sentences do. For instance, the first passive below, in which the unspecified nominal is taken to be 'people', is grammatical; the second, in which the unspecified nominal is understood to be some food item(s) is ungrammatical.

```
(71)a.  Bu    gibi fıkralar-da kızar-ıl-ır.
        this such jokes-LOC    turn red-PASS-PRS

        'It is blushed at such jokes (by people).'

   b. *Bu   fırın-da iyi  kızar-ıl-ır.
       this oven-LOC well turn red-PASS-PRS

        'It is roasted well in this oven (by food).'
```

Each of these sentences forces a particular animacy reading on the unspecified nominal. When the impersonal passive is neutral, the unspecified nominal is still taken to be animate, never inanimate. For instance, the intransitive verb *yanmak* (to burn) can be predicated of living or non-living things.

```
(72)a.  İnsanlar yazın    yan-ar.
        people   in summer burn-PRS

        'In the summer, people burn.'

   b.  Evler    yazın    yan-ar.
       houses in summer burn-PRS

        'In the summer, houses burn down.'
```

But the impersonal passive in (73) can only be understood to be about living things.

```
(73)  Yazın    yan-ıl-ır.
      in summer burn-PASS-PRS

      'In the summer, it is burned (by people).'
```

Finally, consider the two verbs *kanamak* (to bleed) and *terlemek* (to sweat). Both take semantic patients, but the speakers I have consulted permit only the latter to passivize. This fact is surely related to another: for these speakers, beings sweat but parts of beings bleed.

```
(74)a.  Hasan terle-di/*kana-dı.
              sweat-PST/bleed-PST

        'Hasan sweated/bled.'

   b.  Hasan-ın  bacağ-ı  kana-dı.
       GEN leg-POSS bleed-PST

        'Hasan's leg bled.'
```

We can conclude, then, that the unspecified nominal in an impersonal passive is always interpreted as animate; if, for one reason or another, the action or event described by the sentence is not something which an animate being can perform or experience, the sentence is judged ill-formed.

Actually, this doesn't go quite far enough. Predicates describing sounds made by animals, which Perlmutter (1978) classified as unergatives, do not passivize in Turkish. To be more precise, they do not passivize on the expected reading. For example, (75a) below is ungrammatical on the reading 'dogs bark here,' but speakers accept it on the reading 'people bark here.'

```
(75)a. *Burada havla-n-ir.
        here    bark-PASS-PRS

       'It is barked here (by dogs).'

    b. *Burada sik sik mele-n-ir.
        here    often    bleat-PASS-PRS

       'It is often bleated here (by sheep).'

    c. *Şu    orman-da  çok  öt-ül-ür.
        that forest-LOC much chirp-PASS-PRS

       'It is chirped a lot in that forest (by birds).'
```

Predicates describing acts which only animals can perform are also non-passivizable.

```
(76) *İlkbahar-da kuzula-n-ir.
      spring-LOC   lamb-PASS-PRS

     'In the spring it is lambed (by ewes).'
```

Furthermore, while predicates which describe acts performable by humans and non-humans alike are passivizable, the resulting impersonal passive is almost always interpreted as being about people only.

```
(77) Sabahleyin ahir-dan   çayir-a      gid-il-ir.
     in morning stable-ABL pasture-DAT go-PASS-PRS

     'In the morning it is gone from the stable to the
     pasture (by people).'
```

So, the unspecified nominal in an impersonal passive is generally required to be [+human], not simply [+animate]. I will henceforth refer to it as PRO.[38]

---

[38]Impersonal passives are not invariably interpreted as being about people's, and only people's, acts and experiences. Each of the following sentences was judged acceptable on the reading given by at least one native speaker.

    a. Bu   çiftlik-te çabuk büyü-n-ür.
        this farm-LOC   fast grow-PASS-PRS

        'It is grown quickly on this farm (by people, farm
        animals, crops).'

    b. Yuva-ya   bahçe-den uç-ul-du.
        nest-DAT garden-ABL fly-PASS-PST

        'It was flown from the garden to the nest (by birds).'

    c. Bu   kafes-ten kaç-ıl-ır.
        this cage-ABL   escape-PASS-PST

        'It was escaped from this cage (by animals).'

    d. İlkbahar-da gebe kal-ın-ır.
        spring-LOC   become pregnant-PASS-PRS

        'In the spring it is become pregnant (by females).'

Nevertheless, speakers very rarely volunteer translations of impersonal passives which fail to predicate something of people and most speakers, even when pressed, claim that sentences which could in principle be about a variety of living beings are just about human beings.

All of the impersonal passives which I collected which were not judged to be exclusively about human beings contained verbs which can equally naturally predicate things of humans and non-humans. Verbs which typically select non-human subjects (e.g., havlamak, to bark) and verbs which require them (e.g., kuzulamak, to lamb) are either unacceptable on any reading or only acceptable on the 'people' reading. This is an odd finding, and I have no explanation for it. It may not even hold up to further scrutiny.

2.3.2.2. Conclusion

It is quite clear from the above discussion that Turkish impersonal passives provide no striking evidence in favor of Perlmutter's framework. We expected a correlation between the passivizability of a one-place predicate and the kind of act it describes (e.g., willed vs. non-willed) or, alternatively, the kind of semantic role its argument has. But we didn't find it. Instead we found that an intransitive predicate was passivizable as long as its initial nuclear term was PRO. Given this, there is no need to appeal to the Unaccusative Hypothesis, the advancement analysis of Passive, and the 1-Advancement Exclusiveness Law to explain why a sentence such as (80) below is ungrammatical.

(78) *Burada damla-n-ir.
      here   drip-PASS-PRS

      'Here it is dripped.'

It is semantically anomalous in the same way (79) is.

(79) *İnsanlar burada damla-r.
      people   here   drip-PRS

      'People drip here.'

The question is, is (78) not only semantically ill-formed but syntactically ill-formed as well? That is, does (78) involve two advancements to subject? Additional questions arise about the grammatical sentence in (80).

(80) Burada düş-ül-ür.
      here   fall-PASS-PRS

      'Here it is fallen.'

Assuming the validity of the 1-Advancement Exclusiveness Law, (80) must involve no more than a single advancement to subject. Is this to be achieved by assigning the clause to an initial unergative stratum (in spite of the fact that *düş-* takes a semantic patient) or by denying that impersonal passivization in Turkish is 2-1 Advancement? If

we choose the latter, then no impersonal passive will be characterized as being syntactically ill-formed by virtue of having undergone two advancements to subject.

It is obvious that the data presented so far are compatible with a number of different analyses and, furthermore, that none of these analyses incorporates all of Perlmutter's assumptions. In the next section I discuss a set of facts which clarify exactly which assumption needs to be given up.

2.3.3. Double Passives

If both personal and impersonal passivization in Turkish involve 2-1 Advancement and if the 1-Advancement Exclusiveness Law bars more than one advancement to subject in a clause, then it should never be possible to passivize a passive clause. Özkaragöz (1982) argues, however, that there are grammatical sentences in Turkish formed by impersonally passivizing a personal passive. Some examples follow, the first three of which are from Özkaragöz (1982). Note that each sentence contains a verb which is suffixed with two passive morphemes.

(81)a. Bu   şato-da   boğ-ul-un-ur.
         this chateau-LOC strangle-PASS-PASS-PRS

         'In this chateau one is strangled by one.'

   b. Bu   oda-da   döv-ül-ün-ür
       this room-LOC beat-PASS-PASS-PRS

       'In this room one is beaten by one.'

   c. Harp-te vur-ul-un-ur.
       war-LOC shoot-PASS-PASS-PRS

       'In war one is shot by one.'

   d. Rusya-da   Sibirya-ya gönder-il-in-ir.
       Russia-LOC Siberia-DAT send-PASS-PASS-PRS

       'In Russia one is sent by one to Siberia.'

   e. Bu   okul-da   çalış-tır-ıl-ın-ır.
       this school-LOC work-CAUS-PASS-PASS-PRS

       'In this school, one is made to work by one.'

```
f.  Bu   hastahane-de iyi  bak-il-in-ir.
    this hospital-LOC well care for-PASS-PASS-PRS
```

'In this hospital one is cared for well by one.'

```
g.  Tevkif ed-il-in-ir-di.
    arrest-PASS-PASS-PRS-PST
```

'One used to be arrested by one.'

Each of these sentences is superficially subjectless. Furthermore, the underlying subject and direct object, both of which are unrealized in these examples, are understood to be some unspecified set of human beings, i.e., PRO.[39]

Özkaragöz (1962) argues that the representation of these monoclausal double passives is closer to that in (82) below than to that in (83). In the first, there are two instances of a direct object in a transitive stratum undergoing advancement to subject in the subsequent stratum. The morphological component registers the advancements by suffixing the verb with two passive morphemes.

(82)
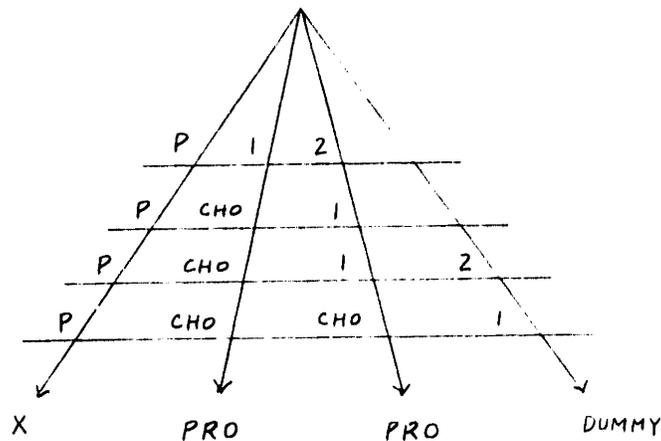
In the alternative representation, 2-1 advancement occurs only once. The appearance of two passive morphemes is interpreted as follows: one registers the advancement, the other registers the presence of a final unspecified PRO subject.

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[39]While the initial direct object must be PRO, this is not true of the initial subject. I discuss this in more detail below.

(83)
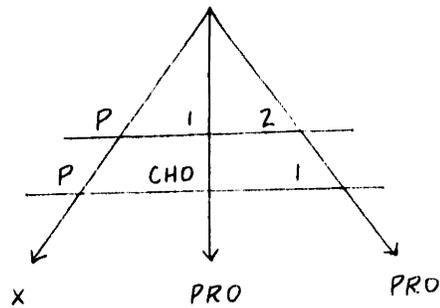
The evidence that Özkaragöz presents in favor of (82) is actually evidence that the initial direct object of a monoclausal double passive does not bear the 1-relation in the final stratum. One argument is based on the fact that PRO is accessible to relativization when it is a final subject but not when it is a final chomeur. (84a) and (84b) illustrate, respectively, relativization of an active PRO subject and a passive PRO subject. Note that the head of the relative clause (RC) is unrealized.

> (84)a. hapishane-den kaç-an
>   prison-ABL   escape-RC
>
>   'people who escaped from the prison'
>
>   b. tevkif ed-il-en
>   arrest-PASS-RC
>
>   'people who were arrested'

When PRO is the initial subject/final chomeur of an impersonal passive (see (85a)), it is not accessible to relativization, (see (85b)).

> (85)a. Hapishane-den kaç-il-dı.
>   prison-ABL   escape-PASS-PST
>
>   'People escaped from the prison.'
>   'It was escaped from the prison by people.'
>
>   b. *hapishane-den kaç-ıl-an
>   prison-ABL   escape-PASS-RC
>
>   'people who escaped from the prison'
>   'people by whom it was escaped from the prison'

Consider now the double passive clause in (86a). Neither the initial PRO subject nor the initial PRO direct object is relativizable: (86b) is garbage on any reading.

```
(86)a.   Tevkit ed-il-in-di.
         arrest-PASS-PASS-PST

         'People were arrested by people.'

    b.  *tevkif ed-il-in-en
         arrest-PASS-PASS-RC
```

This fact is in accord with (82) (both the initial direct object and subject are analyzed as final chomeurs) but not with (83) (the initial direct object is analyzed as a final subject).

Özkaragöz's second argument grows out of a set of observations made by Hankamer and Knecht (1976) about the morphology of relative clauses. Relative clauses are nominalized in Turkish, and there are two distinct nominalization patterns. In the so-called 'subject participle' (SP) pattern, a participle suffix, typically -yEn, is attached to the verb stem. The 'object participle' (OP) pattern is more complex: the verb gets a participle suffix, typically -dIg, the subject of the relative clause is marked genitive, and the participle is suffixed with the agreeing possessive marker. Hankamer and Knecht propose that the SP pattern is chosen in two circumstances: (i) the subject of the relative clause or any part of it is relativized or (ii) a non-subject or any part of it is relativized and the relative clause has no subject; otherwise, the OP pattern is chosen. In place of "has no subject" in (ii), we can substitute "has a final dummy subject" since the clauses which Hankamer and Knecht analyzed as subjectless are represented in Relational Grammar as having a dummy 1 in the final stratum. Impersonal passives are a prime example. Note that no matter what is relativized in an impersonal passive, the SP pattern is always chosen:

```
(87)a.   Adam-in ev-in-den        plaj-a      gid-il-di.
         man-GEN house-POSS-ABL beach-DAT go-PASS-PST

         'It was gone from the man's house to the beach.'
```

b. [ev-in-den   plaj-a   gid-il-en] adam
   house-POSS-ABL beach-DAT go-PASS-SP   man

'the man from whose house it was gone to the beach'

c. [adam-ın ev-in-den   gid-il-en] plaj
   man-GEN house-POSS-ABL go-PASS-SP beach

'the beach to which it was gone from the man's house'

Turning to the double passive construction, if its final subject is a dummy, as claimed by (82), then relativization of an oblique nominal should require the SP pattern. On the other hand, if (83) is correct, we expect the OP pattern. Again, the facts are consistent with (82).

(88) Özkaragöz's (33) and (34)

a. Boğ-ul-un-an   şato
   strangle-PASS-PASS-SP chateau

'the chateau where one is strangled by one'

b. *Boğ-ul-un-duğ-u   şato
   strangle-PASS-PASS-OP-POSS chateau

There is a third piece of evidence that the construction under investigation is the impersonal passive of a personal passive. Recall that the initial subject/final chomeur of a personal passive may be specified; if it is unspecified, it does not have to be interpreted as PRO.

(89)a. Harp-te insan   askerler tarafından vur-ul-ur.
     war-LOC person soldiers by   shoot-PASS-PRS

'In war people are shot by soldiers.'

b. Burada insan ısır-ıl-ır.
   here   person bite-PASS-PRS

'Here people are bitten (by dogs).'

In impersonal passives, on the other hand, the final chomeur is always unspecified and always interpreted as PRO. Given this, if a monoclausal double passive is an impersonally passivized personal passive, we would expect to find sentences containing a

single *tarafından* phrase which corresponds to the initial subject (and only the initial subject) of the sentence. Speakers I have consulted find the following acceptable.

(90) Harp-te askerler tarafından vur-ul-un-ur.
     war-LOC soldiers by   shoot-PASS-PASS-PRS

     'In war, one is shot by soldiers.'
     (but not, 'In war soldiers are shot by one.')

It is also possible to interpret the unspecified initial subject/final chomeur as something other than PRO.

(91) Köpek külübe-sin-de   ısır-ıl-ın-ır.
     dog   kennel-POSS-LOC bite-PASS-PASS-PRS

     'In a dog kennel, one is bitten (by dogs).'

However, the initial direct object must be PRO. Thus, when a verb which does not take a [+human] direct object is doubly passivized, the result is semantically ill-formed (#).

(92) #Burada tamir ed-il-in-ir.
      here   repair-PASS-PASS-PRS

     'Here one is repaired by one.'

There seems little doubt, then, that personal passives can be impersonally passivized in Turkish and that the initial subject and direct object of a double passive both bear the chomeur-relation in the final stratum. However, it is a giant step from this to accepting the analysis of double passives embodied by (82). And since (82) violates the 1-Advancement Exclusiveness Law, it is not an analysis one is eager to adopt. Of course, there is an alternative available: we reject the claim that impersonal passivization in Turkish involves 2-1 Advancement[40] and propose in its stead that impersonal passivization is (motivated) subject demotion, as illustrated by (93).

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[40]Postal (to appear) independently concludes that impersonal passivization in Turkish does not involve 2-1 Advancement.

75

(93)
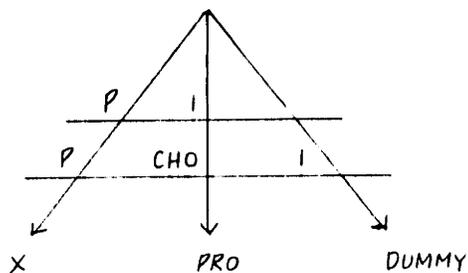
I characterize the rule as follows:

(94)   Impersonal Passivization

If PRO heads a 1-arc in stratum c_n and no nominal heads a 2-arc in c_n, then in stratum c_{n+1}, a dummy heads a 1-arc.[41]

The impersonal passive of a personal passive would thus have the representation in (95), which respects the 1-Advancement Exclusiveness Law.

(95)
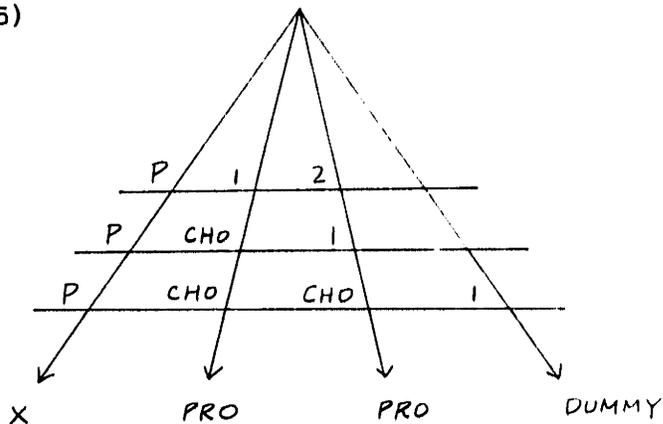
[41]There is a problem here: some PROs which bear the 1-relation in an intransitive stratum are not put into chomage by a dummy, i.e., impersonal passivization is not invariably obligatory. Specifically, PRO does not have to be demoted in non-finite clauses where there is no agreement of any kind between the subject and verb. This includes relative clauses in which a PRO subject is relativized (see example (84a) and the discussion that surrounds it) and -mek infinitival clauses, e.g., Öğren-mek kolay değil ('To learn is not easy'). Having noted this, I will not complicate the statement of impersonal passivization.

The claim that impersonal passivization in Turkish does not involve an advancement to subject not only accounts for the grammaticality of monoclausal double passives but also for the grammaticality of passives containing predicates which are taken to occur in initial unaccusative strata.[42] So long as a predicate can head an arc in an intransitive stratum[43] which also contains a 1-arc headed by an unspecified, [+human] nominal, it can occur in an impersonal passive.

2.3.3.1. Conclusion

If there was independent motivation in Turkish for the 1-Advancement Exclusiveness Law, it would be quite clear that the assumption that Turkish impersonal passivization involves 2-1 Advancement is the assumption to give up in order to account for the facts presented above. However, I am not aware of any independent support for this law in Turkish.

In any event, by proposing that impersonal passivization in Turkish is essentially just subject demotion, we are not rescuing one proposed universal, the 1-Advancement Exclusiveness Law, at the expense of another. Passive can still be claimed to involve 2-1 Advancement universally. However, the impersonal passive construction in Turkish can no longer be claimed to be a real passive construction.

It is worth noting that impersonal passivization in Lithuanian (Timberlake 1962) has many of the same properties as impersonal passivization in Turkish: one finds not only impersonal passives of clauses with predicates which are semantic (and, according to

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[42]As yet, no evidence has been adduced that a subset of intransitive predicates in Turkish actually determine initially unaccusative strata. On the other hand, we have seen no counter-evidence either. I take up the issue of unaccusativity in Chapter 4.

[43]I cannot explain why there are no impersonal passives of transitive clauses in Turkish, i.e., why a nominal which bears the 1-relation in a transitive stratum cannot undergo demotion (without the 2 undergoing 2-1 Advancement).

Timberlake, syntactic) unaccusatives but also impersonal passives of passive clauses. But in Lithuanian, there are facts which support adoption of the 1-Advancement Exclusiveness Law. Timberlake, therefore, concludes that impersonal passivization in Lithuanian does not involve 2-1 Advancement.

One potential problem arises if Turkish impersonal passives are analyzed quite differently from personal passives: the occurrence of the verbal suffix -I/ in personal and impersonal passives cannot be linked to an application of 2-1 Advancement from a transitive stratum. So, what principle accounts for the distribution of this suffix? The obvious suggestion is that -I/ is associated with the demotion of a subject to chomeur. Sentences such as the following are the only potential stumbling block for this principle.

(96) Kapi-nin alt-in-dan   su   ak-iyor.
      door-GEN underneath-POSS-ABL water flow-PRG

      'Water is flowing under the door.'

There are respects in which the initial subject of this clause, *su*, does not behave like a final subject. If it can be argued to be a final chomeur, then it cannot be true that demotion of a subject has as its morphological reflex suffixation of -I/ to the verb. I return to this issue in Chapter 3.

2.3.4. Are There Dummies in Impersonal Passives?

I proposed above that impersonal passivization in Turkish involves having a PRO subject put into chomage by a dummy. Thanks to the dummy, the representation of an impersonal passive satisfies both the Motivated Chomage Law and the Final 1 Law. The question is, does the dummy do anything more than ensure that these two laws are satisfied? In other words, is there any empirical evidence in Turkish that an impersonal passive has a final dummy subject?

Most of the properties of impersonal passives are equally well accounted for if

they are analyzed as being finally subjectless or, instead, as having a final invisible dummy subject. Consider agreement phenomena, for example. In a finite impersonal passive, the verb is always inflected for third person singular agreement, which is to say, not marked at all. One could either propose that the verb agrees with a third person singular dummy subject or that, when there is no subject, the verb appears in its least marked form, i.e., default agreement is third person singular. Either analysis is compatible with another fact mentioned earlier: in embedded, nominalized clauses, the subject is marked genitive and a possessive marker which agrees with the subject in person and number is suffixed to the participle; in a nominalized impersonal passive such as (97), the participle is suffixed with a third person singular possessive marker.

(97)   İris [o   köpek-ten   kork-ul-duğ-un-u]
              that dog-ABL   fear-PASS-PART-POSS:3s-ACC

        söyle-di.
        say-PST

        'Iris said that that dog is feared.'

One construction which might enable us to distinguish between the claim that an impersonal passive has no subject and the claim that it has a final dummy subject is a raising construction. What would be ideal is an optional raising rule which left unambiguous morphological signs that it had applied. Unfortunately, Turkish does not cooperate in this regard. The best it has to offer is an optional rule of SOR, which in the crucial cases cannot be judged to have applied on the basis of morphology alone. SSR is obligatory with some predicates and optional with others; as with optional SOR, it is difficult to tell in the critical cases whether optional SSR has applied. In any event, below I look at a predicate which has been claimed to trigger SSR obligatorily. It should help to resolve the dummy question, but I don't think it does. The problem lies in the fact that there are two different ways to interpret the properties of this predicate, and the argument for a dummy in impersonal passives only goes through on one of the interpretations.

Kornfilt (1976a) suggests that complex sentences such as the following are derived by SSR.[44]

> (98) (Ben) her akşam viski iç-er ol-du-m.
>   1s   every evening whiskey drink-PRS become-PST-1s
>
>   'It's gotten to be the case that I drink whisky every evening.'

The nominal which is interpreted as the subject of the embedded clause functions here as the subject of the matrix verb *ol-* (be, become). The embedded verb is semi-finite: marked for tense but not for agreement. In fact, the embedded verb may never agree with the NP that corresponds to its subject.

> (99)a. *(Ben) her akşam viski iç-er-im   ol-du-m.
>   1s   drink-PRS-1s become-PST-1s
>
>   b. *(Ben) her akşam viski iç-er-im   ol-du.
>   1s   drink-PRS-1s become-PST

Kornfilt proposes that SSR is obligatory with *ol-*.

The claim that SSR rather than Equi has applied in (97) is supported by the fact that *ol-* imposes no selectional restrictions on its surface subject, which suggests that this nominal does not bear a thematic relation to *ol-*. In the following sentence, the subject of *ol-* is an idiom chunk.[45]

---

[44] I am not sure if the translations I give of the sentences below are completely appropriate.

[45] I should say that it appears to be an idiom chunk; I cannot argue that the subject of *ol-* is *fırça*, rather than the sentential subject *fırça her gün Aliye atılır*. For instance, *ol-* would be marked for third person singular agreement in either case. (I know of no phrasal idioms which contain first or second person pronouns.)

(100) *birisine fırçayı at-*
        'get angry at someone'
        (lit: 'throw the brush at someone')

        Fırça her   gün Ali-ye at-ıl-ır   ol-du.
        brush every day   -DAT throw-PASS-PRS become-PST

        'It's gotten to be the case that someone gets angry at Ali
        every day.'
        (lit: 'It's gotten to be the case that the brush is
        thrown at Ali every day.')

Additionally, the following sentences are synonymous.

(101)a. Birisi   her   sabah   ben-i ziyaret ed-er ol-du.
         someone every morning 1s-ACC visit-PRS   become-PST

         'It's gotten to be the case that someone visits me
         every morning.'

    b. (Ben) her   sabah   birisi   tarafından ziyaret ed-il-ir
        1s   every morning someone by   visit-PASS-PRS

        ol-du-m.
        become-PST-1s

        'It's gotten to be the case that I am visited by
        someone every morning.'

Finally, if *ol-* is an Equi verb, we predict an ill-formed sentence when the
complement of *ol-* is an impersonal passive, regardless of whether impersonal passives
are analyzed as lacking a final subject or as having a final dummy subject. However,
the following sentence is grammatical.

(102) Her   gün İstanbul-dan Ankara-ya gid-il-ir
       every day   -ABL   -DAT go-PASS-PRS

       ol-du.
       become-PST

       'It's gotten to be the case that it is gone from
       Istanbul to Ankara every day.'

The grammaticality of (102) could be taken as evidence not only that *ol-* is a SSR
predicate but also as evidence that impersonal passives are not subjectless. That is, if
SSR is characterized as being obligatory with *ol-* and if impersonal passives are taken
to be subjectless, then there is nothing in (102) which can undergo SSR and the

sentence is incorrectly predicted to be ungrammatical. On the other hand, if an impersonal passive has a final dummy subject, SSR can assign it the subject relation in the matrix clause.

However, note that the argument for a dummy in (102) only goes through if it can be established that the condition on $o/-$ is something like the following: the final 1 of $o/-$ must be the final 1 of the clause embedded under it. However, there is another way to look at $o/-$ which is, I think, equally plausible. One might propose that $o/-$ should be characterized as requiring SSR to apply only when it can apply; in other words, if there is a final 1 in the clause embedded under $o/-$, it must come to bear the 1-relation in the matrix clause. I know of no way to choose between these two alternatives and I therefore conclude that SSR provides no argument for (or against) dummies in impersonal passives. The question of whether an impersonal passive contains the arcs in (103a) or tnose in (103b) remains open.

(103)a.
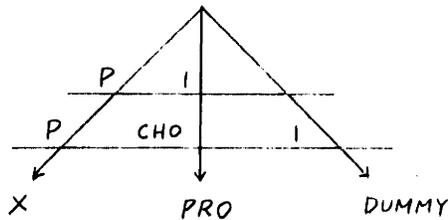
b.
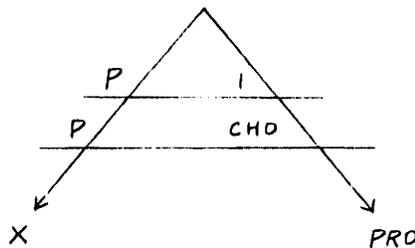
In Chapter 3, I will take up the question of dummies again; at that time I will focus on SOR.

CHAPTER 3

INCORPORATION

3.1. Caseless Direct Objects

3.1.1. Introduction

Some NPs are always marked accusative in Turkish when they function as the direct object of an active transitive verb. This includes pronouns, proper nouns, possessive phrases, and any noun that occurs with a demonstrative.

> (1)a. Ali sen-i sev-iyor.
>   2s-ACC like-PRG
>
>   'Ali likes you.'
>
> b. Köpek Süleyman-i yala-dı.
>   dog   -ACC lick-PST
>
>   'The dog licked Süleyman.'
>
> c. Kemal-in bir kitab-ın-i   kaybet-ti-m.
>   -GEN a   book-POSS:3s-ACC lose-PST-1s
>
>   'I lost one of Kemal's books.'
>
> d. Bu   bina-yi   sev-mi-yor-um.
>   this building-ACC like-NEG-PRG-1s
>
>   'I don't like this building.'

However, accusative casemarking is not always found on other kinds of nominals which appear to be final direct objects. Note that referential definite direct objects, as in (2a) below, are casemarked accusative while non-referential (non-definite) direct objects, as in (2b), are caseless. (The examples in (2), (3) and (4) are from Lewis (1967), although (2a) is slightly adapted.)

```
(2)a.  Gazete-yi      çıkar-mak      zor  bir iş.
        newspaper-ACC  publish-INFIN  hard a   job
```

   'To publish the newspaper is a hard job.'

```
   b.   Gazete    çıkar-mak      zor        bir iş.
        newspaper publish-INFIN  difficult  a   job
```

   'To publish a newspaper/newspapers is a hard job.'

When a direct object is marked indefinite with the article *bir*, accusative casemarking is again associated with a referential reading.

```
(3)  Her    gün bir gazete-yi      oku-yor-um.
     every  day a   newspaper-ACC  read-PRG-1s
```

   'Every day I read a (particular) newspaper.'

But indefinite caseless direct objects are not necessarily non-referential. Consider (4).

```
(4)  Her    gün bir gazete     oku-yor-um.
     every  day a   newspaper  read-PRG-1s
```

   'Every day I read a newspaper.'

A speaker who utters (4) may or may not read a particular newspaper every day; *bir gazete* can be interpreted either as referential or non-referential. In this light, consider (5a&b) below.

```
(5)a.  Bir doktor-u    arı-yor-um
        a   doctor-ACC  look for-PRG-1s
```

   'I'm looking for a (particular) doctor.'

```
   b.   Bir doktor arı-yor-um.
        a   doctor look for-PRG-1s
```

   'I'm looking for a doctor.'

Having said (5b), one could go on to say either (6a) or (6b). But having said (5a), one could not follow with (6a).

(6)a.   Göz doktor-u,[46]   kulak doktor-u,   önemli
          eye doctor-POSS:3s ear   doctor-POSS:3s important

          değil. Sadece bir doktor ol-sun.
          not   only a   doctor be-IMP:3s

          'An eye doctor, an ear doctor -- it's not important;
          just let it be a doctor.'

    b.   İsm-i   Mehlika Bazargan. Burada mı?
          name-POSS:3s   here   Q

          'Her name is Mehlika Bazargan. Is she here?'

On the other hand, a caseless non-definite object cannot be interpreted as referential. It would be very strange to utter (7) below, followed by (6b).

(7)   Doktor arı-yor-um.
       doctor look for-PRG-1s

       'I am looking for a doctor/doctors.'

Not only are some caseless direct objects capable of being interpreted as referential (i.e., indefinite caseless direct objects) but some accusative-casemarked direct objects can be interpreted as non-referential. In particular, non-referential direct objects can be casemarked in statements of general truth. (The following examples are from Dede 1982.)

(8)a.   Çocuklar çikolata/çikolata-yı   sev-er.
          children chocolate/chocolate-ACC like-PRS

          'Children like chocolate.'

    b.   Bir öğretmen öğrenciler-i sev-meli.
          a   teacher students-ACC like-NEC

          'A teacher should like students.'

In fact in (8b), the direct object must be marked accusative because it is animate. There are other complications: whether or not the object is marked plural plays a role

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[46]The head of a nominal compound is suffixed with the third person singular possessive marker.

in its casemarking as does the semantic nature of the verb. These factors will be discussed in more detail in later sections.

Below I compare the syntactic properties of casemarked and caseless direct objects. In the section that immediately follows, I restrict my attention to direct objects which do not occur with *bir*, i.e., casemarked, definite direct objects (such as *gazetey*; in (2a)) and caseless, non-definite, non-referential direct objects (such as *gazete* in (2b)).

3.1.2. Caseless Non-definite Objects

Caseless non-definite direct objects differ from casemarked, definite objects in a number of respects. To begin with, while the latter can occur in many different positions in a sentence, the former are anchored in immediate pre-verbal position. Now, immediate pre-verbal position happens to be focus position in Turkish (see Chapter 1). Notice that a focussed constituent can displace a casemarked definite object from this slot.

```
(3)   A:  Fatoş kitab-ı  al-dı   mı.
              book-ACC buy-PST Q

      B:  Evet al-dı,  ama on-u   anne-si     oku-yor.
          yes  buy-PST but 3s-ACC mother-POSS read-PRG

        'Did Fatoş buy the book?'
        'Yes, she bought it, but her mother is reading it.'
```

But a focussed constituent cannot displace a caseless non-definite object from immediate pre-verbal position.

```
(10)  A:  Hasan-ın  köpeğ-i  mi peynir yi-yor?⁴⁷
          -GEN dog-POSS Q  cheese eat-PRG

      B:  Hayır ye-mi-yor.
          no    eat-NEG-PRG

          *Peynir Fatoş-un  köpeğ-i  yi-yor.
          cheese      -GEN dog-POSS eat-PRG

          'Is Hasan's dog eating cheese?'
          'No, it's not.  Fatos's dog is eating cheese.'
```

Similarly, a casemarked definite object can be backgrounded (in which case it appears in post-verbal position).

```
(11)  Sinema-da  Cahit-e   rastla-dı-m.
      movies-LOC    -DAT meet by chance-PST-1s

      Sev-mi-yor-um    on-u.
      like-NEG-PRG-1s 3s-ACC

      'I ran into Cahit at the movies.  I don't like him.'
```

But a caseless non-definite object cannot be backgrounded.

```
(12)  A:  Türkler çay iç-er     mi?
          Turks   tea drink-PRS Q

      B:  *Sabah   akşam   iç-er-ler    çay.
          morning evening drink-PRS-3p tea

          'Do Turks drink tea?"
          'They drink tea from morning to evening.'
```

Caseless non-definite objects also do not occur in topic (clause-initial) position, but this may be because only definite NPs can be topics in Turkish.

```
(13)  *Et    Bebek-te  al-dı-m.
       meat      -LOC buy-PST-1s

      'I bought meat in Bebek.'
```

Finally, consider the fact that the unmarked position for manner adverbs and

---

[47]As Jorge Hankamer pointed out to me, this sentence presupposes some prior discourse.

question words is immediate pre-verbal position, but they must appear elsewhere if the clause contains a caseless non-definite object.

(14)a.   Zahide kitab-ı yavaş yavaş oku-yor.
             book-ACC slow slow read-PRG

        'Zahide is reading the book slowly.'

    b.   Zahide yavaş yavaş kitap oku-yor.
               slow slow book read-PRG

        'Zahide is reading a book/books slowly.'

    c. *Zahide kitap yavaş yavaş oku-yor.
              book slow slow read-PRG

(15)a.   Kitab-ı kim oku-yor?
             book-ACC who read-PRG

        'Who is reading the book?'

    b.   Kim kitap oku-yor?
            who book read-PRG

        'Who is reading a book/books?'

    c. *Kitap kim oku-yor?
           book who read-PRG

The immobility of non-referential direct objects and their caselessness have suggested to some investigators that such nominals undergo incorporation with their verbs (Aissen 1974a, Hankamer 1971). However, these properties do not necessarily constitute evidence that the nominals combine with their verbs to form a new verb. One could propose that non-definite, non-referential objects cannot be casemarked and that a caseless object is restricted to immediate pre-verbal position. Nevertheless, there are data which support the claim that caseless non-definite objects form a constituent with their verbs.

There is a class of lexical items in Turkish which function equally well as adjectives and adverbs. These include *iyi* (good, well), *yeni* (new, recently), *yavaş* (slow, slowly), *hızlı* (fast, quickly), and *uzun* (long, for a long time). For example,

(16)a. Bir hızlı araba geç-iyor.
        a   fast car   pass-PRG

    'A fast car is passing.'

   b. Fatoş hızlı koş-uyor.
             fast run-PRG

    'Fatoş is running fast.'

Erguvanlı (1979a) calls such adverbs 'non-derived' adverbs. She observes that, unlike adverbs derived by suffixation or reduplication, non-derived adverbs can only appear immediately to the left of the verb.[48] Compare *hızlı* with the reduplicated adverb *harıl harıl* (laboriously).

(17) Erguvanlı's (19a-d), p.192

    a. Ali bu   kitab-ı hızlı oku-yor.
            this book-ACC fast read-PRG

        'Ali is reading this book fast.'

    b. *Ali hızlı bu kitab-ı oku-yor.

    c. *Hızlı Ali bu kitab-ı oku-yor.

    d. *Ali bu kitab-ı oku-yor hızlı.

(18) Erguvanlı's (12a-d), p.188

    a. Adam mektub-u   harıl harıl arı-yor.
        man, letter-ACC laboriously search-PRG

        'The man is searching for the letter laboriously.'

    b. Adam harıl harıl mektub-u arı-yor.

    c. Harıl harıl adam mektub-u arı-yor.

    d. Adam mektub-u arı-yor harıl harıl.

When a clause contains a caseless non-definite object, a nonderived adverb cannot occur immediatedly before the verb; it is only permitted immediately before the object.

---

[48]Jorge Hankamer (personal communication) has pointed out to me that *hızlı* looks like it is derived: *hız* (force, vigor) + *lı* (N -> Adj). The crucial point is that the adverb *hızlı* is not derived by suffixation.

(19) Erguvanlɨ's (22a&b), p.193

    a. Ali hɨzlɨ kitap oku-yor.
          fast book read-PRG

      'Ali is reading a book/books fast.'

    b. *Ali kitap hɨzlɨ oku-yor
          book fast read-PRG

If a caseless non-definite object is simply required to occupy immediate pre-verbal position, then we would expect (19a) to be ungrammatical. That is, there would be two constituents, the object and the adverb, competing for a position that only one can occupy. If, on the other hand, the object has incorporated and forms a constituent with the verb, the adverb is free to occupy the position immediately to the left of this complex verb. In short, the grammaticality of (19a) is evidence that its structure is (20a) below rather than (20b).

(20)a. [[Ali]$_{NP}$ [hɨzlɨ]$_{ADV}$ [kitap okuyor]$_V$]$_S$

    b. [[Ali]$_{NP}$ [hɨzlɨ]$_{ADV}$ [kitap]$_{NP}$

        [okuyor]$_V$]$_S$

It is easy to show that the output of incorporation is not a single phonological word. In Chapter 1, I stated that underlying final voiced stops in Turkish remain voiced before vowels but devoice in final position and before a consonant. There must be a word boundary (or at least a boundary stronger than a morpheme boundary) between an incorporated noun and the verb because the final voiced stop in nouns such as /kitab/, /pirinc/, and /armud/ devoice preceding a vowel-initial verb, e.g., 'to buy pears' is [armut almak], not [armud almak]. Additionally, recall that final underlying /g/ devoices like other voiced stops before a consonant or a word boundary but is [ğ], not [g], intervocalically. When a noun with a final, post-vocalic /g/ is incorporated with a vowel-initial verb, /g/ is realized as [k] rather than [ğ]; for example, 'to buy food' is [yemek almak], not [yemeğ almak].

Actually, some speakers do not completely devoice the final stop of an incorporated noun in casual speech. This suggests either that the word boundary (or boundaries) between an incorporated noun and the verb can be weakened or that a special kind of boundary, along the lines of Lees (1961), needs to be posited. In any event, the boundary is never as weak as a morpheme boundary because, as far as I know, the final /g/ of an incorporated noun is never realized as [ğ] before a vowe -initial verb, no matter how casual or rapid the speech.

If the output of incorporation is not a single phonological word, what is it? Examining the assignment of sentence stress in Turkish provides a likely answer. Generally, sentence stress may fall on the verb when all the other elements of the sentence are discourse-presupposed (Erguvanlı 1979a). (Constituents which receive sentence stress will be underlined.)

(21) A: Köpek kedi-yi ısır-dı, değil mi?
          dog   cat-ACC bite-PST not Q

      B: Isır-ma-dı. Köpek kedi-yi yala-dı.[49]
          bite-NEG-PST dog   cat-ACC lick-PST

          'The dog bit the cat, didn't it?'
          'No, the dog licked the cat.'

There is one exception, however: the verb cannot be assigned sentence stress when it has a caseless non-definite object. Sentence stress must fall on the object, even when the verb is prominent in the discourse.

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[49]This sentence is somewhat unnatural since discourse-presupposed NPs are usually omitted.

```
(22)   A:   Murat oda-sin-da      mektup yaz-iyor, değil mi?
            room-POSS-LOC letter write-PRG not    Q

       B:   Hayir, yaz-mi-yor.
            no     write-NEG-PRG

            Mektup oku-yor/*Mektup oku-yor.
            letter write-PRG

            'Murat is in his room writing letters, isn't he?'
            'No, he's reading letters.'
```

What this suggests is that a caseless non-definite object and its verb have the structure of a compound. Note that in lexical compounds, whether verbs or nouns, peak stress is assigned to the primary stressed syllable in the first element of the compound. (The following examples are from Swift (1962).)

```
(23)a.   boyúnbağ 'necktie' (boyun 'neck'; bağ 'bond, tie')

    b.   kizílağaç 'alder' (kizil 'red'; ağaç 'tree')

    c.   ayákkabi 'shoe' (ayak 'foot'; kap 'receptacle')

    d.   kíz lisesi 'girls' school' (kiz 'girl'; lise 'school')

    e.   év kapisi 'house door' (ev 'house'; kapi 'door')

    f.   ispát et- 'prove'

    g.   dáns et- 'dance'

    h.   tráş ol- 'shave self'
```

Stress cannot be shifted to the head of the compound, even when it is contrastive, as in the discourse below.

```
(24)   A:   Portakal reçeli isti-yor-sun, değil mi?
            orange   jelly  want-PRG-2s    not   Q

       B:   Portakal reçeli değil,
            orange   jelly  not

            portakal marmeladi/*portakal marmeladi isti-yor-um.
            orange   marmalade                     want-PRG-1s

            'You want orange jelly, don't you?'
            'Not orange jelly, I want orange marmalade.'
```

So, prominent stress in a compound is always on the leftmost primary stressed syllable.

The impossibility of assigning sentence stress to a verb when it has a caseless non-definite object follows from this if we characterize incorporation in Turkish as the compounding of a noun and a verb.

3.1.3. Caseless Indefinite Objects

Having established that caseless non-definite objects undergo incorporation, I can now turn my attention to caseless indefinite objects, i.e., those that occur with *bir*. Like incorporated objects, they must occupy immediate pre-verbal position. For instance, they ca .iot be displaced from this position by a focussed constituent.

> (25) *Bir kitap Ali oku-yor.
>   a   book   read-PRG
>
>   'Ali is reading a book.'

Their presence in a clause prevents a manner adverb or a question word from occupying its unmarked position immediately before the verb.

> (26)a. Zahide yavaş yavaş bir kitap oku-yor.
>   slow slow a   book read-PRG
>
>   'Zahide is reading a book slowly.'
>
> b. *Zahide bir kitap yavaş yavaş oku-yor.
>   a   book slow slow read-PRG
>
> (27)a. Kim bir kitap oku-yor?
>   who a   book read-PRG
>
>   'Who is reading a book?'
>
> b. *Bir kitap kim oku-yor.
>   a   book who read-PRG

In contrast, an indefinite, accusative-casemarked object has some positional freedom.

> (28)a. Zahide bir kitab-ı yavaş yavaş oku-yor.
>   a   book-ACC slow slow read-PRG
>
>   'Zahide is reading a book slowly.'

It appears to be safe to conclude that caseless indefinite objects, like caseless non-

definite objects, are incorporated. However, the following facts show that this is not the correct conclusion. Recall that non-derived adverbs must occur in immediate pre-verbal position and that in clauses in which incorporation has applied, a non-derived adverb appears immediately before the caseless object, that is to say, immediately before the compound verb of which the object is a subpart. But as Erguvanli (1979a) observes, when a clause contains an indefinite caseless object, a non-derived adverb may not precede it. Nor may it follow it. There is, in fact, no position it can occupy: a nonderived adverb simply cannot co-occur with an indefinite caseless object.

(29) Erguvanli's (21a-d), pp.192-3

a. *Ali hızlı bir kitap oku-yor.[50]
      fast a   book read-PRG

   'Ali is reading a book fast.'

b. *Ali bir kitap hızlı oku-yor.

c. *Hızlı Ali bir kitap oku-yor.

d. *Ali bir kitap oku-yor hızlı.

Erguvanli is surely correct in inferring from the ungrammaticality of (29a) that indefinite caseless objects do not incorporate with their verbs. This also explains why such objects never co-occur with non-derived adverbs: any sentence which contains both an indefinite caseless object and a non-derived adverb contains two constituents which must occur in immediate pre-verbal position. No matter how they are arranged, one of them will not be in the slot it has to occupy.

The incorporability of a noun such as kitap and the non-incorporability of bir kitap suggests that only nouns -- or, better yet, noun stems -- undergo incorporation in Turkish. Restricting incorporation to stems would explain why caseless objects which

---

[50]If this sentence means anything, it means 'Ali is reading a fast (action-packed, fast-moving) book.' In other words, hızlı is interpreted as an adjective modifying bir kitap.

are marked plural do not incorporate. Note that non-derived adverbs cannot co-occur with plural, caseless objects. For instance, in (30) below, *yeni* can only be interpreted as an adjective which modifies *kitaplar*.

```
(30)   Ali yeni     kitap-lar oku-du.
           new/just book-PLU  read-PST

       *'Ali just read hooks.'
       ='Ali read new books.'
```

However, the grammaticality of the following sentence shows that incorporation does not apply just to noun stems. In (31), a noun and its modifying adjective have incorporated (as an NP? separately?), freeing up immediate pre-verbal position for the non-derived adverb, *hizli*.

```
(31)   Sedef hizli resimli     kitap oku-yor.
             fast  illustrated book  read-PRG

       'Sedef is reading illustrated books fast.'
```

In conclusion, incorporation applies to caseless, non-definite, non-referential direct objects; such NPs appear to be restricted to immediate pre-verbal position but they are

actually part of a compound verb.[51]   Caseless, indefinite direct objects do not incorporate although their position is fixed immediately before the verb.   The properties of caseless direct objects are further explored in subsequent sections.

3.2. Non-Referential Subjects

3.2.1. Introduction

The subjects of finite clauses in Turkish are not casemarked, so though casemarking has a role in signalling the definiteness of direct objects, it has none whatever in signalling the definiteness of the subject of a finite verb.   The indefinite article *bir* does play a part, however.   Consider the following sentences.

---

[51]Mithun (1984) discusses a wide range of languages in which noun incorporation "is a solidly morphological device that derives lexical items, not sentences" (p.847).   Of the four types of noun incorporation that she distinguishes, the one that most closely resembles incorporation in Turkish is Type I.   She describes it as follows:

> In this first kind of NI [noun incorporation], a N stem and V stem combine to form a derived intransitive predicate.   The IN's [incorporated nouns] have no syntactic status of their own, so they bear no case-markers....They do not refer to specific entities, but rather qualify their host V's; so they are also unmarked for definiteness or number.   Their non-referential character usually results in their use for habitual activities, for those directed at an unspecified portion of a mass, for those that incompletely affect an individual patient, or for those that are simply part of a greater group effort. (p.890)

Is incorporation in Turkish Type I incorporation or just something like it?   The answer hinges on whether the Turkish rule is a "morphological device that derives lexical items, not sentences."   Given that I argue in Chapter 5 that incorporation must apply after a syntactic rule, it follows that object incorporation in Turkish cannot be a lexical rule and hence that it cannot be an instance of Mithun's Type I incorporation.

(32)a. Çocuk oda-da   uyu-yor.
        child room-LOC sleep-PRG

        'The child is sleeping in the room.'

    b. Oda-da   bir çocuk uyu-yor.
        room-LOC a   child sleep-PRG

        'A child is sleeping in the room.'

As (32a&b) illustrate, the position of the subject also correlates with its definiteness: the unmarked position for a definite subject in Turkish is clause-initial position while the neutral position for an indefinite subject is immediate pre-verbal position.[52] When a subject is not marked indefinite with *bir*, position alone may signal definiteness. This is true not only of those abstract and mass nouns which don't occur with *bir*, but also of count nouns.

(33)a. Su   kapı-nın alt-ın-dan   ak-ıyor.
        water door-GEN underneath-POSS-ABL flow-PRG

        'The water is flowing under the door.'

    b. Kapı-nın alt-ın-dan   su   ak-ıyor.
        door-GEN underneath-POSS-ABL water flow-PRG

        'Water is flowing under the door.'

(34)a. Çocuk oda-da   oku-yor.
        child room-LOC sleep-PRG

        The child is sleeping in the room.'

    b. Oda-da   çccuk oku-yor.
        room-LOC child sleep-PRG

        'A child/some children are sleeping in the room.'

    c. Çocuk-lar oda-da   oku-yor.
        child-PLU room-LOC sleep-PRG

        'The children are sleeping in the room.'

---

[52]Erguvanlı (1979a) claims that inanimate indefinite subjects occur only in immediate pre-verbal position. However, the speakers I have consulted readily accept some sentences with initial inanimate indefinite subjects.

```
    d.  Oda-da     çocuk-lar oku-yor.⁵³
        room-LOC child-PLU sleep-PRG
```

'Some children are sleeping in the room.'

The immediately pre-verbal subjects of the following sentences (from Dede 1982) are interpreted not as indefinite and referential but instead as non-referential (e.g., number is vague in (35a)).

```
    (35)a.  Saat   çal-iyor.
            clock ring-PRG
```

'A clock is/clocks are ringing.'

```
    b.  Amerika-dan bir haber gel-di   mi?
        ABL a       news  come-PST Q
```

'Is there any news from the States?'

Like non-referential direct objects, such subjects have a number of unusual properties. Specifically, they don't act like subjects in some respects. I argue below that this is due to the fact that they are incorporated and are not the final subjects of their clauses. The first argument is based on relativization.

3.2.2. Subject Incorporation

3.2.2.1. Relativization, Comparative Deletion, Non-Derived Adverbs

Relative clauses in Turkish precede their heads; relativization is accomplished by deleting the target in the relative clause which is coreferent with the head. No relative pronoun or complementizer appears. The verb of the relative clause appears in a non-finite form which goes by the traditional name of 'participle'. Subjects, direct objects, indirect objects, obliques, and possessors all relativize. Relativization can also apply into sentential subjects, relative clauses, appositive clauses, and some adverbial clauses (Tato

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[53]This sentence and (34b), among others, are superficially identical to sentences in which definite subjects have been focussed and thus appear in immediate pre-verbal position.

1974). The object of a postposition is not accessible to relativization, however (Carrier 1974). Non-restrictive relative clauses are not distinguished from restrictive relative clauses.

There are two kinds of morphological patterns for relative clauses, illustrated below. In (a), a subject has been relativized; in (b), an object.

(36)a. [portakal-ı yi-yen] keçi
orange-ACC eat-PART goat

'the goat that ate the orange'

b. [keçi-nin ye-diğ-i] portakal
goat-GEN eat-PART-POSS orange

'the orange that the goat ate'

The relative clause in (a) illustrates the 'subject participle' (SP) construction: a participial suffix, in this case -yEn, appears attached to the verb stem. In (b), which exemplifies the 'object participle' (OP) construction, a different participial suffix, -dIg, is attached to the verb, the subject is marked genitive, and a possessive suffix which agrees with the subject in person and number is affixed to the participle.

The participial suffix -yEn is completely unspecified for tense and it occurs only in the SP construction; -dIg occurs only in the OP construction and denotes non-future tense. However, the main difference between these two constructions lies not in the participial suffix but rather in absence or presence of the genitive/possessive marking. Note that the participial suffix -yEcEg (future) can occur in both the SP and OP constructions.

(37)a. [portakal-ı yi-yecek] keçi
orange-ACC eat-SP goat

'the goat that will eat the orange'

b. [keçi-nin yi-yeceğ-i] portakal
goat-GEN eat-OP-POSS orange

'the orange that the goat will eat'

In Chapter 2, Section 2.3.3, I mentioned Hankamer and Knecht's (1976) account of the principles which determine whether the SP or OP construction is chosen for a particular relative clause. (See also Underhill 1972, Dede 1978, Knecht 1979.) I will elaborate on them here. The primary principle is given in (38).

(38)   The subject of the relative clause relativizes with the SP construction; a non-subject relativizes with the OP construction.

Additionally, they establish a second principle which accounts for relativization of non-major constituents in the relative clause.

(39)   The Mother Node Principle

If a subconstituent of a major constituent of the relative clause is relativized, the participle construction is chosen which would be appropriate for relativization of the major constituent itself.

Given (38) and (39), when a subconstituent of a phrasal or clausal subject is relativized (or when the entire subject is relativized: see (36a) above), the SP construction is chosen.

(40)   Possessor of subject relativized

a.   Kadin-in   ev-i   yan-di.
      woman-GEN house-POSS burn-PST

      'the woman's house burned down.'

b.   [Ø ev-i   yan-an] kadin
          house-POSS burn-SP woman

      'the woman whose house burned down'

(41) Constituent of sentential subject relativized[54]

    a. [Kadın-ın   asker-i   vur-duğ-u]   şüpheli.
       woman-GEN   soldier-ACC shoot-PART-POSS doubtful

      'That the woman shot the soldier is doubtful.'

    b. [[∅ asker-i   vur-duğ-u]   şüpheli
          soldier-ACC shoot-PART-POSS doubtful

      ol-a̲n̲] kadın[55]
      be-S̲P̲ woman

      'the woman who it is doubtful that (she) shot the
      soldier'

    c. [[kadın-ın ∅ vur-duğ-u]   şüpheli ol-a̲n̲]
       woman-GEN   shoot-PART-POSS doubtful be-S̲P̲

      asker
      soldier

      'the soldier who it is doubtful that the woman shot'

Only the OP construction is possible when part of a phrasal or clausal non-subject is

relativized (or when an entire non-subject is relativized: see (36b) above).

(42) Possessor of non-subject relativized

    a. Cengiz kadın-ın arkadaş-ın-a   araba-yı sat-tı.
            woman-GEN friend-POSS-DAT car-ACC sell-PST

      'Cengiz sold the car to the woman's friend.'

    b. [Cengiz-i̲n̲ ∅ arkadaş-ın-a   araba-yı
          G̲E̲N̲   friend-POSS-DAT car-ACC

      sat-t̲ı̲ğ̲-ı̲] kadın
      sell-O̲P̲-P̲O̲S̲S̲ woman

      'the woman whose friend Cengiz sold the car to'

---

[54]Note that sentential subjects are nominalized in Turkish: the subject is marked genitive, a participial suffix is attached to the verb stem, and a possessive suffix, which agrees with the subject in person and number, follows it.

[55]Although the verb ol- (be, become) does not appear in the matrix predicate in (a), it is required in (b) and (c) because the participial suffix must attach to a verb stem.

(43) Constituent of sentential object relativized[56]

   a. Cengiz [adam-ın araba-yı al-dığ-ın-ı]   san-dı.
            man-GEN car-ACC buy-PART-POSS-ACC think-PST

     'Cengiz thought that the man bought the car.'

   b. [Cengiz-in [∅ araba-yı al-dığ-ın-ı]
         -GEN   car-ACC buy-PART-POSS-ACC

     san-çığ-ı]   adam
     think-OP-POSS man

     'the man who Cengiz thought bought the car'

   c. [Cengiz-in [adam-ın ∅ al-dığ-in-ı]
         -GEN man-GEN   buy-PART-POSS-ACC

     san-dığ-ı]   araba
     think-OP-POSS car

     'the car which Cengiz thought that the man bought'

The third and final principle which Hankamer and Knecht proposed is given in (44); it accounts for 'exceptional' use of the SP construction when non-subjects (and anything in them) are relativized.

    (44) The No-Subject Principle

        If there is no subject in the relative clause at the time of relative
        clause formation, then the OP construction is impossible and only
        the SP construction is chosen.

As I mentioned in Chapter 2, Hankamer and Knecht analyze impersonal passives as sentences which lack a final subject. Note that, in accord with (44), relativization of any constituent in an impersonal passive requires the SP construction. (The following examples appear as (89) in Chapter 2.)

    (45)a. Adam-ın ev-in-den   plaj-a   gid-il-di.
        man-GEN house-POSS-ABL beach-DAT go-PASS-PST

        'It was gone from the man's house to the beach.'

---

[56]The sentential object below is nominalized in the familiar way and, since it is the direct object of the matrix verb, it is marked accusative.

b. [∅ ev-in-den   plaj-a   gid-il-<u>en</u>] adam
   house-POSS-ABL beach-DAT go-PASS-<u>SP</u> man

'the man from whose house it was gone to the beach'

c. [adam-ın ev-in-den   ∅ gid-il-<u>en</u>] plaj
   man-GEN house-POSS-ABL   go-PASS-<u>SP</u> beach

'the beach to which it was gone from the man's house'

If impersonal passives are analyzed as having a final dummy subject, (44) must be restated as follows.

(46)   The Dummy Subject Principle

If the final subject of the relative clause is a dummy, then the SP construction is chosen no matter what is relativized.

Now, it turns out that clauses with non-referential subjects in immediate pre-verbal position behave just like impersonal passives with respect to relativization: no NP relativizes with the OP construction.

(47)   Hankamer and Knecht's (7) and (8)

a. Kapı-nın alt-ın-dan   yer-in   üzer-in-e
    door-GEN bottom-POSS-ABL floor-GEN top-POSS-DAT

    su   ak-ıyor.
    water flow-PRG

'Water is flowing under the door onto the floor.'

b. [∅ alt-ın-dan   yer-in   üzer-in-e   su
      bottom-POSS-ABL floor-GEN top-POSS-DAT water

    ak-<u>an</u>] kapı
    flow-<u>SP</u> door

'the door under which water is flowing onto the floor'

c. [kapı-nın alt-ın-dan   ∅ üzer-in-e   su
   door-GEN bottom-POSS-ABL   top-POSS-DAT water

    ak-<u>an</u>] yer
    flow-<u>SP</u> floor

'the floor onto which water is flowing from under the door'

(48)a. Okul-un   yan-in-da   ev   yan-di.
       school-GEN side-POSS-LOC house burn-PST

'A house/houses burned down next to the school.'

b. [∅ yan-in-da   ev   yan-an] okul
         side-POSS-LOC house burn-SP school

'the school next to which a house/houses burned down'

This finding suggested to Hankamer and Knecht that non-referential subjects in immediate pre-verbal position undergo a demotion process which strips them of their subjecthood. Thus, relativization in (47) and (48) has applied into a subjectless sentence and the No-Subject Principle given in (44) is the operative one.

Confirmation that non-referential subjects are not the final subjects of their clauses comes from the comparative construction. Comparative clauses in Turkish (see Knecht 1976) are like relative clauses in many respects: (i) they precede their heads, (ii) they contain a gap, and (iii) they are participial constructions. In fact, except for the ablative casemarker that appears suffixed to the participle in the comparative clause, they look just like OP relative clauses. Consider the following:

(49) Orhan [Ayşe-nin ∅ al-diğ-in-dan]   fazla kabak
                 -GEN   buy-PART-POSS-ABL more squash

      al-di.
      buy-PST

'Orhan bought more squash than Ayşe bought.'

In Knecht (1976), I showed that any major constituent of a comparative clause can be extracted with the notable exception of the final subject.[57]

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[57]Comparative Deletion obeys the same general constraints as Relativization, e.g., it cannot extract the object of a postposition. Also, some constituent types undergo Comparative Deletion more readily than others.

(50) Knecht's (36) and (38)

a. *Parti-de [∅ köşe-de   otur-duk-(lar)-ın-dan]
   party-LOC   corner-LOC sit-PART-(PLU)-POSS-ABL

   fazla adam dans et-ti.
   more man dance-PST

   'At the party more men danced than sat in the corner.'

b. *Hasan [∅ kendi-sin-i   sev-dik-(ler)-in-den]
              self-POSS-ACC like-PART-(PLU)-POSS-ABL

   fazla kız sev-iyor.
   more girl like-PRG

   'Hasan likes more girls than like him.'

I also showed that Comparative Deletion can 'exceptionally' extract just the sort of non-referential subject which is associated with 'exceptional' use of the SP construction when the target of relativization is a non-subject. Needless to say, this is exactly what we expect to find if non-referential subjects are not the final subjects of their clauses.

(51) Knecht's (78) and (80)

a. Yer-in   üzer-in-e   [kapı-nın alt-ın-dan
   floor-GEN top-POSS-DAT door-GEN bottom-POSS-ABL

   ∅ ak-tığ-ın-dan]   fazla şarap ak-tı.
   flow-PART-POSS-ABL .more wine flow-PST

   'More wine flowed onto the floor than flowed
   under the door.'

b. Dam-ın   üzer-in-de   [bahçe-nin iç-in-de
   roof-GEN top-POSS-LOC garden-GEN inside-POSS-LOC

   ∅ bit-tiğ-in-den]   fazla çimen bit-iyor.
   grow-PART-POSS-ABL more grass grow-PRG

   'More grass is growing on the roof than is
   growing in the garden.'

If non-referential subjects do not bear the final 1 relation, then what final relation do they bear, and how do they come to bear it? In order to answer this question, we must examine some of the other properties of non-referential subjects.

To begin with, note that non-referential subjects in SP relative clauses are frozen

in immediate pre-verbal position. For instance, an adverb cannot occur between the verb of the relative clause and the subject:

(52)a. *[∅ alt-ın-dan   yer-in   üzer-in-e   su
           bottom-POSS-ABL floor-GEN top-POSS-DAT water

        yavaş yavaş ak-an] kapı
        slow slow flow-SP door

        'the door under which water is flowing slowly onto the
        floor'

    b. *[∅ yan-ın-da   ev   dün   yan-an] okul
           side-POSS-LOC house yesterday burn-SP school

        'the school next to which a house/houses burned down
        yesterday'

As we learned from the earlier discussion of caseless direct objects, some nominals which are restricted to immediate pre-verbal position are incorporated and others are not. As it turns out, non-referential subjects do pass the test for incorporation.[58] a non-derived adverb, which typically must appear in immediate pre-verbal position, occurs immediately to the left of the non-referential subject (and only in that position: see (53b) below). Consider *yeni*, for example; as I mentioned above, when it is used as an adjective, it means 'new' and when it is used as an adverb, it means 'just, recently'. Note that (53a) below is ambiguous.

(53)a. [∅ yan-ın-da   yeni   ev   yan-an] okul
          side-POSS-LOC just/new house burn-SP school

        'the school next to which a house/houses just burned
        down'
        'the school next to which a new house/new houses
        burned down'

    b. *[∅ yan-ın-da   ev   yeni yan-an] okul
           side-POSS-LOC house just burn-SP school

Additionally, we find clauses with immediately pre-verbal non-referential subjects in which sentential stress is always on the subject. Recall that this stress pattern is

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[58]Those without *bir* pass the test; indefinite subjects do not, as I will show later.

associated with incorporated objects. (The following example is from Dede (1982); the underlined constituent receives sentential stress.)

(54) A: Bu   ses   ne?
          this noise what

      B: <u>Köpek</u> havlı-yor.
          dog   bark-PRG

          'What is this noise?'
          'A dog is/dogs are barking.'

If stress is assigned to the verb, *havlıyor*, rather than to the subject, *köpek*, B's answer can c..ly be interpreted to mean, 'The dog is barking'.

3.2.3. Three Analyses

I will examine three analyses which are consistent with these facts. The first is sketched out in Özkaragöz (1982). It is claimed there that non-referential subjects are final chomeurs, having been put into chomage by a dummy 1. Although the mechanism of incorporation is not made explicit, such an analysis at least entails the claim that incorporation applies to final chomeurs. In any event, a sentence such as (55) would have the representation in (56).

(55) Kapı-nın alt-ın-dan   su   ak-ıyor.
      door-GEN bottom-POSS-ABL   water flow-PRG

      'Water is flowing under the door.'

(56)

ak-   su   DUMMY   Kapının altından
flow   water   under door
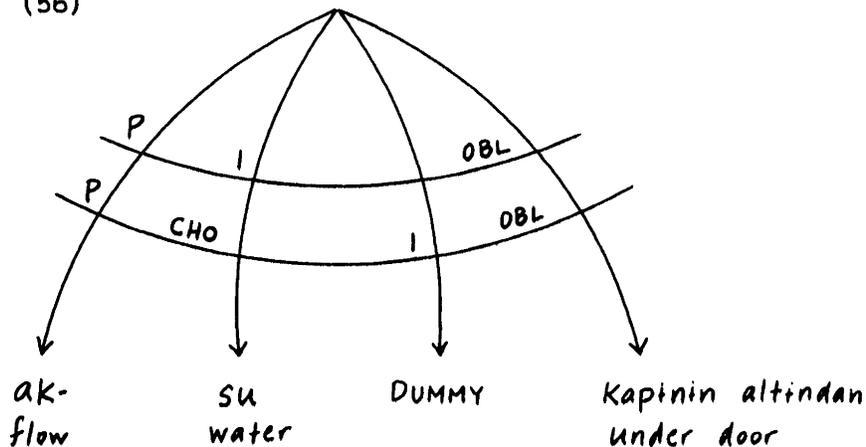
Given that (55) has a final dummy subject, relativization of a non-subject will require the SP construction, in accordance with the Dummy Subject Principle, stated in (46).

Alternatively, we could propose that rather than bearing the chomeur-relation in the final stratum, non-referential subjects bear the INC(orporated)-relation.[59] Depending upon whether or not the Final 1 Law is satisfied, (55) will either have the representation in (57) or (58).

(57)[60]

a k-
flow

su
water

DUMMY

Kapının altından
under the door

---
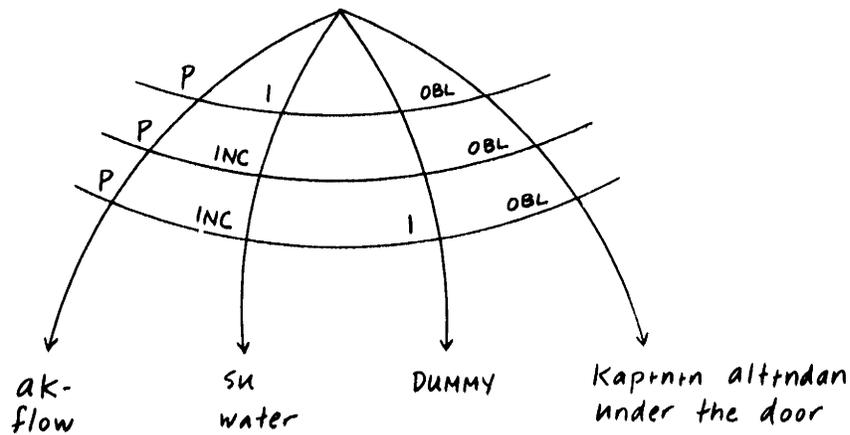
[59]This is essentially the approach of Postal (to appear), with one major difference. Under his account, incorporated 1s are final 1s. He therefore faces the challenge of explaining why non-referential subjects can be extracted by Comparative Deletion. As I mentioned above, final 1s are not, in general, accessible to this rule.

[60]The Final 1 Law would be satisfied if the dummy bore the 1-relation in the first stratum in which the initial subject bore the INC-relation. I have no way of choosing between this analysis and the one presented in (57).

(58)

P   I   OBL

P   INC   OBL

ak-   su   Kapının altından
flow   water   under the door
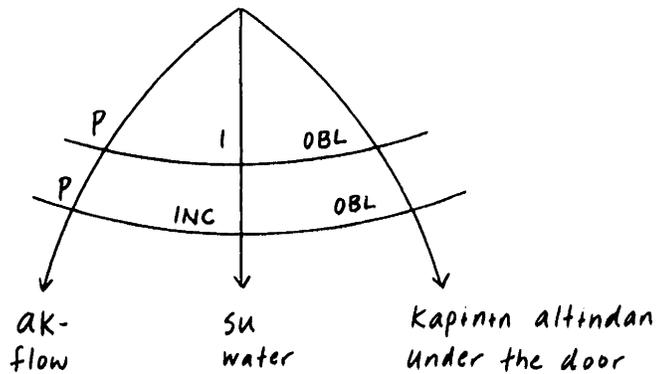
For (57), the Dummy Subject Principle will oversee participle choice in relative clause; for (58), the operative principle will be the No-Subject Principle.

3.2.3.1. Motivated Demotion

I will now take up the claim, embodied by (56), that incorporated subjects are put into chomage by a dummy. My argument against this notion is an indirect one, based on the properties of clauses with incorporated objects.

I assume that it would be desirable to have a uniform account of incorporated subjects and incorporated direct objects in Turkish, and that if the former are analyzed as final chomeurs, then the latter should be, too. Incorporation could then be restricted to a subset of final chomeurs, perhaps the subset of caseless chomeurs. Let us consider, then, the claim that the caseless non-definite (incorporated) object of (59) has been put into chomage by a dummy 2, as shown in (60).

```
(59)   Murat kitap oku-du.
       book   read-PST

    'Murat read a book/books.'
```

(60)
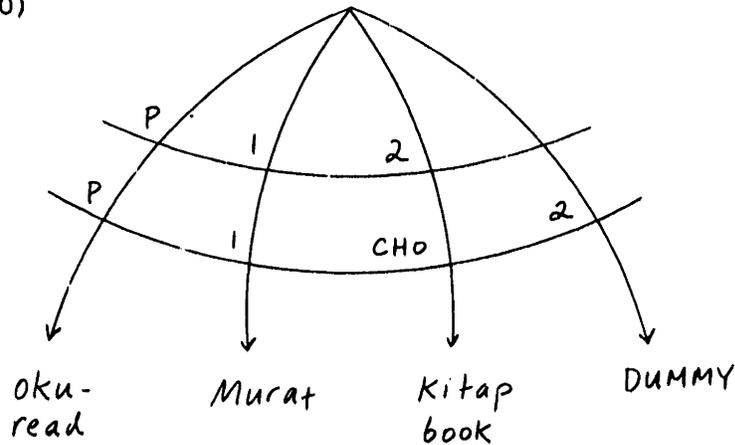
According to (60), the first stratum that contains the demoted object is transitive. Given that the personal passive rule permits the 2 in a transitive stratum to advance to 1 in the immediately succeeding stratum, (59) should have a related personal passive in which a dummy acts as final 1. Since *tarafîndan* phrases are permitted in personal passives but not in impersonal passives, the motivated demotion analysis predicts that the following sentence is the passive version of (59), i.e., that it is acceptable on the reading, 'A book/books were read by Murat'.

(61) Murat tarafîndan kitap oku-n-du.
      by   book read-PASS-PST

But it is not acceptable on that reading; (61) can only mean, 'The book was read by Murat'. Note that the generic reading is possible if the *tarafîndan* phrase is removed from (61).

(62) Kitap oku-n-du.
      book read-PASS-PST

      'A book/books were read.'
      'The book was read.'

So, positing that a dummy 2 puts a caseless nondefinite (incorporated) object into chomage has the wrong result. However, the passive facts follow from the claim that incorporated nominals bear the final INC-relation. In the following representation of (59) above, there is no stratum in which 1, 2, and INC co-occur, so personal passivization is correctly predicted to be impossible.

(63)
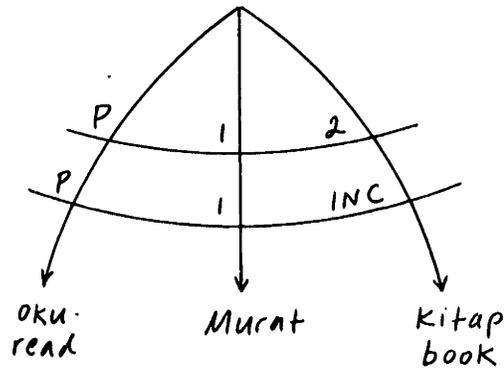
Under the motivated demotion analysis, we either have to claim that it is impossible to unify the description of what is subject of incorporation (i.e., we claim that incorporated objects are not put into chomage by a dummy but incorporated subjects are) or we have to be satisfied with a false prediction about the passivization of clauses with incorporated objects. In contrast, assigning the INC-relation to incorporees satisfies all our goals.

It solves another problem as well. In Chapter 2, I mentioned one consequence that follows from the claim that the impersonal passive construction in Turkish is not a genuine passive construction involving 2-1 advancement: the morpheme -I/, which is always suffixed to personal and impersonal passive verbs, cannot be characterized as a passive marker. I tentatively proposed that since both personal and impersonal passivization involve the demotion of a subject to chomeur, -I/ could be analyzed as the morphological reflex of subject demotion.

The claim that incorporated subjects bear the final INC-relation is consistent with this proposal; such nominals have not undergone demotion to chomeur, so the conditions are not met for suffixation of -I/ to the verb.

3.2.3.2. Dummies

In Chapter 2, I took up the question of whether or not impersonal passives have a final dummy subject. A promising test, SSR, proved to be inconclusive. Here I use SOR to explore the same question with regard to clauses containing incorporated subjects. That is, which representation of (55) is appropriate: the one in (57), which satisfies the Final 1 Law, or the one in (58), which violates it?

Recall that the verb *san-* (think) occurs in three different kinds of complex sentences. In (a) below, its complement is nominalized and marked accusative; (b) illustrates the 'bare complement' construction (the complement looks just like a finite root clause); (c) illustrates the SOR construction.

```
(64)a. [Hasan-in  Adana-da   otur-duğ-un-u]      san-iyor-um.
           -GEN        -LOC live-PART-POSS-ACC think-PRG-1s

       'I think that Hasan lives in Adana.'
     b. [Hasan Adana-da   otur-uyor] san-iyor-um.
                  -LOC live-PRG    think-PRG-1s


     c. Hasan-i    [Adana-da   otur-uyor] san-iyor-um.
           -ACC         -LOC live-PRG    think-PRG-1s
```

For most speakers, the complement verb in a SOR construction is marked for tense but not for agreement with the raisee. This means that when the subject of a non-nominalized clause embedded under *san-* is first or second person, there are two ways to tell that SOR has applied: the pronoun is casemarked accusative and the embedded verb is unmarked for agreement (where unmarked agreement = third person singular agreement). Given this, it is easy to distinguish the bare complement construction in (65a) below from the raising construction in (65b).

```
(65)a. Hasan (ben) Adana-da   otur-uyor-um san-iyor.
             1s          -LOC live-PRG-1s   think-PRG

       'Hasan thinks that I live in Adana,'

     b. Hasan ben-i  Adana-da   otur-uyor san-iyor.
             1s-ACC      -LOC live-PRG   think-PRG
```

On the other hand, when the complement subject is third person, casemarking alone signals that it has raised: compare (64b) and (64c). What this means is that the result of passivizing the former, where Raising has applied, looks exactly like the result of passivizing the latter, where it hasn't:

(66) Hasan Adana-da   otur-uyor san-il-iyor.
                 -LOC live-PRG think-PASS-PRG

      'It is thought that Hasan lives in Adana.'
      'Hasan is thought to live in Adana.'

Now consider a *san-* sentence, the bare complement clause of which contains an incorporated subject. If the final subject of such a clause is a dummy, the dummy should be able to undergo SOR. But in (67) below, we can't tell by inspection whether anything has raised.

(67) [çocuğ-un-u   köy-ünüz-de   arı
       child-POSS-ACC village-POSS:2p-LOC bee

      sok-tu]   san-dı-lar.
      sting-PST think-PST-3p

      'They thought a bee/bees stung his child in your
      village.'

A similar problem exists for (68) below: is it only derived by passivizing a sentence with a bare complement (see the representation in (69)) or is there an alternative derivation in which a dummy in the embedded clause has been raised and passivized (see the representation in (70))?

(68) [çocuğ-un-u   köy-ünüz-de   arı sok-tu]
       child-POSS-ACC village-POSS:2p-LOC bee sting-PST

      san-il-dı.
      think-PASS-PST

      'It was thought that a bee/bees stung his child in
      your village.'

(69)

P / 1 / 2

P / CHO / 1

think   PRO   bee stung his child in your village
san-   çocuğunu koyunuzde arı soktu

(70)

P / 1 / 2

P / 1 / CHO / 2

P / CHO / CHO / 1

think   PRO
san-

DUMMY

1

1 CHO   bee, arı

2 2
LOC

LOC   his child, çocuğunu

P

P   your village, koyunuzde

sting, sok-
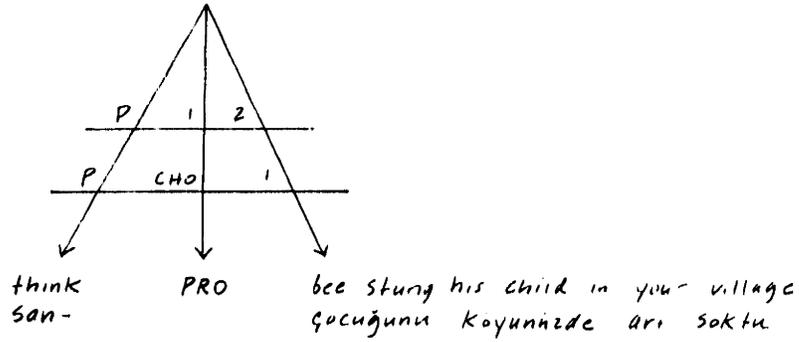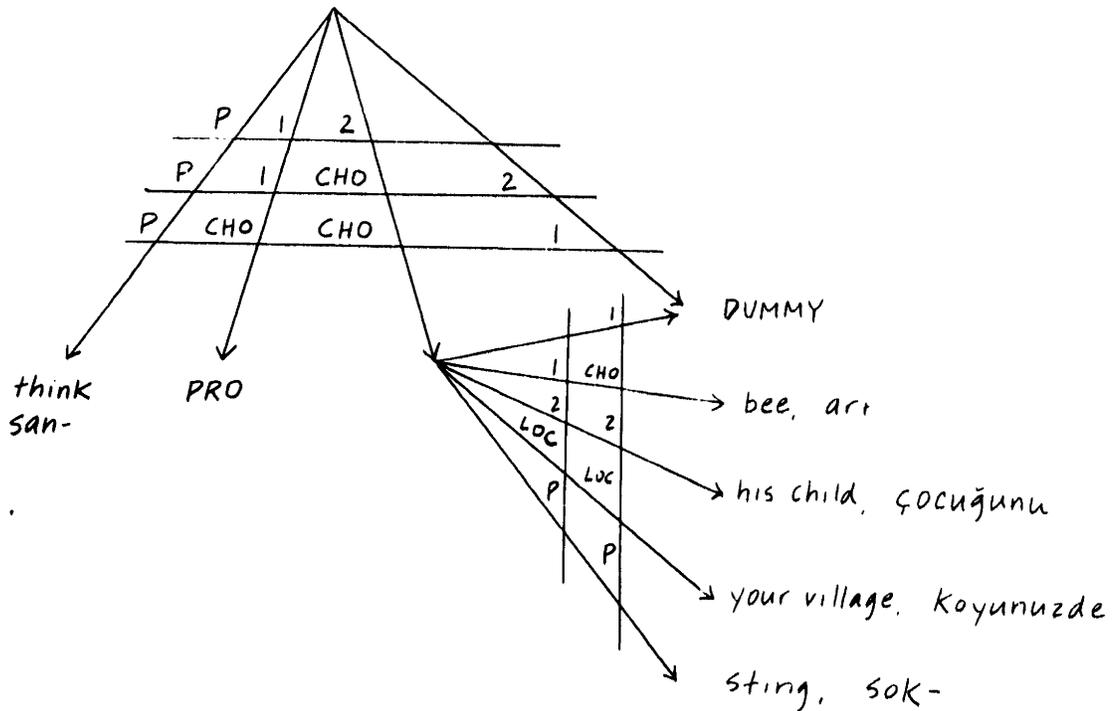
There is, in principle, a way to ascertain whether (68) has a derivation in which a dummy undergoes Raising and Passive. For reasons that will be clear shortly, the discussion will henceforth center around (71) below, which is (68) with the non-subject phrase *adamın köyünde* added to the matrix clause.

(71) Adam-ın köy-ün-de   [çocuğ-un-u
     man-GEN village-POSS-LOC child-POSS-ACC

     köy-ünüz-de   arı sok-tu]   san-ıl-dı.
     village-POSS:2p-LOC   bee sting-PST think-PASS-PST

     'In the man's village it was thought that a bee/bees
     stung his child in your village.'

Recall that when a relative clause has a subject (alternatively, has a non-dummy
subject), relativization into a major constituent of the relative clause which functions as
a non-subject requires the OP construction; but when the relative clause is subjectless
(alternatively, has a final dummy subject), the SP construction is chosen no matter what
is relativized.   Given the analysis in (69), according to which the bare complement
clause functions as final subject, we expect the OP when (71) is embedded as a relative
clause and *adamın* is relativized.   However, if (71) can also be analyzed as having a
final dummy subject, as in (70), then relativization of *adamın* should be possible with
the SP. The following should clarify the situation.

(72) Matrix Non-Subject Relativized
      Subject of RC = Bare Complement

[adamın köyünde   [çocuğunu köyünüzde arı soktu] sanıldı]

[IN MAN'S VILLAGE   [BEE STUNG HIS CHILD...]   WAS THOUGHT]
        | | |
        | | |
NON-SUBJECT   SUBJECT   PREDICATE
        |
REL TARGET
        |
OP RELATIVE CLAUSE
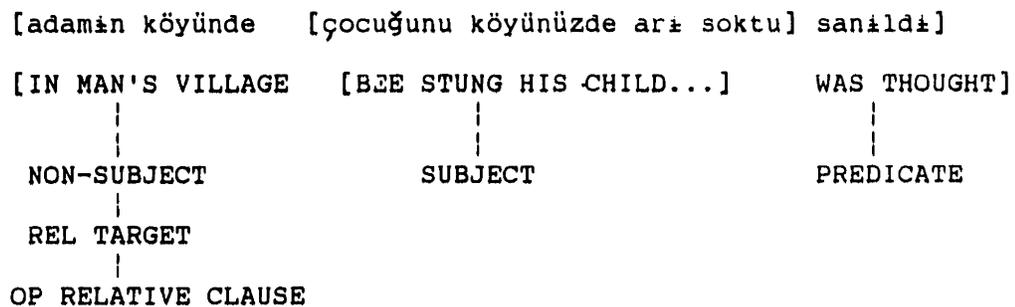
(73) Matrix Non-Subject Relativized
Subject of RC = Raised and Passivized Dummy

[adamın köyünde DUMMY [çocuğunu köyünüzde arı soktu] sanıldı]

[IN MAN'S VILLAGE │   [BEE STUNG HIS CHILD...]   WAS THOUGHT]
│   │   │   │
NON-SUBJECT   SUBJECT   CHOMEUR   PREDICATE
│
REL TARGET
│
SP RELATIVE CLAUSE
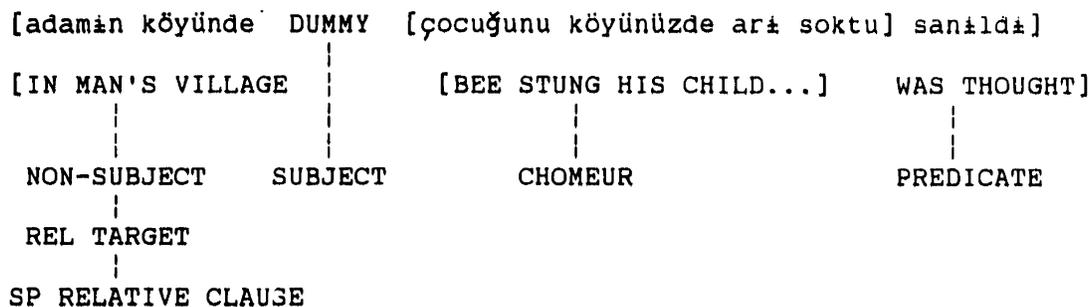
What we find is that the SP construction is marginally grammatical; see (74) below. It looks as if the argument for a dummy goes through.[61]

---

[61]If the bare complement in (71) is an impersonal passive, we find the same thing: relativization of part of the non-subject phrase *adamın köyünde* is marginally acceptable with the SP construction.

(a)   Adam-ın köy-ün-de   [beş ev-e
       man-GEN village-POSS-LOC five house-DAT

       baba-sın-ın   köy-ün-de   gir-il-di]
       father-POSS-GEN village-POSS-LOC enter-PASS-PST

       san-ıl-dı.
       think-PASS-PST

       'It was thought in the man's village that five houses
       were entered in his father's village.'

(b) ?[∅ köy-ün-de   [beş ev-e   baba-sın-ın
       village-POSS-LOC five house-DAT father-POSS-GEN

       köy-ün-de   gir-il-di]   san-ıl-an]   adam
       village-POSS-LOC enter-PASS-PST think-PASS-SP man

       'the man in whose village it is thought that five houses
       were entered in his father's village'

This finding suggests that impersonal passives also have final dummy subjects which can undergo SOR and Passive. However, the alternative explanation I give below for the marginal acceptability of (74) also applies to (b) above.

(74) ?[∅ köy-ün-de   [çocuǧ-un-u   köy-ünüz-de
         village-POSS-LOC   child-POSS-ACC village-POSS:2p-LOC

      arı sok-tu]   san-ıl-<u>an</u>]   adam
      bee sting-PST believe-PASS-<u>SP</u> man

      'the man in whose village it was believed that a bee/bees
      stung his child in your village'

However, the marginal grammaticality of this SP relative clause is open to a explanation which makes no reference to dummies. Recall that given the representation in (69)/(72), where the bare complement functions as final 1, *adamın* in (71) should be able to relativize with the OP construction. However, the following is hopelessly bad.

(75) *[köy-ün-de   [çocuǧ-un-u   köy-ünüz-de
        village-POSS-LOC   child-POSS-ACC village-POSS:2p-LOC

      arı sok-tu-<u>nun</u>] san-ıl-<u>dıǧ-ı</u>]   adam
      bee sting-PST-<u>GEN</u> believe-PASS-<u>OP-POSS</u> man

Actually, this is hardly surprising. The OP construction requires that the final subject of the relative clause be casemarked genitive. Even assuming that *çocuǧunu köyünüzde arı soktu* in (75) is the final subject of the relative clause, it could not be suffixed with the genitive because it is a tensed clause. The genitive, like other casemarkers, cannot attach to a finite verb such as *soktu.* Now if the OP construction is impossible in (75) because the genitive cannot, for morphosyntactic reasons, be assigned to the subject of the relative clause, then perhaps that alone explains why the SP construction is marginally grammatical. With this in mind, consider (76).

(76) [(Ben) baba-sın-ın   köy-ün-de
       1s   father-POSS-GEN village-POSS-LOC

      otur-du-m]   san-ıl-dı.
      live-PST-1s think-PASS-PST

      'It was thought that I lived in his father's village.'

The fact that the verb in the bare complement clause is inflected for first person singular agreement indicates that its subject has not undergone SOR. (76), therefore, only has a representation essentially like the one in (69) above. Now, when a non-

subject phrase is added to the matrix clause of (76), and relativization applies into it, we see again that the SP construction is marginally grammatical and the OP construction is hopelessly bad.

```
(77)a. ?[ ∅ köy-ün-de        [(ben)  baba-sin-in
            village-POSS-LOC   1s     father-POSS-GEN

        köy-ün-de        otur-du-m]  san-il-an]   adam
        village-POSS-LOC live-PST-1s think-PASS-SP man

        'the man in whose village it was thought that I
        lived in his father's village'
    b. *[ ∅ köy-ün-de        [(ben)  baba-sin-in
            village-POSS-LOC   1s     father-POSS-GEN

        köy-ün-de        otur-du-m-un]    san-il-diğ-i]
        village-POSS-LOC live-PST-1s-GEN  think-PASS-OP-POSS

        adam
        man
```

Again, the ungrammaticality of (77b) can be traced to the fact that the genitive casemarker has been suffixed to a finite verb (*oturdum + un*). However, the marginal grammaticality of the SP in (77a) cannot be explained by positing that a dummy has undergone Raising and Passive and is thus the final 1 of the relative clause. So, there is support for the notion that the SP construction is chosen in (74) and (77a) just because the OP construction is impossible.

I would like to pursue this idea further. Suppose we propose that the SP construction is chosen in two circumstances: (i) when the target of relativization is part of the subject of the relative clause and (ii) when, for whatever reason, the genitive and agreeing possessive cannot be assigned in a relative clause. The latter correctly predicts an SP relative clause when the entire subject of the relative clause is extracted by relativization, as well as when the subject is completely intact but cannot be casemarked. It also correctly predicts nothing but SP relative clauses when relativization applies into an impersonal passive or a sentence with an incorporated non-referential subject -- so long as such sentences are analyzed as being finally subjectless. If,

however, we analyze them as having final dummy subjects, we have a mystery on our hands. Why can't the genitive be assigned to the dummy subject of a relative clause? It can't be because phonologically null subjects in Turkish are generally treated differently from overt subjects, e.g., that inflectional rules don't see them. Consider the following sentences with invisible pronominal subjects.

(78)a. Mersin-de   hali-yi al-di.
                LOC rug-ACC buy-PST

      '(He/she) bought the rug in Mersin.'

   b. Dün   bardağ-i kir-di-n.
       yesterday glass-ACC break-PST-2s

      '(You) broke the glass yesterday.'

If a non-subject in (a) or (b) is relativized, the OP construction is required.

(79)a. [Mersin-de   al-diğ-i]   hali
                LOC buy-OP-POSS:3s rug

      'the rug that (he/she) bought in Mersin'

   b. [dün   kir-diğ-in]   bardak
       yesterday break-OP-POSS:2s glass

      'the glass that (you) broke yesterday'

It seems, then, that a more insightful explanation of exceptional use of the SP construction is possible if impersonal passives and sentences with incorporated non-referential subjects are analyzed as not having a final subject rather than as having a final dummy subject. The fact that the Final 1 Law rules out such an analysis suggests that the Final 1 Law is wrong.

3.2.3.3. Indefinite Subjects

The investigation of caseless direct object revealed that those that occur with *bir* do not undergo incorporation, though they are restricted to immediate pre-verbal position. The same is true of indefinite subjects. Note that while the indefinite subjects of SP relative clauses must appear in immediate pre-verbal position,

```
(80)a.  [ ∅ yan-ɨn-da       dün        bir ev    yan-an] okul
          side-POSS-LOC yesterday a    house burn-SP school
```

        'the school next to which a house burned down
        yesterday.'

```
   b. *[ ∅ yan-ɨn-da       bir ev    dün        yan-an] okul
          side-POSS-LOC a    house yesterday burn-SP school
```

they cannot occur with non-derived adverbs, and thus they fail the incorporation test. For instance, *yeni* cannot appear immediately before *bir ev* and the verb (see (c)), and if it is placed immediately to the left of *bir ev*, it can only be interpreted as an adjective (see (d)).

```
   c. *[ ∅ yan-ɨn-da       bir ev    yeni       yan-an] okul
          side-POSS-LOC a    house just/new burn-SP school

   d.  [ ∅ yan-ɨn-da       yeni       bir ev    yan-an] okul
          side-POSS-LOC just/new a    house burn-SP school
```

    = 'the school next to which a new house burned down'
    = 'the school next to which a house just burned down'

While the non-incorporability of indefinite subjects comes as no surprise, the grammaticality of (80a) requires explanation. There is no evidence that *bir ev* is not the final subject of the relative clause. Why is relativization of a non-subject in (80a) acceptable with the SP?

I believe that the answer lies in the proposal I made in the preceding section, i.e., that the SP construction is chosen when, for whatever reason, the genitive and the agreeing possessive are not assigned in the relative clause. I suggest that the reason why the indefinite subject of (80a) is not suffixed with the genitive is that it is non-specific in reference and that, in general, non-specific final nuclear terms are not casemarked in Turkish. Recall that for indefinite direct objects, accusative casemarking is associated with a [+specific] reading. (The following example appeared earlier as (5a).)

```
(81)  Bir doktor-u    arɨ-yor-um
      a   doctor-ACC look for-PRG-1s
```

'I am looking for a (particular) doctor.'

While there is no contrast between casemarked and caseless subjects in finite clauses, such a contrast can be noted in non-finite, nominalized clauses. Typically, the subject of an embedded clause is casemarked genitive (see (a) below); however, we find indefinite, non-referential subjects which are not genitivized in nominalized clauses (see (b)).

```
(82)a.  (Ben) [çocuǧ-u    bir köpeǧ-in ɨsir-diǧ-in-ɨ]
        1s    child-ACC a   dog-GEN   bite-PART-POSS-ACC

        bil-di-m.
        believe-PST-1s
```

'I believe that a (particular) dog bit the child.'

```
    b.  (Ben) [çocuǧ-u    bir köpek ɨsir-diǧ-in-ɨ]
        1s    child-ACC a   dog    bite-PART-POSS-ACC

        bil-di-m.
        believe-PST-1s
```

'I believe that a dog bit the child.'

Although I cannot explain why casemarking, as it were, confers specificity on indefinite direct objects and subjects in Turkish, it is at least clear that the phenomenon helps to explain the grammaticality of SP relative clauses such as (80a): if the indefinite subject of a relative clause is not unambiguously [+specific] in reference, the genitive is not assigned to it and, as a consequence, the SP construction is chosen over the OP construction.

3.3. What Incorporates?

Most of the sentences presented above to illustrate subject incorporation contain inactive intransitive verbs, i.e., just the sort of predicates which, given the Unaccusative Hypothesis, are likely to be analyzed as determining initial strata which contain a 2 but no 1. Since the direct objects of transitive verbs also incorporate, one might pursue

the notion that initial 2s (and only initial 2s) incorporate in Turkish. Contrasts such as the following could be offered in support. (The examples that follow are of SP relative clauses in which the target of relativization is a non-subject or part of a non-subject. Under these circumstances, the SP construction is a diagnostic for subject incorporation: the relative clause will be grammatical only if the subject has incorporated and is not a final 1.)

(83)a. [Ø iç-in-den   şurup siz-an] baklava
        inside-POSS-ABL syrup ooze-SP

      'the baklava from the inside of which syrup oozed'

     b. *[ban-a Ø bir çocuk at-an]   taş
         1s-DAT   a   child throw-SP stone

      'the stone which a child threw at me'

However, it is easy to show that incorporation is not restricted to initial direct objects. In the following examples, the subject of a transitive clause has incorporated.

(84)a. [Ø deliğ-in-i   saç tıka-yan] lavabo
        drain-POSS-ACC hair clog-SP   sink

      'the sink whose drain hair clogged'

     b. [Ø iç-in-i   duman doldur-an] oda
        inside-POSS-ACC smoke fill-SP   room

      'the room the inside of which smoke filled'

     c. [Ø sokaklar-ın-ı   çamur kaplı-yan] İstanbul
        streets-POSS-ACC mud   cover-SP

      'Istanbul, the streets of which mud covered'

The subjects of (83a) and (84a-c) do share a property with direct objects: they are not actors. This suggests that incorporation can be stated with reference to thematic roles. However, in (85) and (86) below, incorporation has applied to subjects which are quite plausibly analyzed as actors.[62]   (85a&b) illustrate incorporation of intransitive subjects, (86a-c) of transitive subjects.

---

[62]Actually, I'm not sure about the semantic role of *arı* (bee) in (86c), where it is the subject of *sok-* (the basic meaning of which is 'thrust into, insert').

(85)a. [∅ iç-in-e   polis gir-en] kɪz yurdu
          inside-POSS-DAT police enter-SP girls' dorm

'the girls' dorm which police entered'

   b. [∅ üzer-in-e   fil   otur-an] araba
          top-POSS-DAT elephant sit-SP   car

'the car which an elephant/elephants sat down on'

(86)a. [∅ gömleǧ-in-i   keçi çiǧni-yen] adam
          shirt-POSS-ACC goat chew-SP   man

'the man whose shirt a goat/goats chewed'

   b. [∅ yüz-ün-ü   manda   yalɪ-yan] kadɪn
          face-POSS-ACC water buffalo lick-SP   woman

'the woman whose face a water buffalo/buffalos licked'

   c. [∅ baba-sɪn-ɪ   arɪ sok-an] kɪz
          father-POSS-ACC bee sting-SP girl

'the girl whose father a bee/bees stung'

Nevertheless, in general, non-actors are more incorporable than actors. And inanimates incorporate more readily than animates, non-humans more readily than humans. I believe that this is related to the fact that a subject must be non-referential in order to incorporate, and special conditions have to be met before an animate actor, particularly a human agent, can be interpreted as non-referential. The sentence has to describe an event that was brought about by an individual or individuals whose identity is irrelevant; the class membership of the individual(s) alone is of interest and it is given solely to narrow the focus of the verb. In (86a), the state of the man's shirt, the circumstances it was found in, etc. permit it to be described not simply as having been chewed, but as having been goat-chewed, as opposed, say, to cow-chewed. Incorporation is particularly common when specifying the class membership of the actor is practically superfluous. Consider (87a&b).

(87)a. [∅ televizyon-un-u hirsiz çal-an] adam
          TV-POSS-ACC   thief steal-SP man

    'the man whose TV a thief/thieves stole'

   b. [∅ ev-in-de   kedi miyavli-yan] adam
          house-POSS-LOC cat   meow-SP   man

    'the man in whose house a cat is/cats are meowing'

A stolen TV is essentially a thief-stolen TV; meowing is typically meowing by cats.

There is more to be said about the conditions under which a subject can be incorporated, but I will not pursue the matter any further. The main point of the preceding discussion is that the INC-relation is not assigned to inital 2s alone, nor is it assigned to nominals which bear a particular thematic role. Incorporation applies to non-definite 1s and 2s, i.e., nuclear terms, which are typically non-specific in reference.

.

CHAPTER 4

TURKISH AND THE UNACCUSATIVE HYPOTHESIS

In Chapter 2, I proposed that impersonal passivization in Turkish does not involve an advancement to subject. What this means, among other things, is that impersonal passivization cannot be used as a diagnostic for initial unaccusativity vs. unergativity in Turkish. To put it another way, the impersonal passive construction can provide no evidence for or against the Unaccusative Hypothesis because the consequences of setting up two classes of intransitive verbs or only one class are the same. The reason is, of course, that if impersonal passivization in Turkish involves motivated subject demotion rather than 2-1 advancement, both initial unergative and initial unaccusative clauses are characterized as having syntactically well-formed passives. Note that no law of Relational Grammar is violated in either of the following representations.

(1)
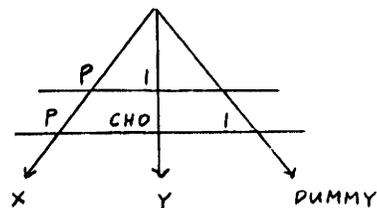
(2)
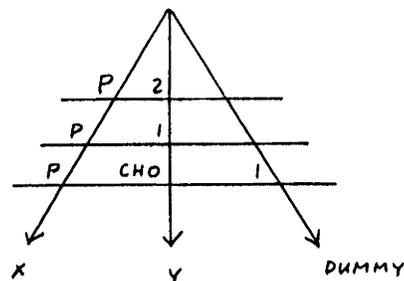
While there is no case based on impersonal passives for adoption of the

Unaccusative Hypothesis in Turkish, Özkaragöz (1980) argues that there is supportive evidence for it elsewhere in the language. I review her proposals below and then go on to argue that the construction she examined actually provides no evidence that intransitive verbs fall into two syntactic classes.

4.1. The -yErEk Construction: Evidence for the Unaccusative Hypothesis?

4.1.1. Özkaragöz's Proposals

Özkaragöz (1980) is an investigation of the properties of adverbial clauses which contain non-finite verbs suffixed with -yErEk, specifically those which describe an action or event which is simultaneous with the action or event described by the matrix clause.[63] -YErEk clauses are controlled clauses which always lack a surface subject (see Chapter 2, Section 2.1.1.4); Özkaragöz assumes that Equi deletes the lower subject under coreference with the matrix subject. A typical example of the construction appears in (3) below.

---

[63]-yErEk may also denote that the event described by the adverbial clause occurred prior to or was a prerequisite for the event described by the matrix clause.

```
(a)  Özi [işiğ-i      kapa-yarak]  yat-tı.
         light-ACC turn off-ADV lie down-PST

     'Ozi went to bed after turning off the light.'

(b)  Kadın [çalış-arak] başarılı    ol-du
     woman  work-ADV     successful become-PST

     'The woman became successful by working.'
```

Additionally, -yErEk may be translated as 'for' or 'as', particularly when it is suffixed to the verb olmak (to be, become). The example below is from Swift (1962).

```
(c)  Fabrika-da  [mühendis ol-arak] çalış-acak.
     factory-LOC engineer be-ADV    work-FUT

     'He is going to work in the factory as an engineer.'
```

(3) Murat [∅ yemek yi-yerek] televizyon seyret-ti.
         food   eat-ADV   television watch-PST

'Murat, while eating, watched television.'

Özkaragöz makes the following two claims about the relationship between the controller of Equi in the matrix clause and the victim of Equi in the embedded adverbial clause.

(4)

    a.   Both controller and victim must be final subjects.[64]

    b.   Both controller and victim must bear the same initial grammatical relation.

The second claim is the one of interest. Support for it comes from the following observations: When the controller and victim are the final subjects of transitive verbs (as in (5) below) or when both are the final subjects of passive verbs (as in (6) below), we find grammatical sentences. However, as (7) illustrates, the final subject of a passive cannot control deletion of the final subject of an active transitive verb. (Following Özkaragöz, I will keep track of the initial (I) and final (F) grammatical relations of controller and victim in the examples. For instance, the expression 12/F1 lined up under the matrix controller identifies it as an initial 2 and final 1.)

(5) Transitive subjects
    Özkaragöz's (20)

    Çocuk [∅   sakız çiğni-yerek] annesin-ı   öp-tü.
    child   gum   chew-ADV   his mother-ACC kiss-PST

    I1/F1 I1/F1

    'The child, while chewing gum, kissed his mother.'

---

[64]Özkaragöz herself notes that this condition does not always hold: there are grammatical sentences in which the controller of -yErEk Equi is a final passive chomeur. I discuss a subset of such sentences in a different context below.

(6) Passive subjects
   Özkaragöz's (17) = (a) below

   a. Gazete [$\emptyset$ anlaş-ıl-arak]   oku-n-du.
      newspaper   understand-PASS-ADV read-PASS-PST

      I2/F1   I2/F1

      'The newspaper was read and understood.'

   b. Bebek [$\emptyset$ avut-ul-arak] yıka-n-ıl-dı.
      baby   amuse-PASS-ADV wash-PASS-PASS**-PST

      I2/F1 I2/F1

      'The baby, while being amused, was washed.'

(7) Transitive subject and passive subject
   Özkaragöz's (21)

   *Çocuk [$\emptyset$ sakız çiğni-yerek] öp-ül-dü.
    child   gum   chew-ADV   kiss-PASS-PST

    I2/F1 I1/F1

   'The child, while chewing gum, was kissed.'

Furthermore, Özkaragöz reports that passive subjects can control deletion of the final subjects of some, but not all, intransitive verbs.[66] The intransitive verbs whose subjects can be victims are semantic unaccusatives while the others are semantic unergatives. The facts are consistent with the claim stated in (4b) if the Unaccusative Hypothesis is adopted. That is, the final subject of a semantically unaccusative verb such as *geçmek* (to pass) is analyzed as an initial 2 but the final subject of a semantically unergative verb such as *bağırmak* (to shout) is analyzed as an initial 1. Only the initial grammatical relation of the former will be the same as that borne by a passive subject.

---

[65]When the passive suffix is realized as -*n*, a second passive morpheme may be suffixed optionally with no syntactic consequences. Since the passive allomorph -*n* is homophonous with the reflexive (or middle) morpheme, doubling up the passive suffix in (6b) avoids potential ambiguity. That is, while *yıkan-* can be interpreted either as 'wash (self)' or 'be washed', *yıkanıl-* only has the latter reading.

[66]I was not able to replicate her data. I take this up in more detail below.

(8) Passive subject and unaccusative subject
     Özkaragöz's (27)

     Good Year Blimp [∅   üzerimizden geç-erek]
                          overhead   pass-ADV

     I2/F1   I2/F1

     herkes   tarafından merakla   seyred-il-di.
     everyone by   with curiosity watch-PASS-PST

     'The G.Y.B., while passing overhead, was watched with
     curiosity by everyone.'

(9) Passive subject and unergative subject
     Özkaragöz's (28)

     *Öğrenci [∅   bağir-arak] döv-ül-dü.
      student   shout-ADV   beat-PASS-PST

     I2/F1   I1/F1

     'The student, while shouting, was beaten.'

Finally, as Özkaragöz argues, a framework which incorporates both the Unaccusative

Hypothesis and the claim that *-yErEk* Equi requires controller and victim to bear the

same initial grammatical relation makes it possible to explain why there are successful

associations between the final subjects of some, but not all, intransitive verbs. In the

grammatical sentences in (10) below, an unergative subject has been deleted under the

control of an unergative subject and an unaccusative subject has been deleted under the

control of an unaccusative subject. In the ungrammatical sentences in (11), Equi has

involved unergative subjects with unaccusative subjects.

(10) Unergative with unergative; unaccusative with
      unaccusative
      Özkaragöz's (37) = (b) below

      a. Kiz [∅   oyna-yarak] konuş-tu.
          girl   play-ADV   talk-PST

          I1/F1 I1/F1

          'The girl, while playing, talked.'

```
  b.  Guneş [  ∅   kızar-arak]  bat-tı.
      sun          turn red-ADV set-PST

      I2/F1  I2/F1

      'The sun, turning red, set.'
```

(11) Unergative with unaccusative
      Özkaragöz's (29) and (34)

```
  a. *Kız  [  ∅  oyna-yarak] kay-dı.
      girl        play-ADV    slip-PST

      I2/F1 I1/F1

      'The girl, while playing, slipped.'
```

```
  b. *Adam [  ∅   çalış-arak] hastalan-dı.
      man          work-ADV    get sick-PST

      I2/F1 I1/F1

      'The man, while working, got sick.'
```

While the data presented above are consistent with Özkaragöz's claims, she recognizes that there is an alternative semantic account of the data which seems to work just as well as her syntactic account and obviates the need to adopt the Unaccusative Hypothesis and make reference to initial grammatical relations. She proposes the following as a basis for discussion:

(12) The controller and target of Equi must bear the same semantic role, e.g., they must both be agents or non-agents.

However, Özkaragöz points out that (12) is counterexemplified by the grammatical sentence presented below. The final subject of the adverbial clause is an agent but the final subject of the matrix clause is not. Both nominals are initial 1s, however.

```
(13)  Hasan Las Vegas-ta [  ∅  hem  ağla-yarak hem  gül-erek]
                         LOC      both cry-ADV    both laugh-ADV

      para  kaybet-ti.
      money lose-PST

      'In Las Vegas, Hasan, while both crying and laughing,
      lost money.'
```

While it is true that the semantic condition in (12) is not a viable alternative to Özkaragöz's (4b) (in conjunction with the Unaccusative Hypothesis), it is possible to state a semantic condition that works. Consider the following, which puts a limit on how different the semantic roles played by controller and target of -yErEk Equi can be.[67]

    (14)   If the controller of -yErEk is an agent, then the target cannot
            be a patient, or vice versa.[68]

(14) makes the right predictions about all the data presented so far. It rules out (7) and (9) above, where the controller is a semantic patient/passive subject and the victim is a semantic agent/active subject; it also blocks (11a&b) in which both the matrix and embedded clauses are active but the controller is a patient and the victim is an agent. Furthermore, (14) doesn't rule out any of the grammatical sentences we have seen so far.

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[67]Růžička (1983) argues that subject-controlled Equi in a variety of languages in subject to a condition that makes reference to thematic relations. Specifically, for verbs such as *promise*, the thematic role of the controller must be identical to the thematic role of the controllee. Furthermore, he distinguishes between "nearness" and "remoteness" of thematic relations such that near thematic relations satisfy the identity condition. The approach I have taken here to -yErEk Equi is very similar to Růžička's; condition (14) blocks Equi when the thematic relations borne by controller and controllee are remote. (Thanks to Luigi Rizzi for pointing this out to me.)

[68]I use the terms 'agent' and 'patient' in their traditional, albeit vague, senses. I admit that in the absence of any definition of these terms or any diagnostics for agenthood or patienthood, it will be difficult to evaluate (14) fully. In any event, in what follows I will be restricting my attention to cases where it seems to me to be clear that a controller is an agent, a non-agent, a patient, etc. Now, (13) above is not such a case; I'm not sure what semantic role should be assigned to *Hasan*, the subject of the matrix clause *Las Vegasta Hasan para kaybetti* (Hasan lost money in Las Vegas). However, if the initial object of 'lose' is the patient (which seems plausible), then on the assumption that there is only one patient argument per predicate, the initial subject of 'lose' must be something other than a patient. Given this, condition (14) permits (13).

While Özkaragöz has not made a totally persuasive case for her framework, at least it appears to be as successful as the alternative approach which makes reference to semantic roles. However, we have not yet seen all the facts that bear on the choice between the two approaches. Investigation of a fuller range of data reveals that the following claims made by Özkaragöz cannot both be true: (i) the controller and victim of -yErEk Equi must bear the same initial grammatical relation and (ii) the semantic patients of intransitive predicates are initial 2s in Turkish.

4.1.2. Counterevidence

Özkaragöz's framework predicts that the nominal which is the initial and final subject of a transitive clause will never be able to control deletion of, or be deleted by, the final subject of a semantically unaccusative verb, e.g., a semantic patient, which she analyzes as an initial direct object. On the other hand, the framework that incorporates the semantic condition in (14) predicts an ungrammatical sentence if the subject of the transitive clause is an agent and a grammatical sentence if it's not. The following sentence is correctly characterized as ill-formed on both accounts.

```
(15) *Adam  [ ∅   köprü-den  düş-erek]  şapkasin-i  çikar-di.
     man          bridge-ABL fall-ADV   his hat-ACC  remove-PST

     I1/F1   I2/F1
     agent   patient

     'The man, while falling from the bridge, removed his
     hat.'
```

However, the following data distinguish between the two proposals. The matrix clauses in each of these examples are active transitive clauses containing accusative-casemarked direct objects. Their final subjects are surely initial subjects as well; at any rate, it is difficult to imagine how else they might be analyzed. What makes these transitive subjects special is that they are non-agentive. Note that they can control deletion of the final subjects of semantically unaccusative verbs.

(16)a. Çorba   [∅   taş-arak]   elim-i   yak-tı.
      soup   boil over-ADV my hand-ACC burn-PST

      I1/F1   I2/F1
      non-agent patient

      'The soup, while boiling over, burned my hand.'

   b. Patlıcan [∅   piş-erek] suy-u   em-iyor.
      eggplant   cook-ADV water-ACC absorb-PRG

      I1/F1   I2/F1
      non-agent patient

      'The eggplant, while cooking, absorbs the water.'

   c. Ateş   [∅   yan-arak] ben-i   isit-iyor.
      fire   burn-ADV 1s-ACC warm-PRG

      I1/F1   I2/F1
      non-agent patient

      'The fire, while burning, is warming me.'

   d. Kaya   [∅   tepe-den yuvarlan-arak] ayağım-ı
      rock   hill-ABL roll-ADV   my foot-ACC

      I1/F1   I2/F1
      non-agent patient

      ez-di.
      crush-PST

      'The rock, while rolling down the hill, crushed my
      foot.'

   e. Yağmur [∅   pek şiddetli yağ-arak] bahçem-i
      rain   heavily   rain-ADV my garden-ACC

      I1/F1   I2/F1
      non-agent patient

      boz-du.
      ruin-PST

      'The rain, raining heavily, destroyed my garden.'

The grammaticality of these sentences is in accord with condition (14): in each case, a non-agent is the controller of Equi and a patient is the victim. But Özkaragöz's syntactic account fails here: the controllers are initial 1s and the victims are, by her criteria, initial 2s.

(14) also solves a problem which Özkaragöz acknowledged in a footnote to her paper. She wrote,

According to Perlmutter's (1978) criteria, predicates expressing states of mind are classed as unaccusative. In Turkish, with respect to the [-yErEk] construction, these predicates behave blindly in that they appear in the matrix clause with an embedded unergative or unaccusative, or vice versa. Further work is needed to determine the nature of this behavior. (footnote 3)

The examples in (17a&b) illustrate this phenomenon.

(17)a. [∅ sevin-erek]   çaliş-ti-m.
          feel happy-ADV work-PST-1s

'I worked, feeling happy.'

b. Asker [∅ sevin-erek]   öl-dü.
    soldier   feel happy-ADV die-PST

'The soldier died, feeling happy.'

The semantic condition in (14) does not mention experiencers or cognizers, so they are free to associate with both agents (as in (17a)) and patients (as in (17b)) in the -yErEk construction. In contrast, Özkaragöz's framework is in a bind. The obvious proposal to make, given the grammaticality of (17a&b), is that state of mind predicates are ambiguous, occurring both in initial unaccusative and initial unergative strata. This predicts that the final subject of such a predicate could control deletion of, or be deleted by, a passive subject. However, as the examples below illustrate, the prediction is wrong.

(18)a. *Ayşe [∅ sikil-arak]   disko-ya götür-ül-dü.
            feel bored-ADV disco-DAT take-PASS-PST

'Ayşe was taken to the disco feeling bored.'

b. *Ali [sevin-erek]   öp-ül-dü.
         feel happy-ADV kiss-PASS-PST

'Ali, while feeling happy, was kissed.'

I conclude that there is enough evidence to reject Özkaragöz's claim that both of the following are true: (i) -yErEk Equi requires that the controller and victim bear the same initial grammatical relation and (ii) the semantic patients of one-place

predicates are initial direct objects in Turkish. The data that I will discuss below reinforces this conclusion and, at the same time, shows that we need more than the semantic condition stated in (14) to account for the properties of the *-yErEk* construction. Actually, this is already apparent since (14) permits the ungrammatical sentences in (18).

4.2. Alternative Proposals

Crucial to Özkaragöz's claim that Turkish distinguishes syntactically between unaccusative and unergative verbs and that *-yErEk* Equi is sensitive to the distinction is a contrast between grammatical sentences in which a passive subject controls deletion of the final subject of a semantically unaccusative verb and ungrammatical sentences in which a passive subject controls deletion of the final subject of a semantically unergative verb. She reports that such contrasts are found (see (8) and (9) above). However, I have been unable to replicate her data. The native speakers I consulted reject sentences of both types.[69] Below I give examples of sentences which are expected to be grammatical, given Özkaragöz's assumptions. Note that when the controller of Equi is a passive subject, it doesn't matter whether the victim is an animate, hence potentially agentive, subject of an active intransitive verb (as in (19a-d)) or an inanimate, hence non-agentive, subject (as in (20a-d)).

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[69]Speakers unhesitatingly rejected sentences in which the controller of *-yErEk* Equi is a passive subject and the victim is the agentive subject of an active intransitive verb (or vice versa). When a passive subject is associated with a non-agentive active subject, speakers were occasionally uncertain about the status of the sentence; even less frequently, a sentence of this type was judged acceptable, but not by all speakers. Thus, except for a few unsystematic exceptions (different for each speaker), this kind of sentence was judged to be ungrammatical on the intended reading (according to which the two clauses describe simultaneous events).

(19)a. *Hastalar [∅ iyileş-erek] ziyaret ed-il-me-di.
   patients   recover-ADV visit-PASS-NEG-PST

   I2/F1 . I2/F1

   'The patients, while recovering, were not visited.'

b. *Çocuk [∅ titri-yerek] yıka-n-ıl-ıyor.
   child   shiver-ADV   wash-PASS-PASS-PRG

   I2/F1 I2/F1

   'The child, while shivering, is being washed.'

c. *Kız [∅ kızar-arak] merakla   seyred-il-di.
   girl   blush-ADV   with curiosity watch-PASS-PST

   I2/F1 I2/F1

   'The girl, while blushing, was watched with curiosity.'

d. *Adam [∅ sarar-arak]   otur-t-ul-du.
   man   turn pale-ADV sit-CAUS-PASS-PST

   I2/F1 I2/F1

   'The man, while turning pale, was made to sit.'

(20)a. *Buz [∅ eri-yerek] mutfağ-a   taş-ın-dı.[70]
   ice   melt-ADV   kitchen-DAT carry-PASS-PST

   I2/F1 I2/F1

   'The ice, while melting, was carried to the kitchen.'

b. *Fırın [∅ ısın-arak] sil-in-di.
   oven   warm up-ADV wipe off-PASS-PST

   I2/F1 I2/F1

   'The oven, while warming up, was wiped off.'

c. *Güneş [∅ bat-arak] beğen-il-di.
   sun   set-ADV   admire-PASS-PST

   I2/F1 I2/F1

   'The sun, while setting, was admired.'

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[70]It is interesting to note what one informant volunteered in place of the ungrammatical (20a&b): for the active embedded verbs eri- (melt, intransitive) and ısın- (warm up, intransitive), he substituted the passives of the corresponding causative verbs: eritil- (to be melted) and ısıtıl- (to be warmed up). The result is grammatical sentences with passive clauses upstairs and downstairs and both controller and victim initial 2s.

d. *Çorba [∅ piş-erek] karıştır-ıl-dı.
   soup   cook-ADV stir-PASS-PST

   I2/F1 I2/F1

   'The soup, while cooking, was stirred.'

e. *Bina   [∅ yan-arak] boşalt-ıl-dı.
   building   burn-ADV evacuate-PASS-PST

   I2/F1   I2/F1

   'The building, while burning, was evacuated.'

If these data are representative, they provide yet another reason for rejecting Özkaragöz's interlocking claims. At the same time they show that the alternative account that has been advanced is not complete: semantic condition (14) does not predict the ungrammaticality of the sentences in (19) and (20), where both controllers and victims are non-agentive. Furthermore, recall that the condition also was not adequate with respect to the sentences in (18a&b), repeated below. Like (19) and (20), they contain a passive matrix clause and an active adverbial clause.

(18)a. *Ayşe [∅ sıkıl-arak]   disko-ya götür-ül-dü.
             feel bored-ADV disco-DAT take-PASS-PST

       'Ayşe was taken to the disco feeling bored.'

   b. *Ali [sevin-erek]   öp-ül-dü.
           feel happy-ADV kiss-PASS-PST

       'Ali, while feeling happy, was kissed.'

One conclusion that might be drawn from this latest set of data is that the -yErEk adverbial clause and the clause in which it is embedded must have parallel structure, i.e., both active or both passive. However, inspection of an exceptional class of -yErEk sentences described by Biktimir (1982) forces rejection of this notion. What makes Biktimir's sentences special is that the controller of Equi is not a final subject but rather an unspecified PRO chomeur. Thus, they are exceptions to Özkaragöz's claim that both the controller and victim of -yErEk Equi must be final 1s. Consider the following two examples from Biktimir.

(21)a. [∅ konuş-arak] yap-ıl-ır.
　　　　　talk-ADV　　do-PASS-PRS

'One does (it) talking.'
'While talking, it is done by one.'

　　b. [∅ sayıkla-yarak] öl-ün-ür.
　　　　　rave-ADV　　　　die-PASS-PRS

'One dies raving.'
'While raving, it is died by one.'

The matrix clause is a personal passive in (21a)[71] and an impersonal passive in (21b). In both cases, the absent nominal in the active adverbial clause is controlled by the initial subject/final chomeur of the matrix clause, which is also unrealized but understood to be some unspecified set of human beings. Notice that in accord with the semantic condition in (14), the following examples, also from Biktimir (1982), are ungrammatical. (That there is a clash between semantic roles in (22a) is pretty obvious. It is less obvious in (22b), given that I have glossed the embedded verb *sayıkla-* as 'rave.' A lengthier and more accurate gloss is, 'talk in one's sleep or in delirium.')

(22)a. *[∅ konuş-arak] öl-ün-ür.
　　　　　speak-ADV　die-PASS-PRS

'One dies speaking.'
'While speaking, it is died by one.'

　　b. *[∅ sayıkla-yarak] yap-ıl-ır.
　　　　　rave-ADV　　　　do-PASS-PRS

'One does it raving.'
'While raving, it is done by one.'

The grammaticality of (21a&b) shows that voice parallelism is not required in the *-yErEk* construction. What, then, accounts for the ill-formedness of (18), (19), and (20)?

One possible explanation incorporates Özkaragöz's claim that *-yErEk* Equi requires the controller and victim to bear the same initial grammatical relation but rejects the

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[71]The final pronominal subject of the matrix personal passive doesn't appear.

claim that there is a distinction between initial unaccusative and unergative verbs in Turkish. That is, if it is assumed that intransitive verbs in Turkish determine nothing but initially unergative clauses, then all the data we have seen are explained by the following two conditions, the first of which is the semantic condition stated originally in (14):

(23) Conditions on -yErEk Equi: Solution A

    a. If the controller is a semantic agent, the victim
       cannot be a semantic patient, or vice versa.
    b. The controller and victim must bear the same
       initial grammatical relation.

Given (23b) plus abandonment of the Unaccusative Hypothesis, it is correctly predicted that the final subject of a passive clause will never control the deletion of, or be deleted by, the final subject of an active (intransitive or transitive) verb, regardless of its semantic role.

Alternatively, one could propose that -yErEk Equi is insensitive to initial grammatical relations and that the properties of -yErEk sentences in which the controlling clause is passive and the controlled clause active (or vice versa) can be explained by making reference to thematic roles. Specifically, if we set up a hierarchy of thematic roles with agent outranking both goal and patient,[72] then in place of (23b) we can substitute (24b):

(24) Conditions on -yErEk Equi: Solution B

    a. (same as (23a) above)
    b. When the -yErEk clause is active and the matrix
       clause is passive, or vice versa, then the nominals
       involved in Equi must be the highest ranking
       nominals in their respective clauses on the thematic
       hierarchy.[73]

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[72]And with (animate) goal outranking patient.

[73]Luigi Rizzi (personal communication) suggested this account to me.

Given (24b), the semantic patient of a passive verb cannot be involved in Equi if the verb takes an agent as one of its other arguments. This accounts for the ungrammaticality of (18), (19), and (20), where the Equi controller is the semantic patient/final 1 of a passive clause, and for the grammaticality of the 'exceptional' sentences in (21), where the Equi controller is not the final 1 of the passive clause but is the highest ranked nominal on the thematic hierarchy.

(24b) might be faulted for being ad hoc, but it is actually no more ad hoc than (23b). The fact is that, under Solution A, reference to initial grammatical relations is only required when one of the clauses in the -yErEk construction is active and the other passive.

The choice between Solution A and Solution B is an interesting one, but I will not attempt to make it here. The point is that neither solution requires adoption of the Unaccusative Hypothesis. In fact, under Solution A, all intransitive predicates in Turkish must be syntactic unergatives. Furthermore, even if the facts reported here are shown to be incorrect or unrepresentative and, as Özkaragöz reported, -yErEk Equi can involve the final subject of a passive verb and the final subject of an intransitive, semantically unaccusative verb, there would still be no support for the Unaccusative Hypothesis. That is, all we would need is condition (14), which makes reference to nothing but semantic roles. It provides a more satisfactory account of the properties of the -yErEk construction than the solution proposed by Özkaragöz.

4.3. Inchoatives

If the -yErEk construction provides no evidence in favor of the Unaccusative Hypothesis, then are there any data in Turkish, the explanation of which requires that two kinds of intransitive predicates be distinguished? I am aware of only one other set of facts which might be taken as evidence that a subset of intransitive verbs in Turkish determine initially unaccusative strata. I discuss the data below and argue that there is no support for the Unaccusative Hypothesis here either.

There are transitive verbs in Turkish which are related to intransitive inchoative verbs. The subject of the intransitive corresponds to the object of the transitive, and the intransitive verb is suffixed with a morpheme which is identical in form to the passive (-*In* after [l], -*n* after vowels, and -*Il* elsewhere). Thus, alongside *aç-* (open, transitive), we find *açıl-*, which can get an inchoative or a passive reading:

(25) Kapı aç-ıl-dı.
     door open-Il-PST

     'The door opened.'
     'The door was opened.'

Adding a *tarafından* phrase to (25) will force the passive reading:

(26) Kapı Cengiz tarafından aç-ıl-dı.
     door   by   open-PASS-PST

     'The door was opened by Cengiz.'

The expression *kendiliğinden* (by itself/oneself) forces the stative reading:

(27) Kapı kendiliğinden aç-ıl-dı.
     door by itself   open-INCHO-PST

     'The door opened by itself.'

Other examples of pairs of related verbs appear below. (The first member of each pair is transitive.)

(28)a. as- (hang, suspend)
        asıl- (hang)
     b. boğ- (strangle, drown)
        boğul- (gasp, choke, drown)
     c. büz- (constrict)
        büzül- (contract, shrink)
     d. çek- (pull)
        çekil- (withdraw, shrink, draw back)
     e. dök- (spill)
        dökül (spill)

```
f.  eğ- (bend)
    eğil- (bend)
g.  kapa- (close)
    kapan- (close)
h.  kat- (add, join, mix)
    katıl- (join)
i.  kır- (break)
    kırıl- (break)
j.  salla- (swing, shake)
    sallan- (swing about)
```

Turkish is not the only language in which there are active intransitive verbs and passive verbs marked with (what appears to be) the same morpheme. The same situation is found in Sanskrit and Albanian. Rosen (1984) observes that in Sanskrit, *-ya* is found affixed to verbs in the middle voice, whether active inchoatives or passives. It does not, however, occur suffixed to intransitive verbs in the active voice or to transitive verbs.[74]

(29) Rosen's (54b), (55b), (54a), (55a)

    a. Odanaḥ   pacyate.
        rice-NOM cooks-*ya*-MIDDLE

        'The rice is cooking.'

    b. Odanaḥ   pacyate   Devadattena.
        rice-NOM cooks-*ya*-MIDDLE INST

        'The rice is being cooked by Devadatta.'

    c. Devadattaḥ pacati.
        NOM   cooks

        'Devadatta is cooking.'

    d. Devadatta odanam   pacati.
        NOM   rice-ACC cooks

        'Devadatta is cooking the rice.'

Rosen suggests that *-ya* is the morphological reflex of 2-1 Advancement. This would account for its occurrence in passive clauses as well as in active intransitive clauses such as (28a), so long as one assumes that the final subject/semantic patient of an inchoative

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[74]Rosen says that her examples are "mainly" from Cardona (1976).

is an initial 2. Citing Hubbard (1980), Rosen also proposes that the Unaccusative Hypothesis plays a key role in explaining the occurrence of the middle voice in Albanian, which is associated with passive, reflexive, and reciprocal readings and, additionally, is required in just the sort of intransitive clauses that would be analyzed on semantic grounds as initially unaccusative.

An account of the occurrence of the suffix *-Il* in Turkish along the same lines as Rosen's account of *-ya* in Sanskrit is attractive, but it is not the only plausible account which comes to mind. I propose as an alternative that the relationship between a transitive verb such as *aç-* and the inchoative *açIl-* is to be captured by a lexical redundancy rule. The rule I present below includes an operation on predicate argument structure, and is identical to one formulated by Grimshaw (1982) to generate inchoative verbs in French (with reflexive morphology).

```
(30)  Inchoativization

   a.  Pred       :  CAUSE (x, BECOME (PREDICATE (y)))  --->
           cause

       Pred     :  BECOME (predicate (y))
           incn

   b.  V --->  V+Il
```

The rule creates a one-place predicate from a two-place predicate. If we assume for the sake of discussion that the single argument of a one-place predicate is assigned the 1-relation in Turkish, then the lexical entry in (32) will be derived from the one in (31).

```
(31)  aç   < 1       2 >
             |       |
            AGENT  PATIENT


(32)  açıl  < 1 >
              |
            PATIENT>
```

While the lexical rule of Inchoativization has the effect of making the direct object

of a transitive verb the subject of the related inchoative and thus mimics syntactic 2-1 Advancement,[75] the fact remains that under this approach we cannot formulate a uniform condition governing the occurrence of the suffix -*Il* in Turkish. However, this isn't necessarily a bad result. Consider the distribution of the morpheme: it occurs with all passive verbs, but it is certainly not the case that it occurs with all predicates which are suspected on semantic grounds of taking initial 2s which advance to 1. For instance, 'fall' (intransitive) is *düş-* not **düşül-*, 'melt' (intransitive) is *eri-* not **erin-*, 'freeze' (intransitive) is *don-* not **donul-*.[76] Given this, one could certainly not claim that 2-1 Advancement is a sufficient condition for the suffixation of -*Il*. Neither could one claim simply that it is a necessary condition: the occurrence of Passive 2-1 Advancement would have to be characterized as a necessary and sufficient condition for suffixation of -*Il*, the occurrence of Unaccusative 2-1 Advancement as just a necessary condition. It appears, then, that no matter what theoretical assumptions we make, we will have to analyze -*Il* suffixed to active verbs differently from -*Il* suffixed to passive verbs; there are, in effect, two different -*Il* suffixes.[77] Given this, it cannot be claimed that the approach outlined ⋏bove fails to capture a generalization about the occurrence of the morpheme. By the same token, the occurrence of -*Il* does not argue for adoption of the Unaccusative Hypothesis.

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[75]There may be historical reasons for this, but there is no point in my speculating about them.

[76]Also, one can isolate the suffix on verbs which are not semantic unaccusatives: *çekil-* (compare *çek*, 'pull') means not only 'shrink' and 'recede' but also 'withdraw,' 'retire,' and 'resign'; *atıl-* (compare *at-*, 'throw') means 'attack'; *sarıl-* (compare *sar-*, 'wrap') means 'embrace'.

[77]Make that three different -*Il* suffixes. Impersonal passive verbs are also suffixed with this morpheme and I have proposed that impersonal passivization does not involve 2-1 Advancement.

4.4. Conclusion

Although the Unaccusative Hypothesis apparently finds no support in Turkish, a growing body of literature demonstrates clearly that we need it to capture linguistic generalizations in a variety of other languages. The case for it in Italian, for instance, is particularly strong (see Burzio 1981 as well as Rosen 1984 and the references cited therein). Where the case is weaker, it would not be surprising if a second look at the facts resulted in the kind of conclusion I have reached in this chapter about the -yErEk construction: that the facts are equally well explained -- or more satisfactorily explained -- when reference is made to thematic roles rather than to initial grammatical relations. That is, since there is a high (but not perfect) correlation between semantic roles and initial grammatical relations, an essentially semantic phenomenon could be analyzed as a syntactic phenomenon with considerable success. In general, I expect that as a system for classifying thematic relations takes shape and as diagnostics for agenthood, patienthood, etc. are developed, numerous strictly syntactic explanations of linguistic phenomena will be supplanted by explanations that make reference to both syntactic and semantic factors.

CHAPTER 5

CAUSATIVES

5.1. Introduction

Causative formation in Turkish, as in many other languages, is an operation that increases the valency of a verb by one: causativizing an intransitive verb creates a transitive verb, causativizing a transitive verb creates a ditransitive verb.

(1)a. Sedef zɨpla-dɨ.
              hop-PST

       'Sedef hopped.'

   b. Hoca   Sedef-i   zɨpla-t-tɨ.
       teacher   ACC hop-CAUS-PST

       'The teacher made Sedef hop.'

(2)a. Sedef pencere-yi aç-tɨ.
              window-ACC open-PST

       'Sedef opened the window.'

   b. Hoca   Sedef-e   pencere-yi aç-tɨr-dɨ.
       teacher   DAT window-ACC open-CAUS-PST

       'The teacher made Sedef open the window.'

The process is very productive in Turkish. Given a verb whose meaning is compatible with causativization, there typically exists a related verb suffixed with the causative morpheme. After polysyllabic stems ending in a vowel or a liquid, the causative suffix is realized as -t; elsewhere it is generally -d/r.

There is no question about the superficial simplexity of Turkish causative sentences (Aissen 1974a & 1974b). What is controversial is whether their source is simplex or

complex. Relational Grammar assumes a bi-sentential source. In some non-initial stratum, the embedded predicate is assigned the U(nion)- relation in the matrix. This triggers Clause Union: all the nominal dependents of the embedded clause come to bear relations in the matrix. (Henceforth, I will use the phrase 'union stratum' to refer to the first stratum in which dependents of the embedded clause bear grammatical relations to the matrix clause.)

Given the Stratal Uniqueness Law, the final subject of the embedded clause and the matrix subject cannot both bear the 1-relation in the union stratum. Until recently, it was supposed that the embedded subject was universally assigned the 2-relation in the union stratum if the final stratum of the embedded clause was intransitive and the 3-relation if the final stratum was transitive. However, Gibson and Raposo (to appear) argue persuasively that this schema is too restrictive. In Chamorro, for example, the final embedded subject always becomes a matrix 2. Thus, Clause Union appears universally to involve the assignment of an object-relation (i.e., the 2-relation or 3-

relation) to the embedded subject.[78]

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[78]This may still be too strong, as Gibson and Raposo acknowledge. If assignment of a new grammatical relation to the embedded subject in the union stratum is motivated by the Stratal Uniqueness Law, the law would be satisfied if the subject were assigned the chomeur-relation rather than an object-relation. This may well be what happens in Korean. Chun, Gerdts, and Youn (1984) propose that the embedded intransitive subject of the following causative, *sensaengnimi* (teacher), is a union chomeur; note that it is casemarked nominative.

(a) Haksaeng-i   sensaengnim-i ttena-key ha-yet-ta.
     student-NOM teacher-NOM   leave-CMP do-PST-IND

     'The student made the teacher leave.'

One piece of evidence comes from the fact that *sensaengnimi* cannot trigger suffixation of the verb with the 'subject honorification' (SH) morpheme -*si*:

(b) *Haksaeng-i   sensaengnim-i ttena-key ha-<u>si</u>-yet-ta.
     student-NOM teacher-NOM   leave-CMP do-<u>SH</u>-PST-IND

In general, -*si* appears on the verb when the clause contains a working 1 (a nominal that heads a 1-arc and a final 1-arc, 2-arc, or 3-arc) which refers to a high status person. If *sensaengnimi* in (a) is a final chomeur, then it is not a working 1 and the ungrammaticality of (b) is explained. By way of contrast, note that in an unexceptional-looking causative such as (c) below, in which the embedded intransitive subject appears as an accusative-casemarked object (and is presumably a final 2, hence a working 1), *si* is suffixed to the verb.

(c) Haksaeng-i   sensaengnim-il ttena-<u>si</u>-key ha-yet-ta.
     student-NOM teacher-ACC   leave-<u>SH</u>-CMP do-PST-IND

     'The student made the teacher leave.'

Incidentally, Stratal Uniqueness would be satisfied if the *matrix* subject, not the embedded subject, were revalued in a clause union construction. Chun, Gerdts, and Youn propose that this is, in fact, an option in Korean. They claim that the matrix subject has been put into chomage in the following Korean causative.

(d) Sensaengnim-i na-eyiyhaese satali-eyse
     teacher-NOM   I-by   ladder-from

     tteleci-key haye-ci-si-et-ta.
     fall-CMP   do-PASS-SH-PST-IND

     'The teacher was made by me to fall from the ladder.'

Gibson and Raposo also defend what they call the Inheritance Principle: embedded nominals other than the subject bear the same relation in the union stratum that they bear in the final stratum of the embedded clause. However, when adherence to the Inheritance Principle would lead to a violation of Stratal Uniqueness, the former is suspended and a nominal is assigned the chomeur relation. Thus, in Chamorro, where the embedded subject always bears the 2-relation in the union stratum, an embedded direct object is always a union chomeur. For example, (3a) has the representation in (3b).[79]

```
(3)a.  Ha      na'-taitai ham    i    ma'estru ni   esti
        3s:ERG CAUS-read  1p:ABS the  teacher  OBL  this

        na    lebblu.
        LINK  book
```

'The teacher made us read this book.'

b.
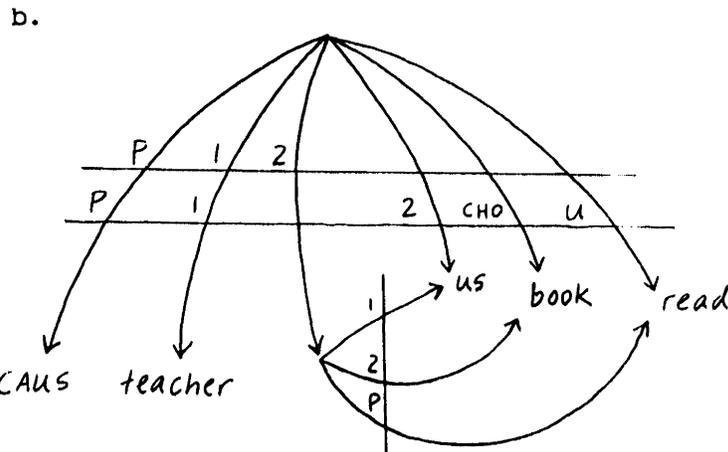
Though the representation in (3b) provides a full account of the properties of the causative in (3a), it runs afoul of the Motivated Chomage Law. Recall that this law states that the first stratum which contains a chomeur must also contain a nominal that bears a term relation, and that the chomeur must bear exactly the same term relation in the previous stratum. The problem here is with 'previous stratum': in (3b), the

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[79]See Gibson (1980) and Gibson and Raposo (to appear) for the arguments that *ni esti na lebblu* (this book) in (3a) is a final chomeur.

first relation that the embedded 2 bears in the matrix is the chomeur relation; it bears no relation at all in the previous stratum. Gibson and Raposo suggest a revision of the law which "...represents the natural extension of the notion 'Chomeur' when the range of relevant phenomena goes beyond single clauses." In essence, for nominals which first bear grammatical relations to a clause in a union stratum, their revision permits the final stratum of the embedded clause to count as the stratum which precedes the union stratum. In what follows, I will assume the Gibson and Raposo account of Clause Union, including their modification of the Motivated Chomage Law.

Returning to Turkish causatives, the fact is that the final subject of the embedded clause becomes the direct object of the union clause when the embedded clause lacks a final direct object. This is illustrated in (1), repeated below, where the embedded clause contains only a final 1, and in (4), where it contains a final 1 and a final 3.[80]

(1)a. Sedef zıpla-dı.
             hop-PST

     'Sedef hopped.'

  b. Hoca   Sedef-i   zıpla-t-tı.
     teacher   ACC hop-CAUS-PST

     'The teacher made Sedef hop.'

(4)a. (Ben) çocuğ-a   bağır-tı-m.
    1s   child-DAT shout-PST-1s

     'I shouted at the child.'

  b. Hasan ben-i   çocuğ-a   bağır-t-tı.
     1s-ACC child-DAT shout-CAUS-PST

     'Hasan made me shout at the child.'

Like other 2s in Turkish, the union 2/embedded 1 is casemarked accusative and it undergoes passive. The passives of (1b) and (4b) are given below.

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[80]I am assuming that the dative casemarked object of the verb *bağırmak* (to shout) in (4a) is a 3, not an oblique (say, a directional). This may be wrong, but nothing much hinges on it. It is very difficult to find clear-cut cases of verbs in Turkish which take 3s without co-occurring 2s.

```
(5)a.  Sedef  (hoca      tarafından)  zıpla-t-ıl-dı.
              teacher by              hop-CAUS-PASS-PST
```

'Sedef was made to hop (by the teacher).'

```
  b.   (Ben)  çocuğ-a    (Hasan tarafından)
        1s    child-DAT          by

       bağır-t-ıl-dı-m.
       shout-CAUS-PASS-PST-1s
```

'I was made (by Hasan) to shout at the child.'

When the final stratum of the embedded clause contains both a 1 and a 2, the former becomes the union 3 (casemarked dative); this is illustrated by (2b), repeated below.

```
(2)b.  Hoca      Sedef-e   pencere-yi aç-tır-dı.
       teacher        DAT window-ACC open-CAUS-PST
```

'The teacher made Sedef open the window.'

The embedded final 2, in keeping with the Inheritance Principle, is also the 2 of the union clause. It is casemarked accusative and it is passivizable.

```
(6)   Pencere Sedef-e   (hoca      tarafından)
      window         DAT  teacher by

      aç-tır-ıl-dı.
      open-CAUS-PASS-PST
```

'The window was caused (by the teacher) to be opened by Sedef.'

Finally, consider an embedded clause which contains a final 1, 2, and 3. As a consequence of the fact that the clause is finally transitive, the subject will become the union 3; as a consequence of that, the indirect object should be a matrix chomeur. That is, it cannot inherit without there being a violation of Stratal Uniqueness. Nothing stops the embedded direct object from inheriting, however. Thus, the causative in (7b) should have the representation in (8).

(7)a. Cengiz çiçeğ-i   Gül-e   ver-di.
              flower-ACC   DAT give-PST

   'Cengiz gave the flower to Gül.'

   b. (Ben) Cengiz-e   çiçeğ-i   Gül-e
        1s   DAT flower-ACC   DAT

        ver-dir-di-m.
        give-CAUS-PST-1s

   'I made Cengiz give the flower to Gül.'

(8)
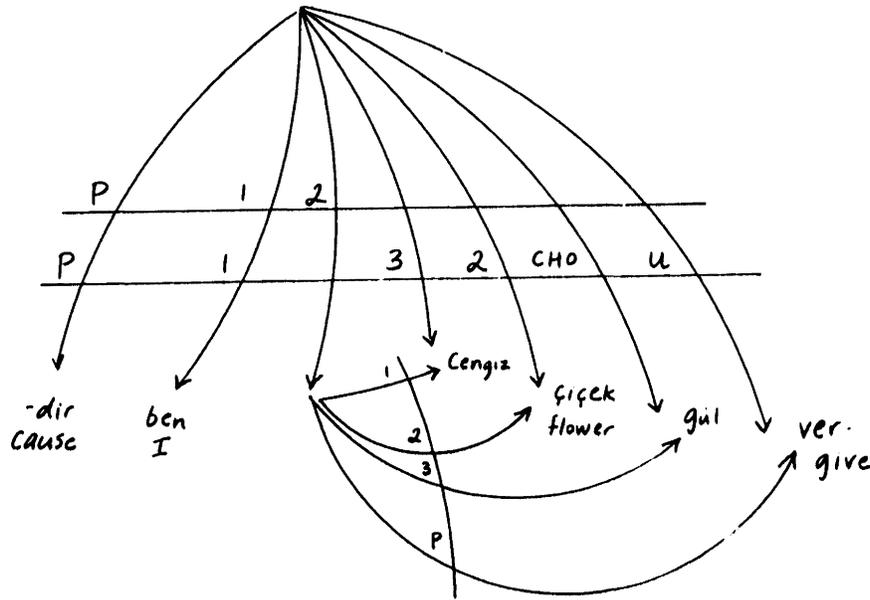
Morphology is not a good guide to grammatical relations here since what are claimed to be the union 3 and the union chomeur are both casemarked dative. But there is evidence that (8) correctly represents the structure of (7b). Below I present an argument due to Gibson and Özkaragöz (1981).

Given the fact that many variations on the basic word order are permitted in Turkish, the sentence in (7b) is expected to be ambiguous, i.e., the first dative-casemarked nominal could be interpreted as subject of the embedded verb and the second as indirect object, or vice versa. However, as Aissen (1974a) first observed, the leftmost dative NP is always interpreted as corresponding to the embedded subject. Gibson and Özkaragöz explain this fact as follows. First they make the plausible claim

that the unmarked word order of Turkish is [(1) 3 2 (non-term) V], where the

relations referred to are final relations, and where 'non-term' includes chomeurs and

obliques. Second, they propose that the unmarked word order is adhered to "when, for

any reason, variation is not allowed." As Aissen (1974a) has shown, the full variety of

marked orders is not allowed when a clause contains two dative-casemarked nominals.[81]

So, in (7b) the dative-casemarked nominal which bears the final 3-relation should

appear in its unmarked position, which is to the left of a dative-casemarked nominal

which bears the final chomeur-relation. Given the representation in (8), this means

that the leftmost dative nominal should always be interpreted as the deep subject and

the rightmost as the deep indirect object. Of course, this is exactly the right result.

5.2. The Problem with Passive

The relational account of causative formation in Turkish -- in fact, any account

which posits a bi-sentential source for causatives -- faces the problem of explaining

why rules which can, in general, apply in embedded clauses cannot apply in a clause

embedded under the causative predicate. This is a well-known problem, documented in '

detail in Aissen (1974a&b). Consider (personal) passivization, for instance. Apparently

it cannot apply before Clause Union.

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[81]It's not true that all the constituents of a clause which contains two dative-
casemarked NPs have to appear in their unmarked positions; the subject of the clause,
for example, doesn't have to. Moreover, even the dative-casemarked NPs have some
positional freedom. As Aissen shows, in causatives with two datives, where one
corresponds to the embedded subject and the other to the embedded indirect object or
to an oblique object, the former must occur to the left of the latter. This relative
order is maintained if the nominal that corresponds to the embedded indirect object or
oblique is backgrounded, and the resulting sentence rates nothing worse than a '?' on
the intended reading.

```
(13)a.   Pencere aç-ıl-dı.
         window  open-PASS-PST

         'The window was opened.'

    b.  *(Ben) pencere-yi aç-ıl-t-ti-m.
         1s    window-ACC open-PASS-CAUS-PST-1s

         'I had the window opened.'
```

One could propose, as Zimmer (1976) did, that the ungrammaticality of (13b) stems from a morphological rather than a syntactic fault. That is, Passive can apply before Clause Union but passive morphology must be suppressed. This idea is incorporated into some accounts of causative formation in French (though it remains controversial). For example, consider (14) below.

```
(14)   Je ferai porter ce paquet par Gaston.

       'I will have this parcel carried by Gaston.'
```

Passive chomeurs are marked with *par* in French, so the occurrence of a *par* phrase associated with the embedded verb suggests that passive applied before causative formation in (14). However, the active infinitive *porter* appears rather than the expected passive infinitive.

The suggestion that passive morphology is suppressed in Turkish has some initial plausibility. Consider a so-called 'missing subject' causative, illustrated in (15). It looks just like the ungrammatical (13b) with the passive morpheme removed. Zimmer (1976) proposes that such sentences are derived by causativizing agentless passives.

```
(15)   (Ben) pencere-yi aç-tır-dı-m.
        1s    window-ACC open-CAUS-PST-1s

       'I had the window opened.' 'I had someone open the window.'
```

There are several problems here, as Zimmer acknowledged. First, note that while agentless personal passives can apparently be causativized, agentless impersonal passives cannot be, whether the morpheme *-Il* appears, as in (16b), or is missing, as in (16c).

Thus, it would not be sufficient to claim that a rule can apply before causativization so long as its characteristic verbal morphology is unexpressed.

```
(16)a.   Hapishane-den kaç-ıl-dı.
         prison-ABL     escape-PASS-PST

         'The prison was escaped from.'
         'Someone escaped from the prison.'

    b.  *Hapishane-den kaç-tır-dı-m.
         prison-ABL     escape-CAUS-PST-1s

         'I had the prison escaped from.'
         'I had someone escape from the prison.'

    c.  *Hapishane-den kaç-ıl-t-tı-m.
         prison-ABL     escape-PASS-CAUS-PST-1s
```

A second problem is this: if (personal) passivization is permitted to apply before causative formation, its application must be restricted to clauses which have unspecified subjects. That is, only agentless personal passives appear to have related causatives. A sentence such as (17), which contains a *tarafından* phrase, is ungrammatical.

```
(17) *(Ben) pencere-yi  Cengiz tarafından aç-tır-dı-m.
      1s    window-ACC           by        open-CAUS-PST-1s

      'I had the window opened by Cengiz.'
```

It might be suggested that this additional restriction isn't as unwelcome as it seems since most speakers prefer personal passives without *tarafından* phrases to personal passives with them. Nevertheless, while many speakers report that a sentence such as (18) is not completely felicitous,

```
(18)  Pencere Cengiz tarafından aç-ıl-dı.
      window         by        open-PASS-PST

      'The window was opened by Cengiz.'
```

the causative in (17) is judged to be completely ungrammatical. So, in Turkish, unlike French, none of the morphological markers associated with downstairs passive appear in

causatives.[82] Either there is some sort of a conspiracy in Turkish to make it look as if

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[82]There are grammatical causatives in Turkish which contain *tarafından* phrases which are associated with the embedded verb. Consider, first, the following sentences. (Many of the examples presented below, and the discussion that accompanies them, are from Zimmer (1976) and sources cited therein.)

    (a)   Hasan biz-i çalış-tır-dı.
              1p-ACC work-CAUS-PST

        'Hasan made us work.'

    (b)   Müdür   mektub-u   Hasan-a   göster-di.
          director letter-ACC   -DAT show-PST

        'The director showed the letter to Hasan.'

Causativizing (a) should yield (c) below. As Zimmer (1976) notes, some speakers find this double causative very awkward at best.

    (c)   Ahmet Hasan-a   biz-i çalış-tır-t-tı.
               -DAT 1p-ACC work-CAUS-CAUS-PST

        'Ahmet made Hasan make us work.'

Zimmer proposes that these speakers prohibit an 'intermediary' from being casemarked dative in a causative, where an intermediary is "an agent who is caused by another agent to make a third agent do something" (p. 409). The sentence in (c) is fully grammatical if the intermediary is left unspecified and it improves markedly if the intermediary appears in a *tarafından* phrase.

Now consider the causative in (d) below, related to (b). Some speakers reject any causative with two dative-casemarked NPs (Aissen 1974a).

    (d)   Müdür-e   mektub-u   Hasan-a   göster-t-ti-m.
          director-DAT letter-ACC   -DAT show-CAUS-PST-1s

        'I made the director show the letter to Hasan.'

If one of the datives is left unspecified, the sentence is fully grammatical, and if *müdür* is made the object of *tarafından*, grammaticality improves significantly.

In general, then, an agent which, for one reason or another cannot be casemarked dative in a causative, may appear in a *tarafından* phrase.

Passive doesn't apply before Clause Union or Passive simply doesn't apply before Clause Union.

There is evidence that the latter conclusion is the correct one. Consider the fact that not all transitive idioms passivize in Turkish. For instance, (19b) is good on an idiomatic reading while (20b) is not.

```
(19)a.   Zahide Ali-ye   firça-yi   at-ti.
                   -DAT brush-ACC throw-PST

         'Zahide got angry at Ali.'
         (lit:  Zahide threw the brush at Ali.')

     b.  Firça Ali-ye   at-il-di.
         brush     -DAT throw-PASS-PST

         'Someone got angry at Ali.'
         (lit:  The brush was thrown at Ali.')

(20)a.   Zahide pire-yi   nalla-di.
                   flea-ACC shoe-PST

         'Zahide accomplished something very difficult.'
         (lit: ' Zahide shoed the flea.')

     b.  Pire nalla-n-di.
         flea shoe-PASS-PST

       ='Something very difficult was accomplished.'
       (= 'The flea was shoed.')
```

If a missing subject causative is derived by causativizing an agentless passive, then the causative in (21a) below should be good on an idiomatic reading but the causative in (21b) should not be. But both causatives are grammatical on idiomatic readings.

```
(21)a.   Firça-yi  Ali-ye   at-tir-di-m
         brush-ACC     -DAT throw-CAUS-PST-1s

         'I made someone get angry at Ali.'
         (lit:  I made someone throw the brush at Ali.')

     b.  Pire-yi  nalla-t-ti-m.
         flea-ACC shoe-CAUS-PST-1s

         'I had someone accomplish something very difficult.'
         (lit:  'I had someone shoe the flea.')
```

I conclude that there is no reason to think that Passive applies before causativization to

derive missing subject causatives. And since only missing subject causatives invite the claim that there are causatives of passives, I additionally conclude that Passive never applies before causative formation in Turkish.

5.3. A Lexical Account of Causative Formation

In a 1980 paper, Aissen and Hankamer (AH) explore the idea that causative formation in Turkish is a lexical rule. As they point out, on the natural assumption that syntactic rules cannot apply before lexical rules, "...the inapplicability of Passive in causative constructions...would be an automatic consequence of a lexical analysis, as long as the Passive rule can be argued to be a transformation, and not a lexical rule itself." The lexical rule of causative formation which they propose is given below. (The lower case variable stands for the phonological representation of the verb while the upper case variable stands for its semantic representation. DIR is the causative suffix. The labels ERG (ergative) and ABS (absolutive) are merely cover terms. OBL$_i$ includes any object, with the exception of a direct object, for which a verb is subcategorized.)

$$
\begin{array}{llllll}
(22) & x & \langle \ (ERG) & ABS & (OBL_i) & \rangle \\
 & X & & & & \\
 & & \downarrow & \downarrow & \downarrow & \\
 & x+DIR & \langle \ (1) & \quad (3) \quad 2 & (OBL_i) & \rangle \\
 & X' & & & &
\end{array}
$$

Given an entry for an intransitive verb, the rule creates a new lexical entry by relating the input subject (ABS) to the output direct object and by introducing an optional subject. For transitive verbs, the rule maps the optional subject of the input (ERG) onto the optional indirect object of the output and the direct object of the input (ABS) onto the direct object of the output; again, an optional subject is introduced. Note that whether the basic entry is intransitive or transitive, the derived causative entry is always transitive. Moreover, the only term that the derived causative is required to have is a direct object. As a result, causatives such as (23a), with an unspecified direct

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object. are correctly predicted to be ungrammatical while causatives such as (23b), with an unspecified indirect object, are correctly predicted to be grammatical. ((23b) exemplifies the missing subject construction, which Zimmer (1976) characterizes as the causative of an agentless (personal) passive.)

(23)a. AH's (15)

    *Antrenör koş-tur-du.[83]
    trainer   run-CAUS-PST

    'The trainer made (someone) run.'
  b. AH's (12)

    Kadın et-i   kes-tir-di.
    woman meat-ACC cut-CAUS-PST

    'The woman had the meat cut.'

Note that on AH's account, there could be no causatives of impersonal passives even if impersonal passivization were a lexical rule.[84]

5.4. Three Challenges to a Lexical Rule of Causative Formation

In a 1981 paper, Gibson and Özkaragöz (GÖ) argue that AH's lexical account of causative formation in Turkish is inadequate. They discuss a number of phenomena which appear to receive a superior treatment if causatives are analyzed as underlyingly complex in the syntax rather than simplex. Although I show below that the three arguments that GÖ advance against a lexical account of causative formation do not go through, I present a set of facts which demonstrate that causative formation is, as GÖ

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[83]Because discourse-recoverable NPs may be unrealized in surface structure, this sentence is grammatical on a reading which is irrelevant to the discussion. For example, (23a) would be a well-formed response to a question such as, 'What happened to Hasan?' (Answer: The trainer made him run.)

[84]This is especially clear if impersonal passives are analyzed as subjectless: the causative of an impersonal passive would be missing a direct object since the related non-causative verb would be missing a subject.

proposed, a syntactic operation that merges clauses.[85]

5.4.1. Benefactive Advancement

GÖ claim that the (a) and (b) sentences below are related by a rule of benefactive-to-indirect object advancement (BEN-3).

```
(24)a.   Erdoğan Tokay için yemek yap-ti.
                        for   food   make-PST

         'Erdoğan made food for Tokay.'

    b.   Erdoğan Tokay-a    yemek yap-ti.
                       -DAT  food   make-PST

         'Erdoğan made food for Tokay.'
```

In (a), the benefactive is the object of the postposition *için*; in (b), it is casemarked dative, which is consistent with the claim that it is a final 3. We will see later that the dative-casemarked nominal in (b) has another properties which identify it as a final 3.

GÖ note that the benefactive in a sentence such as (25a) below cannot advance to indirect object.

```
(25)a.   Hoca-ya      hediye-yi    Tokay için ver-di-m.
         teacher-DAT  present-ACC        for  give-PST-1s

         'I gave the present to the teacher for Tokay.'

    b.  *Hoca-ya      hediye-yi    Tokay-a  ver-di-m.
         teacher-DAT  present-ACC        -DAT give-PST-1s

         'I gave the present to the teacher for Tokay.'[86]
```

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[85]The discussion below is based heavily on Knecht (to appear). However, in that paper I concluded that AH were correct in proposing that causative formation in Turkish is lexical. A new set of data has led me to change my mind.

[86]This sentence is also bad on the reading, 'I gave the present to Tokay for the teacher.'

GÖ blame the ungrammaticality of (25b) on the fact that the verb *ver-* (give) is subcategorized for an indirect object. They propose the following:

(26)   BEN-3 is blocked if the lexical specification of the
        verb contains a 3.

Now, AH's lexical account of causative formation is not compatible with (26). Recall that they propose that all causative verbs which are related to transitive verbs (optionally) subcategorize an indirect object. Given this, if (26) is valid, BEN-3 should not be able to apply in a causative such as (27) below.

(27)   Ali-ye et-i   kız için kes-tir-di-m.
        -DAT meat-ACC girl for cut-CAUS-PST-1s

        'I made Ali cut the meat for the girl.'

However, for speakers who accept causatives which contain two (or more) dative-casemarked nominals, (28) is grammatical.

(28)   Kız-a   et-i   Ali-ye kes-tir-di-m.
        girl-DAT meat-ACC   -DAT cut-CAUS-PST-1s

        'I made Ali cut the meat for the girl.'[87]

In contrast, under the Relational Grammar account of causative formation, (28) is not predicted to be ungrammatical because causative verbs are not listed in the lexicon. The only 3 that could block BEN-3 in a causative is the 3 for which the complement verb is subcategorized — not the 3 that corresponds to the final subject of a transitive clause embedded under the causative predicate (e.g., *Aliye* in (27) and (28)).

The argument for the syntactic account of causative formation over the lexical account clearly hinges on (26). I argue below that it should not be incorporated into the grammar of Turkish. It turns out that there are semantic conditions on BEN-3

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[87]This sentence cannot also mean, 'I made the girl cut the meat for Ali.' I discuss this fact at more length in Section 5.4.1.

which are independently needed and obviate the need for (26). These conditions are fully compatible with AH's lexical rule of causative formation.

Note that BEN-3 applies productively in clauses which describe an act which yields or creates a product:

    (29)a. San-a omlet yap-acağ-im.
              2s-DAT   make-FUT-1s

          'I will make an omelet for you.'

        b. San-a bu   kazağ-i   ör-üyor-um.
           2s-DAT this sweater-ACC knit-PRG-1s

          'I am knitting this sweater for you.'

        c. Annem-e   bir elbise dik-ti-m.
           my mother-DAT a   dress   sew-PST-1s

          'I sewed a dress for my mother.'

        d. Ali-ye bir fotograf çek-ti-m.
              -DAT a   photograph pull-PST-1s

          'I took a photograph for Ali.'

It also applies very freely in sentences which describe acquisitions:

    (30)a. Kardeşim-e   bir palto al-di-m.
            my sibling-DAT a   coat buy-PST-1s

          'I bought a coat for my sibling.'

        b. San-a kitab-i kütüphane-den al-di-m.
           2s-DAT book-ACC library-ABL   take-PST-1s

          'I took a book out of the library for you.'

        c. San-a bir yüzük çal-di-m.
           2s-DAT a   ring steal-PST-1s

          'I stole a ring for you.'

        d. San-a bir kuş tut-tu-m.
           2s-DAT a   bird catch-PST-1s

          'I caught a bird for you.'

        e. Çocuğ-a   bir hediye seç-ti-m.
           child-DAT a   gift   select-PST-1s

          'I selected a gift for the child.'

In each of the above examples, the beneficiary stands to profit in a very direct and

tangible way from the action performed by the agent. It is understood that whatever the agent creates or acquires is intended for the benefactive and, presumably, will be transferred to him.

In some cases where BEN-3 applies, the agent takes temporary control over the patient and modifies it to make it more serviceable for the beneficiary.

(31)a. San-a   bulaşiklar-i   yiki-yacağ-im.
        2s-DAT dirty dishes-ACC wash-FUT-1s

        'I will wash the dirty dishes for you.'

    b. Hasan-a   biber döv-dü-m.
            -DAT pepper grind-PST-1s

        'I ground pepper for Hasan.'

    c. Ali ban-a Cengiz-in sigara-sin-i   yak-ti.
            1s-DAT   -GEN cigarette-POSS-ACC light-PST

        'Ali lit Cengiz's cigarette for me.'

(31c) is only acceptable on the reading that Ali lit one of Cengiz's cigarettes for the speaker to smoke. It cannot be understood to mean that Ali lit Cengiz's cigarette, in or on behalf of the speaker, for Cengiz to smoke.

Note that BEN-3 is not possible in the sentences in (32) below. I suggest that this is because disposition over the object involved in the action cannot ultimately pass to the benefactive.

(32)a. Ali için/*Ali-ye hap-i   yut-acağ-im.
            for   Ali-DAT pill-ACC swallow-FUT-1s

        'I will swallow the pill for Ali.'

    b. Ali için/*Ali-ye et-i   ye-di-m.
            for   -DAT meat-ACC eat-PST-1s

        'I ate the meat for you.'

Nor does it apply in sentences which describe one-participant acts: there is no object acted upon by the agent that could be transferred to the benefactive.

```
(33)a.  Ali için/*Ali-ye  dans ed-eceğ-im.
        for       -DAT dance-FUT-1s
```

   'I will dance for Ali.'

```
   b.  Ali için/*Ali-ye  Ankara-ya  git-ti-m.
       for       -DAT        -DAT go-PST-1s
```

   'I went to Ankara for Ali.'

```
   c.  Ali için/*Ali-ye  haril haril çalış-iyor-um.
       for       -DAT laboriously work-PRG-1s
```

   'I am working laboriously for Ali.'

Furthermore, BEN-3 does not apply when the agent's act cannot be understood to contribute toward making something available to the benefactive which he can use or enjoy,

```
(34)a.  Sedef için/*Sedef-e   Cengiz-i  öp-tü-m.
        for        -DAT        -ACC kiss-PST-1s
```

   'I kissed Cengiz for Sedef.'

```
   b.  Sedef için/*Sedef-e   ayna-ya   hohla-dı-m.
       for        -DAT mirror-DAT blow on-PST-1s
```

   'I blew on the mirror for Sedef.'

or when the agent's action destroys something or makes it less fit to serve the purpose it was designed to serve.

```
(35)a.  Arkadaşim için/*arkadaşim-a   mektub-u    yak-tı-m.
        my friend for   my friend-DAT letter-ACC burn-PST-1s
```

   'I burned the letter for my friend.'

```
   b.  Ali için/*Ali-ye  tabağ-ı  kir-di-m.
       for       -DAT dish-ACC break-PST-1s
```

   'I broke the dish for Ali.'

```
   c.  Fatoş için/*Fatoş-a   mektub-u    yirt-tı-m.
       for        -DAT letter-ACC tear-PST-1s
```

   'I tore the letter for Fatoş.'

In general, then, BEN-3 may apply just when an agent's activities make it possible for the entity denoted by the benefactive to use or enjoy something or further his

ability to use or enjoy it. Disposition of whatever the agents acts upon should be understood to pass to the benefactive. Given this, it is not surprising that verbs subcategorized for indirect objects which are semantic goals do not permit BEN-3. Consider *ver-* (give), which is obligatorily subcategorized for a 3, and *sat-* (sell), which is optionally subcategorized for one.

```
(36)a.  Ali Sedef için yüzüğ-ü  Kemal-a    ver-di.
                for ring-ACC        -DAT give-PST

        'Ali gave the ring to Kemal for Sedef.'

     b. *Ali Sedef-e    yüzüğ-ü  Kemal-a    ver-di.
                -DAT ring-ACC        -DAT give-PST-1s

(37)a.  Ali Sedef için yüzüğ-ü  sat-tı.
                for  ring-ACC sell-PST

        'Ali sold the ring for Sedef.'

     b. Ali Sedef-e    yüzüğ-ü  sat-tı.
               -DAT ring-ACC sell-PST

      ='Ali sold the ring for Sedef.'
      ='Ali sold the ring to Sedef.'
```

In these sentences, the agent has relinquished control over the ring and disposition of it has passed, not to the benefactive, but to someone else. The semantic conditions required for BEN-3 are not met here.

Finally, let's reconsider causative verbs which, on AH's account, are optionally subcategorized for a 3 which corresponds to the subject of the related transitive verb. The following example appeared above as (28); BEN-3 has applied.

```
(38)  Kız-a      et-i      Ali-ye   kes-tir-di-m.
      girl-DAT meat-ACC      -DAT cut-CAUS-PST-1s

      'I made Ali cut the meat for the girl.'
```

The event which the causative agent brought about in (38) is identical to the event described in (39) below, where BEN-3 has also applied.

```
(39)  Ali kiz-a     et-i    kes-ti.
          girl-DAT meat-ACC cut-PST
```

'Ali cut the meat for the girl.'

The semantic conditions for BEN-3 are met in (39) and, therefore, in (38). In both,
Ali took control over the patient and modified it in a desirable way; furthermore,
disposition of the patient is understood to pass to the girl.

I conclude that GÖ's constraint on BEN-3, which makes reference to a 3 in the
lexical entry of a verb, is superfluous. The semantic conditions on the rule which I
have described are more general than GÖ's (26) and, where there is overlap, they
account for the same facts.

5.4.2. 2-3 Retreat

There is a class of two-place predicates in Turkish which occur with objects which
share properties with both 2s and non-2s. I will call them 'oblique transitive verbs'
after Aissen (1974a). In active non-causative sentences, their objects, like non-2s, are
marked for something other than accusative case.[88]

```
(40)a.  San-a/*sen-i   tanri gibi tap-iyor-lar.
            2s-DAT 2s-ACC god    like worship-PRG-3p

        'They worship you like a god.'

    b.  Ayna-ya/*ayna-yi        hohla-di-m.
            mirror-DAT/mirrow-ACC blow on-PST-1s

        'I blew on the mirror.'

    c.  Biz-e/*biz-i   yardim et-ti-ler.
            1p-DAT/1p-ACC help-PST-3p

        'They helped us.'
```

---

[88]Below I just give examples of verbs which take dative-casemarked objects. There is
also a small number of oblique transitive verbs which take ablative-casemarked objects;
they will be discussed later in this chapter. I know of no oblique transitive verbs
whose objects are marked locative.

```
       d.  Taksim-de  ban-a/*ben-i   sataş-tı-lar.
              -LOC  1s-DAT/1s-ACC  annoy-PST-3p
```

'They annoyed me in Taksim.'

```
       e.  Sözüm-e/*sözüm-ü        inan-dı-lar.
           my word-DAT/my word-ACC  believe-PST
```

'They believed my word (what I said).'

Like other verbs which don't occur with 2s, oblique transitive verbs impersonally

passivize. All speakers of Turkish accept the following.

```
    (41)a.  San-a  tanrı gibi tap-ıl-ıyor.
            2s-DAT god   like worship-PASS-PRG
```

'You are worshipped like a god.'

```
       b.  Ayna-ya     hohla-n-dı.
           mirror-DAT blow on-PASS-PST
```

'The mirror was blown on.'

```
       c.  Biz-e  yardım ed-il-di.
           1p-DAT help-PASS-PST
```

'We were helped.'

```
       d.  Ban-a  Taksim-de  sataş-ıl-dı.
           1s-DAT        -LOC annoy-PASS-PST
```

'I was annoyed in Taksim.'

```
       e.  Sözüm-e      inan-ıl-dı.
           my word-DAT believe-PASS-PST
```

'My word (what I said) was believed.'

Furthermore, all speakers accept causatives of the sentences in (42) on the 'intransitive

pattern'. That is, the subject of the non-causative verb occurs as the accusative-

casemarked direct object of the related causative verb (rather than a dative-casemarked

indirect object); the object looks the same in the non-causative and related causative.

```
    (42)a.  Onlar-ı san-a  tap-tır-dı-m.
            3p-ACC  2s-DAT worhsip-PST-1s
```

'I made them worship you.'

```
       b.  Ali ben-i  ayna-ya     hohla-t-tı.
               1s-ACC mirror-DAT blow on-CAUS-PST
```

'Ali made me blow on tne mirror.'

c. Adam onlar-ı biz-e yardım et-tir-di.
    man them-ACC 1p-DAT help-CAUS-PST

    'The man made them help us.'

d. Onlar-ı ban-a sataş-tır-dı-n.
    3p-ACC   1s-DAT annoy-CAUS-PST-2s

    'You made them annoy me.'

e. Onlar-ı sözüm-e   inan-dır-dı-m.
    3p-ACC   my word-DAT believe-CAUS-PST-1s

    'I made them believe my word (what 1 said).'

These facts are consistent with the claim that the oblique transitive verbs given above take objects which bear the 3-relation.[89] But this is not the whole story. Note that many speakers allow oblique transitive verbs to personally passivize.

(43)a. (Sen) tanrı gibi tap-ıl-ıyor-sun.
        2s   god   like worship-PASS-PRG-2s

        'You are worshipped like a god.'

b. Ayna   hohla-n-dı.
    mirror blow on-PASS-PST

    'The mirror was blown on.'

c. (Biz) yardım ed-il-di-k.
    1p   help-PASS-PST-1ɟ

    'We were helped.'

d. (Ben) Taksim-de sataş-ıl-dı-m.
    1s   -LOC annoy-PASS-PST-1s

    'I was annoyed in Taksim.'

e. Sözüm   inan-ıl-dı.
    my word believe-PASS-PST

    'My word was believed.'

Given that personal passivization is the advancement of a 2 in a transitive stratum to 1, the grammaticality of the above sentences argues for assigning the 2-relation to the

---

[89]The other possibility is to assign them some oblique relation. But which one or ones? In any event, the important point is that the objects of oblique transitive verbs can bear a non-2 object relation; I will assume that it is the 3-relation.

objects of oblique transitive verbs in some stratum. As we will see below, these 2s actually surface in causatives.

Özkaragöz (1979) shows that the same speakers who accept the personal passives of oblique transitive verbs also accept causatives of these verbs on the 'transitive pattern'. That is, the nominal which corresponds to the subject of the non-causative verb functions as the dative-casemarked indirect object of the related causative; furthermore, the object of the former appears as the accusative-casemarked direct object of the latter. So, alongside (42a), we find (44).

(44) Sen-i onlar-a tap-tir-di-m.
     2s-ACC 3p-DAT worship-CAUS-PST-1s

     'I made them worship you.'[90]

This is, needless to say, striking evidence that *tap-* (worship) etc. do take objects which bear the 2-relation.

Özkaragöz proposes that the objects of oblique transitive verbs are initial 2s which can retreat to 3. In order to permit (44) above but block (45) below,

(45) *Sen-i tap-iyor-lar.
      2s-ACC worship-PRG-3p

     'They worship you.'

GO offer the following condition:

(46)   The initial 2 of a clause whose predicate is a 2-3 Retreat verb
       cannot be the surface 2 of that clause.

Only in (45) is *seni* the surface 2 of the 2-3 Retreat verb *tap-*. In (44), it is the surface 2 of the causative verb *taptir-*.

---

[90]For those speakers who find (42a) and (44) grammatical on the same reading, the sentences are ambiguous: 'I made them worship you' or 'I made you worship them.

It should be clear by now what threat 2-3 Retreat poses for AH's lexical rule of causative formation. The causatives in (42) can only be generated if 2-3 Retreat is permitted to apply before causativization; if 2-3 Retreat is a syntactic rule, then causative formation cannot be a lexical rule. However, GÖ present no evidence that 2-3 Retreat is a syntactic rule. While such evidence may be forthcoming, at present nothing stops a proponent of lexical causativization from putting 2-3 Retreat in the lexicon, where it relates pairs of verbs such as the following.

```
(47)   tap       < (1)   2 >
       WORSHIP


       tap       < (1)   3 >
       WORSHIP
```

I will investigate 2-3 Retreat at more length in Section 5.4.6.

5.4.3. Control Rules

5.4.3.1. Kendi Reflexivization and Equi

The last, and greatest, challenge faced by AH's lexical account of causative formation concerns control rules such as *kendi* Reflexivization and Equi. For most speakers, the antecedent of the reflexive pronoun *kendi* must be a subject.[91]

```
(48)   AH's (21) and (22)

    a.  Ben Hasan-a    ayna-da    kendi-m-i         göster-di-m.
        1s         -DAT mirror-LOC self-POSS:1s-ACC show-PST-1s

       'I showed Hasan myself in the mirror.'

    b.  *Hasan ban-a    kendi-m-i         göster-di.
              1s-DAT self-POSS:1s-ACC show-PST

       'Hasan showed me myself in the mirror.'
```

---

[91]*Kendi* is suffixed with a possessive morpheme which agrees with the antecedent in person and number. First and second person *kendi* reflexivization is clause-bounded in Turkish, but third person is not.

However, the indirect object of a causative verb can control *kendi* so long as it corresponds to the subject of the related non-causative verb.

```
(49)a.  Ben kendi-m-i       yika-ti-m.
        1s  self-POSS:1s-ACC wash-PST-1s

     'I washed myself.'

   b.  AH's (23)

       Hasan ban-a   kendi-m-i        yika-t-ti.
             1s-DAT  self-POSS:1s-ACC wash-CAUS-PST

     'Hasan made me wash myself.'
```

Equi has a similar 'exception'. Equi with verbs such as *unut-* (forget), *çalış-* (try), and *başla-* (begin) requires a subject controller except in a causative construction, where the controller of Equi can be a direct or an indirect object.

```
(51)  AH's (25) and (27)

   a.  Çocuk [ Ø yürü-meğ-e]    başla-di.
       child     walk-INFIN-DAT begin-PST

     'The child began to walk.'

   b.  Çocuğ-u [ Ø yürü-meğ-e]    başla-t-ti-m.
       child-ACC   walk-INFIN-DAT begin-CAUS-PST-1s

     'I made the child start walking.'

(52)a.  Hasan [ Ø ekmeğ-i    al-mağ-i]     unut-tu.
              bread-ACC  buy-INFIN-ACC forget-PST

     'Hasan forgot to buy the bread.'

   b.  Hasan-a [ Ø ekmeğ-i    al-mağ-i]     unut-tur-du-m.
           -DAT    bread-ACC  buy-INFIN-ACC forget-CAUS-PST-1s

     'I made Hasan forget to buy the bread.'
```

Needless to say, there would be nothing exceptional about the grammaticality of (49b), (51b), and (52b) if causatives were analyzed as underlyingly bi-sentential and both *kendi* Reflexivization and Equi were permitted to apply in the embedded clause before Clause Union. At that point, all the controllers would be subjects. However, if causative formation is a lexical rule, there is no stage in the syntactic derivation of

these sentences at which the controllers are subjects. Proposing that *kendi* Reflexivization and Equi are lexical rules is no way out of the dilemma for AH because both are fed by rules which they must characterize as syntactic, e.g., Passive and Raising.

AH respond to this challenge as follows.

[Control rules] appear in general to involve "global" conditions on the controller....We propose that such rules not only have global access to the strictly "syntactic" derivation, but in principle may be sensitive to "prelexical" structure as well.

For example, the condition on non-third person reflexivization is that the controller must be in the same clause as the reflexive pronoun, and be a subject of the verb of which the reflexive is a dependent. In the causative construction [ex (49b)] the controlling nominal, though dative (presumably a 3) at deep structure and thereafter, is associated through the rule of lexical derviation for causative verbs with the grammatical relation 1 in the argument structure of the kernal verb. Thus, though that nominal is not a 1 at any stage in the strictly syntactic derivation, it "is" a 1 prelexically. We assume that this correspondence of the nominal in question to a 1-argument in the prelexical derivation of the causative verb satisfies the subject condition on the controller of non-third person reflexivization.

We propose a similar treatment of subject-subject Equi...: the condition on the controller is that it be a subject of the embedding verb; an NP counts as a subject of that verb if it is the correspondent of the 1 of the kernal verb from which the causative is formed.

According to GÖ, there are counterexamples to AH's claim that control rules in Turkish can make global reference to syntactic as well as lexical structure. Consider the following noncausative sentence, for example. The nominal in the *tarafından* phrase is the initial subject of the clause, but it cannot control tne reflexive pronoun *kendi*.

(53) GÖ's (12b)

```
*Kendi-m        benim  tarafımdan Hasan-a   ayna-da
 self-PCSS:1s 1s-GEN by            -DAT mirror-LOC

 göster-il-di-m.
 show-PASS-PST-1s
```

'Myself was shown to Hasan in the mirror by me.'

Note that if the ungrammaticality of (53) suggests anything, it suggests that *kendi* Reflexivization cannot make global reference to syntactic structure (as opposed to lexical structure). However, Hankamer (personal communication) proposes that there are independent reasons why (53) is unacceptable: the final subject of this sentence is a reflexive pronoun, the reflexive precedes and commands its antecedent, and in the course of the derivation, an NP has crossed over a coreferent clausemate, thereby violating Postal's (1971) Cross-over Principle.

A second proposed counterexample, this time involving Equi, is no more successful in seriously undermining AH's claim.

(54) GÖ's (14b)

```
*Hasan tarafından Ayşe-yi  döv-mek    iste-n-di.
       by                -ACC beat-INFIN want-PASS-PST
```

'To beat Ayşe was wanted by Hasan.'

GÖ propose that, in order to control Equi, an NP must be a final 1. In (54), the condition is not met: *Hasan* is not a final 1. In contrast, AH claim that the condition on the controller is that it be a subject of the Equi trigger. Since *Hasan* is the initial subject of *iste-* (want) in (54), AH apparently have no explanation for the ungrammaticality of this sentence.

Actually, GÖ have no explanation either. The fact is that the controller of Equi does not have to be a final 1.[92] In (55) below, the controller, *Hasan*, is a final chomeur.

---

[92]GÖ acknowledge this fact in a footnote but fail to follow it up.

```
(55)   Hasan tarafından Ayşe döv-ül-mek      iste-n-di.
       by                    beat-PASS-INFIN want-PASS-PST
```

'Ayşe was wanted by Hasan to be beaten (by Hasan).'

George and Kornfilt (1977) argue that the derivation of sentences such as (55) involves both Equi and a rule of Clause Reduction, which reduces a biclausal structure to a simplex structure. By the time Passive gets a chance to apply in the matrix clause, the embedded clause has been wiped out. That is, after Equi and prior to Passive, (55) has the structure given in (56a) rather than (56b).

```
(56)a.   [Hasan Ayşe-yi  döv-mek    iste-di]
                   -ACC beat-INFIN want-PST

     b.  [Hasan [Ayşe-yi  döv-mek]  iste-di]
                   -ACC beat-INFIN want-PST
```

The 2 of this simplex clause, *Ayşeyi*, is promoted to 1 by Passive; the result is (55). One of the hallmarks of passivization in such a sentence is that both the infinitive and the finite verb are marked with passive morphology.

If, as (55) illustrates, the controller of Equi does not have to be a final 1, why is (54) ungrammatical? The reason is not entirely clear. It happens to be the case that matrix passivization of a sentence with an infinitival complement embedded under the Equi verb *iste-* (want) is only possible if Clause Reduction has applied prior to Passive. Not all Equi verbs are subject to this restriction. For instance, the infinitival complement of the verb *unut-* (forget) can passivize.[93]

---

[93]As Ken Hale (personal communication) points out, the infinitival complement of *unut* is casemarked accusative; it therefore has the status of an NP, and the fact that it is accessible to passivization comes as no surprise. On the other hand, the infinitival complement of *iste* is not casemarked. Perhaps it is not an NP, which would explain its inability to passivize.

```
(57)a.   Annem      [ben-i   yika-mağ-i]    unut-tu.
         my mother  1s-ACC   wash-INFIN-ACC forget-PST

         'My mother forgot to wash me.'

    b.   (Annem       tarafindan) [ben-i   yika-mak]  unut-ul-du.
          my mother   by           1s-ACC  wash-INFIN forget-PASS-PST

         'To wash me was forgotten by my mother.'
```

It might be proposed that Equi with *iste-* obligatorily triggers Clause Reduction but George and Kornfilt present some evidence that suggests otherwise.

5.4.3.2. Clause Reduction and Equi

Although neither of GÖ's counterarguments against AH's proposal goes through, there is a set of facts which cannot be accounted for if control rules (in particular, Equi) are constrained to apply after causative formation. Let's reconsider the sentences in (51) and (52), repeated below.

```
(51)a.   Çocuk [ ∅  yürü-meğ-e]    başla-di.
         child       walk-INFIN-DAT begin-PST

         'The child began to walk.'

    b.   Çocuğ-u   [ ∅  yürü-meğ-e]    başla-t-ti-m.
         child-ACC      walk-INFIN-DAT begin-CAUS-PST-1s

         'I made the child start walking.'

(52)a.   Hasan [ ∅  ekmeğ-i    al-mağ-i]    unut-tu.
                    bread-ACC  buy-INFIN-ACC forget-PST

         'Hasan forgot to buy the bread.'

    b.   Hasan-a [ ∅  ekmeğ-i    al-mağ-i]    unut-tur-du-m.
             -DAT      bread-ACC  buy-INFIN-ACC forget-CAUS-PST-1s

         'I made Hasan forget to buy the bread.'
```

If causative formation is a lexical rule, then it relates the lexical entries for *başla-* (begin) and *unut-* (forget) to, respectively, the lexical entries for *başlat-* (make begin) and *unuttur-* (make forget). Let's assume that the entries for the kernal verbs are more or less like the following.

```
(58)   başla    〈 (1)  3COMP 〉
       BEGIN

       unut     〈 (1)  2COMP 〉
       FORGET
```

'3COMP' and '2COMP' have no theoretical significance; they are simply a convenient way of specifying that *başla-* embeds a clause which bears the 3-relation and *unut-*, a clause which bears the 2-relation.[94] I completely ignore the issue of what, if anything, lexical entries specify about the relationship between the subject of an Equi verb and the subject of its complement in a framework like AH's in which Equi is characterized as a syntactic rule.

Given AH's lexical rule of causative formation, the causative verbs *başlat-* and *unuttur-* have the following entries.

```
(59)   başlat           〈 (1)   2   3COMP 〉
       CAUSE TO BEGIN

       unuttur          〈 (1)  (3)  2COMP 〉
       CAUSE TO FORGET
```

The subject of the kernal verb *unut-* should always correspond to the dative-casemarked indirect object of *unuttur-*, regardless of whether the infinitival complement clause is transitive or intransitive. This is correct. Compare (52b) (repeated below), where the infinitival clause is transitive, with (60) below, where it is intransitive.

---

[94]Note that the infinitival complement of *başla-* is casemarked dative, while the infinitival complement of *unut-* is casemarked accusative. This is consistent with the grammatical relations I have assigned them. There is other evidence that the complement of *unut-* is a 2 but no other evidence that I am aware of that the complement of *başla-* is a 3. In any event, the central claim about the complement of *başla-* is not that it's a 3, but that it's not a 2.

```
(52)b.  Hasan-a   [ekmeğ-i    al-mağ-ı]          unut-tur-du-m.
        -DAT      bread-ACC   buy-INFIN-ACC      forget-CAUS-PST-1s
```

'I made Hasan forget to buy the bread.'

```
(60)    Hasan ban-a   [çalış-mağ-ı]        unut-tur-du.
        1s-DAT   work-INFIN-ACC     forget-CAUS-PST
```

'Hasan made me forget to work.'

Similarly, the subject of *başla-* should always function as the direct object of *başlat-*. However, although this NP is marked accusative in (51b) (repeated below), where the infinitival clause is intransitive, it must be marked dative in (61), where the infinitival clause is transitive. That is, it is assigned the 3-relation, not the 2-relation.

```
(51)b.  Çocuğ-u    [yürü-meğ-e]     başla-t-tı-m.
        child-ACC  walk-INFIN-DAT   begin-CAUS-PST-1s
```

'I made the child start walking.'

```
(61)    Çocuğ-a/*çocuğ-u      [televizyon-u seyret-meğ-e]
        child-DAT/child-ACC   TV-ACC       watch-INFIN-DAT

        başla-t-tı-m.
        begin-CAUS-PST-1s
```

'I made the child start watching TV.'

It looks, oddly enough, as if the assignment of grammatical relations to dependents of a causative verb is sensitive to the presence of a 2 inside one of the dependents. However, this is not actually the case. *Televizyonu* in (61) is not really a subconstituent of the infinitival clause; in fact, there is no embedded clause. Recall that Equi may trigger Clause Reduction in Turkish. If we posit that Clause Reduction applies before causative formation, then nothing extraordinary needs to be said about (61). The grammatical relations relevant to causative formation will be those given in (62a) rather than (62b).

(62)a.   [ç∍cuk televizyonu seyretmeğe başladı]
           | | | |
           1   2   U   P

   b.   [çocuk [televizyonu seyretmeğe] başladı]
           | | |
           1   3   P

Because *çocuk* in (51b) cannot be assigned the 2-relation in a causative construction, we'll have to say that Clause Reduction is obligatory with *başla-*. This is not an unwelcome conclusion: there is a body of evidence outside of causatives that Equi always triggers destruction of a clause embedded under *başla-*. For instance, the following sentence is ungrammatical.

(63) *Mektuplar-ı yaz-mağ-a   başla-n-dı.
     letters-ACC write-INFIN-DAT begin-PASS-PST

    'Writing the letters was begun.'

If the infinitival complement of *başla-* is always broken up following Equi, then it's no wonder that an infinitival complement cannot be a dependent of the passive verb *başlan-*. In other words, (63) would have to be derived from (64a), but prior to matrix passivization, (63) can only have the structure in (64b).

(64)a. [PRO [mektuplar-ı yaz-mağ-a]   başla-dı]
          letter-ACC write-INFIN-DAT begin-PST

   b. [PRO mektuplar-ı yaz-mağ-a başla-dı]

When (64b) passivizes, the result is the 'double passive' in (65).

(65) Mektuplar yaz-ıl-mağ-a   başla-n-dı.
     letters   write-PASS-INFIN-DAT begin-PASS-PST

For some speakers, Equi with *unut-* (forget) optionally triggers Clause Reduction. But this is not obvious from an inspection of causatives. Because its infinitival complement bears the 2-relation, the subject of *unut-* will be assigned the 3-relation in a causative if a 2-containing complement is left intact or if it is broken up by Clause Reduction.

(66)a.　No Clause Reduction

```
[Hasan [ekmeği almağı] unuttu]
        ̶̶̶̶̶̶̶̶̶̶̶̶̶̶̶̶̶
   |        |        |       |
   1        2                P
```

　　　b.　Clause Reduction

```
[Hasan ekmeği almağı unuttu]
   |      |      |      |
   1      2      U      P
```

Finally, consider *çalış-* (try), which is like *unut-* in that it triggers Equi and optional Clause Reduction but different from *unut-* in that its infinitival complement is not a 2. If Clause Reduction can apply before causative formation, then a sentence such as (68) below is predicted to have two related causatives.

(68)　Çocuk bu　　kitab-ı oku-mağ-a　　　　çalış-tı.
　　　child this book-ACC read-INFIN-DAT try-PST

　　　'The child tried to read this book.'

That is, when the infinitival clause remains intact, (68) will have the following structure and *çocuk* should be assigned the 2-relation in the causative construction.

```
(69)　[çocuk [bu kitabı okumağa] çalıştı]
               ̶̶̶̶̶̶̶̶̶̶̶̶̶̶̶̶̶
        |           |              |
        1           3              P
```

But if Clause Reduction applies, *çocuk* will be assigned the 3-relation in a causative because the derived simplex clause of which it is the subject contains a direct object.

```
(70)　[çocuk bu kitabı okumağa çalıştı]
             ̶̶̶̶̶̶̶̶̶
        |      |       |         |
        1      2       U         P
```

In conformity with these predictions, both of the following sentences are grammatical.

```
(71)a.  Çocuğ-u     bu    kitab-ı    oku-mağ-a
        child-ACC this  book-ACC  read-INFIN-DAT

        çalış-tır-dı-m.
        try-CAUS-PST-1s

        'I made the child try to read this book.'

    b.  Çocuğ-a     bu    kitab-ı    oku-mağ-a
        child-DAT this  book-ACC  read-INFIN-DAT

        çalış-tır-dı-m.
        try-CAUS-PST-1s
```

The finding that Clause Reduction can apply before causative formation appears to completely undermine AH's framework. Since Clause Reduction is triggered by Equi, Equi must also apply before causative formation. However, by characterizing Equi as a syntactic rule and causative formation as a lexical rule, AH specifically prohibit these two rules from interacting in the manner they have been observed to.

The interactional properties of Equi and causative formation could be accounted for if both were assigned to the lexical component. And since Passive can feed Equi in Turkish, Passive would also have to be characterized as a lexical rule. However, if Passive is in the same component of the grammar as causative formation, AH no longer have any explanation as to why there are no causatives of passive verbs. Needless to say, the same problem arises if all these rules are assigned to the syntactic component.

The following response to the problem posed by Clause Reduction has some superficial merit: one could propose, first, that Clause Reduction is not triggered by Equi and, second, that Clause Reduction is a lexical rule which relates pairs of entries such as the following.

(72)a.　ağla　　　　　　〈 1 〉
　　　　CRY

　　　　ağlamağa başla　〈 1 〉
　　　　BEGIN TO CRY

　　b.　ye　　　　　　　〈 1　2 〉
　　　　EAT

　　　　yemeğe başla　〈 1　2 〉
　　　　BEGIN TO EAT

While this solution works, it requires that similarities between Equi sentences and sentences which contain verbs generated by this lexical rule be characterized as coincidental. It makes no sense of the fact that the heads of the complex verbs created by the lexical rule are a proper subset of Equi verbs or the fact that the first component of the complex verb generated by the lexical rule has the same morphological form as the embedded verb in an Equi sentence. Furthermore, if it is claimed that Clause Reduction is lexical and not triggered by Equi, we will need a distinct lexical rule to generate causative verbs. The complex verbs in (72a&b) above have the same number and type of arguments as the verbs they are derived from. But a causative verb has one more argument than the verb it is related to, and the subject argument of the latter is an object argument of the former.

In contrast, on the claim that Equi triggers Clause Reduction, there is no need to posit a rule of Clause Reduction which is distinct from the rule that operates in causatives. All we require is a single rule (call it Clause Union) which makes each of the dependents of an embedded clause into dependents of the embedding clause. Furthermore, a single set of principles will suffice to ensure that the appropriate grammatical relations are assigned to the new dependents of the matrix verb, whether it is the causative predicate or an Equi verb. Of course, because Clause Union with the causative predicate operates on complement clauses which have final 1s and Clause Union with Equi predicates operates only on clauses which don't, the principle that

determines the fate of an embedded subject is only relevant for the former.[95]

Note furthermore that making Clause Union with verbs such as *başla-* dependent upon a prior application of Equi automatically explains why *ağlamağa başla-* (begin to cry) takes the same number of arguments as *ağla-* (cry) but *ağlat-* (make cry) takes an additional argument: Clause Union triggered by the causative predicate operates on a full embedded clause while Clause Union triggered by *başla-* operates on a subjectless embedded clause. Additionally, if the conditions for Equi must be met and Equi must apply in the generation of a simplex clause such as *Ali ağlamağa başladı* (Ali began to cry), then it's no wonder that the subject of this clause seems to correspond to the subject of *Ali ağladı* (Ali cried). It's actually the Equi victim in the first which corresponds to the subject of the second, but since the Equi victim is controlled by the subject of *başla-*, we get the same effect.

For all the reasons set out above, I conclude that Equi does feed what I've been calling Clause Reduction, which in essence means that Equi applies before Clause Union. Accordingly, to repeat a point made earlier, since the AH's explanation of a class of rule interaction phenomena requires Equi and all other syntactic rules to apply after Clause Union, we must seek out an alternative explanation.

As far as I can see, there is no longer any motivation for characterizing causative formation as a lexical rule; I will henceforth assume that causatives are underlyingly bisentential and that a syntactic rule of Clause Union effects the merging of the two clauses.

---

[95]Aissen and Perlmutter (1983) argue for collapsing ˅ausative Clause Union with Equi- and Raising-triggered Clause Reduction in Spanish. The arguments I present here owe much to their paper.

5.4.4. A Condition on Clause Union

AH made a distinction between rules such as Passive which affect grammatical relations and control rules such as Equi which do not. They proposed that neither type actually applies before causative formation but the latter give the impression of being able to because they have access to prelexical structure. Now, I have argued that Equi does in fact apply before causative formation, so it doesn't need to be given the power to inspect the lexical part of a derivation. I'll go one step further and propose that no syntactic rule has such power.

Despite the fact that AH's central claims have been rejected, the distinction they recognized between rules which affect grammatical relations and those which do not obviously has merit. It surely is no accident that rules such as personal passivization and impersonal passivization cannot apply before Clause Union but rules such as Equi and *kendi* Reflexivization can. There is, however, a fact which complicates the picture: Clause Union can apply before Clause Union. I have already given examples of sentences in which Equi-triggered Clause Union applies prior to Causative Clause Union. (73) illustrates double Causative Clause Union.

```
(73)  Fatoş Caner-i    çalış-tir-t-ti.
                ACC work-CAUS-CAUS-PST

      'Fatoş got someone to get Caner to work.'
```

While Clause Union is not a revaluation rule, it certainly does affect grammatical relations. Nevertheless, unlike personal and impersonal passivization, Clause Union does not affect grammatical relations within a particular clause.[96] The following condition on Clause Union exploits the difference between revaluation and ascension rules.

---

[96]This is not entirely true: the clause embedded under the causative predicate bears the 2-relation in the initial statum of the matrix and no grammatical relation in the final stratum after Clause Union applies. The condition on Clause Union, given in (74) below, is stated in such a way that this fact is accommodated.

(74)   Assume that a clause X heads an arc whose tail is clause Y. The predicate of Y can only be assigned the U-relation in X if all the dependents of Y which bear grammatical relations in the final stratum of Y do not bear different grammatical relations in the initial stratum of Y.

(74) clearly blocks personal and impersonal passivization, from applying on the clause embedded under the causative predicate. In order to see that it permits Clause Union to apply before Clause Union, consider the following representation of the double causative in (73).

(75)
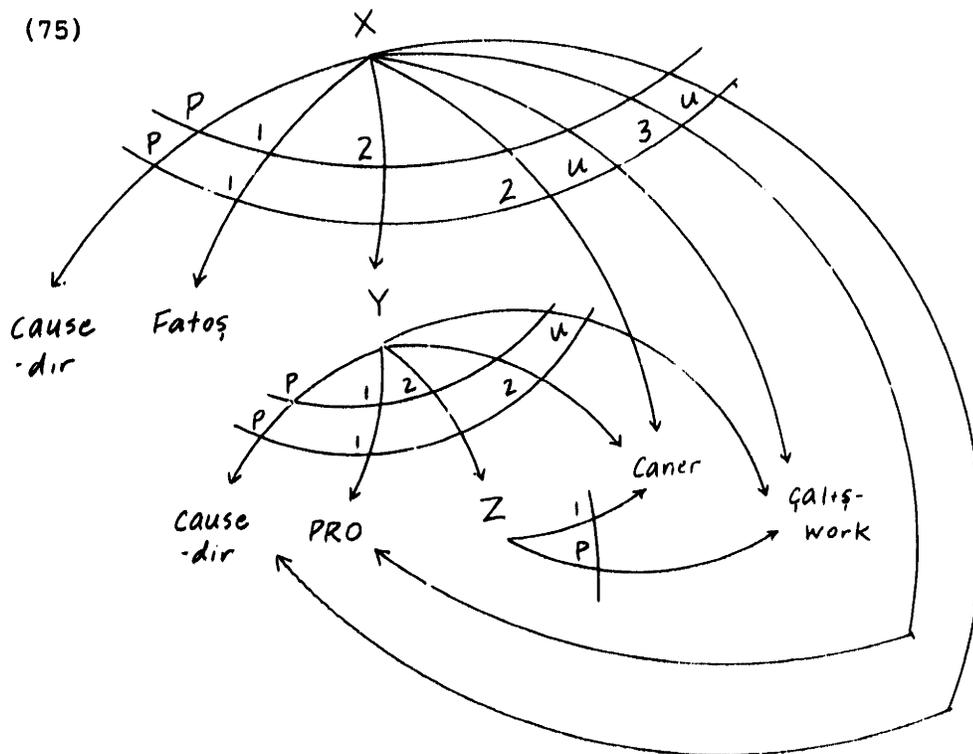
The most deeply embedded clause Z bears no grammatical relation in the final stratum of the higher clause Y, so it is ignored by (74). On the other hand, the dependents of Z, *Caner* and *çalış-*, only bear grammatical relations to Y in the final stratum; thus, their final relations in Y are not different from their initial relations. Given this,

Union of clauses X and Y is permitted by (74).[97]

(74) also accounts for the ungrammaticality of a set of sentences which I haven't discussed yet. Recall that I concluded above that Clause Union, not a distinct rule of Clause Reduction, applies subsequent to Equi with verbs such as *başla-* (begin) and *iste-* (want). And I characterized the former as an obligatory Clause Union trigger. Consequently, if (74) is valid, there should be no grammatical output just when, in order to meet the conditions for Equi, the clause embedded under *başla-* has to be passivized. This is correct.

```
(76)a. *Çocuk öp-ül-meğ-e        başla-dı.
        child kiss-PASS-INFIN-DAT begin-PST

       'The child began to be kissed.'
```

On the other hand, for Equi verbs like *iste-* (want), which optionally trigger Clause Union, a grammatical sentence is predicted under the same circumstances. That is, though Passive has to apply in order to feed Equi in the following sentence and though, as a consequence, Clause Union cannot apply, *iste-* doesn't require Clause Union to apply.

---

[97]Although condition (74) permits Clause Union to apply prior to Clause Union, it would not permit an ascension rule such as SOR to do so, in spite of the fact that SOR, like Clause Union, modifies dependencies. SOR in Turkish makes the final 1 of an embedded clause the 2 of the embedding clause. The clause which the subject ascends out of initially bears the 2-relation in the matrix and it is put into chomage as a consequence of the ascension. Since its grammatical relation in the final stratum of the matrix is different from its initial stratum relation, condition (74) would bar subsequent Clause Union. I predict, then, that there will be no causatives of sentences in which SOR has applied. Unfortunately, the prediction can't be tested because the SOR verb, *san-* (think), cannot be causativized (probably for semantic reasons). This is true whether or not Raising has applied and regardless of what kind of complement is embedded under it (i.e., a nominalized complement or a bare complement).

(76)b. Çocuk öp-ül-mek   iste-di.
        child kiss-PASS-INFIN want-PST

'The child wanted to be kissed.'

As for Equi, (74) permits it to apply before Clause Union. I assume the 'multiattachment' account of Equi, according to which a single nominal heads both an arc in the matrix clause and an arc in the embedded clause. The latter is erased when, as it were, the conditions for Equi are met. In the case of subject-controlled Equi, erasure occurs when the nominal heads a 1-arc in the matrix clause and a final 1-arc in the embedded clause. (In the network below, the double arrow, borrowed from Arc Pair Grammar, indicates that the matrix arc erases the embedded arc.)[98]

(77)a. Yakut kapı-yı aç-mağ-ı   unut-tu.
            door-ACC open-INFIN-ACC forget-PST

'Yakut forgot to open the door.'

b.
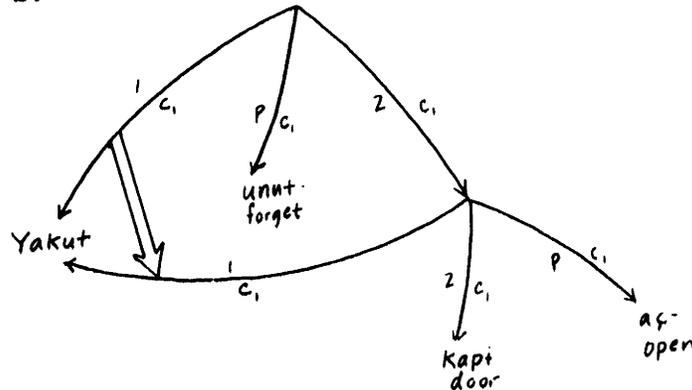
It's clear that condition (74) would not be violated if (77) were causativized: clause Y has only one stratum, so needless to say Yakut and clause Z bear the same relations in the final stratum of Y as they bear in the initial stratum.

---

[98]In Arc Pair Grammar (see Johnson and Postal (1980)), there is a relation 'erase' that holds between arcs, so representing Equi is straightforward. I'm not sure how erasures are formalized in Relational Grammar.

I turn now to *kendi* Reflexivization. Here again I adopt a multiattachment analysis. The sentence in (78a) has the representation in (78b). The nominal *ben* initially heads both a 1-arc and a 2-arc; in the subsequent stratum, these arcs sponsor a 2-arc headed by a reflexive pronoun, and the initial 2-arc is erased.[99]

(78)a. (Ben) kendi-m-i   yika-di-m.
         1s   self-POSS:1s-ACC wash-PST

       'I washed myself.'

b.
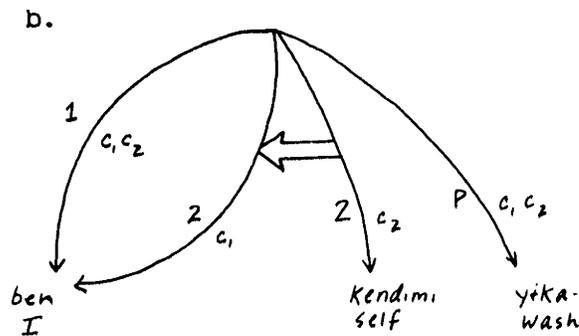
Condition (74) would block the birth of a reflexive pronoun before Clause Union, but that's not a problem: the arc headed by the reflexive pronoun could be sponsored after Clause Union, at which point *ben* would be doubly attached to a 3-arc and a 2-arc. Now, typically, a nominal in Turkish can be multiply attached to a 1-arc and a 2-arc, but not to a 3-arc and a 2-arc; in other words, to use more traditional language, a subject can antecede *kendi* but an indirect object cannot. A 3-arc and a 2-arc with the same head and tail are tolerated in a causative exactly because Clause Union relates them to a 1-arc and a 2-arc with the same head and tail in the clause embedded under the causative predicate.

In what follows, I will adduce further support for the condition in (74).

---

[99]'Sponsor', like 'erase', is an Arc Pair Grammar notion.

5.4.5. Support for the Condition on Clause Union

5.4.5.1. Object and Subject Incorporation

In Chapter 3 I discussed sentences like (79) below.

```
(79)   Cem mektup yaz-iyor.
           letter write-PRG

       'Cem is writing a letter/letters.'
```

I proposed that in the final stratum of sentences with caseless non-definite objects, the initial 2 bears the INC-relation and that there is no nominal which bears the 2-relation.

If, as I assume, Object Incorporation detransitivizes a clause, and if the rule could apply before causative formation, then we would expect that the subject of (79) could be assigned the 2-relation in the causative construction. But it can only be assigned the 3-relation.

```
(80)a.   Cem-e/*Cem-i mektup   yaz-dir-di-m.
             -DAT/-ACC letter   write-CAUS-PST-1s

         'I made Cem write a letter/letters.'
```

Object Incorporation, then, can only occur after Clause Union.

Note that on the assumption that caseless non-definite objects are put into chomage by a dummy 2, Object Incorporation would not have to be constrained to apply after Clause Union: the embedded clause would contain a final 2 whether or not demotion applied prior to Clause Union; consequently, the embedded final 1 would always be assigned the 3-relation in the union clause.

(81)

Cause
-dir   ben
I   yaz·
write   Cem   mektup
letter   Dummy
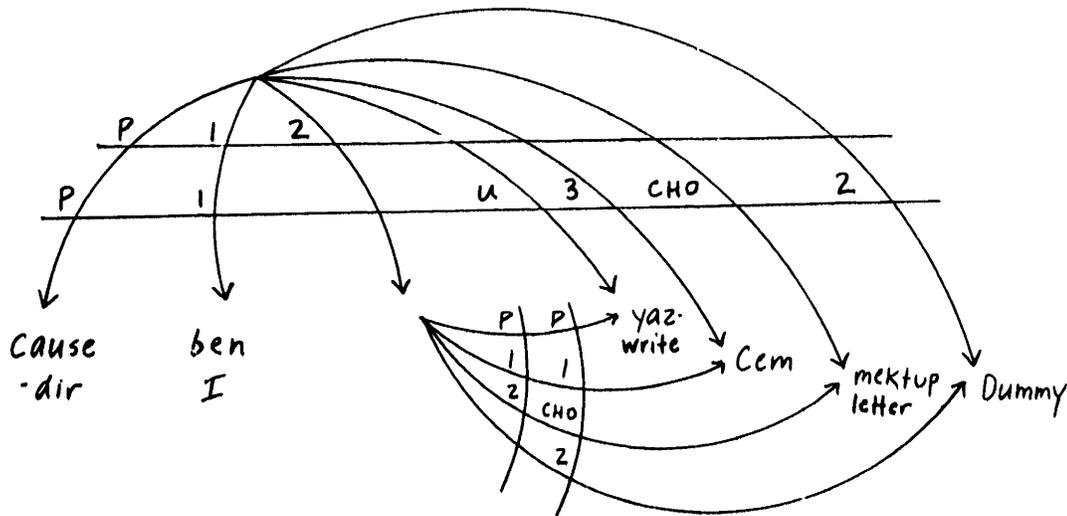
In Chapter 3 I also investigated Subject Incorporation. The non-referential subject of (82) below is not the final subject of its clause.

(82)   Gani-yi   arɨ sok-tu.
        -ACC bee sting-PST

'A bee/bees stung Gani.'

The question of whether (82) has a final dummy subject was taken up in Chapter 3, although no absolutely firm answer was given. On the assumption that a dummy is not present, Subject Incorporation must be blocked from applying before Causative Formation. Note that the following causative is ungrammatical.[100]

(83)   *Gani-yi   arɨ sok-tur-du-m.
        -ACC bee sting-CAUS-PST-1s

'I made a bee/bees sting Gani.'

---

[100]Nothing special has to be said to prevent a subject from incorporating after Clause Union. If arɨ is a final-stratum 1 in a transitive clause embedded under the causative predicate, it will be assigned the 3-relation in the union stratum. But only 1s and 2s incorporate in Turkish.

On the other hand, the ungrammaticality of this sentence is an automatic consequence of the claim that there is a dummy 1 in the final stratum of (82). If the dummy came in as a 1 before Clause Union, (83) would have the ollowing representation.

(84)
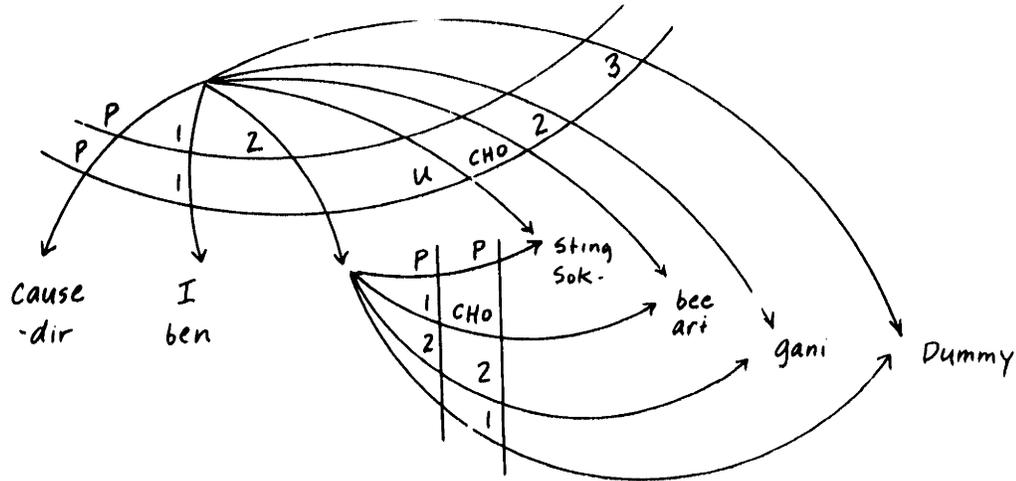
The Jummy must be assigned the 3-relation in the union stratum, but according to the Nuclear Dummy Law, dummies can only bear nuclear term relations, i.e., the 1-relation or 2-relation.

Even though invoking dummies automatically explains the facts presented above, analyzing Object Incorporation as dummy-induced demotion has the wrong consequences elsewhere in the grammar (see Chapter 3). Furthermore, dummy or no dummy, Object Incorporation and Subject Incorporation are rules which affect grammatical relations and thus their failure to apply before Clause Union is exactly what we expect, given (74). At any rate, it is clear that dummies play no role in explaining why neither personal nor impersonal passivization can apply prior to Clause Union; the same is true of the next rule I take up.

5.4.5.2. Benefactive Advancement

As we saw earlier, BEN-3 relates sentences such as (a) and (b) below.

(85)a. Ali et-i   kız için kes-ti.
            meat-ACC girl for cut-PST

    'Ali cut the meat for the girl.'

  b. Ali et-i   kız-a   kes-ti.
            meat-ACC girl-DAT cut-PST

The rule can apply in causatives. The following sentence is judged grammatical by speakers who permit two dative-casemarked nominals in a causative.

(86) Kız-a   et-i   Ali-ye kes-tir-di-m.
        girl-DAT meat-ACC   -DAT cut-CAUS-PST-1s

    'I made Ali cut the meat for the girl.'

As Gibson and Özkaragöz (1981) point out, (86) is not ambiguous: the rightmost of the two dative nominals must be interpreted as the subject, rather than the benefactive, of the embedded clause. What makes this an especially interesting fact is that when (87) below, which contains an indirect object, is causativized,

(87) Ali et-i   kız-a   ver-di.
          meat-ACC girl-DAT give-PST

  .   'Ali gave the meat to the girl.'

the rightmost of the two dative nominals that occur is interpreted not as the subject of the embedded clause but as the indirect object:

(88) Ali-ye et-i   kız-a   ver-dir-di-m.
        -DAT meat-ACC girl-DAT give-CAUS-PST-1s

    'I made Ali give the meat to the girl.'

Recall that GÖ account for the interpretation of double-dative causatives such as (88) by proposing (i) that the unmarked order of nominals in a simple clause in Turkish is [1 3 2 non-term V] and (ii) that when, for whatever reason, variation is not allowed, the unmarked order is adhered to. Furthermore, they claim that *Aliye* in (88) is the final 3 of the union clause and *kıza* a chomeur, hence non-term.

(89)
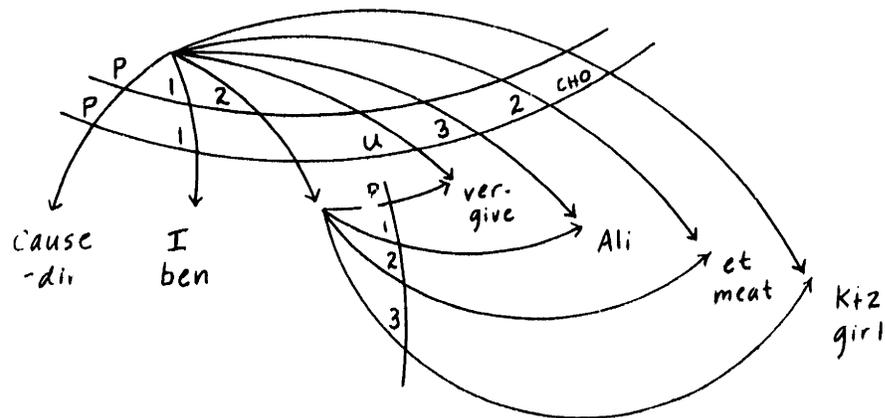
Because the final stratum of the embedded clause contains a 2, *Ali* must be assigned the 3-relation in the union stratum. The final embedded 3, *kɨz*, cannot inherit its relation without there being a violation of Stratal Uniqueness so it is assigned the chomeur-relation in the union stratum. Given the template [1 2 3 non-term V], *Aliye* appears to the left of *kɨza* in surface structure.

Returning to (86), GÖ suggest that grammatical relations are assigned as in (90) below.

(90)
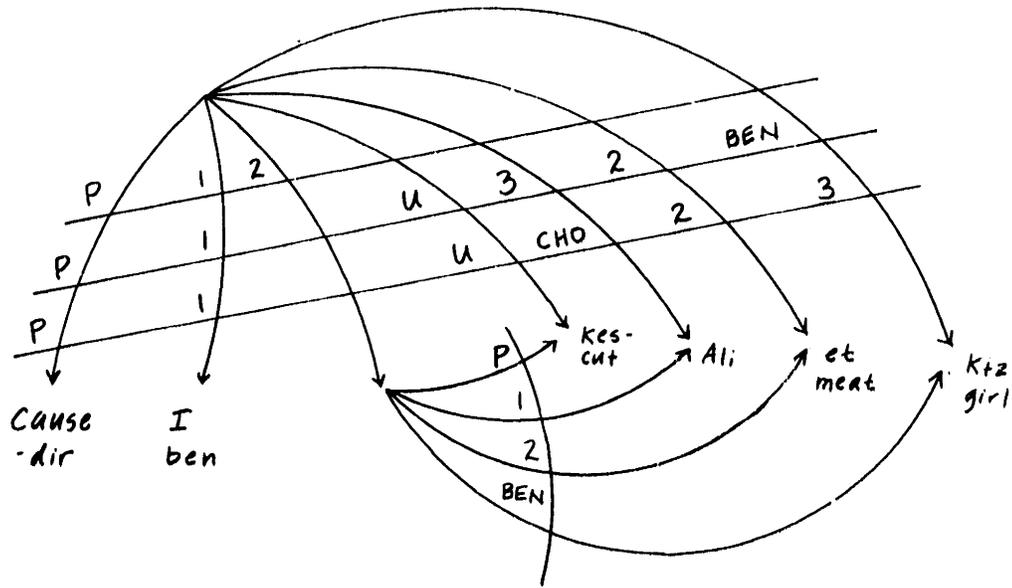
The benefactive advances to 3 after Clause Union, putting the derived 3 into chomage; the nominals line up in the unmarked order and the result is (86).[101]

This is a very attractive solution to the problem of accounting for the difference between (86) and (88). However, for it to work, BEN-3 must not apply on the complement clause before Clause Union. If it did, grammatical relations would be assigned as in (91) below.

---

[101]This supports the claim that a benefactive actually advances to 3. It couldn't put another 3 into chomage otherwise.

(91)
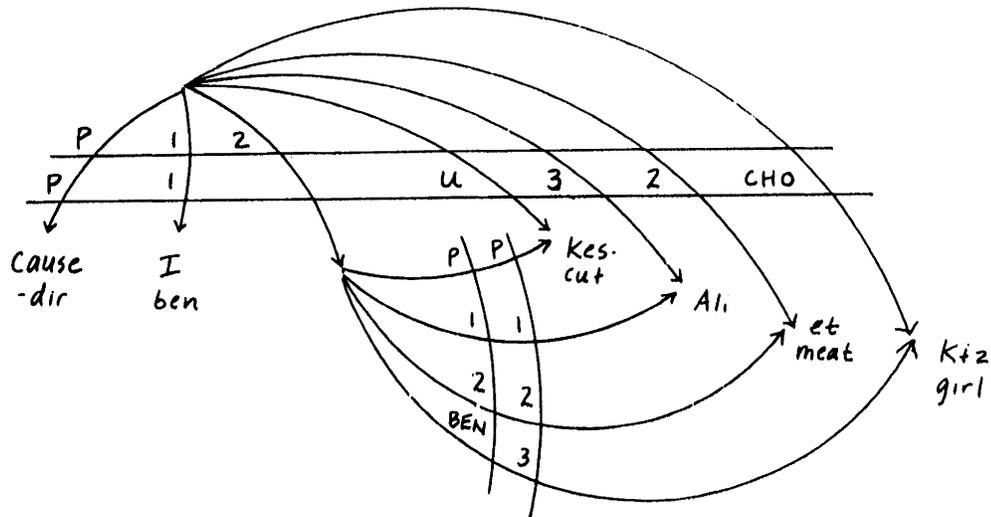
Ali bears the 3-relation in the union clause; thus, it should precede *kɨz*, a chomeur, in surface structure. But this yields *Aliye eti kɨza kestirdim*, which can only be interpreted to mean, 'I made the girl cut the meat for Ali.' So, we have further support for the claim that relation-changing rules never apply before Clause Union.

5.4.6. 2-3 Retreat

5.4.6.1. Lexical or Syntactic?

I now turn to the one apparent counterexample to this claim. Recall that Özkaragöz (1979) proposed that what I call oblique transitive verbs occur with an initial 2 which undergoes 2-3 Retreat. In order to derive the pair of causatives in (92a) and (93a), the rule must be permitted to apply optionally before Clause Union.

(92)a. Elif-i   Cem-e   tap-tir-di-m.
        -ACC   -DAT worship-CAUS-PST-1s

'I made Cem worship Elif.'

b.
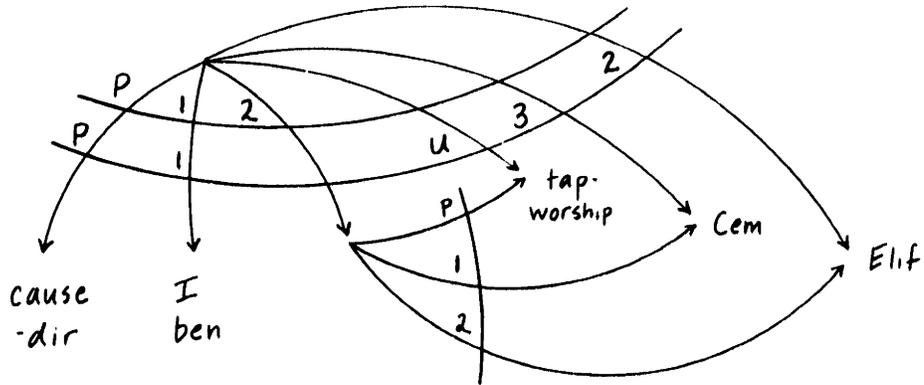
(93)a. Cem-i   Elif-e   tap-tir-di-m.
        -ACC   -DAT worship-CAUS-PST-1s

'I made Cem worship Elif.'

b.
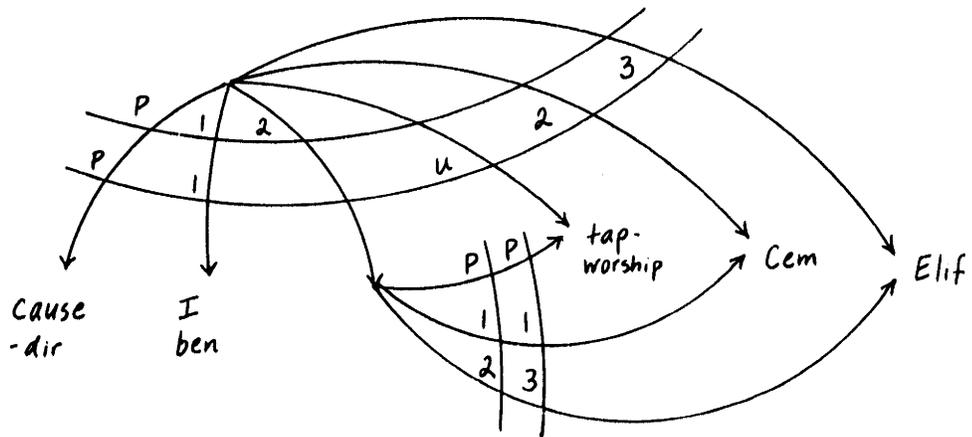
However, 2-3 Retreat is an exception to (74) only if it is characterized as a syntactic rule. No problem arises if it is formulated as a lexical rule, relating an entry such as the one in (94a) below to the one in (94b).

(94)a. tap   〈 1 2 〉
        WORSHIP

   b.   tap   〈 1 3 〉
        WORSHIP

As I mentioned in Section 5.4.2, there is no evidence that 2-3 Retreat is a syntactic rule. For instance, no syntactic rules feed it. On the other hand, it has a property which, according to Wasow (1977), is characteristic of lexical rules: it has idiosyncratic exceptions. It is impossible to predict whether a verb which takes a direct object will permit it to retreat to indirect object, and there is considerable variation across speakers. On the assumption that 2-3 Retreat is in the lexicon, condition (74) does not prevent it from applying before Clause Union. In general, (74) allows any lexically derived verb to be causativized. So, for instance, it doesn't rule out causatives of reciprocal verbs, which can be argued to be lexically derived:[102]

   (95) AH's (30) and (32)

      a. İkizler öp-üş-tü.
          twins   kiss-RECIP-PST

          'The twins kissed (each other).'

      b. Memür   ikizler-i öp-üş-tür-dü.
          official twins-ACC kiss-RECIP-CAUS-PST

          'The official had the twins kiss (each other).'

(74) also permits causatives of middle verbs, on the plausible assumption that they, like reciprocal verbs, are lexically derived. AH report, however, that the causative related to (96a) below is ungrammatical.

---

[102]Reciprocal formation has lexical exceptions and, as AH show, it cannot be fed be SOR.

(96) AH's (31) and (33)

    a. Hasan yɨka-n-dɨ.
             wash-MID-PST

      'Hasan washed (himself).'

    b. *Mehmet Hasan-ɨ   yɨka-n-dɨr-dɨ.
                 -ACC wash-MID-CAUS-PST

      'Mehmet made Hasan wash.'

In contrast, note that the middle verb *giyin-* (to dress (oneself)), related to *giy-* (wear, put on (clothes)), can be made causative. (The following examples are from Underhill 1976, p. 359.)

    (97)a. Çocuk giy-in-di.
           child dress-MID-PST

        'The child dressed.'

    b. Ben çocuǧ-u   giy-in-dir-di-m.
        1s child-ACC dress-MID-CAUS-PST-1s

      'I caused (enabled) the child to dress.'

It's not clear whether the ungrammaticality of (96b) or the grammaticality of (97b) is typical. In any event, if it should turn out to be true in general that there are no causatives to middles, the condition in (74) would not be undermined: while (74) prohibits syntactic relation-changing rules from applying before Clause Union, it does not guarantee that interactions between Clause Union and other types of rules will always be successful.

I will assume henceforth that 2-3 Retreat is a lexical rule and in the sections that follow, I will investigate its properties in more detail. I will argue that the lexical entries for oblique transitive verbs are more complicated than, for instance, those given in (94) for *tap-*. And I will widen the discussion to include oblique transitive verbs

which take ablative-casemarked, rather than dative casemarked, objects.[103]

5.4.6.2. Quirky Case

Recall that many speakers permit clauses containing verbs such as *tap-* to passivize in two different ways.

```
(98)a.  Efif-e    tap-il-iyor.
           -DAT worship-PASS-PRG

        'Elif is worshipped.'

     b.  Elif tap-il-iyor.
```

Apparently, (98a) is the impersonal passive of intransitive *tap-* and (98b) is the personal passive of transitive *tap-*. If this is correct, then since impersonal passives do not permit *tarafindan* phrases,

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[103]Although I will continue to make reference to 2-3 Retreat, I believe the rule is better characterized as 3-2 Advancement. That is, there are reasons to think that the basic lexical entry of an oblique transitive verb contains a 3 and the derived entry a 2. (Translating into the syntactic account, an oblique transitive verb takes an initial 3 which advances under certain circumstances to 2, not an initial 2 which retreats sometimes to 3. Incidentally, Özkaragöz (1979) argues that oblique transitive verbs take initial 2s rather than 3s, but her arguments do not go through. In any event, even if they did, the lexical account I adopt is completely compatible with the observation that the object of an oblique transitive verb behaves like an initial 2)

I favor 3-2 Advancement over 2-3 Retreat because, for some speakers, oblique transitive verbs always behave like intransitives: they do not form personal passives and they only form causatives on the 'intransitive pattern', i.e., their subjects appear casemarked accusative and their objects dative (or ablative). Even speakers who accept the personal passives of oblique transitive verbs and permit them to form causatives on the 'transitive pattern' typically prefer to impersonally passivize these verbs and causativize them on the 'intransitive pattern'. I propose, then, that the basic entry of an oblique transitive verb for all speakers contains a 3; in the lexicons of some speakers, there is additionally an entry with a 2.

(99)a. Caner otobüs-e bin-di.
              bus-DAT mount-PST

     'Caner got on the bus.'

     b. *Otobüs-e   Caner tarafından bin-il-di.
             -DAT   by   mount-PASS-PST

     'The bus was gotten on by Caner.'

a *tarafından* phrase should be acceptable only in (98b) above. But many of the speakers who accept (98a&b) (and reject (99)) judge both of the following sentences to be grammatical.

(100)a. Elif-e   Cem tarafından tap-ıl-ıyor.
             -DAT   by   worship-PASS-PRG

     'Elif is worshipped by Cem.'

     b. Elif Cem tarafından tap-ıl-ıyor.
                   by   worship-PASS-PRG

The syntactic account of 2-3 Retreat makes the wrong prediction here, too.

The grammaticality of (100a) can be accounted for if we assume (i) that *tap-* takes, in addition to a 3, a dative-casemarked 2 and (ii) that Passive can advance a quirky casemarked 2 to 1. Given this, (98a) is syntactically ambiguous: *Elife* is either the final 3 of an impersonal passive or the final non-nominative subject of a personal passive.[104] An attractive by-product of this approach is that there is no need for a special condition to block sentences such as (101) below, where the object of *tap-* is marked accusative.

(101) *Cem Elif-i   tap-ıyor.
              -ACC worship-PRG

---

[104]Agreement is never possible between a verb and what I'm analyzing as a non-nominative subject, but I don't think this poses a problem. In Icelandic, where there is considerable evidence for non-nominative subjects, the latter do not trigger agreement with their verbs either. See Thrainsson (1979).

If the dative-casemarked nominal *Elife* in (98a) is the final 1 (or final 3) of its clause, we would expect it to be able to undergo Equi. The following sentence is indeed grammatical, but unfortunately it's impossible to tell whether the missing subject of the infinitival clause is *Elif* or *Elife*.

> (102) Elif [∅ tap-il-mak] isti-yor.
> worship-PASS-INFIN want-PRG
>
> 'Elif wants to be worshipped.'

There is, nevertheless, an argument based on Equi for the 1-hood of *Elife*. Some speakers accept (98a) above but not (98b); in general, they reject any sentences in which the initial object of an oblique transitive verb such as *tap-* is overt and not casemarked dative. Özkaragöz would presumably say that, for them, 2-3 Retreat is obligatory and applies as soon as it can, thereby bleeding personal passivization and feeding impersonal passivization; on the lexical account, such speakers could be characterized as having only one entry for an oblique transitive verb, i.e., the intransitive entry. Since an Equi victim must be a final 1, both accounts predict that these speakers will reject (102). However, the prediction is wrong: they judge it to be grammatical. So, the distribution of *tarafindan* phrases and Equi both support the claim that the passive sentence in (98a) has a non-nominative subject on one derivation.

We can now reconsider (98b), the ordinary-looking personal passive. I suggest that speakers who accept it — Dialect I — allow Passive to strip quirky casemarking off a subject and that speakers who reject it — Dialect II — require Passive to leave quirky casemarking on. The following should clarify my proposals.

> (103)a. Active sentences: Dialects I and II
>
> Cem Elif-e tapiyor/Cem Elif-e tapiyor.
> | | | |
> 1   3   1   2-DAT

b. Impersonal passive: Dialects I and II

    Elif-e tapılıyor.
         |
         3

c. Personal passive with optional case-stripping: Dialect I

    Elif-e tapılıyor/Elif tapılıyor
         | |
         1-DAT   1

d. Personal passive without case-stripping: Dialect II

    Elif-e tapılıyor.
         |
         1-DAT

Now let's turn to causativization of oblique transitive clauses.   When the final stratum of the embedded clause contains a 1 and a 3, the former is assigned the 2-relation in the union stratum and the result is (93a), repeated below.

    (93)a. Cem-i   Elif-e   tap-tır-dı-m.
                -ACC   -DAT worship-CAUS-PST-1s

        'I made Cem worship Elif.'

When *tap-* takes a dative-casemarked 2, and when quirky case comes off, causativization yields (92a), repeated below.[105]

    (92)a. Elif-i   Cem-e   tap-tır-dı-m.
        .   -ACC   -DAT worship-CAUS-PST-1s

        'I made Cem worship Elif.'

It is of interest that quirky casemarking must come off; the following causative is ungrammatical.

    (104) *Elif-e   Cem-e   tap-tır-dı-m.
               -DAT   -DAT worship-CAUS-PST-1s

Why does quirky case have to be stripped off here?   I offer the following explanation.

---

[105]I assume that when quirky casemarking comes off a nominal, it is casemarked in the usual way, e.g. a final 2 is marked accusative, a final 1 nominative, a final 3 dative.

Recall that a transitive clause with an unspecified subject can be causativized but an intransitive clause with an unspecified subject cannot be.

```
(105)a.  Kemal duvarlar-ı yıka-t-tı.
               walls-ACC  wash-CAUS-PST

         'Kemal had someone wash the walls.'
         'Kemal had the wall washed.'

     b. *Kemal çalış-tır-dı.
               work-CAUS-PST

        'Kemal had someone work.'
```

AH explained this by proposing that causative verbs are transitive verbs and thus strictly subcategorized for a direct object. Under a syntactic account of causative formation, one could claim that the union stratum in a causative, just like the initial stratum of a non-causative transitive clause, must contain a specified 2. This ensures that an active causative sentence will have either an accusative-casemarked object or, if the direct object later demotes, a caseless object.

Now, it's clear that under my assumptions, the union stratum of the causative in (104) does contain a specified 2. However, it doesn't look like a transitive clause (i.e., there is no accusative-casemarked or caseless object present) and this, I suggest, is why speakers reject it. On the other hand, a personal passive with a non-nominative subject resembles other well-formed sentences in the language: impersonal passives.

Support for this explanation comes from an examination of oblique transitive verbs which take ablative-casemarked objects. Consider the verb *şüphelen-* (doubt, suspect).[106] For many speakers, the active sentence below,

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[106]The verbs *hoşlan-* (like, enjoy) and *tiksin-* (loathe), which also take ablative-casemarked objects, behave like *şüphelen-* in all respects.

```
(106)  Yasemin Cengiz-den şüphelen-di.
                      -ABL  suspect-PST

       'Yasemin suspected Cengiz.'
```

has two re'ated passives:

```
(107)a.  Cengiz-den şüphelen-il-di.
             -ABL  suspect-PASS-PST

         'Cengiz was suspected.'

     b.  Cengiz şüphelen-il-di.
```

A *tarafından* phrase is possible both in the personal passive and in what looks like an impersonal passive. Thus, I propose that *şüphelen-* takes an ablative-casemarked 2 and that Passive can remove quirky case from a 1.

What's surprising is that (106) causativizes in three different ways for some speakers:[107]

```
(108)a.  Yasemin-i   Cengiz-den  şüphelen-dir-di-m.
             -ACC        -ABL    suspect-CAUS-PST-1s

         'I made Yasemin suspect Cengiz.'

     b.  Cengiz-i    Yasemin-e   şüphelen-dir-di-m.
             -ACC        -DAT    suspect-CAUS-PST-1s

         'I made Yasemin suspect Cengiz.'

     c.  Yasemin-i   Cengiz-e    şüphelen-dir-di-m.
             -ACC        -DAT    suspect-CAUS-PST-1s

         'I made Yasemin suspect Cengiz.'
```

The nominal which corresponds to the object of *şüphelen-* can be casemarked ablative, accusative, or dative in a causative.

The assumption that *şüphelen-* takes an ablative-casemarked 2 and that quirky casemarking comes off under causativization accounts for the casemarking pattern in (b)

---

[107]The majority of speakers accept only (108a). Even those who accept all three prefer (108a) to the others.

above, where the accusative object, presumably a 2, is understood as the object of
şüphelen- and the dative object, presumably a 3, is understood as the subject. Again,
if quirky case did not come off, the result would be a causative with no accusative-
casemarked object.

In (a) and (c), the nominal which corresponds to the subject of *şüphelen-* is
marked accusative, not dative. It is presumably a 2. For it to be assigned the 2-
relation in the union stratum, it cannot co-occur with a 2 in the final stratum of the
embedded clause. Given this, I propose that in addition to the lexical entry given in
(109a) below, there is also the entry in (b). The entries are related by the lexical rule
of 2-3 Retreat.[108]

```
(109)a.   şüphelen   < 1   2   >
                           |
                          ABL

      b.   şüphelen   < 1   3   >
                           |
                          ABL
```

When intransitive *şüphelen-* is causativized and ablative casemarking comes off the 3,
the result is (108c), where the embedded subject shows up as an accusative-casemarked
object and the embedded object as a dative-casemarked object. If ablative casemarking
stays on the 3, the result is (108a).

Note that quirky case is removed obligatorily from the 2 of *şüphelen-* but
optionally from its 3 in the causative construction. In other words, ablative case
doesn't have to come off the object of the verb when its subject is assigned the 2-
relation in the union clause, i.e., exactly when the causative will have an accusative-
casemarked object whether the object of *şüphelen-* retains its ablative casemarking or

---

[108]But see footnote 103 above.

loses it.[109]

---

[109]I would also posit a quirky casemarked 2 to account for the unusual properties of the verb *bak-* on one of its readings (Karaca 1977, Erguvanlı 1979b). *Bak-* has two basic meanings: 'look at' and 'look after, take care of'. In active (non-causative) clauses, its object is casemarked dative. *Bak-* on the 'look at' reading behaves like a garden-variety intransitive verb. It forms impersonal, but not personal, passives:

    (b) Çocuğ-a/*çocuk bak-ıl-dı.
          child-DAT   -PASS-PST

        'The child was looked at.'

In the causative construction, its subject is casemarked accusative and its object dative:

    (c) Kadın-ı   çocuğ-a   bak-tır-dı-m.
          woman-ACC child-DAT   -CAUS-PST-1s

        'I had the woman look at the child.'

Bak- on the 'look after' reading behaves quite differently. To begin with, it passivizes in two ways:

    (d) Çocuğ-a   (kadın tarafından) bak-ıl-dı.
          child-DAT woman by   -PASS-PST

        'The child was looked after (by the woman).'

    (e) Çocuk (kadın tarafından) bak-ıl-dı.

And in the causative construction, its subject is marked dative and its object accusative:

    (f) Çocuğ-u   kadın-a   bak-tır-dı-m.
          child-ACC woman-DAT   -CAUS-PST-1s

        'I had the woman look after the child.'

I propose that *bak-* (look at) occurs only with a 3 (or, alternatively, an oblique) while *bak-* (look after) takes only a dative-casemarked 2, where dative case comes off in the causative construction and (optionally) in the personal passive construction.

5.4.6.3. Puzzles

The analysis presented above of oblique transitive verbs does not account for all their properties. But I know of no alternative analysis which does. The following facts are particularly puzzling.

The causative in (93a), repeated below, is ambiguous.

```
(93)a.  Cem-i    Elif-e    tap-tir-di-m.
        -ACC     -DAT worship-CAUS-PST-1s

        'I made Cem worship Elif.'
        'I made Elif worship Cem.'
```

This is not surprising given that, as was demonstrated above, either the subject of *tap-* can be marked dative in a causative and its object accusative, or the subject can be marked accusative and the object dative. What is surprising is that the passive related to (93a) is not ambiguous for the speakers I have consulted.

```
(110)   Cem Elif-e    tap-tir-il-di.
            -DAT worship-CAUS-PASS-PST

        'Cem was made to worship Elif.'
```

The subject of the passive must be interpreted as the deep subject of *tap-*.

Now consider causatives of oblique transitive verbs with ablative objects. In (108a), repeated below, the subject of the embedded verb is the accusative object of the union clause and the object is the ablative object.

```
(108)a.  Yasemin-i    Cengiz-den  şüphelen-dir-di-m.
         -ACC         -ABL suspect-CAUS-PST-1s

         'I made Yasemin suspect Cengiz.'
```

The sentence is unambiguous and its accusative object passivizes:

```
(111)   Yasemin Cengiz-den  şüphelen-dir-il-di.
                -ABL suspect-CAUS-PASS-PST

        'Yasemin was made to suspect Cengiz.'
```

On the other hand, (108b) and (108c), both repeated below, are ambiguous, as expected.

```
(108)b.  Cengiz-i    Yasemin-e    şüphelen-dir-di-m.
             -ACC        -DAT  suspect-CAUS-PST-1s
```

      'I made Yasemin suspect Cengiz.'
      'I made Cengiz suspect Yasemin.'

```
     c.  Yasemin-i   Cengiz-e    şüphelen-dir-di-m.
             -ACC        -DAT  suspect-CAUS-PST-1s
```

      'I made Yasemin suspect Cengiz.'
      'I made Cengiz suspect Yasemin.'

And the corresponding passives are unambiguous.

```
(112)a.  Cengiz Yasemin-e    şüphelen-dir-il-di.
                    -DAT  suspect-CAUS-PASS-PST
```

      'Cengiz is such that Yasemin was made to suspect him.'

```
     b.  Yasemin Cengiz-e    şüphelen-dir-il-di.
                    -DAT  suspect-CAUS-PASS-PST
```

      'Yasemin is such that Cengiz was made to suspect her.'

In both (112a&b), the subject of the passive clause is interpreted as the deep object of *şüphelen-*. But this is just the opposite of what was observed above for the passive of a *tap-* causative.

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These data raise two questions: why does ambiguity disappear under passivization and how do we predict which reading is eliminated? One might speculate that the passives in (111) and (112) are so complex that speakers only report primary readings. The first reading for (93a), repeated below, is 'I made Cem worship Elif.'

```
(93)a.  Cem-i    Elif-e    tap-tir-di-m.
            -ACC      -DAT  worship-CAUS-PST-1s
```

And the only reading speakers report for the passive is the one in which *Cem* is interpreted as the subject of *tap-* and *Elife* as its object. Unfortunately, the primary reading for (108b) is 'I made Cengiz suspect Yasemin.'

```
(108)b.  Cengiz-i    Yasemin-e    şüphelen-dir-di-m.
              -ACC          -DAT suspect-CAUS-PST-1s
```

But when *Cengiz* is passivized, it can only be understood as the object of *şüphelen-*. I cannot explain this discrepancy.

The facts I've reported for *şüphelen-* are so hard to account for that there's no point in speculating further about them until they are replicated.

There are other puzzling facts about oblique transitive verbs which I will only mention. In the *tap-* (worship) causatives discussed above, selectional restrictions were no help in sorting out which nominal was the worshipper and which the worshippee, and we saw that many informants casemarked the worshipper accusative and the worshippee dative, or vice versa; as a result, the causatives were ambiguous. Consider now a sentence such as (113) below.

```
(113)   Ali ateş-e    tap-tı.
            fire-DAT worship-PST
```

        'Ali worshipped fire.'

Some of the same informants who accept two casemarking patterns when a sentence such as 'Ali worshipped Ayşe' is causativized accept only one casemarking pattern when (113) is causativized:

```
(114)   Ali-yi  ateş-e    tap-tır-dı-m.
            -ACC fire-DAT worship-CAUS-PST-1s
```

        'I made Ali worship fire.'

However, just to make things worse, these speakers allow the sentences in (115a) and (116) below to causativize in two different ways.

(115)a. Öğrenci ders-e   başla-dı.
         student lesson-DAT begin-PST

         'The student began the lesson.'

     b. Öğretmen öğrenci-yi ders-e   başla-t-tı.
         teacher   student-ACC lesson-DAT begin-CAUS-PST

         'The teacher made the student begin the lesson.'

     c. Öğretmen ders-i   ˌğrenci-ye başla-t-tı.
         teacher lesson-ACC student-DAT begin-CAUᵤ-PST

         'The teacher made the student begin the lesson.'

(116)a. Ayşen sözüm-e   inan-dı.
                my word-DAT believe-PST

         'Ayşen believed my word.'

     b. Ayşen-i   sözüm-e   inan-dır-dı-m.
         -ACC my word-DAT believe-CAUS-PST-1s

         'I made Ayşen believe my word.'

     c. Sözüm-ü   Ayşen-e   inan-dır-dı-m.
         my word-ACC   -DAT believe-CAUS-PST-1s

         'I made Ayşen believe my word.'

I have no explanation for this.

The last puzzling fact I will mention is this: speakers who report that the causatives in (117), with clause-initial accusative objects, are ambiguous,

(117)a. Elif-i   Cem-e   tap-tır-dı-m.
           -ACC   -DAT worship-CAUS-PST-1s

         'I made Elif worship Cem.'
         'I made Cem worship Elif.'

     b. Elif-i   Cem-e   şüphelen-dir-di-m.
           -ACC   -DAT suspect-CAUS-PST-1s

         'I made Elif suspect Cem.'
         'I made Cem suspect Elif.'

judge the following, with clause-initial dative objects, to be unambiguous:

```
(118)a.  Elif-e    Cem-i    tap-tir-di-m.
              -DAT     -ACC  worship-CAUS-PST-1s

         'I made Elif worship Cem.'

      b.  Elif-e    Cem-i    şüphelen-dir-di-m.
              -DAT     -ACC  suspect-CAUS-PST-1s

         'I made Elif suspect Cem.'
```

I have no explanation for this either.

5.5. Conclusion

I have argued against Aissen and Hankamer's (1980) proposal that causative formation in Turkish is a lexical rule and, hence, that the only rules that can apply before causative formation are also lexical rules. Causative sentences must be set up with an embedded clause on which syntactic rules can apply before Clause Union merges it with the matrix.

The question of which syntactic rules can apply before Clause Union in Turkish and which can't has, I believe, been answered: any rule that results in a difference between the final grammatical relations borne by dependents of the embedded clause and the initial grammatical relations they bear to that clause is barred from applying. The question of why this should be so remains unanswered. On the other hand, although Aissen and Hankamer could say that the reason why Passive, for instance, doesn't apply before causative formation is that the former is a syntactic rule and the latter is a lexical rule, they couldn't explain why these rules are assigned to their respective components (and it would be odd to fault them for failing to do so). Having said this, I would like to look at the interaction between Clause Union and other syntactic rules in Turkish from a different angle.

I take the following to be the central property of Clause Union: it creates a new, simplex clause by making all the dependents of an embedded clause into dependents of the embedding clause. Languages which have a Clause Union construction seem to

differ principally with respect to what grammatical relation the subject of the embedded clause is assigned in the union stratum. In Chamorro (Gibson 1980), the final-stratum subject of the lower clause is mapped onto the union 2; in numerous other languages, a final-stratum absolutive subject becomes the union 2 and a final-stratum ergative subject becomes the union 3. In French, the conditions which govern assignment of a grammatical relation to the embedded subject are more complex (Gibson and Raposo (to appear)): the nominal which heads a final 1-arc in the lower clause heads a 3-arc in the union clause if it does not also head a 2-arc and it co-occurs with a nominal heading an object-arc (i.e., a 2-arc or a 3-arc); otherwise, it heads a 2-arc in the union clause. In any event, all accounts of Clause Union (in universal grammar and in the grammars of particular languages) agree on one thing: the assignment of grammatical relations in the union clause makes reference to the final arcs headed by dependents of the embedded clause. But perhaps this is not a universal feature of the rule. Perhaps the reason why the Clause Union construction in Turkish has many of the properties it does is that reference is made, not to the final arcs headed by dependents of the embedded clause, but to the initial arcs. If this were the case, there would be no need to bar certain syntactic rules from applying before Clause Union in Turkish. Clause Union would, in effect, ignore every stratum of the complement clause save 'the initial one; that is, it would ignore any strata created by advancements, demotions, births, ascensions, and retreats (if there are any in Turkish).

The proposal that Clause Union is sensitive just to initial grammatical relations faces a potential problem with double causatives, i.e., sentences in which a simplex clause created by Clause Union itself undergoes Clause Union. Assume that the causative in (119) below is embedded under the causative predicate.

(119) Gani ben-i çaliş-tir-di.
       1s-ACC work-CAUS-PST

       'Gani made me work.'

What is the initial stratum of this clause: the one labelled A in the representation below or the one labelled B, which I've been calling the union stratum?

(120)
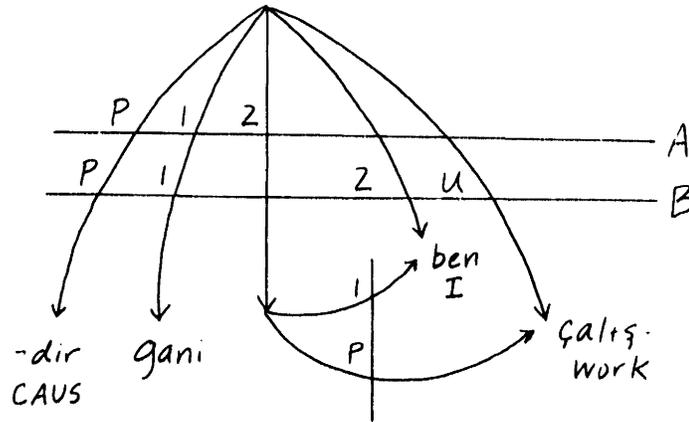
In order to obtain a well-formed causative of this causative, Clause Union must attend to the makeup of stratum B. Since (120) doesn't 'exist' prior to stratum B, it seems to me that it's fair to claim that the initial stratum of any clause that has been created by Clause Union is, in fact, the union stratum.

Although it looks as if the proposal that Clause Union in Turkish is sensitive to initial grammatical relations could be made to work, one wonders whether the cost of permitting all syntactic rules to apply before Clause Union is too great: a subset of them will create levels of syntactic structure that make no contribution whatsoever to the surface form of the sentence.

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