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FUNCTIONS OF PASSIVE AND IMPERSONAL CONSTRUCTIONS.
A CASE STUDY FROM SWEDISH.

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ABSTRACT


Passive and impersonal constructions in Swedish are examined. It is argued that these are used instead of constructions with locative subjects, subject clauses, referentially dependent subjects, and subject ellipsis, which are excluded by the condition that a Swedish clause-level construction should be an expansion of a basic subject noun phrase - verb construction with a referentially independent subject. The motivation for this condition is then discussed. Finally, it is demonstrated that the notions of topic and given information have only an indirect relevance to the analysis of Swedish passive and impersonal sentences.

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ERRATA

to Anward: Functions of Passive and Impersonal Constructions. A Case Study from Swedish.

p. 48, line 1: these ➔ tense
p. 93, line 9b: Kirri 1972 ➔ Kirri 1974
p. 97, line 13: Teleman 1968 ➔ Teleman 1969
p. 103, line 4: Severinson 1970 ➔ Severinson 1972
p. 134, line 8b: Mathesius 1935 ➔ Mathesius 1975
p. 138, line 1b: Chomsky 1971 ➔ Chomsky 1970

after line 15!

(Key: Line ib means the i-th line from the bottom of the page.)
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This study seeks to answer the following question: What are Swedish passive and impersonal sentences good for? The following answer is proposed: A basic feature of Swedish clauses is the presence of a subject noun phrase. Swedish clause-level constructions can in fact be regarded as expansions of a basic subject noun phrase - verb construction, and variations on this basic construction and the constructions that are expansions of the basic construction. The primary expansion of the basic construction is a construction with an added object noun phrase. Variations on this expansion are constructions with an added object clause, or an added locative object, and object ellipsis constructions. These expansions are governed by the condition that subjects should be referentially and structurally primary relative to objects, i.e. that subjects should be independently referring first argument expressions. Furthermore, there is an object noun phrase expansion of the primary expansion of the basic construction, and object clause and locative object variations on this expansion. These expansions are governed by the following conditions: Of two object noun phrases, the second is structurally primary; Of an object noun phrase and an object clause, either constituent may be structurally primary; Of an object noun phrase and a locative object, the object noun phrase is structurally primary; Of two objects, the first one is referentially primary. There is also a variation on the construction subject noun phrase - verb - object noun phrase - locative object where the locative object is referentially primary relative to the object noun phrase.
phrase. Suppose now that we want to extend the range of constructions further by generalizing the object variations to variations on both subjects and objects. We would then get subject ellipsis constructions, constructions with subject clauses and locative subjects, and a variation on the construction subject - verb - locative object where the locative object is referentially primary. Such constructions are however excluded in Swedish, or possible only in declarative main clauses. The reason is that these constructions can not be interpreted as expansions of a basic subject noun phrase - verb construction, with a referentially primary subject. They violate, in other words, what I have called the Subject Condition. Instead, s-passive and impersonal sentences are used. s-passives allow first argument ellipsis, without violating the Subject Condition. Impersonal sentences make available first argument locative objects and objects clauses, as well as referentially primary locative objects.

In chapter 1, the answer summarized above is presented and justified. In chapter 2, the motivation for the Subject Condition is discussed. In chapter 3, finally, other properties of subjects than referential and structural primacy are discussed, and it is concluded that they have only an indirect relevance to passive and impersonal sentences.

* 

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1. AN ANALYSIS OF PASSIVE AND IMPERSONAL SENTENCES IN SWEDISH

In Swedish, the contrasts between active and passive clauses and between personal and impersonal clauses define a rather elaborate system of clause types. First of all, we get contrasts between personal active clauses, impersonal active clauses, personal passive clauses, and impersonal passive clauses. The distinguishing mark of an impersonal clause is the presence of the expletive subject det (it). Secondly, for each of these clause types, we can make a distinction between main verb clauses and copula clauses. A main verb clause has the structure Subject-Verb-(Object), while a copula clause has the structure Subject-vara/bli (be/become)-Predicative, in the simplest cases. In a passive main verb clause, the verb is marked with the suffix -s, while in a passive copula clause, the predicative is a past participle phrase. Finally, for each of the eight clause types so far described, we find a distinction between formally intransitive and formally transitive clauses, i.e. between clauses with one non-predicative noun phrase and clauses with two non-predicative noun phrases. Moreover, there are also formally bitransitive personal active clauses and formally bitransitive impersonal passive clauses, as well as some cases of formally bitransitive impersonal active clauses. The various clause types are exemplified in (1) - (8). Note that I have glossed both vara and bli in periphrastic passives as "be". The distinction corresponds roughly to the distinction between a statal passive (vara) and a processual passive (bli). Moreover, I have only provided examples of active copula clauses with adjectival predicatives. The head of a predicative may also be a noun, a preposition or a verb.
(1) Active, personal: main verb clauses: NP V (NP) (NP) X
   a. Intransitive: NP V X
      Professorn arbetade hårt förra veckan
      (The professor worked hard last week)
   b. Transitive: NP V NP X
      Bönderna skördade höet i juli
      (The farmers harvested the hay in July)
   c. Bitransitive: NP V NP NP X
      Firman erbjöd kvinnan en ny lägenhet
      (The company offered the woman a new flat)

(2) Active, impersonal: main verb clauses: det V (NP) (NP) X
   a. Intransitive: det V X
      Det regnade igår
      (It rained yesterday)
   b. Transitive: det V NP X
      Det stod en man på trottoaren
      (There stood a man on the sidewalk)
   c. Bitransitive: det V NP NP X (marginal)
      Det hände mig något konstigt igår
      (There happened me something strange yesterday =
      = Something strange happened to me yesterday)

(3) Active, personal: copula clauses: NP vara/bli ADJ (NP) (NP) X
   a. Intransitive: NP vara/bli ADJ X
      Mannen var/blev trött
      (The man was/became tired)
   b. Transitive: NP vara/bli ADJ NP X
      Pojken var/blev lik sin far
      (The boy was/became similar his father =
      The boy was/became similar to his father)
c. Bitransitive: NP *vara/bli* ADJ NP NP X (marginal)
Mannen var/blev skyldig mig hundra kronor
(The man was/became "debty" me a hundred crowns =
The man owed me a hundred crowns)

(4) Active, impersonal: copula clauses: *det vara/bli* \(\{\text{ADJ (NP)}\}\{\text{(NP) ADJ}\}\) X

a. Intransitive: *det vara/bli* ADJ X
Det var/blev mörkt
(It was/became dark)

b. Transitive: *det vara/bli* \(\{\text{ADJ NP}\}\{\text{N ADJ}\}\) X
Det var/blev kvar lite olja i burken
(There was/became left som oil in the can)
Det var/blev lite olja kvar i burken
(There was/became some oil left in the can)

(5) \(\sim\)-passive, personal: NP V-s (NP) X

a. Intransitive: NP V-s X
Höet skördades i juli (av lejda arbetare)
(The hay was harvested in July (by hired workers))

b. Transitive: NP V-s NP X
Kvinnan erbjöds en ny lägenhet (av firman)
(The woman was offered a new flat (by the company))
Lägenheten erbjöds kvinnan (av en mäklare) redan förra året
(The flat was offered the woman (by a broker) last year already)

(6) \(\sim\)-passive, impersonal: *det V-s* (NP) (NP) X

a. Intransitive: *det V-s* X
Det arbetades hårt där
(It was worked hard there =
They worked hard there)
b. Transitive: \textit{det V-s NP X}

Det tillverkas leksaker där  
(There are produced toys there =  
There are toys produced there)

c. Bitransitive: \textit{det V-s NP NP X}

Det erbjuds kvinnan en lägenhet  
(There was offered the woman a flat =  
There was a flat offered to the woman)

(7) Periphrastic passives, personal: NP \textit{vara/bli} PTC (NP) X

a. Intransitive: NP \textit{vara/bli} PTC X

Den teorin var/blev bortglömd (av många)  
(That theory was forgotten (by many people))

b. Transitive: NP \textit{vara/bli} PTC NP X

Kvinnan var/blev erbjuden en lägenhet (av en mäklare)  
(The woman was offered a flat (by a broker))

Den lägenheten var/blev erbjuden en kvinna  
(That flat was offered a woman)

(8) Periphrastic passives, impersonal: \textit{det vara/bli} PTC (NP) X

a. Intransitive: \textit{det vara/bli} PTC X

Det var/blev avstängt där  
(It was closed off there)

b. Transitive: \textit{det vara/bli} \{PTC NP\} (NP) X

Det var/blev utlovat en belöning  
(There was promised a reward)

Det var/blev en belöning utlovad  
(There was/became a reward promised)

c. Bitransitive: \textit{det vara/bli} PTC NP NP X

Det var/blev erbjudet kaparna en flyktbil  
(There was offered the hijackers a getaway car =  
There was offered a getaway car to the hijackers)
In addition to the clause types in (1) - (8), there are three more types of impersonal clauses in Swedish. First, we have clauses with "extraposed" sentential subjects, exemplified in (9). Such clauses exhibit the full range of contrasts possible in impersonal clauses, i.e. main verb - copula, active - passive and formally intransitive - formally transitive (not counting the sentential subject itself).

(9) a. Det är troligt att han kommer  
    (It is probable that he will come)

    b. Det framgick att han var sjuk  
    (It turned out that he was sick)

    c. Det irriterade henne att han visslade  
    (It annoyed her that he was whistling)

    d. Det pastods att han skulle få sparken  
    (It was claimed that he was going to be fired)

    e. Det blev bestämt att vi skulle mötas klockan åtta  
    (It was decided that we would meet at eight o'clock)

Secondly, there are impersonal clauses with what we might tentatively classify as "extraposed" noun phrases. Such noun phrases are construed with the preposition med (with) and placed at the end of the clauses in which they occur. Med-phrases occur chiefly in active copula clauses, but there are also a few main verbs and participles which take such phrases. As far as I have been able to determine, med-phrases do not occur in s-passives.

(10) a. Det är vackert med rosor  
    (It is beautiful with roses = to have roses around)

    b. Det är förnuftigt med stövlar  
    (It is sensible with boots = to wear boots)

    c. Det räcker med en kopp kaffe  
    (It suffices with a cup of coffee = A cup of coffee is OK)
d. Det är förbjudet med kameror här
   (It is forbidden with cameras here = Cameras are forbidden here)

Finally, there is a class of impersonal copula clauses, including cleft sentences and related constructions:

(11) a. Det är jag
   (It is I)

b. Det var i juli
   (It was in July)

c. Det var jag som gjorde det
   (It was I who did it)

d. Det är så att vår telefon är trasig
   (It is the case that our phone is out of order)

Moreover, verbs with the suffix -s and past participles occur in clauses which clearly can not be described as passive. As for s-verbs, we have the following three cases, in addition to the passive cases: 1) the s-verb is an ordinary intransitive verb, which has no systematic connection with any transitive verb:

(12) a. Hon andas
   (She breathes = She is breathing)

   b. *Något andar henne
      (Something breathes her)

2) the s-verb is an intransitive verb which is related to a transitive verb without -s. The meaning of the s-verb is not passive, however, but reciprocal:

(13) a. Flickorna kramades
   (The girls hugged = The girls hugged each other)

   b. Flickorna kramade pojkarna
      (The girls hugged the boys)
3) the *s*-verb is an intransitive verb which is related to a transitive verb without *-s*. The meaning of the *s*-verb is something like unspecified direct object:

(14) a. Den här hunden bits
    (This dog bites = This dog bites one)

   b. Den här hunden biter folk
    (This dog bites people)

As for past participles, there are cases where an intransitive clause with a main verb has a corresponding clause with *vara/bli* and a past participle:

(15) a. Hunden sprang bort
    (The dog ran away)

   b. Hunden var bortsprungen
    (The dog was away-run = The dog had run away)

The list of constructions just given gives us a fair picture of the range of impersonal, passive and related constructions in Swedish. However, by itself, the list does not tell us very much about what systematic relations obtain among the various constructions. In order to bring out these relations, it is useful to consider the range of constructions that individual verbs can occur in. As a first approximation, we can classify verbs in terms of the maximal number of non-expletive non-adverbial NP:s that they can be construed with. Thus a one-place verb is one which can be construed with at most one non-expletive non-adverbial NP, etc.

A zero-place verb, like *snöa* (snow) and other metereological verbs, can only be the head of an active, impersonal and intransitive clause:

(16) Det snöar
    (It snows)
The unmarked clause type for a one-place verb is of course an active, personal and intransitive clause:

(17) a. Himlen mörknade snabbt
    (The sky darkened rapidly = The sky was rapidly getting dark)

   b. Vasen stod på ett bord
      (The vase stood on a table)

   c. Gästerna dansade hela natten
      (The guests danced all night)

Certain one-place verbs can occur in active, impersonal and intransitive clauses:

(18) a. Himlen mörknade snabbt
    (The sky darkened rapidly)

   b. Det mörknade snabbt
      (It darkened rapidly = It was getting dark rapidly)

   c. Fiskn lukttrutten
      (The fish smells rotten)

   d. Det luktar rutten här
      (It smells rotten here)

What seems to be the common denominator of active, impersonal and intransitive clauses is that they all denote sensations or feelings. Active, impersonal and intransitive clause thus indicate simple sensations of sight, sound, touch, smell and taste as well as internal sensations and general conditions (Cederschiöld 1910):

(19) a. Det lyser
    (It shines = There is a light)

   b. Det bullrar
      (It rumbles = There is a rumble)
c. Det är halt
   (It is slippery)

d. Det luktar fisk
   (It smells fish = It smells of fish)

e. Det smakar fisk
   (It tastes fish = It tastes of fish)

f. Det väcker i hjärtat
   (It hurts in the heart = My heart hurts)

g. – Hur är det?
   (How is it? = How are you?)
   – Det är fint
   (It's fine = I am fine)

Verbs which can be interpreted as locating a referent in time or space can occur in active, impersonal and transitive clauses. In such clauses, the direct object is the "semantic subject" of the verb, i.e. it has the same relation to the verb as the subject of a corresponding intransitive personal clause.

(20)  a. Vasen stod på ett bord
       (The vase stood on a table)

b. Det stod en vas på bordet
   (There stood a vase on the table)

c. En segelbåt dök upp vid horisonten
   (A sailboat appeared at the horizon)

d. Det dök upp en segelbåt vid horisonten
   (There appeared a sailboat at the horizon)

e. Fyrtio människor arbetar i den fabriken
   (Forty persons work in that factory)

f. Det arbetar fyrtio människor i den fabriken
   (There work forty persons in that factory)
Even verbs which denote activities, like *arbeta* (work) and *leka* (play), may occur in active, impersonal and transitive clauses. Witness (20f). It seems though that the activity meaning fades away in such clauses, and that verbs which clearly denote intentional activities in personal clauses come to have a purely locative meaning in clauses like (20f). One indication of this is that adverbials like *motvilligt* (reluctantly) and *entusiastiskt* (enthusiastically), which only describe intentional behavior, do no fit very well into clauses like (20f).

(21) a. Många personer arbetar ganska motvilligt här
(Many people work rather reluctantly here)

b. *Det arbetar många personer ganska motvilligt här
(There work many people rather reluctantly here)

c. Några barn lekte entusiastiskt på gräsmattan
(Some children played enthusiastically on the lawn)

d. *Det lekte några barn entusiastiskt på gräsmattan
(There played some children enthusiastically on the lawn)

Clauses of the form *det V NP* thus seem to have a unitary meaning. As I have already indicated, they are used to locate the referent of the NP in time or space. One-place verbs can occur in such clauses only if there is a locative component in their meaning. This explains why a verb like *blunda* (close one's eyes), for example, can not occur in such clauses.

(22) *Det blundar några människor där inne
(There close their eyes some people in there)

One-place verbs can also occur in passive, impersonal and intransitive clauses:

(23) a. Gästerna dansade hela natten
(The guests danced all night)
b. Det dansades hela natten
   (It was danced all night = People danced all night)

c. Politikerna ljuger för mycket
   (The politicians lie too much)

d. Det ljugs för mycket
   (It is lied too much = People lie too much)

e. Mänheten har arbetat färdigt
   (The men have worked ready =
    The men have finished their work)

f. Det är färdigarbetat för i kväll
   (It is ready-worked for tonight =
    The work is finished for tonight)

g. Det blev inte färdigarbetat förrän sent på natten
   (It was not ready-worked until late in the night =
    The work was not finished until late in the night)

Clauses of the form det V-s denote actions or activities. This is the reason why a verb like växa (grow) can not occur in impersonal intransitive passives. A verb can occur in a clause of the form det V-s only if it can be interpreted as denoting an action. This is also the reason why verbs like snubbbla (stumble) and falla (fall) denote intentional behavior in impersonal intransitive passives. (24b) can not describe a series of misfortunes, but only a series of actions (by actors in a slapstick, for example).

(24) a. *Det växtes mycket det året
   (It was grown very much that year)
   
b. Det snubblades och fölls
   (It was stumbled and fallen)

Certain verbs occur in both intransitive and transitive impersonal actives. There are also verbs which occur both in impersonal, active and transitive clauses, and in impersonal, passive and intransitive clauses.
Two-place verbs occur as heads of active, personal and transitive clauses. Such verbs may also occur as heads of passive, personal and intransitive clauses, and as heads of passive, impersonal and transitive clauses.

Swedish also marginally permits active, impersonal and bitransitive clauses. Hända (happen) is one of the few verbs which readily occur in such clauses.
(30) a. Något konstigt hände mig igår
   (Something strange happened me (= to me) yesterday)
   b. Det hände mig något konstigt igår
   (There happened me something strange yesterday)

In such clauses, the direct object, i.e. the second postverbal NP, is the "semantic subject".

A number of two-place verbs may also occur as heads of active, personal and intransitive clauses. That is, they allow object ellipsis. Depending on their semantic properties, they may also occur as heads of active, impersonal and intransitive clauses, as heads of passive, impersonal and intransitive clauses, and as heads of active, impersonal and transitive clauses.

(28) a. Det här pillret lindrar smärtan
   (This pill relieves the pain)
   b. Det här pillret lindrar
   (This pill relieves)
   c. Det lindrar
   (It relieves)

(29) a. Mannen målade bordet
   (The man painted the table)
   b. Mannen målade hela dagen igår
   (The man painted all day yesterday)
   c. Det målades här igår
   (It was painted here yesterday)
   d. Det är målat här
   (It is painted here)
   e. Det blev målat här igår
   (It was painted here yesterday)
   f. Det målar tjugo personer i det här rummet
   (There paint twenty persons in this room)
Not all two-place verbs occur in transitive clauses. A number of such verbs, as well as predicative adjectives and nouns, take oblique objects, objects governed by a preposition, rather than direct objects. Some examples:

(31) a. Sidorna vimlar av tryckfel
(The pages swarm with misprints)
b. Alla längtar efter sommaren
(Everyone longs for summer)
c. Mannen väjde inte för någon
(The man did not go out of his way for anyone)
d. Författaren arbetade på en roman
(The writer was working on a novel)
e. Kulan snuddade vid mig
(The bullet touched at me)
f. Publiken skrattade åt honom
(The audience laughed at him)

Verbs which take oblique objects may also occur as heads of impersonal clauses and as heads of passive, personal and intransitive clauses. The clause types in which two-place verbs with oblique objects occur are exemplified in (32) - (34).

(32) a. Den här sidan vimlar av tryckfel
(This page swarms with misprints)
b. Det vimlar av tryckfel på den här sidan
(It swarms with misprints here/in this page)

(33) a. Ingen mossa fastnar på en rullande sten
(No moss sticks to a rolling stone =
A rolling stone gathers no moss)
b. Det fastnar ingen mossa på en rullande sten
(There sticks no moss on a rolling stone)
c. Den där studenten ringde till dig igår
(That student called you yesterday)
d. Det ringde en student till dig igår
(There called a student to you yesterday =
A student called you yesterday)

(34) a. Publiken skrattade åt honom
(The audience laughed at him)
b. Han skrattades åt
c. Han blev skrattad åt
(He was laughed at)
d. Det skrattades åt honom
e. Det blev skrattat åt honom
(It was laughed at him)

Oblique objects are normally optional. Certain two-place verbs
may moreover take either a direct object or an oblique object:

(35) a. Författaren skrev en roman
(The writer wrote a novel)
b. Författaren skrev på en roman
(The writer was writing on a novel)
c. Jag ringer till dig ikväll
(I call to you tonight)
d. Jag ringer dig ikväll
(I call you tonight)

Three-place verbs take two oblique objects, a direct object
and an oblique object, or a direct object and an indirect object:

(36) a. Kvinnan talade med sin advokat om problemet
(The woman talked to her lawyer about the problem)
b. Advokaten gav brevet till en medhjälpare
(The lawyer gave the letter to an assistent)
c. Han unnade henne lite själsovred
(He didn't grudge her some peace of mind)

Certain verbs (so-called Dative Movement verbs) can take either a direct object and an oblique object or a direct object and an indirect object. Other verbs take only a direct and an oblique object, while still others take only a direct and an indirect object.

(37) a. Advokaten gav brevet till sin medhjälpare
(The lawyer gave the letter to his assistent)

b. Advokaten gav sin medhjälpare brevet
(The lawyer gave his assistent the letter)

c. Han berättade hela historien för henne
(He told the whole story to her)

d. *Han berättade henne hela historien
(He told her the whole story)

e. *Jag unnar den semestern åt henne
(I don't grudge that vacation to her)

f. Jag unnar henne den semestern
(I don't grudge her that vacation)

Three-place verbs which take direct objects also occur in passive clauses. In impersonal passives we get either direct object + oblique object or indirect object + direct object:

(38) a. Det delades ut filtar till flyktingarna
(There were distributed blankets to the refugees)

b. Det var/blev utdelat filtar till flyktingarna
(There were distributed blankets to the refugees)

c. Det erbjöds kaparna en flyktbil
(There was offered the hijackers a getaway car)
In personal passives we get either an oblique object or a direct object. Personal passives with direct objects can furthermore get two distinct interpretations. Either the subject of the passive clause has the same relation to the verb as the direct object of the active clause, or it has the same relation to the verb as the indirect object of the active clause.

(39) a. Uppdraget anförtroddes åt James Bond
b. Uppdraget var/blev anförtrott åt James Bond
   (The mission was entrusted to James Bond)
c. Uppdraget anförtroddes James Bond
d. Uppdraget var/blev anförtrott James Bond
   (The mission was entrusted James Bond)
e. James Bond anförtroddes uppdraget
f. James Bond var/blev anförtrodd uppdraget
   (James Bond was entrusted the mission)

The verb *anförtro* is exceptional in that it occurs in both types of personal passives. Normally, only verbs which do not take oblique objects occur in direct object passives.

(40) a. Vi gav boken till ett bibliotek
   (We gave the book to a library)
b. Vi gav biblioteket ett antal böcker
   (We gave the library several books)
c. Boken gavs till ett bibliotek
   (The book was given a library)
d. *Boken gavs ett bibliotek
   (The book was given a library)
e. *Biblioteket gavs ett antal böcker
   (The library was given several books)

(41) a. Akademien borde ha tilldelat Ritsos nobelpriset
   (The academy should have awarded Ritsos the Nobel Prize)
b. *Akademien borde ha tilldelat nobelpriset åt Ritsos
(The Academy should have awarded the Nobel Prize to Ritsos)

c. Nobelpriset borde ha tilldelats Ritsos
(The Nobel Prize should have been awarded Ritsos)

d. Ritsos borde ha tilldelats nobelpriset
(Ritsos should have been awarded the Nobel Prize)

The possibilities for object ellipsis with three-place verbs
are indicated in (42) - (44).

(42) Subject - Verb - (Oblique object) - (Oblique object)
a. Hon pratade med sin advokat om problemet
   (She talked to her lawyer about the problem)
b. Hon pratade om problemet
c. Hon pratade med sin advokat
d. Hon pratade

(43) Subject - Verb - (Direct object) - (Oblique object)
a. Han brukar ge kläder till de fattiga
   (He usually gives clothes to the poor)b. Han brukar ge till de fattiga
c. Han brukar ge kläder
d. Han brukar ge

(44) Subject - Verb - (Indirect object) - Direct object
a. Vi kan erbjuda våra kunder förstklassiga pianon
   (We can offer our customers first class pianos)
b. Vi kan erbjuda förstklassiga pianon
c. *Vi kan erbjuda våra kunder
d. *Vi kan erbjuda
Let us now develop a simple format in which the just presented facts can be stated. We can consider the syntax of Swedish, or any language, for that matter, as a system of syntactic constructions, or syntactic forms. Syntactic constructions can be described in terms of constituent structure rules (Gazdar 1979), i.e. in terms of well-formedness conditions on labelled bracketings of, ultimately, strings of word forms. The notion of constituent structure rule is an elaboration of McCawley's notion of node admissibility condition (McCawley 1968), the essential difference between the two notions being that constituent structure rules are context-sensitive while node-admissibility conditions are context-free. The mode of description resulting from a use of constituent structure rules is best illustrated by means of a sample syntax for a small fragment of Swedish. Such a sample syntax is given in (45).

(45) a. \[ S[ NP_{nom} \{ V_{past}\{V_{present}\}\} \{ NP_{acc}\} ] \]

b. \[ V_{present} \{ V-x\{V-er\}\} \]

c. \[ V_{past} \{ V-te\{V-de\}\} \]

d. \[ NP_{nom} [PRO_{nom}] \]

e. \[ NP_{acc} [PRO_{acc}] \]

f. \[ NP [N] \]

g. \[ NP [ART\{en\}] N ] \]

h. \[ NP [N_{def} \{N-en\}\{N-et\}] ] \]
Since the rules in (45) are meant to directly describe "phonologically interpreted surface structures", a constituent structure rule such as (46a) is not only open to the interpretation (46b), but also to the more straightforward interpretation (46c).

(46) a. \( A [B \ C \ D] \)

b. \( A [B \ C \ D] \) is a well-formed structural description of a class of Swedish expressions.

c. An utterance, or a part of an utterance, which can be interpreted as a \( B \) followed by a \( C \) and a \( D \) is a well-formed \( A \) in Swedish.

Thus, (45a) can be taken as equivalent to a statement that an utterance which can be interpreted as a (nominative) noun phrase followed by a verb marked for past or present tense and another (accusative) noun phrase is a well-formed Swedish sentence, and (45i) can be taken as equivalent to a statement that a noun stem followed by \(-ar\), \(-or\), \(-er\), \(-r\), \(-n\) or nothing is a plural noun in Swedish and that a single plural noun is a well-formed noun phrase in Swedish.

There is a technical detail in (45) which requires a comment. Subscripts on category symbols are to be regarded as unary
features, i.e. as devices for subcategorizing form classes. Thus, \( NP_{\text{nom}} \) is not to be taken as an unanalyzable symbol, but rather as an NP with the feature specification "nominative". This means that a statement about NPs in general will also be applicable to \( NP_{\text{nom}} \) and \( NP_{\text{acc}} \). Thus, both \( NP_{\text{nom}} \) and \( NP_{\text{acc}} \) can have any of the forms specified in (45f) - (45j). The nominative-accusative contrast is, in other words, not marked on nouns, but only on pronouns.

The rules in (45) describe only abstract constructions, but the format of constituent structure rules can also be used to state which words occur in which constructions. Thus, in addition to the forms in (45), our sample syntax will also include lexically specified syntactic forms. Some examples are given in (47).

\[(47)\]

\[\begin{align*}
\text{a. } & S[ \quad NP_{\text{nom}} \quad \{ \begin{array}{c} \text{V}_{\text{past}} \quad \text{kasta-de} \end{array} \} \quad \text{NP}_{\text{acc}} \} \\
& \quad \{ \begin{array}{c} \text{V}_{\text{present}} \quad \text{kasta-r} \end{array} \} \\
& \quad \{ \begin{array}{c} \text{V}_{\text{past}} \quad \text{leka-te} \end{array} \} \quad \text{NP}_{\text{acc}} \} \\
& \quad \{ \begin{array}{c} \text{V}_{\text{present}} \quad \text{leka-ex} \end{array} \} \\
\text{(kasta = throw)}
\end{align*}\]

\[\begin{align*}
\text{b. } & S[ \quad NP_{\text{nom}} \quad \{ \begin{array}{c} \text{V}_{\text{past}} \quad \text{leka-te} \end{array} \} \quad \text{NP}_{\text{acc}} \} \\
& \quad \{ \begin{array}{c} \text{V}_{\text{present}} \quad \text{leka-ex} \end{array} \} \\
\text{(leka = play)}
\end{align*}\]

\[\begin{align*}
\text{c. } & NP_{\text{nom}} \quad PRO_{\text{nom}} \quad \{ \begin{array}{c} \text{jag} \end{array} \} \\
\text{(jag = I)}
\end{align*}\]

\[\begin{align*}
\text{d. } & NP_{\text{acc}} \quad PRO_{\text{acc}} \quad \{ \begin{array}{c} \text{mig} \end{array} \} \\
\text{(mig = me)}
\end{align*}\]
Lexically specified syntactic forms is also a suitable format for describing idioms and lexicalized sentences. The idiom ge NP ett handtag (give NP a handle = give NP a hand) and the lexicalized sentence Små grytor har också öron (Small pots have also ears = Children understand more than one thinks, roughly) can for example be described in the following way:

(48) a. $S \leftarrow NP_{nom} \left\{ \begin{array}{c} V_{past} \left[ \text{gav} \right] \end{array} \right\}_{NP_{acc}}$, $NP_{\text{ett handtag}}$

b. $S \leftarrow NP_{\text{Små grytor}}$, $V_{present} \left[ \text{ha-r} \right]_{ADV_{också}}$, $NP_{\text{öron}}$
These syntactic forms can be assumed to be included as such among the syntactic forms of Swedish. In this way, we can account for their frozen character in a natural way.

In order to generate structural descriptions of utterances, we need only substitute forms for category symbols in other forms. In the simplest case, this substitution process is governed by the following principle:

\[(49) \text{If } B \left[ X \ A \ Y \right] \text{ and } A \left[ Z \right] \text{ are syntactic forms, then} \]

\[B \left[ X \ A \left[ Z \right] \ Y \right] \text{ is a syntactic form.}\]

By substituting (47c) for NP\text{nom} in (47a) and the third form of (47e) for NP\text{acc} in (47a), we for example get a structural description of the utterance (50a), namely (50b).

\[(50) \]

\[a. \text{ Jag kastade duken} \]

\[(I \text{ threw away the table-cloth})\]

\[b. \ S\left[ \text{NP}_{\text{nom}} \ [\text{PRO}_{\text{nom}} ^{\text{[jag]}} \text{V}_{\text{past}} ^{\text{[kasta-de]}} \text{NP}_{\text{acc}} ^{\text{[N}_{ \text{def} } ^{\text{[duk-en]}}]}}\]

There are, however, also slightly more complicated cases. Suppose we substitute (47c) for NP\text{nom} in (47a) and one version of (45g) for NP\text{acc} in (47a). We then get the following (simplified) syntactic form:

\[(51) \ S\left[ \text{jag} ^{\text{[jag]}} \text{kasta-de} ^{\text{[kasta-de]}} \text{NP}_{\text{acc}} ^{\text{[ART}_{\text{en}} ^{\text{[N]}}]}}\]

Now we would like to be able to substitute duk for N in (51), but that is not possible, since our syntax does not include any syntactic form \text{N}_{\text{[duk]}}. To remedy this, we introduce another substitution principle:
If $C[X_1 B[Y_1 A Y_2] X_2]$ is a syntactic form and $B[Y_1 A[Z] Y_2]$ is a syntactic form, then $C[X_1 B[Y_1 A[Z] Y_2] X_2]$ is a syntactic form.

If we allow (52) to cover the special case where $B[Y_1 A Y_2]$ is an unembedded form, then we also have an effective way of generating a lexically specified form from a lexically unspecified form. Thus, we can for example substitute $V[\text{kasta-de}]_{\text{past}}$ for $V_{\text{past}}$ in (45a) and obtain (47a). In other words, in generating a structural description we need not always start from a lexically specified syntactic form.

So much for the notion of syntactic construction, or syntactic form. Let us now return to the particular constructions that are the subject of this study.

These constructions contrast with other constructions along at least three dimensions. We have already made a distinction between verbs which can take at most one noun phrase, verbs which can take at most two noun phrases and verbs which can take at most three noun phrases. Among verbs which can take at most two noun phrases, we also made a distinction between verbs which take two plain noun phrases and verbs which take a plain noun phrase and a noun phrase governed by a preposition, and among verbs which can take at most three noun phrases, we made a distinction between those which can take two plain noun phrases, those which take a plain noun phrase and a noun phrase governed by a preposition, and those which two noun phrases governed by prepositions. We have thus six classes of verbs (ignoring, for the moment, zero-place verbs), which we can call $V_1, V_2, V_3, V_4, V_5$ and $V_6$. For each such class, there exists a maximal construction, a construction in which verbs from the class can be construed with the maximal number of
noun phrases that they can take. These maximal constructions are listed in (53).

(53) a. $s[ NP \ V_1 ]$

b. $s[ NP \ V_2 \ NP ]$

c. $s[ NP \ V_4 \ P \ NP ]$

d. $s[ NP \ V_5 \ NP \ NP ]$

e. $s[ NP \ V_5 \ NP \ P \ NP ]$

f. $s[ NP \ V_6 \ P \ NP \ P \ NP ]$

The constructions of (53) form a set of contrasting clause types, differentiated in terms of the number of NP positions (1, 2 or 3), the number of plain NP positions (1, 2 or 3) and the class membership of the verbal head.

The verbal constructions that we have considered are also related along another dimension. As is well-known, there exist, beside verbs which can only occur with one plain NP and verbs which can only occur with two plain NP:s, verbs which can take either one or two plain NP:s. Thus, we get contrasts like the following ones:

(54) a. Han darrade
    (He trembled)

b. *Han darrade händerna
    (He trembled his hands)

(55) a. Han skrev
    (He was writing)
(56) a. *Han ägde
(He owned)

b. Han ägde en gård
(He owned a farm)

Consequently, we see that the class $V_2$ is not unitary, but comprises at least two subclasses, those verbs which can occur in both intransitive and transitive constructions, and those verbs which can only occur in transitive constructions. If we just consider (53a) and (53b), and incorporate the dimension just introduced, we get the following picture:

(57) a. $\text{S}\left[\text{NP} \quad V_1\right]$

b. $\text{S}\left[\text{NP} \quad V_{21} \quad \text{NP}\right] - \text{S}\left[\text{NP} \quad V_{21}\right]$

c. $\text{S}\left[\text{NP} \quad V_{22} \quad \text{NP}\right]$

As before, the vertical dimension signifies a contrast in terms of the number of NP positions and the class membership of the verbal head. The horizontal dimension, on the other hand, signifies a contrast only in the number of NP positions.

Another type of vertical contrast included in (53) was a contrast in terms of the number of plain NP positions. This type of contrast is also a possible horizontal contrast. As I have already pointed out, there are sentence pairs of the following types in Swedish:

(58) a. Han skrev en roman
(He wrote a novel)

b. Han skrev på en roman
(He was writing on a novel)
(59) a. Han skänkte henne boken
   (He gave her the book)

   b. Han skänkte boken till henne
      (He gave the book to her)

If we consider just (53b) - (53e) and add horizontal contrasts in terms of the number of plain NP positions (keeping the number of NP positions constant), the following picture emerges:

(60) a. $S[NP \ V_{21} \ NP]$

   b. $S[NP \ V_{22} \ NP] - S[NP \ V_{22} \ P \ NP]$

   c. $S[NP \ V_3 \ P \ NP]$

   d. $S[NP \ V_{41} \ NP \ NP]$

   e. $S[NP \ V_{41} \ NP \ NP] - S[NP \ V_{41} \ NP \ P \ NP]$

   f. $S[NP \ V_5 \ NP \ P \ NP]$

(Note that $V_{21}$ and $V_{22}$ are not the same classes as $V_{21}$ and $V_{22}$ in (57). The indices have only a distinctive function.)

The possible contrasts among syntactic constructions regarding the number of NP positions and the number of plain NP positions can be displayed in compact form by omitting the verb class indices from the constructions in (53) and rearranging these constructions as in (61).

(61) $S[NP \ V]$

   $S[NP \ V \ NP] - S[NP \ V \ P \ NP]$

   $S[NP \ V \ NP \ NP] - S[NP \ V \ NP \ P \ NP] - S[NP \ V \ P \ NP \ P \ NP]$
Each vertical step represents a possible contrast in terms of the number of NP positions and each horizontal step represents a contrast in terms of the number of plain NP positions. There are some obvious restrictions on what steps are allowed: there is no direct step from NP V P NP P NP to NP V NP or from NP V NP NP to NP V P NP. That is, the two types of contrast are independent of each other.

Contrasts between verb classes are then easily stated in terms of (61). For each class of verbs (or each verb, if it is impossible to find independent criteria for class membership) we get a lexically specified fraction of the paradigm in (61). The paradigm for *ge* (give), represented by the present tense form *ger*, is shown in (62), and the paradigm for *skriva* (write), represented by the present tense form *skriver*, is shown in (63).

(62) \[ s[NP \text{ ger}] \]
\[ s[NP \text{ ger } NP] \]
\[ s[NP \text{ ger till } NP] \]
\[ s[NP \text{ ger } NP NP] \]
\[ s[NP \text{ ger NP till } NP] \]

(63) \[ s[NP \text{ skriver}] \]
\[ s[NP \text{ skriver } NP] \]
\[ s[NP \text{ skriver om } NP] \]
\[ s[NP \text{ skriver på } NP] \]
\[ s[NP \text{ skriver NP om } NP] \]
\[ s[NP \text{ skriver på } NP om ] \]

(a skriver på b om c = a is writing on b about c)

As can be seen from (63), a verb paradigm of this type may include more than on NP V P NP form. It may also include more than one NP V NP P NP form, as illustrated in (64).
(64) a. Han lastade hö på vagnen
(He loaded hay on the wagon)

b. Han lastade vagnen med hö
(He loaded the wagon with hay)

The value (in the sense of Saussure 1916) of a particular lexically specified syntactic construction (NP gen NP, say) thus derives from two sources: from the place of the abstract construction (NP V NP) in the general paradigm of (53), and from the place of the lexically specified construction in the paradigm of the verbal head of the construction (the paradigm of (62), in this case).

So far, then, we have identified two dimensions of contrast. Let us now turn to another dimension of contrast: that between main verb constructions and copula constructions. In Swedish, the most important copula constructions are the following ones (where the present tense form of vara (be) represents the copula):

(65) a. s[ NP är ADJ]
Hon är trött  (She is tired)

b. s[ NP är N]
Hon är konstnär  (She is artist = She is an artist)

c. s[ NP är NP]
Hon är en mördare   (She is a murderer)
Hon är mördaren    (She is the murderer)

d. s[ NP är NPgen]
Segern är vår    (The victory is our = The victory is ours)

e. s[ NP är LocP]
Hon är i sitt arbetsrum  (She is in her study)
In order to understand these constructions, and their relations to main verb constructions, we must come to a preliminary understanding of the nature of predication. Roughly speaking, we can say that in a simple predicative sentence NP V, the NP identifies a referent and the V specifies something that holds of that referent in a certain situation. In a transitive sentence NP V NP, two referents are identified, one by the first NP and one by the second NP, and the V specifies a relation that holds between these two referents in a certain situation.

The constructions (65a) and (65b) are quite parallel to intransitive main verb constructions. The NP identifies a referent and the ADJ/N specifies something that holds of that referent. The constructions (65c), (65d), and (65e), on the other hand, contrast more sharply with intransitive and transitive main verb constructions. Consider first (65c), the NP är NP construction. There are two basic uses of sentences of this form, chiefly depending on whether the second NP is definite or indefinite. If the second NP is definite, the normal interpretation is that the referent of the first NP is identical to the referent of the second NP. If the second NP is indefinite, the normal interpretation is that the first NP is of the type specified by the second NP. It is sometimes claimed (e.g. by Lyons 1977:469-473) that the existence of these two interpretations of NP Copula NP sentences indicates that languages like Swedish and English have two structurally homonymous NP Copula NP constructions, one equative and one predicative. However, as far as I can see, there is no need to postulate two NP är NP constructions in Swedish, since the contrast between the two interpretations of NP är NP sentences seems to involve little more than the normal contrast between a definite NP and an indefinite NP.

The following is a simple characterization of the contrast between definite and indefinite NP:s: While a definite noun phrase identifies a unique referent, be it an individual, a
group of individuals or a "substance" of some kind, an indefinite noun phrase identifies only a type of referent, leaving it open whether the sentence in which the noun phrase occurs holds of any token of that type, or of just one token of that type, and, in the latter case, whether it holds of a particular token or of an arbitrarily selected token. Let us consider some examples:

(66) a. En hund har fyra ben
   (A dog has four legs)

b. Jag behöver ett glas
   (I need a glass)

c. Han köpte en hund
   (He bought a dog)

(66a) holds of all (non-defect) dogs. Thus it would be strange to utter (66a) and go on with Det här är hunden som har fyra ben (This is the dog that has four legs). (66b), on the other hand, holds of just one glass, but any glass will do. If one utters (66b) and gets the reply Det här är glaset som du behöver, the effect is again marked, although not downright strange, as it was with (66a). In the case of (66b), the reply suggests that the one who utters the reply knows better than the one who uttered (66b). The force of the reply is something like: "You think that any old glass will do, but I know better: Only this glass will do.". (66c), finally, holds for just one particular dog, and here it is perfectly natural to go on with Det här är hunden som han köpte (This is the dog that he bought).

In order to use a definite noun phrase, a speaker must not only assume that the noun phrase identifies a unique referent, but also that the hearer can in fact identify that referent by means of that noun phrase. As is well-known, small children often make mistakes in this respect, by using definite noun phrases to refer to things that are unique to them, but not to the people they are talking to. The assumption that the hearer can identify the unique referent of a definite noun phrase can
be justified in several ways. Following Hawkins (1978), we can distinguish at least four different "uses" of definite noun phrases:

(i) Anaphoric referent: The noun phrase identifies exactly one of the referents that have been explicitly introduced into the ongoing discourse.

(ii) Associative anaphoric referent: The noun phrase identifies a referent that is unique relative to exactly one of the referents that have been explicitly introduced into the ongoing discourse.

(iii) Immediate situation referent: The noun phrase identifies exactly one of the referents in the concrete spatio-temporal setting of the ongoing speech event.

(iv) Larger situation referent: The noun phrases identifies exactly one of the referents in some larger socio-cultural setting which are shared by the participants in the ongoing speech event.

Some examples:

(67) a. Anaphoric referent:
Vi skall ha sill och potatis. Potatisen är klar.
(We're going to have herring and potatoes. The potatoes are ready.)

b. Associative anaphoric referent:
Jag fick ett paket i morse, och snöret var omöjligt att få av.
(I received a package this morning, and the string was impossible to cut)

c. Immediate situation referent:
Titta på molnen!
(look at the clouds!)
Mata inte djuren!
(Do not feed the animals)
Riset var för hårt
(The rice was too hard) (with no prior mention of the rice)
d. Larger situation referent:
Var är bilen?
(Where's the car)
Jag är på väg till institutionen
(I'm on my way to the department)
Det är fest i Stadshuset i kväll
(There is a party in the City Hall tonight)
Vad gjorde kungen i Saud-Arabien?
(What did the king do in Saudi Arabia)

The most oblique cases are those in (67b). In those cases, definite reference succeeds because the participants are currently talking about only one package (only one place), and it is at least common that packages have only one string (places have only one dog).

It should be noted, though, that unique identification is possible also in cases where there are several referents that fit a certain NP description, provided that only one of these referents is relevant to the current concern of the ongoing event. Thus I may use the apple to refer to the apple that you are eating, even though there may be dozens of other apples in a basket at your feet. Uniqueness can result both from "objective" uniqueness and from uniqueness in relevance to the ongoing speech event.

Somewhat abstractly, the identification of a unique referent can be described as the result of a two-step operation on some environment. In the first step, referents of a certain type are differentiated from all other types of referents. In the second step, a particular referent of the selected type is differentiated from all other referents of that type.

Let us call these steps type-identification and token-identification, respectively. The contrast between a definite noun phrase and an indefinite noun phrase can now be described in the following way:
A definite NP signals that the description provided by the NP enables the hearer to make a token-identification of the referent of the NP, relative to some environment.

An indefinite NP signals that the description provided by the NP enables the hearer to make no more than a type-identification of the referent of the NP, relative to some environment.

If we furthermore make the plausible assumptions that the speaker can make all the identifications that he signals that the hearer can make and that the speaker and/or the hearer can make a type-identification whenever he can make a token-identification, then it follows that a definite noun phrase signals that both the speaker and the hearer can use the NP to make both a type-identification and a token-identification, while an indefinite noun phrase only signals that both the speaker and the hearer can use the NP to make a type-identification.

In addition to signalling that the hearer can make a type-identification, an indefinite noun phrase also signals that the hearer can not make a token-identification. It might not be necessary to incorporate this in the characterization of the meaning of indefinite NP:s, though, since it would seem to follow from Grice's Maxim of Quantity: Be as informative as required (Grice 1975) that the hearer has the right to assume that speakers use indefinite NP:s only when they have no grounds for using a definite noun phrase.

In contrast, an indefinite noun phrase does not say anything about the speaker's ability to make a token-identification. Here, both cases are possible, and it is left to the sentential context to signal which interpretation is intended. As I have illustrated, there are three main uses of indefinite noun phrases: generic, non-specific non-generic, and specific non-generic (the examples in (66a), (66b), and (66c), respectively). In the generic case, no token-identification is possible, or
intended. In the specific non-generic case, token-identification is possible, and intended. The non-specific non-generic case is an intermediate case: a token-identification is intended, the speaker knows that only one token is involved, but he does not know or is not interested in which token is involved. Still, this case is best treated as a species of token-identification, non-specific token-identification, quite simply. As Partee (1972) has demonstrated, definite noun phrase can also have a non-specific use. For example:

(68) a. Den som mördade Smith måste vara galen
(He who murdered Smith must be insane)

b. Han vill gifta sig med den rikaste kvinnan i Sussex
(He wants to marry the richest woman in Sussex)

In such cases, the speaker may know that there is only one murderer (only one woman that is the richest woman in Sussex), without knowing who he (she) is. If he assumes that the hearer too knows that only one referent is involved, he can use a definite noun phrase to refer to that referent. Thus, both non-specific definite noun phrases and non-specific indefinite noun phrases can be said to involve token-identification, namely a non-specific token-identification.

It should be noted that the contrast I have described concern what is the case before the sentence in which the NP in question appears has been produced. After the sentence has been produced, and the hearer has accepted it, the contrast between definite and non-generic indefinite noun phrases disappears.

Thus, definiteness and indefiniteness are used to signal what is common ground to the speaker and the hearer before the production of the current utterance.

This leads us over to another important distinction, that between given and non-given noun phrases. A noun phrase is given if it has a given referent, i.e. a referent which has
already figured in the ongoing speech event, either by being
talked about, or by being attended to in some other way. Thus,
definite noun phrases are given if the tokens they identify
have figured in the ongoing speech event, and indefinite noun
phrases are given if the types they identify have figured in
the ongoing speech event. In (69a), the second occurrence of
äpplet is given, while in (69b), äpplet is non-given. In (69c),
the second occurrence of ett äpple is likewise given, while in
(69d), ett äpple is non-given.

(69) a. - Tog han med sig äpplet? - Ja, han tog med sig
äpplet.
 (Did he take the apple? - Yes, he took the apple.)

b. - Vad tog han med sig? - Han tog med sig äpplet.
 (What did he take? - He took the apple.)

 (Do you have an apple? - There's an apple on the
table.)

 (What's in your hand? - It's just an apple.)

Note though that the second occurrence of ett äpple in (69c),
is both given and non-given: it identifies both a given type
and (as is signalled by the sentential context) a non-given
token. Obviously, an indefinite NP can not identify a given
token, since a given token is necessarily one that the hearer
can identify. In other words, the given/non-given contrast
pertains only to tokens (and types) that the hearer can identify.

In (spoken) Swedish, non-given constituents normally receive
a phrase accent (which is not to be confused with any of the
Swedish word accents), a pitch rise which starts in a stressed
syllable and terminates in a post-stress syllable (Bruce 1977).
A sentence may contain several phrase accents:
The last phrase accent of a sentence is normally interpreted as the sentence accent of that sentence. However, sentence accent is not an independent prosodic category, but rather a combination of a phrase accent and a terminal juncture (Bruce 1977. Note that Bruce's term sentence accent corresponds to my phrase accent. He has no corresponding term for my sentence accent.)

As can be seen from the examples in (69), phrase accents fall on non-given constituents. Thus, neither äpplet in (71a) nor ett äpple in (71b) can have a phrase accent.

   (I gave him an apple. Unfortunately, the apple was rotten.)

b. Han sa att han inte ville ha något äpple. Men när jag läde ett äpple på hans tallrik, så protesterade han inte.
   (He said he didn't want any apple. But when I put an apple/one on his plate, he didn't protest.)

The phrase accent on the so-called focus constituent of a cleft sentence is often treated as an exception to the claim that phrase accent (or stress) signals new information. Consider the following examples:

(72) Det var \{ mig \} du såg
    \{ katten \}
    \{ en älg \}

   (It was me/the cat/a moose you saw)

If we only consider the focus constituent, we see that it carries phrase accent even in cases when it is given. Mig, katten och en älg may all be given in (72). Thus, we might...
come to the conclusion that the focus constituent of a cleft sentence always carries phrase accent, regardless of whether it is given or non-given.

However, such an analysis fails to take into account the special nature of cleft sentences. What is necessarily non-given in a cleft sentence with phrase accent on the focus constituent is neither the focus constituent nor the relative clause, but the particular combination of the (given or non-given) focus constituent and the (normally given) relative clause. Thus, a cleft sentence counts as a specification of the relative clause contained in it, and as in other cases where a constituent counts as a specification of another, given, constituent, the phrase accent falls on the element which provides the specification. Just as the phrase accent falls on rött in (73a) and on stort in (73b), the phrase accent falls on the focus constituents in (72).

(73) a. Jag vill ha ett äpple, ett rött äpple
    (I want an apple, a red apple)

b. Jag vill ha ett rött äpple, ett stort rött äpple
    (I want an apple, a big red apple)

This type of analysis can also be extended to cases like the following, where the replies count as specifications of the preceding questions:

(74) - Vem stängde fönstret?
    (- Who shut the window?)
- Jag stängde fönstret
    (- I shut the window)

(75) - Kommer det någon jag känner?
    (- Will someone I know be there?)
- Ja, Lars kommer
    (- Yes, Lars will be there)
Armed with the preceding explication of the contrast definite - indefinite, we can now say that a sentence of the form NP är NP signals that the referent of the first NP (NP1) can also be identified by means of the second NP (NP2).

If both NP1 and NP2 are definite, both NP:s identify a unique referent, and an equative interpretation results. If NP1 is definite and NP2 is indefinite, NP1 identifies a unique referent and NP2 identifies a type of referent. The natural interpretation is then that the referent of NP1 is of the type specified by NP2. If both NP1 and NP2 are indefinite, both NP:s identify a type of referent, and the resulting interpretation is that referents of the type specified by NP1 are of the type specified by NP2 (En val är ett däggdjur (A whale is a mammal), for example). Finally, we have the case where NP1 is indefinite and NP2 is definite. This case is rare, but nevertheless existing:

(76) Det var en hemsk deckare. Ett barn var mördaren.

(That was a terrible crime novel. A child was the murderer).

In such cases, the initial indefinite noun phrase must be interpreted as "one in particular". It is possible to have a type-identifying NP in the first position of an NP är NP sentence, but then the sentence must be interpreted as "inverted". Note that (77a), which is allright as a main clause, has no subordinate clause counterpart.

(77) a. En underbar clown var min far

(A wonderful clown was my father)

b. Att en underbar clown var min far är välkänt

(That a wonderful clown was my father is well-known)

c. Att min far var en underbar clown är välkänt

(That my father was a wonderful clown is well-known)
Only the subordinate clause of (77c) can mean the same as (77a). In (77b), the initial noun phrase must mean "one in particular".

This follows from a general property of sentences with two referential noun phrases: Normally the identification of the referent of the subject is independent of the identification of the referent of the object. The identification of the referent of the object may, however, depend on the identification of the referent of the subject. Consider a sentence such as (78).

(78) Några män köpte en vas
    (Some men bought a vase)

This sentence can be used to describe a situation where a group of men bought just one vase, but it can also be interpreted as the "plural" of (79), in which case it describes a situation where each man bought one vase.

(79) En man köpte en vas
    (A man bought a vase)

Now consider the following sentence:

(80) En man köpte några vaser
    (A man bought some vases)

This sentence can normally only be used to describe a situation where just one man bought a collection of vases. It is next to impossible to interpret it as the "plural" of (79), i.e. as describing a situation where each vase was bought by a different man.

In other words, while a singular subject can mean only "one", a singular object can mean either "one" or "one each". In the latter case, we say that the identification of the referent of the object is dependent on the identification of the referent.
of the subject. In order to model what the sentence claims to be the case we have to postulate one vase for each of the individuals in the group identified by the subject.

If we apply this reasoning to NP är NP sentences, we note that it implies that the identification of the first NP can not be dependent on the identification of the second NP. Let us now see what this means. In the case of two definite noun phrases, the normal interpretation is that the first and the second NP identify a token each and that the whole sentence signals that the two tokens are identical. In the case where NP1 is definite and NP2 is indefinite, the interpretation is that NP1 identifies a token which is also a token of the type specified by NP2. In the case where both NP1 and NP2 are indefinite, the sentence signals that each token of the type specified by NP1 is also a token of the type specified by NP2. Thus, for each token identified by NP1, we get a token identified by NP2. However, the converse does not hold, except in the case where both NP:s are definite. Thus, if we have a sentence such as Mörden var ett barn, we can not conclude that each child was identical to the murderer, and if we have a sentence such as En val är ett daggdjur, we can not conclude that each mammal is a whale.

Consider now the second sentence of (76). There are only two interpretations of this sentence that are compatible with the principle given above. On the first interpretation, NP1 identifies one referent which is identified with the referent of NP2. On the second interpretation, NP1 gets a generic interpretation. The result is that each child is described as being identical to a particular referent, i.e. the murderer, which means that each child is described as being identical to all other children. This is clearly an absurd reading, and it seems reasonable to restrict the possibility of a generic interpretation to sentences which can hold of more than one (pair of) referent(s). Thus, the principle we have proposed effectively restricts the possible interpretations of NP är NP sentences with a definite NP2 and an indefinite NP1 to the single interpretation token - token.
Let us now pull together the various aspects of the preceding argument that there is just one NP construction. We started with a simple characterization of predicative constructions. In a predicative sentence NP V, we said that NP identifies a referent, and that V specifies something, let us call it a property, that holds of the referent identified by NP. In a predicative sentence NP1 V NP2, NP1 and NP2 normally identify different referents, and V specifies a relation that holds between these referents. We then moved on to consider the various ways in which an NP can identify a referent, and attempted to capture the definite - indefinite contrast in such terms. In doing this, we made a distinction between type-identification and token-identification, on the one hand, and between identifications that the hearer can make and identifications that the speaker can make, prior to the current utterance, on the other hand. It was argued that a definite NP identifies a referent that the hearer can token-identify, while an indefinite NP identifies a referent that the hearer can type-identify, and, possibly, the speaker can token-identify. We furthermore noted that that a referent token identified by a definite noun phrase and a referent type identified by an indefinite noun phrase can be given or non-given. All in all, this gives us the following modes of identification:

(81) 1. \( \text{NP}_{\text{def}} \) token-identifies a given and known referent
    2. \( \text{NP}_{\text{def}} \) token-identifies a known referent
    3. \( \text{NP}_{\text{indef}} \) type-identifies a referent of a given and known type
    4. \( \text{NP}_{\text{indef}} \) type-identifies a referent of a known type
    5. \( \text{NP}_{\text{indef}} \) token-identifies a referent of a given and known type
    6. \( \text{NP}_{\text{indef}} \) token-identifies a referent of a known type
I have used "known" as an abbreviation of "that the hearer can identify" in (81). Furthermore, a token or type is unknown if it is not specified as known, and non-given if it is not specified as given.

Finally, we arrived at a principle for the interpretation of transitive sentences, which in its most general form can be stated as a negative condition: The identification of the referent of the subject NP can not be dependent on the identification of the referent of the object NP. Another way to express this is to say that an NP1 V NP2 sentence can not mean "For each NP2 referent there is an NP1 referent or a number of NP1 referents such that NP1 V NP2". An important corollary of this principle is that an NP1 V NP2 sentence can not be a generalization about referents of the type specified by NP2. Thus, (82) can be a generalization about beavers, but not about dams. If (82) were interpreted as a generalization about dams, it would have precisely the excluded interpretation "For each dam", there are one or more beavers such that that beaver/those beavers built that dam".

(82) Bävrar bygger dammar
(Beavers build dams)

We can then say that the contrast between NP1 är NP2 and NP1 V NP2 is a contrast between sentences where both NP1 and NP2 identify the same referent (the marked case) and sentences where NP1 and NP2 may identify different referents (the un-marked case). Note that it would be wrong to say that NP1 and NP2 must identify different referents, since NP2 may be a reflexive pronoun.

NP är NP gen and NP är LocP contrast with NP är NP in the same way as does NP V NP. NP gen and LocP identify referents that may be different from the referent of the subject. In the case of LocP, I assume, following Jackendoff 1978, that LocP as a whole is referential, and that the types of referents
that are identified by LocP:s are places and paths (Stockholm would identify a place, as would här (here), and från Stockholm till Uppsala (from Stockholm to Uppsala) would identify a path, as would härifrån (from here)). The contrast between NP är NP gen and NP är LocP, on the one hand, and NP V NP, on the other hand, can be stated in the following way: All three sentence types indicate that there is a relation between the referent of the subject and the referent of the object/NP gen/ LocP. However, only in NP V NP is that relation specified (by V).

Having identified some of the major oppositions that characterize Swedish clauses, I will now attempt to describe these in a more systematic way. In order to do this, I will consider the constructions that I have discussed from a different perspective than that employed so far.

The grammar presented in (47) was essentially an item-and-arrangement description, a static presentation of combinatorial possibilities. Suppose instead we view a sentence not as an instance of a ready-made form, but as the result of a finite number of successive expansions of an initial string, where each expansion is meaningful, i.e. adds something to the interpretation of the result, and contrasts with other expansions that could have been made at the same point.

We then get a grammar which specifies a number of initial strings and a number of operations whereby new strings can be derived from already constructed strings. The strings that are derived are not simple linear strings, but have internal composition, i.e. they are bracketted strings of elements which themselves may be bracketted strings. An elementary operation on a string can add an element to that string or substitute a new element for an element of the original string. Substitution is limited to elements of the same syntactic category. A syntactic rule is a specific combination of elementary operations on the same string. Syntactic rules are always optional.
If we take the null string ($\emptyset$) as our initial string, we get the following grammar of simple declarative clauses:

\[(83)\]

\(a. \emptyset \rightarrow S[NP1 \ V_{\text{finite}}]\)

\(b. V_a (NP2) \rightarrow V (NP2) \ NP2\)

\(c. V_a ((P) NP2) \rightarrow V ((P) NP2) [P NP2]_{pp}\)

\[(84)\]

\(a. NP1 = \text{PRO}_{\text{nom}} / \text{NP}_{\text{def}} / \text{NP}\)

\(b. NP2 = \text{PRO}_{\text{acc}} / \text{sig} / \text{NP}_{\text{def}} / \text{NP}\)

\(c. V_{\text{finite}} = V_{\text{present}} / V_{\text{past}}\)

\(d. V_a = V_{\text{finite}} / V_{\text{infinite}} / V_{\text{supine}} / V_{\text{imperative}}\)

These rules account for the paradigm in (61), and introduce the categories of definiteness, case and tense, as well as the reflexive pronoun \(\text{sig}\). By recognizing two different categories of NP, we get a simple description of the distribution of accusative and reflexive pronouns.

To the rules in (83), we can add the following rule, which introduces subordinate clauses:

\[(85)\]

\(a. V_a ((P) NP2') \rightarrow V_a ((P) NP2) S\)

The kind of structures introduced by (85a) are exemplified in (86) and (87).

\[(86)\]

\(a. \text{Han vet att jag är trött} \)

(He knows that I am tired)
b. Han sade åt oss att restaurangen var stängd
(He told us that the restaurant was closed)
c. Han förklarade för oss att platserna var upptagna
(He explained to us that the seats were reserved)

(87) a. Han frågade om restaurangen var stängd
(He asked if the restaurant was closed)
b. Han berättade att restaurangen var stängd
(He told that the restaurant was closed)
c. Han frågade oss om restaurangen var stängd
(He asked us if the restaurant was closed)
d. Han berättade för oss att restaurangen var stängd
(He told for us (= told us) that the restaurant was closed)

The meaning contrasts that accompany the rules above have to some extent already been given. The contrast between definite NP:s and indefinite NPs (NP_{def} - NP) can be summarized as in (88).

(88) NP_{def} - NP: NP_{def} token-identifies a known referent
NP does not token-identify a known referent

The contrast between present tense and past tense can be characterized as a contrast between cases where the sentence holds before the moment of speech (past tense, the marked case), and cases where the sentence holds at or after the moment of speech (present tense, the unmarked case). Thus, (89a) can only indicate something that took place before now, while (89b) can indicate something that takes place now or in the future (see Lyons 1968:306, Ejerhed 1974).
(89) a. Han köpte öl
   (He bought some beer)
b. Han köper öl
   (He buys some beer = He is buying some beer or
   He will buy some beer)

Tense interacts with the Aktionsart indicated by the verb. Here I will only take up two distinctions: bounded - non-bounded and punctual - non-punctual. Following Dahl (1978), the bounded - non-bounded distinction can be described as a distinction between cases where the situation described comes to an end during the specified period of time and cases where no endpoint is indicated. The punctual - non-punctual distinction is a distinction between cases where the situation described lasts only a moment and cases where it lasts longer. Punctual situations are of course always bounded. The situation described in (90a) is unbounded, the one described in (90b) is bounded and non-punctual, and the situation described in (90c) is punctual.

(90) a. Han skrev
   (He wrote = was writing)
b. Han byggde ett hus
   (He built a house)
c. Han krossade en vas
   (He broke a vase)

A verb which indicates an unbounded situation specifies only a period of time when the verb is true of some referents. Let us call this period V. A verb which indicates a bounded situation also specifies that there is a point at which the verb is no longer true of those referents. This point will be called V_e. A bounded situation is thus one where V is followed by V_e. This will be symbolized by V - V_e.
Past these can now be symbolized as $V - 0$, where $0$ is the moment of speech, and present tense as either $OV$ ($0$ falls within or coincides with $V$) or $0 - V$ ($V$ follows $0$). In the past tense case, $V_e$ can be added to $V$, so we get the following possibilities: $V - 0$, and $V_e - V - 0$. In the present tense case, however, an endpoint can only be interpreted as potential, since it must follow $V$, which either follows or coincides with $0$.

A finite verb contrasts directly with $\text{vara/bli}_{\text{finite}}$ ADJ and with $\text{vara/bli}_{\text{finite}}$ PTC, i.e. with predicative adjective and past participle constructions. Moreover, there is a contrast between the perfect construction $\text{ha}_{\text{finite}} V_{\text{supine}}$ (the supine verb form is a special verb form, used only in this construction) and the non-perfect $V_{\text{finite}}$, where $V$ is either a main verb or $\text{vara/bli}_{\text{adj/ptc}}$. These contrasts can be described in the following way:

(91) a. $V_{\text{finite}} \rightarrow V[\text{ha}_{\text{finite}}] V_{\text{supine}}$

b. $V_a \rightarrow V[\text{vara/bli}_{a}] \text{ADJ}_{\text{agree}}$

c. $V_a \rightarrow V[\text{vara/bli}_{a}] \text{PTC}_{\text{agree}}$

The feature "agree" indicates that predicative adjectives and past participles show number and gender agreement. The exact interpretation of this feature is not essential to the purpose of this study, and will thus not be discussed.

The meaning of (91a) is that the described period of time is shifted from $V$ to a period of time that follows $V$, i.e. we get $V - V_{\text{sup}}$. If the verb refers to a bounded situation, an endpoint may follow $V$ and precede $V_{\text{sup}}$. $0$, the moment of speech, is then placed relative to $V_{\text{sup}}$. Thus, if we have a verb that refers to an unbounded situation, $V$ may be true also during
Vsup. (92) is compatible both with a situation where John is still sleeping and with a situation where he is now awake. In contrast, (93) is incompatible with a situation where John is still building the house.

(92) John har sovit i en timme
     (John has slept/has been sleeping for an hour)

(93) John har byggt ett hus
     (John has built a house)

In general, a temporal structure V - X can be interpreted as a description of a situation where V is bounded by X, but it need not be so interpreted. To be more precise, we can say that V - X leaves it open whether V still holds during X (unless of course V is bounded by an independently established endpoint). Thus, a past tense description of an unbounded situation, such as (94), is compatible with a state of affairs where the situation has not come to an end before the moment of speech.

(94) John sov (sist jag såg honom)
     (John slept (when I saw him last))

The case where X bounds V seems, however, to be the unmarked case.

V and vara/bli ADJ/PTC contrasts in that only V can be inherently bounded. ADJ and PTC can only be bounded by a following X, provided by the tense specification, the perfect construction or a time adverbial. Thus adjectives and past participles behave precisely like verbs which refer to unbounded situations. The sentences in (95) are all compatible with a situation where the machine is red/unrigged at the moment of speech. Moreover, (95a) is incompatible with a situation where the machine ceased to be red/unrigged before the moment of speech.
(95)  a. Maskinen är röd/nedmonterad
       (The machine is red/unrigged)

       b. Maskinen var röd/nedmonterad
       (The machine was red/unrigged)

       c. Maskinen har varit röd/nedmonterad
       (The machine has been red/unrigged)

We can then say that the contrast V - ADJ/PTC signals the meaning contrast "may be inherently bounded - can not be inherently bounded". Note, by the way, that the same meaning contrast is signalled by the contrast V - V supine.

The temporal meaning of (91c) is not so easily stated. For verbs which describe bounded situations, the meaning is similar to the meaning of (91a): The described period of time is shifted from V to a later period of time. For verbs which describe unbounded situations, however, this description is not valid. In such cases, the described period of time is V. (96) can for example not refer to a period of time when John is no longer loved, as (97) can.

(96) John är älskad
       (John is loved)

(97) Mary har älskat John
       (Mary has loved John)

So if we want to find a general meaning for participles, it would have to be something along the following lines: The described period of time is shifted from V to an unbounded period of time starting with V_e, if the verb refers to an inherently bounded situation. Otherwise, the described period of time is not shifted. If we let X, V symbolize that V includes X and that X and V start at the same point, we can state the general meaning of past participles as V (- V_e), PTC. If the
verb refers to a bounded situation, we get $V - V_e, PTC$ or just $V_e, PTC$. If the verb refers to an unbounded situation, we get $V, PTC$.

One contrast remains: that between vara and bli. Vara leaves the temporal meaning unchanged, while bli provides an initial boundary for ADJ or PTC, a period or point of time when ADJ or PTC is not yet the case. Thus, the general meaning of bli is $bli - ADJ/PTC$. In other words, the described period of time is shifted from ADJ/PTC to an earlier period or point of time. When bli modifies a participle, the meaning is either $bli - V, PTC$ or $bli - V_e, PTC$, depending on whether the verb describes an unbounded situation or not.

Thus, neither (98a) nor (98b) can describe a situation where the machine is red/hated at 0. (98c), on the other hand, can describe a situation where the election is going on at 0, but not a situation where it is over at 0.

(98) a. Maskinen blir röd
   (The machine becomes red)
   b. Den här maskinen blir säkert avskydd
      (This machine will certainly become hated)
   c. Reagan blir vald till kandidat
      (Reagan becomes elected candidate)

The system of tense/aspect oppositions can be summarized in more transparent terms in the following way: A bounded situation can be described as a change in some environment, while an unbounded situation can be described as a prevailing state of an environment. Thus, the opposition $V - ADJ$ can be characterized in the following way:

(99) $V$: Change or state

   $ADJ$: State

The opposition $V - PTC$ can then be characterized as:
(100)  \( V: \text{ Change or State} \)
\( \text{PTC: State after Change} \)

If the meaning of \( V \) is State, the only change that the state referred to by PTC can follow is the (unspecified) onset of the state referred to by \( V \). The two states will thus coincide.

The opposition \( \text{vara ADJ/PTC} - \text{bli ADJ/PTC} \) can be characterized as:

(101)  \( \text{vara ADJ/PTC : State} \)
\( \text{bli ADJ/PTC : Change before State} \)

The full meaning of \( \text{bli PTC} \) is then: Change before State after Change. That is, \( \text{bli PTC} \) and a corresponding \( V \) with the meaning Change describe the same period of time. If the corresponding \( V \) has the meaning State, on the other hand, \( \text{bli PTC} \) describes a period of time that precedes that described by \( V \).

The opposition \( V - \text{ha V} \) can be characterized as:

(102)  \( V : V \)
\( \text{ha} \text{ V}_{\text{sup}}: \text{State after V} \)

Finally, the opposition \( V_{\text{present}} - V_{\text{past}} \) can be characterized as:

(103)  \( V_{\text{present}} : \text{V includes or follows 0} \)
\( V_{\text{past}} : \text{V precedes 0} \)

The meaning of the most marked expansion of \( V_{\text{finite}} : \text{ha} \text{ past} \text{bli}_{\text{sup}} \text{PTC} \) is then: [State after [Change before [State after Change]]] precedes 0.

There are two basic meaning contrasts that are introduced by the rules in (83). These have to do with (1) the number of
referents involved in the situation described by the sentence, and (2) the roles that these referents play in the described situation.

Consider first the question of referents. To begin with, we assume that each non-reflexive and non-expletive NP introduces a distinct referent, which is either token-identified or just type-identified. This is of course an oversimplification, since pronouns may refer to already introduced referents and since there are idiomatic NP:s that cannot be described as referential, but it will do for our purposes. A referent of an NP can be independently identifiable, i.e. identifiable on the basis of the NP alone, or dependent for its identification on the larger sentential context in which the NP appears. The referent of a definite NP is either independently identifiable or dependent for its identification on the identification of another, known or given, referent. The latter case is the case when a definite NP is associatively anaphoric. However, the referent of a definite NP is never dependent on the sentential context for its identification.

The referent of a definite NP is thus token-identified either on the basis of the NP description alone or on the basis of its relation to a known or given referent. The referent of an indefinite NP is either just type-identified, in which case the identification is made on the basis of the NP description alone, or token-identified by means of the described situation in which it is involved. Thus, if we have a sentence which describes a particular situation, such as (104), the subject referent is type-identified by the NP description and token-identified by the particular situation described.

(104) En häst gnäggade
(A horse neighed)
However, if we have a generic sentence, a sentence that provides a timeless characterization of referents of a certain type such as (105), no token-identification is possible, and the referent of an indefinite subject NP is just type-identified, on the basis of the NP description alone.

(105) En häst är ett däggdjur  
(A horse is a mammal)

Thus, we have the following possibilities for simple NP V sentences: If the sentence provides a timeless characterization of the subject referent, then the subject referent is independently identifiable, regardless of whether the subject is definite, as in (106), or indefinite, as in (105). If the sentence describes a particular situation, however, only definite subjects are independently identifiable.

(106) Hästen är brun  
(The horse is brown)

Using Kuroda's notions of categorical and thetic (Kuroda 1972), we can call a combination of a verb and an NP with an independently identifiable referent a categorical combination, and a combination of a verb and an NP with a referent whose identification is dependent on NP V combination a thetic combination. A categorical combination exhibits the "classical" type of predication: First, an entity is named, and then something is ascribed to it. A thetic combination, on the other hand, exhibits another type of predication. Here the naming and the ascription are carried out in one step, so to speak.

A verb - object combination can also be either categorical, as in (107) and (108), or thetic, as in (109).

(107) Han köpte boken  
(He bought the book)
Han avskyr måndagar
(He hates mondays)

Han köpte en bok
(He bought a book)

A categorical subject - verb combination fits together both
with a categorical verb - object combination and with a thetic
verb-combination (exemplified in (107) - (108) and (109),
respectively), and a thetic subject - verb combination fits
together with a thetic verb - object combination, as in (110).
Sentences with a thetic subject - verb combination and a cate-
gorical verb - object combination, as in (111), are however
somewhat unnatural.

En man köpte en bok
(A man bought a book)

a. En man köpte boken
(A man bought the book)

b. En lärare avskyr måndagar
(A teacher hates mondays)

((111b) is of course not unnatural, if the subject is taken as
a generic NP.)

These facts can be better understood, if we treat categorical
and thetic, not only as independent properties of subject-verb
and verb-object combinations, but also as properties of the
successive steps of a derivation. In a transitive sentence,
then, we first have a categorical or thetic subject - verb
combination and then a categorical or thetic subject-verb-object
combination.

If the subject - verb combination is categorical, the first
step in a derivation gives us C(NP1) (a combination that is
categorical with respect to NP1). If the following verb -
object combination is categorical, on the other hand, we get C(NP1, NP2). In both cases, the value assigned to the first step can be taken as a value that pertains to the whole sentence. This is also the case when both the subject - verb combination and the verb - object combination are thetic. The first step is assigned the value T (thetic) and the second step is assigned the same value. However, when the subject - verb combination is thetic and the verb - object combination is categorical, we get the successive values T and C(NP2). In this case, the value assigned to the first step can not be taken as a value that pertains to the whole sentence.

To capture the marked character of sentences like (111a) and (111b), we need then only make a distinction between categorical sentences, sentences with at least one categorical combination, and thetic sentences, sentences with no categorical combination, and require that the values categorical and thetic should preferably be introduced by rule (83a).

A sentence can be a timeless characterization of the referent of NP1, if it is categorical with respect to NP1, as in (112), or categorical with respect to both NP1 and NP2, as in (113).

(112) a. Erik skriver sonetter
      (Erik writes sonnets)

      b. Båvrar bygger dammar
      (Beavers build dams)

(113) a. Erik äter sill
      (Erik eats herring)

      b. Hunden tycker om ben
      (Dog likes bones)

In the latter case, the sentence is also interpreted as a timeless characterization of the relation between the referent of NP1 and the type of referent identified by NP2. Thus, on
the basis of (113b), we may conclude that bones are charac-
tristically liked by dogs. However, on the basis of (112b), we
can not conclude that dams are characteristically built by
beavers. Which interpretation is made, categorical with re-
spect to NP1, as in (112b), or categorical with respect to NP1
and NP2, as in (113b), seems to depend on the meaning of the
verb.

However, a sentence that is categorical with respect to just
NP2 can not be a timeless characterization of the referent of
NP2, since the subject - verb combination can be thetic only
if the sentence is not timeless. (114) can thus only be inter-
preted as a characterization of professors, and their relations
to snails, or as a description of a particular situation in-
volving a professor and snails.

(114) En professor åter sniglar
     (A professor eats/is eating snails)

In this connection, we should also mention the constraint we
discussed earlier: that the identification of a subject refe-
rent can not depend on the identification of an object referent.
This constraint follows directly from the assumption that the
introduction of an NP is normally accompanied by the introdun-
tion of an NP referent, which is identified on the basis of
the sentential context available at the step where the NP is
introduced. If a subject referent depends for its identifica-
ton an object referent, then the introduction of the subject
referent can not be made when the subject NP is introduced
but has to wait until the object NP has been introduced.

To summarize: (83a), (83b) and (83c) introduce one NP referent
each. These referents may be independently identifiable, in
which case we have categorical NP - V combinations, or not,
in which case we have thetic NP - V combinations. (83b) and
(83c) should preferrably not change the value of the entire
sentence from thetic to categorical.
Let us now turn to the meaning contrasts that concern the roles that the introduced referents play in the described situations. The first contrasts that I will discuss have to do with the roles of controller and cause of the described situation.

That someone is a controller of a situation means that the situation is the result of that individual's deliberate choice. Here we have to make a distinction between two cases. Suppose that a situation T obtains at a certain time. In the first case, T would not have occurred in the natural course of events, but occurred because an individual who could have let the natural course of events go on undisturbed chose to cause T to occur. In the other case, T is part of the natural course of events, and there is an individual which could have prevented T from occurring, but lets T occur. In the first case, the individual is both the cause and the controller of T. In the second case, the individual is just the controller of T.

That someone or something is the cause of a situation means roughly that the situation would not have occurred if that someone/something had not intervened in the natural course of events. It is perfectly possible to be the cause of a situation without being the controller of that situation. You might for example break your favorite cup without having chosen to do so. The cup would not have broken if you had not touched it, but the breaking was not the result of a deliberate choice.

Now, in an intransitive sentence, the referent of NP1 may be both the cause and controller of the situation described, as in (115), just the controller, as in (116), just the cause, as in (117), or neither, as in (118).

(115) Han sprang
(He ran)

(116) Han trätttnade
(He got tired)
The difference between (115) and (116) can be illustrated by means of the imperative sentences in (119) and (120). If we have a situation that can be both caused and controlled, both positive and negative imperatives are possible. However, if we have a situation that can be controlled, but not caused, only a negative imperative is completely natural. Thus, (120a) is rather odd.

(119) a. Spring!
   (Run!)
   b. Spring inte!
   (Don't run!)

(120) a. Tröttna!
   (Get tired)
   b. Tröttna inte!
   (Don't get tired!)

In a transitive sentence, either the referent of NP1 or the referent of an oblique object may be the cause of the situation described. In (121), the referent of NP1 is the cause, in (122a), the referent of the NP governed by på is the cause. However, there are no sentences like (122b), where the referent of a non-oblique object is the cause of the described situation, in Swedish.

(121) Han sparkade till stenen
   (He kicked the stone)

(122) a. Han snubblade på stenen
   (He stumbled on the stone)
b. *Han snubblade stenen
   (He stumbled the stone)

While both subjects and oblique objects can refer to the cause of a described situation, only subjects can refer to the controller of a described situation. This is most easily demonstrated by means of sentence pairs like the following:

(123) a. Han slog sig på stolen
   (He hit himself on the chair)

   b. Stolen slog honom
   (The chair hit him)

   c. Han slog sig på Patrik
   (He hit himself on Patrik)

   d. Patrik slog honom
   (Patrik hit him)

In sentences of the form NP1 slå NP2, the referent of NP1 is the cause of the described situation and also the controller of that situation. Sentence (123b) is consequently very odd, if it is taken literally. To make sense, this sentence would require a special context, for example a fairy tale context, where objects like chairs are animated. In sentences of the form NP1 slå sig på NP2, on the other hand, the referent of NP2 is the cause of the described situation, but that referent can not be the controller of the situation. In (123c), the person Patrik is described just as an obstacle, and no control is attributed to him. In fact, sentences of the form NP1 slå sig på NP2 typically describe uncontrolled situations. The construction can however be used in negative imperative sentences, and marginally, with a special interpretation ("See to it that you hit yourself on NP2"), also in positive imperative sentences:

(124) a. Slå dig inte på stolen!
   (Don't hit yourself on the chair)
b. Slå dig på stolen!
   (Hit yourself on the chair)

Cases like (124) are probably best described as cases where control is imposed on the referent of the understood second person subject by the imperative construction. Nevertheless, sentences like (124a) clearly demonstrate that an oblique object cause is not incompatible with a subject controller.

Summarizing the preceding discussion of cause and control, we can say that the rule (83a) can introduce both a cause and controller, while the rule (83c) can introduce only a cause and the rule (83b) can introduce neither a cause nor a controller.

This description also implies that indirect objects (NP2/ V _ NP2) can never be controllers or causes. As far as I have been able to determine, this is correct. Moreover, it implies that an oblique object in the context V (P) NP2 _ can refer to a cause. This is also correct:

(125) Jag rev sönder min rock på de taggiga buskarna
       (I tore my coat on the thorny bushes)

(126) Jag darrade i hela kroppen av undertryckt ilska
       (I trembled in my whole body with repressed anger = My whole body trembled with repressed anger)

Consider now the following sentences:

(127) a. Han arbetar
       (He is working)

b. Han målar
   (He is painting)

c. Han målar bordet
   (He is painting the table)
d. Rågen skördas i augusti
   (The rye is harvested in August)

e. Det skördas råg i augusti
   (It is harvested rye in August)

f. Det kommer en man på vägen
   (There comes a man on the road)

g. Det gick två timmar
   (There elapsed two hours)

(128) a. Han är sjuk
   (He is ill)

b. Han hade dörren öppen
   (He had the door open)

c. Han verkar vara inkompetent
   (He seems to be incompetent)

d. Han anser henne vara inkompetent
   (He considers her to be incompetent)

e. Han anses vara inkompetent
   (He is considered to be incompetent)

These sentences illustrate the major ways in which subjects and objects can combine with finite verbs in Swedish. Let us first consider the ways in which subjects can combine with verbs. In order to facilitate the description, I will use the following terminology:

(129) a. An NP is the **functional subject** of a V if its referent has the same role in the situation described by V as the referent of the subject of V in an active declarative sentence.

b. An NP is the **functional object** of a V if its referent has the same role in the situation described by V as the referent of the (direct) object of V in an active declarative sentence.
Note that this terminology does not imply that active, declarative sentences are closer to some underlying representation than other sentence types, or that an NP which is the functional subject of V in a sentence is the subject of that V in the underlying representation of that sentence. All that is implied by the notions of functional subject and functional object is that a certain relation ("expresses the same role as") holds between an NP in a certain sentence and the subject or object of an active declarative sentence.

The first type of combination is exemplified in (127a). Here the subject is also the functional subject of the verb, and no functional object referent is implied. In (127b), we have a slightly different type of combination. The subject is again the functional subject of the verb, but in this case a functional object referent is implied. The same combination is exemplified in (127c). The third type of combination of subjects and simple verbs is exemplified in (127d). In this case, the subject is the functional object of the verb, and a functional subject referent is implied.

Let us now name these combinations. The names I will use are based on the four major types of case inflections found in natural languages: nominative, accusative, absolutive and ergative. The two ideal types of case marking systems in which these inflections appear are the following:

(130) a. "Accusative":

\[
\begin{align*}
\text{Intransitive:} & \quad \text{SUBJ}^{\text{nominative}} \\
\text{Transitive:} & \quad \text{SUBJ}^{\text{nominative}} \text{ OBJ}^{\text{accusative}}
\end{align*}
\]

b. "Ergative":

\[
\begin{align*}
\text{Intransitive:} & \quad \text{SUBJ}^{\text{absolutive}} \\
\text{Transitive:} & \quad "\text{SUBJ}^{\text{ergative}} "\text{OBJ}^{\text{absolutive}}
\end{align*}
\]
(I have put SUBJ and OBJ in scare quotes in the transitive part of (130b) in order to indicate that these are not necessarily internally justified, but only indicates "what would be the subject/object of a transitive sentence in an accusative system").

In an active and personal intransitive sentence, the verb can only be combined with an NP that is its functional subject. Thus, in cases like (127a), we can speak of an intransitive combination of the subject and the verb. In the case of an intransitive combination, no functional object referent is thus implied. If we have a combination of a subject and a verb, where the subject is the functional subject and a functional object referent is implied, we will speak of an ergative combination. Note that an ergative NP normally implies the presence of a functional object NP referent. Finally, in cases like (127d), where the subject is the functional object and the presence of a functional subject referent is implied, we will speak of an accusative combination. An accusative NP normally implies the presence of a functional subject referent.

Let us then consider the ways in which objects can combine with verbs. In both (127d) and (127e), the object is the functional object and the presence of a functional subject referent is implied. Thus, in these cases, we have an accusative combination of a verb and an object. In (127g), on the other hand, the object is the functional subject of the verb, and no functional object referent is implied. Thus, we have an intransitive combination of a verb and an object. In (127f), finally, the object is again the functional subject of the verb, but here the presence of a locative object referent is implied. Locative objects are normally obligatory in impersonal transitive sentences. Sentences like (131a) and (131b) sound definitely unfinished.

(131) a. Det satt en kvinna
(There sat a woman)
b. Det sprang en man
(There ran a man)

Thus, in (127f), there is an ergative combination of a verb and an object, with a locative object referent implied.

Next consider the sentences in (128a). In (128a), the subject is the functional subject of the predicative adjective, and in (128c) and (128e), the subject is the functional subject of the infinitive. However, the subjects are not the functional subjects of the verbs they are combined with. There is no reason to treat är as a two-place verb and verka (seem) and anse (consider) are good examples of so-called Raising verbs (see e.g. Anward 1974). In such cases, we will say that the verbs are combined with a subject-cum-predicative or a subject-cum-infinitive, which means that there is a predication involving the subject and the predicative/infinitive, but no predication directly involving the subject and the verb. If we have a case like (131), where the subject is the functional subject of both the finite verb and the infinitive, we will simply say that the verb combines both with the subject and with the subject-cum-infinitive.

(131) Han vill sjunga
(He wants to sing)

In (128a), we have an intransitive combination of a verb and a subject-cum-predicative, and in (128c), we have an intransitive combination of a verb and a subject-cum-infinitive. In (128e), on the other hand, we have an accusative combination of a verb and a subject-cum-infinitive. The subject-cum-infinitive is the functional object of the verb, and the presence of a functional subject referent is implied.

In (128b), we have a combination of a verb and an object-cum-predicative. The direct object of ha is the functional subject of the predicative. Finally, in (128d), we have a combination of a verb and an object-cum-infinitive.
Note that the combinations are recursive. In (128a), there is an intransitive combination of a predicative and the subject of a subject-cum-predicative. Moreover, in (128c), there is an intransitive combination of an infinitive and a subject-cum-predicative, where the subject of the subject-cum-predicative is the subject of a superordinate subject-cum-infinitive.

In order to capture indirect objects, we will have to introduce a further type of combination, let us call it a dative combination of a verb and an object. A dative combination signals that the object is the functional "third argument" of the verb. In other words, it signals that V holds of (x,y,NP2).

Oblique objects combine with verbs in the same ways as non-oblique objects do. Thus, we have intransitive, ergative, accusative and dative combinations of verbs and oblique objects:

(133) a. Det sjöng i telefonrädarna
   (It was singing in the telephone lines = The telephone lines were singing)
   b. Det myllrade av bin i trädgården
   (It swarmed with bees in the garden)
   c. Han längtar efter sommaren
   (He longs for summer)
   d. Han gav boken till en student
   (He gave the book to a student)

Finally, we must determine the nature of the combination of a verb with a formal subject. The two basic cases are the following:

(134) a. det V:
   Det snöar (It is snowing)
   b. det Vs:
   Det röks för mycket här
   (It is smoked too much here = One smokes too much here)
In neither case does the subject introduce a referent. Consequently, det can neither be the functional subject nor the functional object of the verb it is combined with. In (134a), no referent is implied, neither a functional subject referent nor a functional object referent. In (134b), on the other hand, a functional subject referent is implied. Furthermore, that referent must be both the cause and the controller of the situation described by the verb. As we have already noted, sentences like (134b) can only describe intentional activities.

A way to capture these properties of sentences like (134a) and (134b) is to say that det V(s) constitutes a zero-combination of a subject and a verb, i.e. a combination where no referent is introduced or assigned a role. The difference between (134a) and (134b) can be captured by saying that the combination of det and an active verb is an intransitive zero-combination of a subject and a verb, i.e. a combination where no functional subject is expressed and no functional subject referent is implied, and that the combination of det and a passive verb is an accusative zero-combination of a subject and a verb, i.e. a combination where a functional subject referent is implied, but no functional object referent is expressed or implied.

The notion of zero-combination has no direct relation to role structures, but is rather on a par with the notions of categorical and thetic combinations. That is, it has to do with the referentiality of the NP in the combination. In fact, it constitutes one extreme of a contrast that is even more fundamental than the categorical-thetic contrast: the contrast between an NP-V combination which introduces a distinct referent, i.e. a referent that is distinct from all other referents introduced in the same clause, or sentence, and an NP-V combination which do not introduce any distinct referent. The types of combinations that we have discussed so far, i.e. thetic and categorical combinations, are combinations which introduce distinct referents. Combinations which do no introduce distinct referents are of two kinds: combinations which do not introduce
any referents at all, i.e. zero-combinations, and combinations which "repeat" already introduced referents, i.e. (on the clause level) combinations with a reflexive or reciprocal meaning, which I will call reflexive and reciprocal combinations, respectively.

Thus, in (135a), there is an accusative reflexive combination of sig and a verb, and in (135b), there is an accusative reciprocal combination of varandra (each other) and a verb.

(135) a. Han rakade sig  
(He shaved himself)  
b. De rakade varandra  
(They shaved each other)

The meaning of a reflexive combination is that the role introduced by that combination is played by an already introduced referent, which thus play two roles at once. The meaning of a reciprocal combination is that the role introduced by that combination is played by a referent that belongs to an already introduced group of referents, but does not play two roles at once. In (135b), there are at least two shavings described, but in none of these shavings is the shaver and the "shavee" the same person.

We have now assembled the notions that we need for our analysis of passive and impersonal constructions. These notions all find their place within a simple theory of the ways in which constituents can combine. What we have arrived at is a notion of combination which incorporates the following three dimensions:

1) A combination of an NP and a verb can be a subject-verb (S,V) combination, a direct object-verb (O,V) combination, an indirect object-verb (IO,V) combination, or an oblique object-verb (QO,V) combination. A combination of an NP, a verb, and a predicative/infinitive can be a combination of
a subject-cum-predicative/infinitive and a verb (S-P/I,V),
or a combination of an object-cum-predicative/infinitive
and a verb (O-P/I,V).

2) A combination of a subject, etc. and a verb can be an in
transitive combination (X^I,V) an ergative combination (X^E,V),
an accusative combination (X^A,V) or a dative combination
(X^D,V). Theoretically, each such combination may further-
more introduce a cause (C) and/or a controller (K).
X^{CKE},V, for example, is then an ergative combination that
introduces a cause and a controller.

3) A combination of a subject, etc. and a verb is furthermore
either a combination that introduces a distinct referent,
or a combination that does not introduce any distinct refe-
rent. In the former case, the combination is either a
categorical combination (X^C,V) or a thetic combination
(X^T,V). In the latter case, the combination is a zero-
combination (X^0,V), a reflexive combination (X^RX,V), or a
reciprocal combination (X^RC,V).

We can now add to our rules an explicit indication of which
combination is introduced by the rule. Thus, we can reformu-
late rule (83a) as (136).

(136) SC^{CKI},V: \emptyset \rightarrow s[NP1 V_{finite}]

In (136), I have indicated just one of the combinations that
are compatible with (83a), an intransitive and categorical com-
bination of a subject and a verb, where the subject referent
is the cause and the controller of the described situation.
Instead of doing this, I could have tried to define a Gesamt-
bedeutung for the expansion in (83a), something along the
lines of (137).

(137) S^{(C)(K)I/E}, V
However, a Gesamtbedeutung would deprive us of a dynamic view of the various uses of (83a). If we postulate a Gesamtbedeutung, all uses are treated as equally typical and equally basic. That does not seem to be the case, however. To take just one example: a thetic subject-verb combination is clearly more marked than a categorical one, and that is not reflected in (137).

A better alternative is to treat one or more of the uses of a certain expansion as basic, and treat the other uses as extensions of the basic use(s). This alternative can be given a rather concrete interpretation, if we assume that all language user learns an expansion in one use, and that part of his linguistic competence is the ability to extend the forms he has at his disposal to new cases, cases which are only partially covered by the uses he has learnt.

I will assume that there are two basic uses of (83a): (136) and (138). I have no independent arguments for this decision, but, as I hope will become apparent, it provides us with a good point of departure for unravelling the Swedish system of clause-level constructions.

(138) $S_C^I, V: \emptyset \rightarrow S_{NP1}^N V_{finite}$

(136) is typically the case when the subject referent is a person, as in (139a), and (138) is typically the case when the subject referent is an inanimate object, as in (139b).

(139) a. Han springer
     (He is running)

     b. Den gick sönder
     (It broke)

I will also assume that (136) is more basic than (138), i.e. that (138) is a primary extension of (136). Again, I have no
other arguments for this decision than the internal logic of the Swedish system of clause-level constructions.

(136) can then be extended in such a way that we get an ergative combination instead of an intransitive one:

\[(140) \ S_{C}^{CKE}, V: \emptyset \rightarrow S[NP_1 \ V_{finite}] \]

Examples:

(141) a. Han målar
   (He paints)

   b. Hon skriver
   (She is writing)

   c. Vi planterade
   (We planted)

Let me now introduce the notion of construction. A construction is simply a sequence of combinations. In the limiting case, we have only one combination, but a typical construction involves more than one combination. The combinations in (136) and (138) only enter into one-combination constructions, or into constructions which contain only verb - adverbial combinations in addition to the subject - verb combination. The combination in (140), however, can enter into a construction with more than one combination. In addition to a subject - verb combination, we can have a verb - object combination, for example, as in (141). Note that the description of the construction in (141) is not in terms of rules, but rather in terms of combinations and steps of derivations. This format can be seen as an abbreviation of the more complete description in (142).
A construction should be understood as a kind of Gestalt, and not just as the sum of its parts. This means that the rules that are part of a certain construction have no independent existence. They can only be applied in the course of a derivation defined by a construction. Nevertheless, we can still regard a construction as composed of a small set of rules.

The combination in (138) can also be extended so that we get an ergative combination instead of an intransitive one:

(143) $S_C^{E}, V : \emptyset \rightarrow S_{[NP1 \ V_{finite}]}$

For example:

(144) Skottet träffade
(The shot hit)

However, such cases seem to be comparatively rare.

(143) can also enter into an SVO construction. Thus, we get sentences like:

(145) a. Skottet träffade mig
(The shot hit me)
b. Vattnet omslöt honom
(The water surrounded him)

(140) and (143) also enter into two-combination constructions where the second combination is a combination of the verb and a locative phrase. Such a combination, a variant of a verb-oblique object combination, will be called a verb-locative object combination. Furthermore, the combination (140) enters into three-combination constructions where the two other combinations are a verb-direct object combination and either a verb-indirect object or verb-locative object combination. Some examples are given below:

(146) a. Han gick till affären
(He went to the store)
b. Boken ligger på bordet
(The book lies on the table)

(147) a. Han lade boken på bordet
(He put the book on the table)
b. Han erbjöd mig en cigarr
(He offered me a cigar)

The identification of a direct object referent can be dependent on the identification of a locative object referent. Thus, (148a) can mean that every box had an egg beside it. The identification of a direct object can also be dependent on the identification of an indirect object. Thus, (148b) can mean that each guest got his own beer.

(148) a. Han lade ett ägg bredvid kartongerna
(He put an egg beside the boxes)
b. Han gav gästerna en öl
(He gave the guests a beer)
However, the identification of an indirect object referent can not be dependent on the identification of a direct object referent. (149) can not mean that each book was given to a different woman.

(149) Han gav en kvinna några böcker
(He gave a woman some books)

The identification of a locative object referent can however be dependent on the identification of a direct object referent, but that requires that the direct object includes a strong distributive quantifier, such as varje (each). Although (150a) can mean that each egg was placed in its own box, the most natural interpretation of (150b) is that all the eggs went into the same box.

(150) a. Han lade varje ägg i en kartong
(He put each egg in a box)

b. Han lade några ägg i en kartong
(He put some eggs in a box)

The identification of a subject referent can not be dependent on the identification of a locative object referent however. Nor can it be dependent on the identification of an indirect object referent. (151a) can not mean that each box had an egg beside it, and (151b) can not mean that each woman received her book from a separate man.

(151) a. Ett ägg låg bredvid kartongerna
(An egg lay beside the boxes)

b. En man gav några kvinnor en bok
(A man gave some women a book)

A categorical verb-locative object combination can co-occur with a thetic verb-direct object combination, and a thetic
verb-locative object combination can co-occur with a categorical verb-direct object combination:

(152) a. Han lade en bok i lådan
(He put a book into the drawer)

b. Han lade boken i en låda
(He put the book into a drawer)

However, a sentence with a thetic subject-verb combination and a categorical verb-locative object combination is rather unnatural, just as a sentence with a thetic subject-verb combination and a categorical verb-direct object combination is.

(153) En bok ligger på bordet
(A book lies on the table)

A sentence with a thetic verb-indirect object combination is likewise slightly unnatural, particularly if it is followed by a categorical verb-direct object combination:

(154) Mannen gav några kvinnor böckerna
(The man gave some women the books)

What we have then is the following three implicational relations:

(155) a. If $O_C$, $V$, then $IO_C$, $V$

b. If $O_C$, $V$, then $S_C$, $V$

c. If $LO_C$, $V$, then $S_C$, $V$

(where $LO$ stands for Locative Object)

and these constrain the following system of constructions:
In (156), I have only indicated what combinations are included in the constructions. Moreover, I have not indicated whether a combination is categorical or thetic. We can simply say that each combination can be categorical or thetic, subject to the constraints in (155). However, the system in (156) is not only constrained by (155). It is also constrained by two further conditions. The first condition is that the constructions in (156) can only consist of the following types of rules:

\[(157) \begin{align*}
\text{a. } S, V: & \emptyset \rightarrow NP_1 V_{\text{finite}} \\
\text{b. } V, O: & V_a (NP_2) \rightarrow V_a (NP_2) NP_2 \\
\text{c. } V, IO: & V_a \rightarrow V_a NP_2 \\
\text{d. } V, LO: & V_a (NP_2) \rightarrow V_a (NP_2) LocP
\end{align*}\]

As we will see in chapter 2, Swedish permits certain deviations from this condition. However, these deviant clause types have a restricted distribution. The only truly general Swedish clause format is the one defined by (157).
The second condition is the following:

(158) The Subject Condition:
    A Swedish clause-level construction must include a subject-verb combination.

The most extensive motivation for this constraint has been provided by Beckman 1934 and Hammarberg & Viberg 1975. It will be discussed in detail in chapter 2.

Note now that a schematic construction such as SVO can be regarded as a plan for the construction of clauses, that is, as a principle which specifies that derivations of a certain type are standard ways of constructing clauses in the language in question. Each combination included in the construction will trigger one or more expansions, and these expansions are carried out in the order specified by the construction. Thus, if we have the schematic construction SVIOO, SV will first trigger expansion (157a). Then VIO will trigger (157c), and, finally, VO will trigger (157b). We can also let SV trigger the tense/aspect expansions in (91). The following derivation is consequently one of those defined by the schematic construction SVIOO:

(159) \[ \begin{array}{l}
S \quad V \quad IO \quad O \\
NP1 \quad V_{finite} \\
NP1 \quad V_{finite} \quad NP2 \\
NP1 \quad V_{finite} \quad NP2 \quad NP2 \\
\end{array} \]

Since the rules I have proposed are generally optional, ellipsis can easily be accounted for. Ellipsis is simply the case when a rule that is associated with a certain combination is not applied in the course of a derivation. Obviously, this holds only for combinations that are explicitly specified in a
schematic construction. Thus, there is no ellipsis involving the rules in (91) or adverbial expansions.

However, subject ellipsis is not in general possible in Swedish. The second sentence of (160a) sounds awkward and the subordinate clause of (160b) is definitely illformed.

(160)  

a. Han är upptagen. Pratar med Sören.  
(He is busy. Is talking to Sören)  
b. Jag ska äta när kommer hem  
(I am going to eat when get home)

Moreover, as was noted earlier in this chapter, direct object ellipsis is not possible in SVIOO clauses. Thus, the only permitted ellipsis version of (159) is (161) (Ø indicates ellipsis).

(161)  

SV 10 0  
NP1 Vfinitenp1 Vfinitenp1 Vfinitenp1

Note though that the subject condition is not a prohibition against subject ellipsis, which is possible, or even required, under certain conditions (see chapter 2). What the subject condition excludes are constructions like OV, VO, etc.

(159) specifies the linear composition of sentences that are instances of the SVIOO construction, that is, it specifies what constituents these sentences can consist of, and the order in which these constituents appear. However, a linear composition is not the only type of composition that a construction imposes on a sentence that instantiates the construction. In addition to a linear composition, a construction
also specifies a structural composition, an assignment of roles to the referents of the constituent NP:s, and a referential composition, an assignment of distinct referents to the NP:s specified in the construction.

So far, we have described the structural composition of a sentence in terms of the notions of intransitive, ergative, accusative, and dative combinations. These notions were to be interpreted in the following way:

(162) a. An intransitive combination of a NP and a verb: the verb is a one-place predicate and the referent of the NP is its first argument.
   b. An ergative combination of an NP and a verb: the verb is a two-place or three-place predicate, and the referent of the NP is its first argument.
   c. An accusative combination of an NP and a verb: the verb is a two-place or three-place predicate, and the referent of the NP is its second argument.
   d. A dative combination of an NP and a verb: the verb is a three-place predicate, and the NP is its third argument.

These notions can now be reduced to a principle of composition that is similar to the principle governing the linear composition. We have said that a sentence has the linear composition SVIOO, if Ø is expanded to S:NP V (a S(ubject) - V(erb) combination of an NP and a V), S:NP V is expanded to S:NP V IO:NP, and S:NP V IO:NP is expanded to S:NP V IO:NP O:NP. In an entirely analogous fashion, we can say that a sentence has the structural composition $_S^E VI ^O ^D ^O ^A$, if Ø is expanded to S:NP V (which in this case will be interpreted as a combination of a one-place predicate with its first argument), S:NP V is expanded to S:NP V O:NP (a combination of a two-place predicate and its first and second arguments), and S:NP V O:NP is expanded to S:NP V IO:NP O:NP (a three-place predicate and its
first, second and third arguments). In the case of indirect object ellipsis, S:NP V O:NP is expanded to S:NP V IO:Ø O:NP. In this mode of description, an ergative combination is the combination of a verb and the first NP specified in a structural composition involving at least two expansions, while an accusative combination is the combination of a verb and the second NP specified in a structural composition. A dative combination is the combination of a verb and the third NP specified in a structural composition, and an intransitive combination is the combination of a verb and the first NP specified in a structural composition that involves only one expansion.

We have already used the order in which NP:s are introduced to explicate the condition that the identification of an object referent can depend on the identification of a subject referent, while the identification of a subject referent can not depend on the identification of an object referent, and the condition that a thetic subject-verb combination is preferably not followed by a categorical verb-object combination. These conditions can now be generalized in the following way: If we have a two-combination construction involving NP, V and NP', where the combination of NP' and V can be categorical only if the combination of NP and V is categorical and the identification of the referent of NP' can depend on the identification of the referent of NP, but not vice versa, then we say that NP is referentially primary relative to NP'. As we have seen, S is referentially primary relative to both IO and O in an SVIOO sentence construction, and IO is referentially primary relative to O. Thus, we can say that an SVIOO sentence has the referential composition S₁VIO₂O₃, where 1 indicates referential primacy relative to 2 and 3, and 2 indicates referential primacy relative to 3. In other words, the referential composition of an SVIOO sentence is the following one: Ø is expanded to SV, SV is expanded to SVIO, and SVIO is expanded to SVIOO.
The three types of composition can be displayed simultaneously be means of the following convention: If we have a linear expansion of NP V to NP V NP, then NP\textsuperscript{1} V NP\textsuperscript{2} indicates a structural expansion of NP V to NP V NP, while NP\textsuperscript{2} V NP\textsuperscript{1} indicates a structural expansion of V NP to NP V NP. Moreover, NP\textsuperscript{1} V NP\textsuperscript{2} indicates a referential expansion of NP V to NP V NP, while NP\textsuperscript{2} V NP\textsuperscript{1} indicates a referential expansion of V NP to NP V NP. The SVIOO construction can then be given as: S\textsuperscript{1} V O\textsuperscript{3} O\textsuperscript{2}.

Note that the notion of structural composition makes it possible to dispense with the distinction between IO and O. Instead of IO O, we get O\textsuperscript{3} O\textsuperscript{2}, or, in some cases, O\textsuperscript{2} O\textsuperscript{1}.

A sentence with a reflexive object can then be assigned the composition S\textsuperscript{1} V O\textsuperscript{2}: the linear expansions \(\emptyset\) to SV, and SV to SVO; the structural expansions \(\emptyset\) to SV, and SV to SVO; and the referential expansion \(\emptyset\) to SV. In other words, the expansion of SV to SVO introduces a new constituent and a new role, but not any new referent.

A sentence with a subject-cum-infinitive can be assigned the composition in (163).

\[(163) \quad S:NP\textsuperscript{1} V O: S[ S:\emptyset\textsuperscript{1} V_{inf} ]\]

That is, we have the linear expansions \(\emptyset\) to SV and SV to SV\(\emptyset V_{inf}\), the structural expansions \(\emptyset\) to SVO, where S and O together constitute the first argument, and \(\emptyset\) to SV\textsubscript{inf} (the integers indicating the structural composition are bound to the clause that they appear in), and the referential expansion \(\emptyset\) to SV. As with reflexives, we assume that a structural expansion without an accompanying referential expansion ascribes a new role to an already introduced referent.

We can now present a definitive outline of the Swedish system of clause-level constructions. The following constructions constitute the core of the system:
The constructions in (164) are to be taken as the most unmarked clause-level constructions of Swedish. I have assumed that subject-verb combinations and verb-indirect object combinations are categorical in the unmarked case. Moreover, as was mentioned earlier in this chapter, I have assumed that subject referents are causes and controllers in the unmarked case. (164b), (164c) and (164d) are all expansions of (164a), and (164e), (164f), (164g) and (164h) are all expansions of (164b). (164c) introduces sentential objects, as do (164f) and (164g), and (164d) and (164h) introduce locative objects. The contrast between (164f) and (164g) is a contrast between sentences where sentential objects alternate with direct objects and sentences where sentential objects alternate with oblique objects. In the first case, the postverbal NP is thus an indirect object, in the second case it is a direct object. An example of the first type of sentence is given in (165a), and an example of the second type of sentence is given in (165c). These sentences should be compared with (165b) and (165d), respectively.
(165) a. Han lovade mig att han skulle komma
    (He promised me that he would come)

   b. Han lovade mig en kopia
    (He promised me a copy)

   c. Jag bad honom att han skulle vänta
    (I asked him that he should wait)

   d. Jag bad honom om en kopia
    (I asked him for a copy)

Thus, (164b) - (164d) are alternative structural expansions of
(164a), and (164e) - (164h) are alternative structural expan-
sions of (164b). In other words, the constructions in (164)
are related in the following ways:

(166) Basic construction: NP V

Expansion of NP V: NP V NP
Alternatives: NP V S
               NP V LocP

Expansion of NP V NP: NP V NP NP
Alternatives: NP V NP S
              NP V NP LocP

What was called the Subject Condition can now be taken as a
condition that every clause-level construction must conform to
one of the structures given in (166).

Suppose now that we wanted to construct, not the clause types
covered by the constructions in (164), but the system of con-
structions itself. That is, suppose that we wanted to find
the principles that would allow a person to stepwise acquire
the system of constructions in (164). What would these prin-
ciples look like? I would like to propose that these prin-
ciples can be stated as rules of addition and substitution,
which allow us construct constructions on the basis of already
existing constructions. Such rules are given in (167).
(167) a. Add NP to an existing construction  
b. Add PP to an existing construction  
c. Add S to an existing construction  
d. Add LocP to an existing construction  
e. Change the lexical identity of V

These rules can only be applied to NP V, NP V NP and NP V PP. In order to construct the system, we start with the basic construction NP V. Applying the rules in (167a-d), and, as an automatic consequence of the application of one of these rules, rule (167e), to NP V gives us the following constructions:

(168) a. +NP(NP V) = NP V' NP  
b. +PP(NP V) = NP V' PP  
c. +S (NP V) = NP V' S  
d. +LocP(NP V) = NP V' LocP

Applying the rules to NP V NP gives us the following constructions:

(169) a. +NP(NP V NP) = NP V' NP NP  
b. +PP(NP V NP) = NP V' NP PP  
c. +S(NP V NP) = NP V' NP S  
d. +LocP(NP V NP) = NP V' NP LocP

Finally, applying (167b) and (167c) (and (167e)) to NP V PP gives us the constructions in (170).

(170) a. +PP(NP V PP) = NP V' PP PP  
b. +S (NP V PP) = NP V' PP S
The structural composition and the referential composition of the constructions in (168) are completely straightforward. The same is true of the referential composition of the constructions in (169) and (170). The structural composition of the constructions in (170) deviates, however, in some cases from the linear composition. In NP V NP NP, the last NP is structurally prior to the second NP, and in NP V NP S, either the second NP or S is the structurally primary constituent of the two postverbal constituents, as we have already seen. Likewise, in NP V PP S, either PP or S is the structurally primary constituent of the two postverbal constituents. Compare (171a) and (171b) to (172a) and (172b).

(171) a. Han berättade en sak för oss
(He told something to us = He told us something)
b. Han berättade för oss att han var glad
(He told to us that he was glad = He told us that he was glad)

(172) a. Han värdjade till oss om förståelse
(He pleaded to us for understanding)
b. Han värdjade till oss att vi skulle gå hem
(He pleaded to us that we should go home)

If we reformulate the rule (167a) as (173a), and assume that in addition to rule (167c), we also have rule (173b), then these results follow automatically, if we also assume that an added NP/S² has the consequence that an already introduced NP² is changed to NP³.

(173) a. Add NP² to an already existing construction
   b. Add S² to an already existing construction

As I have already demonstrated, an NP may alternate with a PP or an S, and a PP may alternate with an S. This can be captured by means of the following alternative to (167e):
(174) Identify V with the V of a construction with the same structural composition

Two constructions have the same structural composition if they have the same number of arguments. (174) can for example be applied if a three-argument construction with an S as the third argument expression is constructed and we already have another three-argument construction with an NP as the third argument expression. I have deliberately abstained from restricting the scope of (174), since I am not sure what the restrictions are. The most natural case seems to be when two constructions differ only with respect to one argument expression, and the alternation is between an NP and an S, or between a PP or an NP.

By means of the rules in (167), (173) and (174) we can then construct the system of constructions given in (165). S:NP and O:XP/S can easily be added to the constructions we have discussed, and we have accounted for the resulting referential and structural compositions. Let us now consider various extensions of this system.

First of all, S:NP V can be extended to cover, not only S:NP\textsuperscript{1CK} V, as in (175), but also S:NP\textsuperscript{1C} V, as in (176), S:NP\textsuperscript{1K}, as in (177) (the situations described there can be controlled, but not caused, by the subject referent), and S:NP\textsuperscript{1} V, as in (178).

\begin{enumerate}
\item (175) a. Han sjunger
b. Han arbetar
c. Han hoppade
(He is singing/He is working/He jumped)
\item (176) a. Vinden tjuter
b. Åskan dånade
(The wind is howling/The thunder roared)
\end{enumerate}
(177) a. Han gråter
    b. Han nös
    c. Han snarkade
        (He is crying/He sneezed/He snored)

(178) a. Vasen gick sönder
    b. Tallriken sprack
    c. Bordet välte
        (The vase broke/The plate cracked/The table turned over)

Secondly, the first postverbal O can also be 0:∅. In the unmarked case, an understood object is an unspecified referent (Langacker & Munro 1975), i.e. a referent which can be identified only on the basis of the sentential context. Cases where the understood object referent is known or given are much more rare. Thus, in the unmarked case we have 0:∅_T, as in (179).

(179) a. De äter inte
        (They don't eat)
    b. Vi ska så nästa vecka
        (We're going to sow next week)

Suppose now that we would want to extend the use of S in a similar way, to get a S:∅_T V O:NP construction. Such a construction would be particularly useful when we wish to make a timeless characterization of the referent of O. As I have already demonstrated, this can not be done with a S:NP V O:NP construction. However, if we had a S:∅_T V O:NP_C construction, i.e. a S:∅_2 V O:NP_1 construction, it would be possible to provide a timeless characterization of just the referent of O.

However, such a construction would violate at least three constraints that the constructions in (165) are subject to. First of all, we would have an invariably subjectless construction, something which is ruled out by the Subject Condition. As I have already stated, subject ellipsis is not excluded by this condition, but invariable subject ellipsis is, since, as we
shall see in next chapter, there are alternatives to SVX constructions that require explicit subjects. Secondly, \( S_T \) violates the general feature of the constructions in (165) that they all include a categorical subject-verb combination. However, that constraint can be violated. Thetic subject-verb combinations are possible, but marked. Finally, \( S_V O_1 \) would violate the fundamental constraint that the subject is the referentially primary constituent in all the constructions in (165). Consequently, a \( S:Ø_2 V O:NP_1 \) construction does not fit into the system of (165). If it were included in the system, the system would lose much of its coherence and inner logic. So instead of simply adding a \( S:Ø_2 V O:NP_1 \) construction to the system, one must find a way to express the same thing without departing too much from the constraints under which the system operate. The solution adopted by speakers of Swedish was to extend the use of the NP \( V_S \) construction. The NP \( V_S \) construction was originally a reflexive construction. That is, NP \( V_S \) sentences had the following composition:

(180) \( S:NP_1^V V_S Ø_1^2 \)

The Ø without indication of grammatical function indicates an implied constituent that can not have any overt expression. The NP \( V_S \) construction eventually lost its reflexive meaning (when the connection between NP \( V_S \) sig (NP V self) and NP \( V_S \) could no longer be reconstructed by speakers of Swedish), and developed a number of uses, which follow the pattern of extensions that we set up for the ordinary \( S:NP V \) construction. Thus, we have the following rule:

(181) Substitute \( V_S \) for \( V \)

If this rule is applied to \( S:NP_{CK1}^C V \), we get a reciprocal construction. I am not sure how the composition of a reciprocal sentence is to be described, but the following can serve as a first approximation:
1' indicates that the second referent is identified by the subject NP, but is distinct from the subject referent in each particular case described by the sentence. (182) is very similar to (180), and it is not hard to understand that there can be a transition from a reflexive meaning to a reciprocal meaning.

Some examples of reciprocal s-sentences are given in (183).

(183) a. De slogs
(They were fighting)

b. De kramades
(They were hugging (each other))

c. De kysstes
(They were kissing (each other))

It is also possible to get a reciprocal sentence when (181) is applied to $S^1_{Kv}$. Thus, we have mötas, råkas, träffas, ses (meet), and enas, förenas (be united). Moreover, there are also cases where a reciprocal sentence results from the application of (181) to $S^1_{V}$: blandas (be mixed) and förväxlas (be mistaken for each other). These two applications seem, however, to be severely restricted by semantic conditions. Roughly, the meaning of these sentences must have something to do with meeting or fusion.

The application of rule (181) to $S^{CK1}_{V}$ can also result in a non-reciprocal sentence with an unspecified object referent:

(184) $S^{CK1}_{C1}$ vs $\emptyset^2$

Some examples:

(185) a. Han nyps
(He pinches one)
b. Hon retas
(She teases one)

c. De sparkas
(They kick one)

The same result can also be obtained from an application of (181) to $S^{1C} V$:

(186) a. Hunden bits
(The dog bites one)

b. Rosen sticks
(The rose needles one)

c. Tistlarna rivas
(The thistles scratch one)

Thus, it seems that a reciprocal construction is primarily formed from $S^{1CK} V$, while an unspecified object construction is formed from $S^{1C(K)} V$. In both cases, it seems to be the presence of the cause/controller that supports the transitive meaning.

Since (182) and (184) have the same structural composition as an ordinary transitive sentence, rule (174) applies. The verbs in (183), (185) and (186) can all occur in ordinary SVO sentences. There are some exceptions, though, like munhugga (quarrel). It should also be noted that a special PP (med varandra (with each other)) can be added to a reciprocal sentence. In that case, we get $PP_{1}'$, instead of $\emptyset$.

If (181) is applied to $S^{1K} V$, a transitive meaning can not normally be supported, and a structurally intransitive sentence results:

(187) a. Han andas
(He is breathing)

b. Han svettas
(He is sweating)
This sentence type is however rather rare.

When (181) is applied to $S^1 V$, a transitive meaning can again be supported. A referent that is neither controller nor cause can perfectly well suggest the existence of a controller and cause.

\[(188) \quad S:NP^2_{C_1} \quad Vs \quad \phi^{CK1}_2\]

This is of course the basic $s$-passive construction, and it can be used to express the same meaning as the impossible subject ellipsis construction that was discussed earlier. In fact, as Holm (1952) has demonstrated, in the historically basic use of $s$-passives, as well as in the most frequent use in the genuine Swedish dialects, the first argument referent is unspecified (indefinite) and the sentence provides a timeless characterization of the subject referent. An example of this use of $s$-passives is given in (189).

\[(189) \quad Rågen skördas i augusti\]

(\text{The rye is harvested in August})

Just as with reciprocal sentences, a PP can be added to $s$-passive sentences. This is the so-called agent phrase (av NP), and the addition of this constituent results in the following construction:

\[(190) \quad S:NP^2_{C_1} \quad Vs \quad O:av \quad NP^{CK1}_2\]

However, we also have an intermediate construction, where a LocP or PP is added to an $s$-passive. The resulting construction is a kind of semi-transitive construction, where the LocP or PP denotes the cause of the described situation (that PP:s and LocP:s can denote causes have already been demonstrated in this chapter):
(191) a. Vasen krossades mot golvet
   (The vase was broken against the floor
   = The vase broke against the floor)
   b. Tunnan fylldes snabbt med regnvatten
   (The can was quickly filled with water)

All these s-passive constructions are however sufficiently transitive to allow the application of rule (174). Something which can be regarded as a consequence of the application of this rule is the appearance of stranded prepositions in s-passives:

(192) Hon skrattades åt
   (She was laughed at)

That is, we can assume that V is identified with skratta åt rather than just skratta.

Ordinary object NP:s, PP:s and S:s can also be added to s-passive sentences. If an NP is added, the resulting construction will either pattern like an ordinary SVO sentence, that is, the subject will be structurally prior to the object, as in (193a), or it will pattern like a SVIOO sentence, as in (193b), where the third argument expression precedes the second argument expression.

(193) a. Lägenheten erbjöds en kvinna
   (The flat was offered a woman)
   b. Kvinnan erbjöds en lägenhet
   (The woman was offered a flat)

A further extension of the s-passive construction to cases where the first argument is only the controller of the situation or neither the cause nor the controller of the situation must normally be supported by an explicit first argument expression:
(194) a. De beundras av alla
(They are admired by all)

b. Den ägs av en bonde
(It is owned by a farmer)

c. Den genomkorsas av stigar
(It is criss-crossed by paths)

(194b) and (194c), and to a lesser extent (194a), would sound unfinished without _av_-phrases.

Participial passives differ from _s_-passives in at least two respects: There is an aspectual contrast between plain verbs and participles (see the discussion of the tense/aspect expansions above), but no aspectual contrast between plain verbs and _s_-verbs; and the referent of the subject of a participial passive may be the controller of the described situation, which the subject of an _s_-passive can not be:

(195) a. Bli inte förbigången!
(Don't be bypassed)

b. *Förbigås inte!
(Don't be bypassed)

A consequence of the latter contrast is that the referents of the subjects of participial passives are often human, while the referents of the subjects of _s_-passives are typically non-human (Kirri 1972).

A consequence of the former contrast is that participial passives are not particularly good means to express timeless characterizations of their subject referents, since the aspectual meaning State after Change strongly suggests the existence of a period of time when the state did not obtain. Thus, (196) is normally interpreted as the description of a particular situation. This suggestion disappears, however, when the verb from which the participle is formed describes an unbounded
situation. Thus, (197) is a possible timeless characterization of the referent of han.

(196) Rågen blir skördad i augusti
(The rye will be harvested in August)

(197) Hän är respekterad
(He is respected)

Moreover, when a participial passive is clearly generic, its meaning differs from that of a corresponding generic s-passive. While (198a) describes the correct method of planting seeds, (198b) describes the state of all seeds in the fall, and (198c) describes what happens to all seeds every fall.

(198) a. Frön sätts på hösten
(Seeds are planted in the fall = One plants seeds in the fall)

b. Frön är satta på hösten
(Seeds are planted in the fall)

c. Frön blir satta på hösten
(Seeds get planted in the fall)

In other words, only (198a) provides a timeless characterization which crucially involves an implicit cause. This can be captured in the following way: We assume that the composition of an intransitive participial passive is essentially the same as the composition of an intransitive s-passive, that is:

\[-94-\]

\[
S:\text{NP}^2(K)_{1C} \quad \text{Är/håll} \quad \text{PTC}^{[V-d]} \quad \phi^1_{2C}
\]

However, while the meaning of an intransitive s-passive is "V holds of (∅, NP)", the meaning of intransitive participial passives is "PTC holds of NP after V holds of (∅, NP)". That is, while both ∅ and NP are foregrounded in an s-passive, only NP is foregrounded in a participial passive.
Let us now turn to other extensions of the system of constructions in (165). Suppose that we want to extend the contrast between NP, LocP and S that characterize second argument expressions to first argument expressions. The simplest way would be to add the constructions S V and LocP V to the constructions in (165). However, this does not work. We can assume that the reason is that these constructions would be interpreted as OV constructions, and thus violate the Subject Condition. In other words, we take the Subject Condition to specify, not only that an SV combination must be present, but also that an SV combination can only be a S:NP V combination. While this description makes the correct prediction for LocP V sentences (there are no Swedish sentences like (200)), it erroneously excludes sentences like (201). Thus, S and LocP are not equally great deviations from the canonical NP V form.

(200) *I hjärtat värker  
(In the heart aches = The heart aches)

(201) Att han är sjuk är uppenbart  
(That he is sick is obvious)

However, as is well-known, sentential "subjects" can not appear in a number of subject positions. In fact, the only subject position in which an S can appear is the initial position of a declarative main clause:

(202) a. *Är att han är sjuk uppenbart?  
(Is that he is sick obvious)

b. *Jag tycker att att han är sjuk är uppenbart  
(I think that that he is sick is obvious)

Whether this is due to the perceptual complexity of the sentences in (202) or not is an issue that I will not take any stand on in this study. See Grosu & Thompson 1977 for a recent discussion of this issue.
What I want to show by (202) is simply that sentential "subjects" are restricted to the initial position of a declarative main clause. However, that position is not only a subject position, but also, as will be demonstrated in chapter 2, the foundation position of main clauses. And sentential complements are unproblematic foundations:

(203) Att han var i Paris hade jag aldeles glömt

(That he was in Paris, I had completely forgotten)

A declarative main clause with a subject in the foundation position can be regarded as an instance of the construction FS:NP V X. We can then simply assume that FS:S V is a possible Swedish construction, while just S:S V is not. In other words, we would have the following possible subject-verb combinations:

(204) a. FS:NP V  
    b. FS:S V  
    c. S:NP V

This means that we need another construction if we want to express the same thing as S:S V would express, just as we need another construction to express what S:LocP V would express. Let us see what the possibilities are. The only available way to introduce LocP or S is by adding them to NP V. However, in order to get LocP and S as first argument expressions, we must "neutralize" NP in some way. The way used by speakers of Swedish is to substitute the expletive det for the subject NP. The rule for this substitution is given in (205).

(205) Substitute det for NP in S:NP

(This rule can then be extended to subject and objects of subject/object-cum-infinitive/predicatives.)
The effect of (205) on NP V is shown in (206).

(206) \[ \text{det}/\text{NP}(\text{NP V}) = \text{S}:\text{det}_0^0 \text{ V} \]

If we now apply (205) to NP V LocP and NP V S, we get (207a) and (207b), respectively.

(207) a. \[ \text{det}_0^0 \text{ V LocP}^2 \]
   b. \[ \text{det}_0^0 \text{ V S}^2 \]

However, since the values specified by a structural composition are relative values, the 2:s in (207) can be changed to 1:s, which means that we have got what we wanted.

As for the synchronic source of the expletive use of det, we may note that one relevant characteristic of det is that it is the least marked of all Swedish NP:s: a non-first person, non-second person, non-ute, non-plural pronoun (Teleman 1968), and as Silverstein (1976) has put it, it is not astonishing that a morphological zero is used as a semantic zero. The semantic zero character of det is further reinforced by the identifying construction det är NP, exemplified in (208). In this construction det indicates a given referent that is further identified by NP. Thus, det introduces no role in such sentences, and the referent identified by det is also identified by NP, which may lead to the conclusion that the NP is the only identifying constituent of a det är NP sentence. In that case, det would introduce neither a referent nor a role, and we would have a semantic zero.

(208) a. Det är jag
    (It is I)

b. Det är en björn
    (It's a bear)
Once we have $\text{det}$, it can be used in other ways, too. Thus, by applying (205) to NP $V$, we get a format for expressing semantically subjectless descriptions, such as Det $\text{regnar}$ (It is raining). Furthermore, we can apply (205) to the constructions in (209) and get semantically transitive sentences with "extraposed sentential subjects".

(209) a. NP$^1 V$ NP$^3 S^2$

b. NP$^1 V$ PP$^3 S^2$

In all these cases, the lexical identity of $V$ is changed, since the resulting structural composition is of a new kind. The verb of a $\text{det} V$ (NP/PP) $S$ construction can, however, be identified with that of a $S V$ (NP/PP) construction.

Let us now consider a further use of $\text{det}$. We have assumed that the unmarked referential composition of a NP $V$ NP LocP sentence is NP$^1 V$ NP$^2$ LocP$^3$. However, as was demonstrated earlier in this chapter, NP$^1 V$ NP$^3$ LocP$^2$ is also possible. Suppose now that we want to make that referential composition available to two-argument sentences as well. How can we accomplish that? Clearly not by extending the use of NP $V$ LocP to cover also NP$^2 V$ LocP$^1$, or, to be more precise, NP$^2T V$ LocP$^1$, which covers the referential possibilities that are not covered by the unmarked NP $V$ LocP construction. If we added such a construction to the constructions in (165), we would violate the fundamental condition that the referent of the subject of a sentence is always referentially primary relative to the other referents of the sentence. However, by applying (205) to NP$^1 V$ NP$^3$ LocP$^2$, which in effect is only NP$^1 V$ NP$^3T$ LocP$^2C$, since the other possibilities are covered by the unmarked case, we get the desired result, namely (210).

(210) $\text{det}^O_0 V$ NP$^1_{2T}$ LocP$^2_{1C}$

As before, 2 and 3 have been changed to 1 and 2, respectively.
The direct object of a det V NP LocP sentence can neither be generic nor definite:

(211) a. *Det bor pingvinerna på Skansen  
   (There live the penguins at Skansen)  
   b. Det bor pingviner i Antarktis  
   (There live penguins in Antarktis)

(211a) is ill-formed, and (211b) can not be interpreted as a characterization of all penguins. Thus, in a det V NP LocP sentence, the V NP combination must be thetic, as is stated in (210).

In Swedish, there is also a FS:LocP V O:NP construction, which is exemplified in (212). Note that the position of the NP en ikon after the supine verb stått unambiguously indicates that that NP is a non-subject. Moreover, (212) can not be explained as the result of a general rule of det ellipsis, since det can not in general be excluded.

(212) I nischen har stått en ikon  
   (In the niche has stood an icon = In the niche, an icon has stood)

(213) a. Sannolikt har det stått en ikon här  
   (Probably, there has stood an icon here)  
   b. *Sannolikt har stått en ikon här  
   (Probably has stood an icon here)

The crucial difference between the LocP V NP construction and the excluded LocP V construction seems to be that the former contains a first argument NP, and thus constitutes a less severe deviation from the canonical construction format than the latter construction.

Since the structural composition specified in (210) and in the FVO construction is the same as that of an ordinary NP V LocP
sentence, rule (174) applies. Verbs like stå and bo can thus appear in all three constructions. Moreover, since object referents can not be causes or controllers, the first argument expressions of det V NP LocP sentences can not be causes or controllers.

(205) can also be applied to NP V NP NP, in which case we get the construction (214).

(214) \[ \det_0^O \ V \ NP_2^2_{1C} \ NP_2^1 \]

However, as I have already pointed out, this construction is marginal in Swedish. This is probably due to the fact that we have a first argument NP that is preceded by another NP, which is a unique feature of this construction.

Thus, there are two basic uses of det-sentences: when the structurally primary constituent is not an NP, and when the structurally primary constituent is part of a thetic NP, V combination. The latter use is restricted by the condition that a first argument NP should be the first NP, or at least the first non-foundation NP of its clause. A first argument NP can be preceded by a non-foundation pronoun (see chapter 2), but then the first argument NP is a subject.

The verb of a det-sentence can also be an s-verb. That is, rule (181) can also be applied to det-sentences. In such cases, the meaning of the s-verb is either intransitive or passive. The other interpretations of s-verbs require the presence of a cause or controller, as we saw, and that is not possible in det-sentences. Impersonal s-passives accept the full range of postverbal complements, subject only to the condition that a structurally primary NP must be part of a thetic NP, V combination:
(215) a. Det arbetas hårt
   (It is worked hard)

   b. Det springs på toaletterna
   (It is run to the toilets)

   c. Det krossades en vas
   (It was broken a vase)

   d. Det ställdes tallrikar på bord
   (It was put plates on the tables)

   e. Det sägs att det är kallt
   (It is said that it is cold)

   f. Det har kämpats för Irlands frihet sedan urminnens
tider
   (It has been fought for the freedom of Ireland
    since time immemorial)

   g. Det berättades för oss att han var besviken
   (It was told to us that he was disappointed)

   h. Det anförtroddes oss att han inte skulle få tjänsten
   (It was confided in us that he would not get the
    position)

Note that det V s NP NP is not problematic in the way that
det V NP NP is, since the second NP of the former construction
is not an first argument expression.

In conclusion, then, det-sentences and s-sentences can be seen
as ways of extending the types of structural and referential
composition made available by the system of constructions in
(165), without violating the inner logic of the system. In
particular, we have seen that s-sentences and det-sentences
make it possible to avoid subjectless sentences, sentences with
non-NP subjects, and sentences with referentially non-primary
subjects, and thus to maintain the canonical format of Swedish
clauses defined by the Subject Condition.
2. THE SUBJECT CONDITION

The analysis of the preceding chapter relied to a large extent on the assumption that SV(IO)O is a kind of "normal form" for Swedish clauses. This assumption made it possible to view passive and impersonal constructions as ways of avoiding potential violations of this normal form. In this chapter, I will consider the ways in which Swedish clauses may deviate from the normal form, and demonstrate that the existence of these deviations do not affect the validity of the arguments of the preceding chapter. In particular, I will argue that the Subject Condition, the condition that Swedish clause-level constructions must contain a subject-verb combination, holds for the deviant clause types, too.

Consider first the following Swedish sentences:

(1) a. Han köper alltid småfranska
   (He buys always rolls =
   He always buys rolls)

b. Småfranska köper han alltid
   (Rolls buys he always =
   Rolls, he always buys)

c. Alltid köper han småfranska
   (Always buys he rolls)

These sentences all consist of four constituents: a subject pronoun (han), a finite verb (köper), a sentence adverbial (alltid), and an object (småfranska), and meet the following string condition:

(2) XP V\_finite (NP) (ADVP) (NP)

(2) is a simple description of the structure of declarative main clauses. The XP, where X is N, A, V, ADV or P, is the so-called foundation of the clause (Diderichsen 1946). In
the foundation position can appear almost any constituent of a sentence, subject only to Ross' constraints on unbounded dependencies (Ross 1967). (For further discussion of what can appear in foundation position, see Severinson 1970, Allwood 1976, and Schlyter 1975). What appears in foundation position in (1a), (1b) and (1c) is the subject, the object, and the sentence adverbial, respectively.

Declarative main clauses in Swedish exhibit an almost exceptionless verb-second order. Only a small class of sentence adverbials (which includes bara (only), kanske (maybe), nästan (almost), rent av (even), and a few others) can appear between the foundation and the verb:

(3) a. Han kanske köper småfranska
   (He maybe buys rolls)

   b. Han nästan grät
   (He almost cried)

The verb in second position is always finite, i.e. inflected for tense (past or present).

A finite clause can lack an explicit subject only in a few well-defined cases, which I will discuss later on. In all other cases, there must be a subject present. If this subject does not appear in foundation position, it appears in the first NP position of (2). This position is one of the two distinctive "coding properties" (Keenan 1976) of Swedish subjects. The other distinctive coding property is the nominative form of pronominal subjects. An outline of the pronominal system of Swedish is displayed in (4).

(4) Nominative   Accusative   Genitive
First person
   singular      jag        mig        min
   plural        vi         oss        Vat

By means of these distinctive coding properties, we can uniquely identify the subject in cases like the following:

(5)  a. Erik känner henne
     (Erik knows her)

     b. Henne känner Erik
     (Her knows Erik =
      Her, Erik knows)

     c. Hon känner Erik
     (She knows Erik)

     d. Erik känner hon
     (Erik knows she =
      Erik, she knows)
In (5a) and (5b), the accusative form identifies henne as object. In (5c) and (5d), the nominative form identifies hon as subject. In (5e) and (5f), finally, the word order identifies Maja as subject. The position of Erik in (5e) is an unambiguous object position, and the position of Maja in (5f) is an unambiguous subject position.

Where neither case nor position uniquely identifies the subject, the first NP in the main clause, i.e. the NP in foundation position, if there is one, and the first postverbal NP, if there is no NP foundation, is normally interpreted as subject.

(6) a. Erik känner Maja
    (Erik knows Maja)

b. Maja känner Erik
    (Maja knows Erik)

c. I Spanien köpte Erik silver
    (In Spain bought Erik silver = In Spain, Erik bought silver)

If there are semantic factors which support another interpretation than the normal one, the first postverbal NP can be interpreted as subject, even though there is an NP in foundation position and no coding property rules out subject interpretation of that NP:

(7) a. Sådana saker gillar Erik
    (Such things likes Erik = Such things, Erik likes)
b. Höken hade mycket skarpa ögon,
   (The hawk had very sharp eyes,
   men den lilla musen såg den inte
   but the little mouse saw it not =
   but the little mouse, it didn't see)

The ADVP position in (2) is the unmarked main clause position for sentence adverbials, i.e. adverbials which express cognitive attitude, emotive attitude or rhetorical value. The second NP is an object position. An NP is interpreted as an object if it is not governed by a preposition and is not a subject. A non-oblique NP (i.e. an NP which is not governed by a preposition) is unambiguously an object in the following two cases: (i) the NP is an accusative pronoun or a reflexive pronoun; and (ii) the NP follows a non-finite verb, a participle, or a predicative adjective. The accusative pronoun oss in (8a) and the reflexive pronoun sig in (8b) are thus interpreted as objects, as are vatten in (8c), vin in (8d) and sin bror in (8e).

(8) a. Erik såg oss
   (Erik saw us)

b. Svensson rakade sig
   (Svensson shaved himself)

c. Jag ska dricka vatten
   (I will drink water)

d. Drick vin istället!
   (Drink wine instead)

e. Hon är lik sin bror
   (She is similar her brother =
   She resembles her brother)

The second NP position after a finite verb is, on the other hand, not entirely distinctive. Subjects can occur in that position, provided that the NP in the first postverbal position is an accusative or a reflexive pronoun, i.e. an unambiguous object:
(9) a. Den morgonen rakade sig Svensson inte
   (That morning shaved himself Svensson not =
    That morning, Svensson didn't shave himself)

   b. På flygplatsen mötte oss en guide
   (At the airport met us a guide =
    At the airport, a guide met us)

The sentence form in (2) can thus be interpreted in terms of subject and object in the following ways (S stands for subject and O for object)

\[
\begin{align*}
\text{(10)} & \quad \text{XP} & \quad V_{\text{finite}} & \quad \text{(NP)} & \quad \text{(NP)} \\
\text{a.} & \quad S & \quad - & \quad O \\
\text{b.} & \quad O & \quad S & \quad - \\
\text{c.} & \quad S & \quad O & \\
\text{d.} & \quad O & \quad S & \\
\end{align*}
\]

The SO interpretations are unmarked and the OS interpretations are marked. The former interpretations obtain in the absence of contrary evidence, while the latter require positive evidence, syntactic or semantic evidence in the case of interpretation b., strictly syntactic evidence in the case of interpretation d.

Let us now look at the contrasts between declarative main clauses, x-interrogative main clauses (main clauses with an initial question word constituent), plain interrogative main clauses (so-called yes-no-question clauses), and imperative main clauses. These clause types are exemplified in (11) - (14).

\[
\begin{align*}
\text{(11)} & \quad \text{a.} & \quad \text{Erik köpte silver} & \quad \text{(Erik bought silver)} \\
\text{b.} & \quad \text{Silver köpte han} & \quad \text{(Silver bought he = Silver, he bought)}
\end{align*}
\]
c. Där möter oss en guide
   (There meets us a guide = There, a guide will meet us)

d. Han rakade sig inte
   (He shaved himself not = He didn't shave himself)

   (12) a. Vem köpte silver?
   (Who bought silver?)

   b. Vad köpte han?
   (What bought he = What did he buy?)

   c. Var möter oss guiden?
   (Where meets us the guide = Where will the guide meet us?)

   d. Vem rakade sig inte?
   (Who shaved himself not = Who did not shave himself?)

   (13) a. Köpte Erik silver?
   (Bought Erik silver = Did Erik buy silver?)

   b. Möter oss en guide där?
   (Meets us a guide there = Will a guide meet us there?)

   c. Rakade han sig inte?
   (Shaved he himself not = Didn't he shave himself?)

   (14) a. Köp silver!
   (Buy silver!)

   b. Möt oss där!
   (Meet us there!)

   c. Raka dig inte!
   (Shave yourself not = Don't shave yourself!)

X-interrogative main clauses have the same form as declarative main clauses, except that the foundation must be an interrogative phrase, an XP_q. A minimal interrogative phrase is either an interrogative pronoun directly dominated by NP (vem (who), vilken/vilket/vilka (which), vad (what)), PP (var (where), vart (to where), när (when)), ADVP (hur (how)), AP (hur, vad,
hurdan (what kind)) or VP (vad), or an interrogative determiner (vilken/vilket/vilka in noun phrases, hur in adjective phrases and adverb phrases) followed by an appropriate head.

Swedish also allows for complex $XP_Q$s. Three important types of complex $XP_Q$s are described and exemplified in (15) (the underlined phrases are minimal interrogative phrases).

(15) a. $pp[P \quad NP]$ 
Till vem (gav du boken)?
(To whom (did you give the book))
I vilken låda (ligger kniven?)
(In which shelf (is the knife))

b. $NP[\quad NP_{\text{genitive}} \quad N]$ 
Vems hus (är det där?)
(Whose house (is that?))
Vilka lingvisters teorier (vill du lära ut?)
(Which linguists' theories (do you want to teach?)

c. $NP[\quad AP \quad N]$ 
Hurdan båt (har du?)
(What kind of boat (do you have?)
Hur stort (är ert hus?)
(How big (is your house?)
Hur stora förpackningar (för ni?)
(How big packages (do you have in stock?)

The NP:s in (15b) and (15c) can be embedded in (15a): I vems hus (bodde du?) (In whose house (did you stay?)), I hur stora förpackningar (säljer ni dem?) (In how big packages (do you sell them?)). (15c) can however not be embedded in (15b): *Hur stora förpackningars pris (diskuterade ni?) (How big
packages' price (did you discuss?).

In Swedish, there is also an interesting x-interrogative construction with the following properties: (i) XP is invariably the most unmarked interrogative pronoun vad; (ii) The questioned constituent is an NP; (iii) This NP is embedded under the preposition för (for); and (iv) för NP occurs in the normal position of the NP:

(16) a. Han köpte en bok där
(He bought a book there)

b. Vilken bok köpte han där?
(Which book did he buy there?)

c. Vad köpte han för bok där?
(What bought he for book there = What book did he buy there?)

d. Han sov i en soffa
(He slept in a sofa)

e. Vilken soffa sov han i?
(Which sofa did he sleep in?)

f. Vad sov han i för soffa?
(What slept he in for sofa = What sofa did he sleep in?)

g. Han bodde hos någon
(He stayed with someone)

h. Vem bodde han hos?
(Who did he stay with?)

i. Vad bodde han hos för någon?
(What stayed he with for someone = Who did he stay with?)

Let us call this construction the vad-interrogative construction. The vad-interrogative construction is clearly a rival to the ordinary x-interrogative construction.
Plain interrogative main clauses and imperative main clauses can not contain foundations. The sentences in (17) are not interrogative clauses and the sentences in (18) are ungrammatical.

(17) a. Silver köpte han (*?)
(Silver, he bought)

b. Där mötte oss en guide (*?)
(There, a guide met us)

(18) a. *Silver köp!
(Silver buy)

b. *Där möt oss!
(There meet us)

Imperative main clauses differ from plain interrogative main clauses in two respects: imperative clauses have a verb in the imperative as head and they are subjectless. Imperative clauses with subjects do exist, but they have a very special force. The production of such a clause counts an act of encouragement, whereby the speaker encourages the hearer to do something that the speaker assumes the hearer wants to do. So while the sentences in (19) can be used as advice, commands, instructions and suggestions, the sentences in (20) can only be used to encourage the hearer.

(19) a. Skala apelsinerna!
(Peel the oranges!)

b. Prata med Sven!
(Talk to Sven!)

c. Hämta en öl!
(Bring a beer!)

(20) a. Skala du apelsinerna!
(Peel you the oranges = Go ahead and peel the oranges)
b. Prata du med Sven!
(Talk you with Sven = Go ahead and talk with Sven)

c. Hämta du en öl
(Bring you a beer = Go ahead and bring a beer)

This makes it justified to say that "normal" imperative clauses are subjectless and to treat the clauses in (20) as examples of a distinct construction.

We are now in a position where we can state a number of conditions on the form of Swedish main clauses. As I have already stated, such conditions will be formulated as constituent structure rules. However, in order to take care of constructions which involve unbounded dependencies, I will extend the notion of constituent structure rule in a non-trivial way, by allowing constituent structure rules to include essential variables. Thus, I will also allow constituent structure rules of the following type, where X and Y are essential variables:

(21) \[ \begin{array}{c}
\text{A} \\
\text{E} \\
\text{B} \\
\text{C} \\
\text{X} \\
\text{D} \\
\text{Y} \\
\end{array} \]

Such conditions are interpreted in the following way: category symbols not flanked by essential variables are immediate constituents of the phrase defined by the innermost brackets around them, while category symbols flanked by essential variables are simply constituents of the phrase defined by the innermost brackets around them. They may be immediate constituents of that phrase, but they need not be.

Conditions on Swedish main clauses are given in (22).

(22) a. Declarative I:

\[ S [ \begin{array}{c}
\text{NP} \\
\text{Vfinite} \\
(\text{ADVP})^n \\
\text{Y} \\
\end{array} ] \]
b. Declarative II:
\[ S[ XP \ V_{finite} (ADVP)^n Y \ XP[e] Z ] \]

c. X-interrogative I:
\[ S[ NP_Q \ V_{finite} (ADVP)^n Y ] \]

d. X-interrogative II:
\[ S[ XP_Q \ V_{finite} (ADVP)^n NP (ADVP)^n Y \ XP[e] Z ] \]

e. Vad-interrogative
\[ S[ NP[vad] \ V_{finite} (ADVP)^n NP (ADVP)^n Y \ PP[f\overline{\text{or}} NP] Z ] \]

f. Plain interrogative:
\[ S[ V_{finite} (ADVP)^n NP (ADVP)^n Y ] \]

g. Imperative I:
\[ S[ V_{imperative} NP PRO (ADVP)^n Y ] \]

h. Imperative II:
\[ S[ V_{imperative} (ADVP)^n Y ] \]

The conditions (22b), (22d) and (22e) introduce unbounded dependencies. In the case of (22b) and (22d), the unbounded dependencies hold between a constituent in foundation position and a "hole" somewhere in the remainder of the sentence. The hole is symbolized by \( XP[e] \), which can, but need not, be interpreted as a trace (Chomsky 1980).
The conditions (22a) and (22c) are based on the assumption that the foundation position is an unmarked subject position, i.e. that there is no dependency between a subject foundation and a postverbal hole. This means that we get a fundamental distinction between clauses with initial subjects and clauses with initial non-subjects for declarative and x-interrogative clauses. As we will see presently, this distinction plays an important role in subordinate clauses in Swedish. Moreover, it allows us to make a distinction between unmarked declarative sentences (initial subject) and marked declarative clauses (initial non-subject). In all styles of Swedish, the overwhelming majority of declarative clauses have initial subjects (Jørgensen 1976).

The subordinate clause (subclause) counterpart of the main clause in (1a), repeated in (23a), is given in (23b). There is no foundation position in declarative subclauses, so (1b), repeated in (23c), has no subclause counterpart.

(23) a. Han köper alltid småfranska
b. (Hon sa) att han alltid köper småfranska
   (She said) that he always buys rolls)
c. Småfranska köper han alltid
   d. *(Hon sa) att småfranska han alltid köper
      (She said) that rolls he always buys

The subclause in (23b) obeys the following condition:

(24) S[ COMP NP (ADVP)n Vfinite (NP) Y ]

The COMP position is the position of the complementizer att (that). There are at least three complementizers in Swedish: att (that), om (if), and som (relative that, approximately). (See Andersson 1975 for justification of this claim). The first NP position is the subject position and the second NP position is the direct object position. The ADVP is the sentence adverbial position. Subject, sentence adverbial, finite
verb and object can only occur in the order specified in (24) in subordinate clauses.

There are also finite subordinate clauses without complementizers and finite subordinate clauses which have neither complementizers nor subjects. These types of subordinate clauses alternate with att-clauses and, in the first case, som-clauses:

(25) a. Jag trodde han var trött
    b. Jag trodde att han var trött
       (I thought (that) he was tired)
    c. Jag trodde att den teorin var vederlagd
       (I thought that that theory was refuted)
    d. Den teorin trodde jag var vederlagd
       (That theory I thought was refuted)
    e. Här är boken som jag köpte
    f. Här är boken jag köpte
       (Here is the book (that) I bought)

In cases like (25d), the subject of the subordinate clause constitutes the foundation of a higher clause. Thus, we also get sentences like (26).

(26) Den teorin vet alla att jag tycker är bra
       (That theory, everybody knows that I think is good)

Moreover, subjectless and complementizerless clauses can only occur as objects of a limited class of verbs, mostly verbs of saying and believing.

Another type of subjectless subordinate clauses is infinitive clauses:

(27) a. Att cykla är roligt
       (To bike is fun)
b. Jag tycker om att cykla
   (I like to bike)

c. Jag avskyr att inte kunna göra något
   (I hate that not be able to do something =
    I hate not to be able to do something)

A verb in the infinitive can combine with sentence adverbials
and the complementizer att, but not with subjects. The simplest
analysis of infinitive complements is, as far as I can see,
the following one: infinitive complements have the same form
as declarative subclauses, except that verbs in the infinitive
do not combine with subjects. The form of infinitive comple­
ments is then

(28) \[ s[ COMP (ADVP)^n V_{\text{infinitive}} Y ] \]

There are certain verbs which can only take infinitive comple­
ments with att:

(29) a. Jag gillar \{ att \} sjunga
    \{ * \emptyset \}
    (I like \{ to \} sing)
    \{ \emptyset \}

There are also certain verbs, notably modal verbs and percep­
tual verbs, which can not take infinitive complements with att:

(30) a. Jag måste \{ \emptyset \} bli klar med det här
    \{ * att \}
    (I must \{ \emptyset \} finish this)
    \{ to \}

b. Jag hörde henne \{ \emptyset \} sjunga
    \{ * att \}
    (I heard her \{ \emptyset \} sing)
    \{ to \}
Finally, there are verbs which take both types of infinitive complements:

\[(31) \text{Jag försökte } \{ \text{att} \} \text{ hindra honom} \]
\[
\{ \emptyset \}
\]

(I tried \{to\} stop him \{\emptyset\}

A finite subordinate clause can also have \textit{om} (if) as complementizer. 
\textit{Om}-clauses have two basic uses: as indirect interrogative clauses and as conditional clauses. There is also a construction where an \textit{om}-clause is embedded under \textit{som} (as). Examples of \textit{om}-clauses are given in (32).

\[(32) \]
\[a. \text{Jag undrar om han kommer} \]
(I wonder if he comes)

\[b. \text{Det är osäkert om det blir regn} \]
(It is uncertain if it will rain)

\[c. \text{Det vore bra om han kom} \]
(It would be good if he came)

\[d. \text{Om han inte har kommit nu, så åker jag hem} \]
(If he has not arrived yet, I will go home)

\[e. \text{Jag åker hem, om han inte har kommit nu} \]
(I will go home, if he has not arrived yet)

\[f. \text{Det låter som om en skruv var löts} \]
(It sounds as if a bolt was loose)

In addition to \textit{att}-clauses, infinitive clauses and \textit{om}-clauses, there are also subordinate clauses with the complementizer \textit{som} (analogous to the English \textit{that} of relative clauses). \textit{Som} occurs in indirect \textit{x}-interrogative clauses, in relative clauses, in exclamative clauses and in comparative clauses, together with or alternating with an interrogative phrase.
The general form of indirect x-interrogative clauses is (33).

(33) \( XP_Q \) (som) (NP) (ADVP)\(^n\) V Y

Some examples are given in (34). As can be seen from (34a) and (34b), a subject NP\(_Q\) must be followed by som.

(34) a. Jag vet inte vem som äger den
   (I know not who that owns it = I don't know who owns it)

b. *Jag vet inte vem äger den
   (I know not who owns it)

c. Han undrade vem som vi träffade i stan
   (He asked who that we met in town)

d. Han undrade vem vi träffade i stan
   (He asked who we met in town)

e. Vi försökte ta reda på i vilka säckar som det finns paket.
   (We tried to find out in which sacks that there were gifts)

f. Vi försökte ta reda på i vilka säckar det finns paket.
   (We tried to find out in which sacks there were gifts)

A relative clause can be introduced by an XP\(_Q\) or by som, but not by XP\(_Q\) som:

(35) En sanning \{ som vilken \}
    \{ vilken som \}
    \{ *vilken som \}

   (A truth \{ that \}
    \{ which \}
    \{ which that \}

If the subject of the relative clause has been relativized, som or XP\(_Q\) must be present:

(36) Vi talade om upplevelser som/vilka/ *\( \emptyset \) trotsar all beskrivning
   (We talked about experiences that/which/\( \emptyset \) defy all description
(37) Vi talade om människor som/vilka/∅ vi inte längre umgås med
(We talked about people that/which/∅ we no longer see)

Adsentential relative clauses must have an initial XP₀, which always contains the neutre singular pronoun vilket:

(38) Det blev regn, vilket \[
\begin{array}{l}
\{\text{var synd} \\
\text{jag kunde ha förutsagt}\}
\end{array}
\]
(It started to rain, which was a pity/I could have predicted)

I should also point out that relative clauses do not accept the full range of interrogative noun phrases. Only vilken/vilket/vilka (which) and vars N (whose N) can occur there. The latter type of interrogative noun phrase occurs only in relative clauses.

Another clause type which may contain XP₀ and som is exclamative clauses. An embedded exclamative clause has the following form:

(39) \[
\left\{\begin{array}{c}
\text{XP₀} \\
\text{XP så}
\end{array}\right\}
\left\{\begin{array}{c}
\text{(som)} \\
\text{som}
\end{array}\right\}
\left\{\begin{array}{c}
\text{NP} \\
\text{som}
\end{array}\right\}
(\text{ADVP})^n \text{V finite} \ Y
\]

The XP in the foundation position is an AP, an ADVP or an NP. Some common types are listed and exemplified in (40).

(40) a. \[
\text{AP}\left[\begin{array}{c}
\text{vad} \\
\text{så}
\end{array}\right]\ A \left[\begin{array}{c}
\text{what}\ A \\
\text{so}
\end{array}\right]
\]
Såg du vad/så lång han var?
(Did you see what/so tall (= how tall) he was)
b. $\text{ADVP} \left[ \begin{array}{c}
\text{vad} \\
\text{så}
\end{array} \right] \text{ADV} \left[ \begin{array}{c}
\{\text{what}\} \\
\{\text{so}\}
\end{array} \right]$

Såg du vad/så fort han sprang?
(Did you see what/so fast (= how fast) he ran)

c. $\text{NP} \left[ \begin{array}{c}
\text{vilken/vilket/vilka} \\
\text{en sådan/ett sådant/sådana}
\end{array} \right] \text{N} \left[ \begin{array}{c}
\{\text{which}\} \\
\{\text{such}\}
\end{array} \right]$

Såg du vilken bil han hade?
(Did you see which car (= what a car) he had)
Såg du en sådan bil han hade?
(Did you see such a car he had)

d. $\text{NP} \left[ \begin{array}{c}
\text{AP} \left[ \begin{array}{c}
\text{vad} \\
\text{så}
\end{array} \right] \text{A} \right] \text{N} \left[ \begin{array}{c}
\{\text{what}\} \\
\{\text{so}\}
\end{array} \right]$

Såg du vad/så tungt lass hon bar?
(Did you see what/so (= what a) heavy load she carried)

The interrogative phrases with vad in (40) are possible only in exclamative clauses.

There is also a vad-exclamative construction, exemplified in (41).

(41) a. Såg du vad han sprang?
( Did you see what he ran = how fast he ran)

b. Såg du vad han var lång?
(Did you see what he was tall = how tall he was)

c. Såg du vad han hade ärr?
(Did you see what he had scars = how many scars he had)

While ordinary exclamative clauses contain "holes", there is no reason to assume that the same holds for vad-exclamative clauses. It is of course possible to postulate holes in the
sentences above, empty ADVP positions after sprang in (41a), before lång in (41b) and before ärr in (41c), but that would only obscure the generalization that a vad-exclamative consists of vad plus a well-formed clause. Note that (42a), where the final noun phrase is not well-formed (it lacks an article), sounds extremely bad, although (42b) is perfectly grammatical.

(42) a. Såg du vad han hade köpt stor bil?  
(Did you see what he had bought big car)  

b. Såg du vad stor bil han hade köpt?  
(Did you see what (a) big car he had bought)  

There are no distinct exclamative main clauses in Swedish. Instead, independent subordinate clauses are used. Independent att-clauses express surprise or disgust, independent om-clauses and infinitive clauses express wishes, and independent exclamative clauses express something unexpected or extraordinary:

(43) a. Att du inte kan lära sig att hålla tyst!  
(That you can't learn to shut up = Why can you never learn to shut up)  

b. Om det ändå vore sommar!  
(If it only were summer)  

c. Åh att få bada!  
(Oh, to be able to swim)  

d. Vad tungt lass hon bar!  
(What (a) heavy burden she carried)  

e. Vad du är känslig!  
(What you are sensitive = How sensitive you are)  

There is, however, one exclamative construction which can not be freely embedded and which thus comes rather close to an exclamative main clause construction. This construction has the following form:
(44) \[
\begin{align*}
\{ & \text{Vimperative} \} \\
\{ & \text{A} \} \\
\{ & \text{Invective} \}
\end{align*}
\]

\[
\begin{align*}
\{ & \text{att NP V finite Y} \} \\
\{ & \text{att V infinite Y} \} \\
\{ & \text{om NP V finite Y} \}
\end{align*}
\]

Examples:

(45) a. Tänk om du kunde komma med!
((just) Think if you could come along)

b. Fan att han alltid är sen!
(Hell that he always is late)

c. Kul att få vara med!
(Nice to be allowed to join in = Nice that I could join in)

Finally, som occurs in comparative clauses. A comparative expression has the form än X (than X), where X is an NP, a clause remnant or a clause. Examples of än NP and än followed by a clause remnant are given in (46).

(46) a. Den här katten är större än vår katt
(This cat is bigger than our cat)

b. Per skriver fler artiklar på en månad än jag på ett år
(Per writes more articles in a month than I (do) in a year)

A clause remnant, or "gapped clause" (Ross 1970), consists of one or two, at most three, constituents which are interpreted as if each constituent of the clause remnant was conjoined with or compared with a parallell constituent in a preceding clause (see Hudson 1976 and Kuno 1976 for further discussion of gapped clauses). Clause remnants occur chiefly as non-initial conjuncts and in comparative and equative expressions.
Examples of än followed by a clause are given in (47).

(47) a. Han körde fortare än {vad som} var tillåtet
     {som
     *vad
     *∅}

     (He drove faster than what that/that/what/∅ was permitted)

b. Hon springer fortare än {*vad som} han gör
     {*som
     vad
     ∅}

     (She runs faster than what that/that/what/∅ he does)

The form of a comparative clause is thus:

(48) (vad) {som NP} (ADVP)^n V_finite Y

Conditions on Swedish subordinate clauses are given in (49) and (50).

(49) a. Declarative I:
    \[ s[ (att) NP (ADVP)^n V_finite Y ] \]

b. Declarative II:
    \[ s[ (ADVP)^n V_finite Y ] \]

c. X-interrogative I:
    \[ s[ NP Q som (ADVP)^n V_finite Y ] \]

d. X-interrogative II:
    \[ s[ XP Q (som) NP (ADVP)^n V_finite Y XP[e] Z ] \]
e. **Vad-interrogative:**
\[ s[\text{NP} \text{vad} \text{NP} (\text{ADVP})^n \text{Vfinite} \text{PPförfNP} z] \]

f. **Exclamative I:**
\[ s[\text{NPQ/så} \text{som} (\text{ADVP})^n \text{Vfinite} y] \]

g. **Exclamative II:**
\[ s[\text{XPQ/så} \text{NP} (\text{ADVP})^n \text{Vfinite} y \text{XP[Ä] z}] \]

h. **Vad-exclamative:**
\[ s[\text{ADVP vad NP} (\text{ADVP})^n \text{Vfinite} y] \]

i. **Infinitive:**
\[ s[\text{(att)} (\text{ADVP})^n \text{Vinfinite} y] \]

(50) a. **Plain relative I:**
\[ s[\text{som} (\text{ADVP})^n \text{Vfinite} y] \]

b. **Plain relative II:**
\[ s[\text{(som)} \text{NP} (\text{ADVP})^n \text{Vfinite} y \text{NP[e] z}] \]

c. **X-relative I:**
\[ s[\text{NPQ} (\text{ADVP})^n \text{Vfinite} y] \]

d. **X-relative II:**
\[ s[\text{XPQ NP} (\text{ADVP})^n \text{Vfinite} y \text{XP[e] z}] \]
As with main clauses, I have assumed that there is a fundamental distinction between clauses with initial subjects and clauses with initial non-subjects. This distinction also carries over to clauses with understood initial constituents, i.e. plain relatives and comparatives. As we have already noted, *som* is obligatory in the context NP V, but optional or excluded in the context XP NP V. Moreover, an unbounded dependency can extend over an initial subject but not over an initial non-subject:

(51) a. Den utställningen minns jag inte riktigt vem som tipsade oss om
    (That exhibition, I don't remember exactly who informed us about)

b. *Den utställningen minns jag inte längre vilka jag tipsade om
    (That exhibition, I can no longer remember who I informed about)

Now note that the same generalizations hold for plain relative clauses. *Som* is obligatory if the relativized NP is the subject of the relative clause and optional if the relativized NP is some other constituent, and an unbounded dependency can extended into a relative clause where the relativized NP is the subject of the clause, but not into a relative clause where the relativized NP is some other constituent:
(52) a. Böcker är det många som ber mig köpa
   (Books, there are many who ask me to buy people)

   b. *Böcker är det många som jag ber köpa
      (Books, there are many people who I ask to buy)

This suggests that we should recognize an empty foundation position in plain relative clauses. If we do that, the distribution of som and the contrast in (52) are immediately accounted for.

Empty foundations are also possible in declarative main clauses:

(53) a. Kommer klockan 6
    (Will be here at six o'clock)

    b. Tror inte det
       (Think I not = I don't think so)

In such cases, the understood foundation referent must be given or known.

The constructions that we have discussed in this chapter belong to a limited number of types, the main clause types listed in (54) and the subclause types listed in (55).

(54) a. FS:NP/∅ V_{finite} X

    b. F:XP/∅ V_{finite} S:NP Y

    c. V_{finite} S:NP X

    d. V_{imperative} S:NP/∅ X
We can form the clause types covered by one of these constructions simply by substituting the particular combination of F, S, and V specified by the construction for the S V combination of one of the constructions discussed in chapter 1. And now we can see the motivation of the Subject Condition. The substitutions defined by the constructions in (54) and (55) can only operate on constructions with explicit subjects (and verbs). A subjectless construction of a construction with an invariable subject ellipsis can not constitute the input to these substitutions, since the presence of an explicit subject is required in some of the constructions of (54) and (55). Thus, we can dispense with the Subject Condition, and simply say that any clause-level construction must be able to serve as input to the substitutions defined by (54) and (55). By clause-level construction I then mean the constructions described in chapter 1. The Subject Condition then reduces to a requirement that any type of clause must be able to display the contrasts described in this chapter.
3. ON THE NOTION OF SUBJECT

So far, I have presented an analysis of passive and impersonal sentences that does not refer to two distinctions that one might have expected would figure in any attempt to explicate the function of such sentences: the distinction between given and non-given information, and the distinction between logical subject (topic) and logical predicate (comment). In this chapter, I will discuss the relevance of these distinctions for syntactic analyses in general, then briefly consider whether these distinctions can throw any further light on the functions of Swedish passives and impersonals.

I will begin my discussion with a consideration of the problems that arise when we try to apply the traditional notions of subject and predicate to impersonal sentences.

Consider the following sentences:

(1) a. Det regnar
    (It rains)

    b. Det låg en bok på bordet
    (There lay a book on the table)

    c. Det är troligt att han inte kommer
    (It is likely that he will not turn up)

The most straightforward traditional analysis of (1a) would be one which treats det (or an understood third person singular pronoun in languages like Latin and Finnish) as subject. However, this means that det must be taken as that which is being talked about. Det must thus be treated as referential, despite the fact that it has no distinct meaning. Hence we get analyses which treat det and comparable pronouns in other languages as referring to the great neutre of Nature (Jespersen
1924:241-3), or something equally vague (see Bolinger 1977 for a recent analysis along these lines).

Another way of analyzing sentences like (1a) in terms of subject and predicate is to say verb forms like regnar are really composite, and can be analyzed as consisting of the subject regn (rain) and the predicate -ar (present) or det ... -ar. The meaning would be analogous to the meaning of Rain is. However, such an analysis would seem to lead to the position that every finite clause can be analyzed as expressing a composite predication.

The problem with these analyses is that they cannot cope with the nature of det. Either det has nothing to do with the category of subject, or it is treated as a full-blown subject. In both cases, the specific properties of sentences like (1a) seem to escape the analysis. This problem becomes more accentuated when we consider sentences like (1b) and (1c). I do not know of any attempt to treat det (or comparable pronouns in other languages) as a full-blown subject in such cases, and the reason is obvious: any attempt to do so would have to treat sentences like (1b) and (1c) as transitive. A sentence like (1b) would thus have to be interpreted as an assertion that the great neutre of Nature at one time caused a book to lie on the table, or something equally far-fetched. A more plausible analysis is one which assigns subjecthood to the postverbal noun phrase in sentences like (1b) and to the extraposed clause in sentences like (1c). However, such an analysis must again treat the occurrence of det as an unprincipled complication of certain sentences. The best one can say is that det is an anticipatory subject or that det and the postverbal noun phrase/clause forms a discontinuous subject. The latter analysis was proposed for Swedish by Beckman (1916).

An interesting solution to these problems was proposed by Ragnar Ljunggren (1926). Briefly, Ljunggren argued that not all grammatical subjects are subjects in the traditional sense,
i.e. simultaneously grammatical and logical subjects. According to Ljunggren, neither expletive subjects like det nor indefinite subjects like en hund in (2) would qualify as logical subjects. Such subjects are only analogical subjects. The only grammatical subjects that are logical subjects are clauses and definite and generic noun phrases. Thus, the grammatical subjects in (3a) - (3c) are also logical subjects.

(2) En hund jagade en katt
   (A dog was chasing a cat)

(3) a. Hunden jagade en katt
    (The dog was chasing a cat)
   b. Hundar jagar katter
    (Dogs chase cats)
   c. Att hundar jagar katter är beklagligt
    (That dogs chase cats is unfortunate)

This means that sentences fall into two types: sentences which can be analyzed into subject and predicate (in the traditional sense of these terms), and sentences which can not be so analyzed. According to Ljunggren, impersonal sentences like (1a) and (1b) are of the latter type: expletive det can never be a logical subject, and the postverbal noun phrase in sentences like (1b) is neither grammatical subject nor logical subject. Impersonal sentences like (1c), on the other hand, are of the subject-predicate type. Ljunggren analyzes det in such cases as an anticipatory subject, and the extraposed clause as both grammatical and logical subject. One reason for this decision is the contrast between the well-formed (4a) and the ill-formed (4b).

(4) a. En bok låg det på bordet
    (A book, there lay on the table)
   b. *Att hundar jagar katter är det beklagligt
    (That dogs chase cats, it is unfortunate)
If det is an anticipatory subject in (4b), but not in (4a), the contrast can be captured by the generalization that a "real" subject must not precede an anticipatory subject.

Ljunggren's analysis has thus two distinctive traits: 1) The subject-predicate form is not a universal sentence form; and 2) Impersonal sentences do not form one class of sentences. Some are of subject-predicate form, while others are (logically) subjectless.

The weakest point in Ljunggren's analysis is perhaps his unwillingness to admit other candidates for logical subjecthood than grammatical subjects. As Wallin (1935) has pointed out, it is hard to see how Ljunggren could escape the conclusion that, for example, maskrosor is the logical subject of (5). The definition of logical subject as that which the sentence says something about, a definition which Ljunggren accepts, would seem to identify maskrosor, or both maskrosor and man, as logical subject(s).

(5) Maskrosor kan man göra vin av
    (Dandelions, one can make wine from)

This is of course a common critique of theories which have tried to maintain the traditional notions of subject and predicate, and there have been a number of attempts to dissociate logical subjects from grammatical subjects. However, most linguists who have argued that the division of a sentence into a part which identifies what is being talked about (for which I will use the abbreviation S) and a part which identifies what is said about that which is being talked about (for which I will use the abbreviation P) should not be equated with the division of a sentence into grammatical subject and grammatical predicate have not been content with the terms logical subject and logical predicate. Instead, terms like psychological subject/predicate, thème/rheme, and topic/comment have been used, often with an accompanying redefinition of the notions of S and P.
One influential redefinition of the notions of S and P was proposed by Paul (1909:124-133). Paul adopted the terms psychological subject and psychological predicate for S and P, respectively, and defined them in the following way: "Das psychologische Subjekt ist die zuerst in dem Bewusstsein des Sprechenden, Denkenden vorhandene Vorstellungsmasse, an die sich eine zweite, das psychologische Prädikat anschliesst.... Richtig bezeichnet v.d. Gabelentz (Zschr f. Völkerpsychologie 6, 378) die beiden Elemente vom Standpunkte des Hörenden aus. Das psychologische Subjekt ist nach ihm das worüber der Sprechende den Horenden denken lassen, worauf er seine Aufmerksamkeit hinleiten will, das psychologische Prädikat dasjenige, was er darüber denken soll." (Paul 1909:124-5). This psychological definition of S and P was no coincidence, but rather a natural consequence of Paul's insistence that "[d]as psychische Element is der wesentlichste Faktor in aller Kulturbewegung, um den sich alles dreht, und die Psychologie is daher die vornehmste Basis aller in einem höheren Sinne gefassten Kulturwissenschaft." (Paul 1909:6).

Despite his definition of the psychological subject as that which first appears in the consciousness of the speaker, Paul did not require that the psychological subject should precede the psychological predicate in actual sentences. On the contrary, Paul recognized a wide variety of \( P(S) \) constructions. Some of these are illustrated below. I have used Paul's examples and bracketed the parts that, according to Paul, constitute S and P.

\[
(6) \quad \begin{align*}
\text{a. } & [\text{Weg}]_S [\text{ist alles, was du liebtest}]_P \\
\text{b. } & [\text{viel Geschrei}]_S [\text{wenig Wolle}]_P \\
\text{c. } & [\text{ein Esel}]_P [\text{ist er}]_S \\
\text{d. } & [\text{ist sie blind}]_P [\text{meine Liebe}]_S
\end{align*}
\]
The sentences in (7) illustrate Paul's contention that "[j]eder Satz besteht demnach aus mindesten zwei Elementen." (124). Apparent cases of "eingliedrige Sätze" are treated as psychologically composite, one part, normally S, being left unexpressed, since it is evident from the context.

An interesting critique of Paul's position was issued by Gardiner (1951), as part of his general theory of speech and language. For Gardiner, "the act of speech involves the two factors, apart from speaker and listener, of a thing spoken about, and something said about it. In my own technical phraseology, speech involves both (1) words having a meaning and (2) a thing-meant. Or again, speech consists in using words to put meanings upon things standing outside speech." (Gardiner 1951:216). A consequence of this view is that every sentence can be taken as predicating something of a thing-meant. However, the thing-meant is outside of speech and language, and can thus not be regarded as logical or psychological subject, in any reasonable interpretation of these terms. This means that we need not postulate implicit psychological subjects for one-word sentences and sentences with grammatical predicates only. In fact, to do so would be to commit the fallacy of not distinguishing between words and things. The mere fact that a sentence always says something about a thing-meant suffices as an explanation of its predicative nature.
As one might expect, Gardiner regards "eingliedrige Sätze" as more basic than sentences with both S and P. Following Wege­ner, he argues that "[t]hat part of the sentence which is called the subject is the word or group of words designed to help the listener in his quest for the ultimate thing-meant." (Gardiner 1951:265). So in a sentence with S and P, P is the part which really says something about the thing-meant. S serves only to help the listener identify the thing-meant, and is thus necessary only in cases where the speaker cannot take it for granted that the listener can easily identify the thing-meant. Naturally, Gardiner also recognizes a more elaborated way of using language, where both S and P serve to say something about the thing-meant. His example is The steep climb up to the other bank was very tiring. In this case, the subject does not only identify the thing-meant but also says something new about it. But such sentences, Gardiner argues, should be viewed as less basic than sentences with a simple identificatory S.

Gardiner also effectively refutes Paul's view that S is what comes first to the speaker's mind, pointing out that a sentence is not an automatic consequence of the speaker's impressions. Thus, it is perfectly possible to first note laundry on the clothesline next door and then report this as The neighbors are washing today. It would reduce Paul's theory to vacuity if we in that case claimed that the neighbors was what first entered the mind of the speaker.

Another redefinition of the notions of S and P was proposed by Vilém Mathesius (1929, 1935), who used the terms theme (východiště) and rheme (jadro) for S and P, respectively. For Mathesius, the theme of a sentence is "that which is known or at least obvious in the given situation and from which the speaker proceeds" (Mathesius 1947:234, quoted from Firbas 1964:268). Thus, the theme of a sentence has a double function: it links the sentence to the situation in which it is used, and it provides the point of departure for the new information
that the sentence conveys. Mathesius also makes an interesting distinction between two types of word order: an objective, in which the theme precedes the rheme, and a subjective, in which the rheme precedes the theme. In using the former order, the speaker adopts the hearer's perspective on the information conveyed by the sentence, starting with what is known to the hearer. In using the latter order, the speaker pays no regard to the hearer, but starts with what he considers most important (Mathesius 1975:156).

The analyses of S and P that we have so far considered raise three issues. The first issue concerns the universality of the S-P sentence form. Paul is clearly a proponent for the view that all sentences have S-P form, while Gardiner, Ljunggren, and, somewhat hesitantly, Mathesius hold that not all sentences have this form. Another issue is the definition of S and P. The various definitions involve three distinct properties of S and P, those listed in (8).

(8)  

a. S names something and P says something about that which is named by S  
b. S is given and P is new  
c. S is the point of departure for P, a sentence which consists of S and P proceeds from S to P

Paul's psychological subject and psychological predicate are defined in accordance with (8c). Gardiner's logical subject and logical predicate are defined in accordance with (8a). Ljunggren's logical subject and logical predicate are defined in accordance with both (8a) and (8b). Mathesius' theme and rheme, finally, are defined in accordance with both (8b) and (8c) (and, occasionally, also in accordance with (8a), e.g. in Mathesius 1975:156).

The third issue is what kind of units are identified by the definitions in (8).
It is natural to assume that $S$ and $P$ are units of the same "size" as the traditional units subject and predicate, i.e. a simple phrase or clause in the case of $S$ and a sentence minus the phrase or clause which constitutes the $S$ in the case of $P$. However, as soon as one abandons the traditional notions of subject and predicate, the nature of the units identified by the definitions in (23) can no longer be taken for granted.

In fact, Paul (1909:283) explicitly departs from the assumption that $S$ and $P$ are of the same size as traditional subjects and predicates. Thus, Paul argues that one possible division of *Karl fährt morgen nach Berlin* is $S$: *Karl fährt nach Berlin*, $P$: *morgen*. He is also prepared to make even more drastic departures from traditional divisions of sentences. According to Paul, *Karl fährt morgen nach Berlin* can also, in the case where it conveys only new information, be divided into two predications, in the following way:

$$
\begin{array}{c}
S \\
S \\
S \\
P' \\
P
\end{array}
$$

It can also, in the case where everything is given except the specific way in which Karl is going to Berlin tomorrow, be divided in the following way: $S$: *Karl V* _motion_ *morgen nach Berlin*, $P$: *fährt*. As we can see, Paul's proposed divisions are made in accordance with both (8b) and (8c). When there is only one "new" constituent, this constituent is taken as $P$ and the remainder of the sentence as $S$. When all constituents are new, the sentence is analyzed as a series of successive predications. In other words, the definitions (8b) and (8c) yield divisions of sentence which differ rather drastically from the traditional subject-predicate division.

The same point has been made in a more systematic way by other linguists, notably Hatcher (1956) and Firbas (1964, 1971). Hatcher argues that all possible divisions of simple $S$(subject) - $V$(verb) and $S$(subject) - $V$(verb) - $O$(bject) sentences into a given
part and a non-given part can be attested. She provides the following classification of sentence types:

<table>
<thead>
<tr>
<th>Given</th>
<th>Non-given</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Zero</td>
<td>S,V,O</td>
</tr>
<tr>
<td>2. S</td>
<td>V,O</td>
</tr>
<tr>
<td>3. O</td>
<td>S,V</td>
</tr>
<tr>
<td>4. S,O</td>
<td>V</td>
</tr>
<tr>
<td>5. V</td>
<td>O</td>
</tr>
<tr>
<td>6. S,V</td>
<td>O</td>
</tr>
<tr>
<td>7. V,O</td>
<td>S</td>
</tr>
<tr>
<td>8. S,V,O</td>
<td>Zero</td>
</tr>
</tbody>
</table>

Some of her examples are given below:

1. There was a scream of laughter; The telephone rang; Somebody ran over a dog
2. She bit her lips; Coffee stimulates
3. Somebody kicked me; He was asked to wait; It got rained on
4. I had it restored; That cured me
5. In Spain, they use a lot of garlic; A new bridge is planned
6. I need a thimble; I'll take vanilla
7. Mary found it; Mother made it
8. I'll surely do it; I believe so

The particular criterion that Hatcher uses for dividing sentences into a given part and a non-given part is one which have been widely used since. Hatcher suggests that each sentence can be taken as an answer to a question which contains the given constituents of the sentence. Where no constituent is given, the sentence would answer a question like What happened? or What is done? To take a simple example: the
sentence (9a) can be taken as an answer to the question (9b), but can not be taken as an answer to (9c) or (9d). Thus, *han* and *pianot* are identified as given and *sälde* as non-given.

(9)  

a. Han sålde pianot  
(He sold the piano)  

b. Vad gjorde han med pianot?  
(What did he do with the piano)  

c. Vem sålde pianot?  
(Who sold the piano)  

d. Vad sålde han?  
(What did he sell)  

However, the criterion should be used with caution. (9a) is not only a possible answer to (9b), but also a possible answer to (10a), (10b) and (10c). Likewise, the sentence (11) can be taken as an answer to any of three questions in (12).

(10)  

a. Vad hände?  
(What happened)  

b. Vad gjorde han?  
(What did he do)  

c. Vad hände med pianot?  
(What happened to the piano)  

(11) Han sålde pianot

(12)  

a. Vad hände?  

b. Vad gjorde han?  

c. Vad sålde han?  

It is not immediately clear how these facts are to be interpreted. One possible interpretation is that of Chomsky (1971),
who would regard (9a) as four-way ambiguous and (11) as three-way ambiguous. But we can also amend Hatcher's criterion and say that a sentence can be taken as an answer to any question which includes a (possibly empty) subset of the given constituents of the sentence (together with one or more WH-phrases and, in certain cases, a general verb like do or happen).

Chomsky's interpretation is clearly incorrect. Thus, han and pianot in (9a) and han in (11) can only be interpreted as given, regardless of which questions these sentences are taken to answer. This means that we simply do not get the amount of ambiguity that Chomsky would predict. The alternative solution, on the other hand, predicts that only one of the questions connected with a certain sentence, the question which includes the greatest number of matching constituents, is relevant to the division of the sentence into a given and a non-given part. It thus correctly predicts that (9a) is unambiguous. However, it would also predict that (11) is unambiguous, which it is not. Sälde can be interpreted both as given and as non-given in (11). Note though that (11) is in fact ambiguous also when it is taken as an answer to (12a) or (12b). Consider the following mini-dialogue:

(13) a. - Han var tvungen att sälja något.  
(He had to sell something)

b. \{Vad hände då? \[Vad gjorde han då?\]
(What happened then/What did he do then)

c. - Han sålde pianot.

Thus, (11) can be taken as an answer to (12a) or (12b), even in cases like (13), where sälja (sell) is given.

The magnitude of the problem increases when we consider sentences like (14a). This sentence can be taken as an answer to all the questions in (14).
(14) a. Han gav Erik en blomma
   (He gave Erik a flower)

b. Vad hände?

c. Vad gjorde han?

d. Hur blev det med Erik då?
   (What about Erik, then?)

e. Hur gjorde han med Erik?
   (What did he do about Erik?)

f. Vad gav han Erik?
   (What did he give Erik?)

The possible interpretations are summarized below:

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer: han gav Erik en blomma</th>
</tr>
</thead>
<tbody>
<tr>
<td>14b</td>
<td>g  g/n  g/n  n</td>
</tr>
<tr>
<td>14c</td>
<td>g  g/n  g/n  n</td>
</tr>
<tr>
<td>14d</td>
<td>g  g/n  g    n</td>
</tr>
<tr>
<td>14e</td>
<td>g  g/n  g    n</td>
</tr>
<tr>
<td>14f</td>
<td>g  g    g    n</td>
</tr>
</tbody>
</table>

(g = given, n = non-given, g/n = given or non-given)

If we set up similar tables for (9a) and (11), we get the following results:

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer: han sålde pianot (= (9a))</th>
</tr>
</thead>
<tbody>
<tr>
<td>10a</td>
<td>g  n    g</td>
</tr>
<tr>
<td>10b</td>
<td>g  n    g</td>
</tr>
<tr>
<td>10c</td>
<td>g  n    g</td>
</tr>
<tr>
<td>9b</td>
<td>g  n    g</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer: han sålde pianot (= (11))</th>
</tr>
</thead>
<tbody>
<tr>
<td>12a</td>
<td>g  g/n  n</td>
</tr>
<tr>
<td>12b</td>
<td>g  g/n  n</td>
</tr>
<tr>
<td>12c</td>
<td>g  g    n</td>
</tr>
</tbody>
</table>
These results seem to indicate that neither Chomsky's interpretation of the question test nor our modification of Hatcher's interpretation of that test is correct. What the question test reveals is not a distinction between those constituents that must be given and those that must be non-given, but rather a distinction between those constituents that may be given and those that must not be given. The distinction between those constituents that must be given and those that may be given is not revealed by the question test.

Note moreover that it is possible to assign exactly one interpretation in terms of given and non-given to the sentences we have considered, provided that we operate with three values instead of two, namely given, non-given and unspecified for givenness (g, n and g/n, respectively). These interpretations would then not be "concrete" interpretations, but should rather be viewed as conditions on the use of particular sentences. That an element of a sentence is specified as given means that the sentence can be used only in contexts where that element is given. That an element is specified as non-given means that the sentence can be used only in contexts where that element is not given. If an element is unspecified for givenness, this means simply that the use of the sentence is not contextually constrained with respect to that element. In other words, if we assume that what is signalled by word order, phrase accent and other contextually relevant features of sentences is not concrete interpretations of sentence tokens but rather contextual conditions on sentence types, then we can get a better understanding of the question test. What the question test will tell us then is simply that a sentence can be used in a context where one of its elements is given if and only if that sentence can be taken as an answer to a question which includes that element.

The sentences (9a), (11) and (14) can then be assigned the following interpretations (where $\emptyset$ indicates that an element is unspecified for givenness):
The \( n \) values can be determined by means of the question test, while the \( g \) values must be determined in some other way.

Perhaps the most ambitious attempt to analyze sentences in terms of givenness is Firbas' theory of Communicative Dynamism (CD) (Firbas 1964, 1971). The theory holds that each element of an actual sentence (except for elements like sentence adverbials and parenthetic adjuncts) carries a certain degree of communicative dynamism, defined in the following way: "By the degree of CD carried by a sentence element we understand the extent to which the sentence element contributes to the development of the communication, to which it 'pushes the communication forward', as it were." (Firbas 1964:270). A sentence can thus be viewed as a dynamic phenomenon which proceeds from the element carrying the lowest degree of CD (the theme proper) to the element carrying the highest degree of CD (the rheme proper). The degree of CD of a certain sentence element is determined by three factors: 1) its relation to the context, whether it is contextually bound ("given") or not; 2) its semantic role, whether it refers to an agent, an action, a place or a goal; and 3) its position and degree of prosodic prominence. Thus, a contextually bound element has normally a higher degree of CD than an element which is not contextually bound ("new"), a verb denoting an action has normally a higher degree of CD than the nominal denoting the agent of that action, but a lower degree of CD than the nominal denoting the goal of that action, an element preceding another element has normally a lower degree of CD than the latter, and a stressed element...
has normally a higher degree of CD than an unstressed element. The actual distribution of degrees of CD over the elements of a sentence is thus determined by a complex interplay of context, semantic relations, linear order and stress, along the following lines: First a sentence is analyzed into communicative fields, i.e. into parts which have both a degree of CD within the communicative field of the entire sentence, and an internal distribution of degrees of CD. A subordinate clause, for example, would constitute such a dependent communicative field. Then each field is analyzed into a context dependent section and a context independent section. The elements within the context dependent section are on-stage given (Dahl 1976), i.e. these elements refer to phenomena which have been introduced into the preceding discourse, either directly or by inference. The elements within the context dependent section have all lower degrees of CD than the elements of the context independent section. Within the context independent section, the distribution of degrees of CD is further determined by the factors of semantic role and linear order. If I understand Firbas (1971) correctly, the principle seems to be the following: the relative degrees of CD of a verb and one of its terms (i.e. subject and objects) and modifiers is determined on the basis of the semantic relation between them. Thus, as I have already stated, an agent expression has a lower degree of CD than an action expression, i.e. a verb, and an action expression has a lower degree of CD than a goal expression. In some cases, the semantic relation between verb and term/modifier does not uniquely determine relative degrees of CD. The relation between a verb and a purpose clause is a case in point. The relative degrees of CD of the terms and modifiers of a certain verb, on the other hand, is determined by linear order (and stress). Thus in the sentence A dog was chasing a cat, a dog would have a lower degree of CD than was chasing, since the relation here is agent-action. Likewise, a cat would have a higher degree of CD than was chasing, the relation in this case being goal-action. The linear order of a dog and a cat, finally, signals that a dog has a lower degree of CD than a cat.
In this case, the factors of linear order and semantic relations give the same result. In a passive sentence, however, they would seem to lead to conflicting results. Thus, if a dog is taken as agent and a cat as goal in A cat was being chased by a dog, the factor of semantic relations would give a lower degree of CD to a dog than to was being chased, which in turn would have a lower degree of CD than a cat. The factor of linear order, on the other hand, would give a cat a lower degree of CD than a dog. Since relative degree of CD clearly must be a transitive relation, we get a contradiction: a cat has both a higher and a lower degree of CD than a dog. To solve this problem, we must take the determining factor to be grammatical relations rather than semantic relations, restrict the relations agent-action and goal-action to active sentences, or say that linear order takes precedence over semantic relations in passive sentences.

Since Firbas (1971) explicitly restricts the role of semantic relations and linear order in determining degrees of CD to the context independent part of a communicative field, the degrees of CD within the context dependent part of a communicative field must be determined directly from the context. However, it is not obvious how this is to be done. One possibility would be to use the question test in the following way: Suppose we have a sentence where the elements A and B are both part of the context dependent section of a certain communicative field. A would then have a lower degree of CD than B if the sentence can be taken as an answer to a question which includes both A and B or only A, but not to a question which includes only B. In practice, however, this use of the question test does not give any clear-cut results. Note that in the examples we have considered, (9a), (11) and (14a), the given elements can not be differentiated by means of the question test. (9a) is a possible answer to both (10b) and (10c), and (14a) is a possible answer to both (14c) and (14d).
A better alternative seems to be to determine the degrees of CD of the elements within the context dependent part of a field on the basis of the "discourse history" of these elements. Let us adopt the following crude model of a discourse: Relative to the current sentence of a discourse, we can set up three more and more inclusive units of that discourse: the current sentence, the current part of the discourse, consisting of the current sentence and the sentence immediately preceding it, and the entire discourse. Of course, the structure of a discourse may be more finely graded, but for our purposes these three units will do. We can then relativize the notion of givenness, so that an element of the current sentence will be given or non-given relative to the current part of the discourse, i.e. have an antecedent or not in the sentence preceding the current sentence, and an element of the current part of the discourse will be given or non-given relative to the entire discourse, i.e. have an antecedent or not in the part of the discourse which precedes the current part of the discourse.

We can then classify elements of the current sentence with respect to these two relativized notions of givenness: whether they, viewed as elements of the current sentence, are given or non-given relative to the current part of the discourse, and whether they, viewed as elements of the current part of the discourse, are given or non-given relative to the entire discourse. Thus we get the following four categories of elements of the current sentence:

<table>
<thead>
<tr>
<th>relative to the entire discourse</th>
<th>relative to the current part of the discourse</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. given</td>
<td>a. given</td>
</tr>
<tr>
<td>2. non-given</td>
<td>b. non-given</td>
</tr>
</tbody>
</table>
Duranti & Ochs (1979) have demonstrated that elements of type 1a and elements of type 1b are coded differently in spoken Italian sentences. Subjects of type 1a are most often indicated by means of verb agreement or clitic pronouns, while subjects of type 1b are most often indicated by means of full subject noun phrases, and non-subjects of type 1a are most often indicated by means of left-dislocated pronouns, while non-subjects of type 1b are most often indicated by means of left-dislocated noun phrases or post-verbal noun phrases. The distinction between type 1a elements and type 1b elements thus appears to have a potential descriptive value.

The same is true of the distinction between elements of type 1a and elements of type 2, which tend to be coded differently in informal spoken Swedish. To illustrate this, I will present the results of a modest test count. The text was a transcribed informal interview, which contained 143 complete sentences and 48 sentence fragments. I looked at four types of constituents: non-subject foundations (non-subjects in sentence-initial position), subject foundations (subjects in sentence-initial position), "inverted" subjects (subjects in the position after the finite verb of a main clause) and direct objects.

The 143 complete sentences contained 23 non-subject foundations, which were classified by means of the four categories 1a, 1b, 2a and 2b above, and compared with the subject and (postverbal) direct objects of the first 51 of the 143 complete sentences. The results of the text count is given below.
As we can see, there is a clear contrast between elements of type 1 and elements of type 2. Elements of type 1 normally occur as subjects, while elements of type 2 normally occur as non-subjects. There is also fairly clear contrast between elements of type 2a and elements of type 2b. Elements of type 2a normally occur in foundation position, while elements of type 2b normally occur in postverbal position (the number of exceptions is somewhat larger in the case of 2b, though).

Finally, we can also detect a possible contrast between elements of type 1a and elements of type 1b. While elements of type 1a occur both in foundation position and in inverted position, elements of type 1b occur only in foundation position. Thus, in the analyzed interview, the four NP positions serve as rather clear signals of the discourse status of NP:s in those positions, as can be seen from the following systematic summary of the results presented above:

<table>
<thead>
<tr>
<th></th>
<th>Non-subject foundation</th>
<th>Subject foundation</th>
<th>Inverted subject</th>
<th>Direct object</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a: given &amp;</td>
<td>0</td>
<td>16</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>given</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1b: given &amp;</td>
<td>2</td>
<td>8</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>non-given</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2a: non-given</td>
<td>15</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>&amp; given</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2b: non-given</td>
<td>6</td>
<td>0</td>
<td>2</td>
<td>19</td>
</tr>
<tr>
<td>&amp; non-given</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>expletive det</td>
<td>-</td>
<td>11</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>37</td>
<td>14</td>
<td>25</td>
</tr>
</tbody>
</table>

subject:    non-foundation: 1a
foundation: 1a, 1b
non-subject: foundation: 2a, (2b)
non-foundation: 2b
It seems clear, then, that the classification of elements with respect to discourse history proposed above has a descriptive value. It would then be natural to base the assignment of degrees of CD to elements within the context dependent part of a communicative field on this classification. Elements of type 1 would then be assigned a lower degree of CD than elements of type 2 and elements of type 1a would be assigned a lower degree of CD than elements of type 1b. This would allow us to make the generalization that subjects normally have a lower degree of CD than non-subjects, for example, which would have the nice consequence that the relative degrees of CD for pairs of subjects and non-subjects can be assigned without regard for which part of the communicative field these elements belong to.

Having established criteria for assigning degrees of CD to sentence elements which do not have the same discourse status, we must now tackle the most problematic aspect of Firbas' theory: the claim that elements which have the same discourse status also should be assigned different degrees of CD. Consider the following sentences:

(15) a. Skatan jagade en ekorre
(The magpie was chasing a squirrel)

b. Skatan jagade ekorren
(The magpie was chasing the squirrel)

c. En skata jagade en ekorre
(A magpie was chasing a squirrel)

d. En skata jagade ekorren
(A magpie was chasing the squirrel)

Let us suppose that these sentences are used in contexts where the definite noun phrases are given relative to the entire discourse and the verbs and the indefinite noun phrases are non-given relative to the entire discourse. The sentences would then have the following interpretations:
The sentences (15a) and (15b) share the property of having a given subject, while the sentences (15a), (15b) and (15c) share the property of having a subject which does not have a higher degree of CD than the object. Both these properties appear to be significant in Swedish: (15a) and (15b) are much more natural than (15c) and (15d), and (15d) is less natural than (15c). If we want to express these properties as contextual conditions on the sentence from NP V NP, we get

\[
\begin{align*}
\text{NP} & \quad V & \quad \text{NP} \\
g & & g \\
\end{align*}
\]

(ignoring the verb) for the first property, and

\[
\begin{align*}
\text{NP} & \quad V & \quad \text{NP} \\
g & & \emptyset \\
\emptyset & & \emptyset \\
\end{align*}
\]

for the second property. However, the contextual condition corresponding to the second property clearly fails to capture the sense of that property. It is precisely here that we see the value of Firbas' relational approach. The appropriate value for the object NP is not an absolute value, but a relative value. We can then express the second property as the following contextual condition, where "(+)" indicates that the object should have the same degree of CD as the subject or a higher degree of CD than the subject:
That is, if the subject is $g$, the object is $g$ or $n$, and if the subject is $n$, the object is also $n$. A "+" without parentheses would have indicated that the object must have a higher degree of CD than subject.

Firbas is, however, prepared to go one step further and claim that the object has a higher degree of CD than subject not only in (15a), but also in (15b) and (15c). That is, he would claim that the relation between the subject and the object in (15a) carries over to (15b) and (15c) as well. However, as far as I can see, this claim has no empirical consequence at all. Assuming that the subject and the object has the same discourse status in both (15b) adn (15c), which is the case we are discussing, we must use the subject - object distinction in order to assign different degrees of CD to the NP:s in (15b) and (15c). But that means that the statement that the first NP of (15b) or (15c) has a higher degree of CD than the second NP is completely equivalent to the statement that the first NP is a subject and the second NP is an object. In other words, a description of the sentences (15b) and (15c) in terms of degrees of CD says nothing new about these sentences. Consequently, I am not prepared to follow Firbas in assigning different degrees of CD to elements with the same discourse status. As far as I can see, the contrasts that we have considered can be adequately described simply in terms of the notions of grammatical subject and object and contextual conditions on sentence forms which specify which discourse statuses the constituents of a particular sentence form may have.

The generalizations about informal spoken Swedish that we arrived at can easily be stated as contextual conditions on the two sentence forms NP V NP (SVO) and XP V NP (FVS). Let us reserve $g$ and $n$ for given/non-given relative to the entire discourse and let us furthermore subcategorize $g$ and $n$ in the
following way: \( gg \) (1a), \( gn \) (1b), \( ng \) (2a), and \( nn \) (2b). The contextual condition on \( NP \ V \ NP \) can then be stated as

\[
\begin{array}{c|c|c}
NP & V & NP \\
g & & nn \\
\end{array}
\]

and the contextual condition on \( XP \ V \ NP \) can be stated as

\[
\begin{array}{c|c|c}
XP & V & NP \\
ng & & gg \\
\end{array}
\]

Other uses of the two sentence forms can be described in terms of extensions of these conditions. One possible line of extension would be the following, where the conditions on \( NP \ V \ NP \) are successively relaxed:

\[
\begin{array}{c|c|c}
NP & V & NP \\
1. & g & nn \\
2. & g & n \ (= g \, +) \\
3. & g & \emptyset \ (= g \, (+)) \\
4. & \emptyset & (+) \\
\end{array}
\]

Another extension would be to generalize the condition on \( XP \) from \( ng \) to \( n \). In formal written Swedish, the contextual conditions that are observed come rather close to the conditions resulting from the two extensions.

We can now better appreciate the proposed definitions of logical subject and logical predicate given in (8). As we have seen, neither (8b) nor (8c) can be used to single out for each sentence exactly one constituent (or at most one constituent) that is the logical subject of that sentence. In cases like (15b), the subject and the object are equally given and both, or rather the subject and the object together, serve as the
point of departure for the sentence (recall that we rejected Firbas' attempt to differentiate between the two in term of different degrees of CD).

This leaves us with the original definition (8a). It is somewhat ironical that the alternatives to the traditional theory of subject and predicate that we have considered have on the whole failed to explicate the traditional notions of subject and predicate (with the exception of Ljunggren, who sticks rather closely to the traditional theory). The basic feature of traditional syntactic analysis: the division of a sentence into a constituent and the remainder of the sentence, simply disappears in Paul's, Hatcher's and Firbas' theories. This could indicate either that the traditional analysis was wrong, or that it captured something which can not be explicated only in terms of givenness and degrees of CD. Recently, many linguists seem to have reached the latter conclusion, and have proposed that the notions S and P, as defined in (23a), have an important role to play in syntactic analysis. These linguists do not, however, use the terms logical subject and logical predicate for S and P, but the terms topic and comment. The terms topic and comment were apparently introduced by Hockett (1958:201), who defines them in the following, rather loose way: "The most general characterization of predicative structures is suggested by the terms "topic" and "comment" for their IC:s: the speaker announces a topic and then says something about it. Thus John ran away; That new book by Thomas Guernsey I haven't read yet." This definition is clearly a variant of (23a).

A comprehensive attempt to demonstrate the usefulness of the notions of topic and comment has been made by Gundel (1976). In her study, she considers four constructions in which a phrase is set off from the remainder of the sentence:
(16) a. Left dislocation:
This room, it really depresses me
This spot in the rug, you better get it out
before the party on Saturday

b. Right dislocation:
It really depresses me, this room
You better get it out before the party on Sunday,
this spot in the rug

c. Cleft sentence:
It is this room that depresses me
It is this spot in the rug that you better get out
before the party on Saturday

d. Topicalization:
John, he called

Using the criteria in (17), she argues that left and right dislocated phrases are topics.

(17) a. A sentence $S$ with $x$ as topic is a possible answer to the question "What about $x$?".

b. A sentence $S$ with $x$ as topic has a paraphrase of the form $A_S$ for $x$ $S$.

c. A topic phrase can not carry the main stress of a sentence (the sentence accent).

In a cleft sentence, on the other hand, the phrase which is set off is not the topic of the sentence, but the focus, the sentence element with the highest degree of CD. A topicalized phrase, finally, is the topic of its sentence if it is unstressed, and the focus of its sentence if it is stressed, i.e. carries the sentence accent.
She also demonstrates that specific indefinite noun phrases can not occur in the topic positions. Gundel argues furthermore that indefinite noun phrases with quantifiers can not occur in the topic positions. However, the evidence for this restriction is far from unambiguous, as she herself admits.

Gundel then argues that all sentences can be analyzed as consisting of a topic and a comment. In practice, this means that a sentence with "normal" word order will have at least as many interpretations as there are phrases in the sentence which meet the criteria in (17). In addition, such a sentence will also have an interpretation where the time and the place referred to by the sentence is taken as topic. Consider for example the sentence (18), taken from Gundel 1976:90.

(18) I don't understand topic-comment structure

Gundel argues that this sentence has three interpretations. On one interpretation it is a possible answer to the question (19a). The topic is then the time and the place referred to by the sentence. But the sentence is also a possible answer to (19b), in which case I is the topic. Finally, (18) is a possible answer to (19c), and in that case the topic is something like x such that I don't understand x.

(19) a. What's happening?
   b. What about you?
   c. What about what you don't understand?

The first of Gundel's criteria for topichood, (17a), is thus precisely the criterion that Hatcher used to identify the given part of a sentence. Gundel differs from Hatcher only in that she takes each distinct question that a sentence can answer to be indicative of a distinct topic-comment interpretation of the sentence. But that move is completely unmotivated.
Hatcher's description, amended in the way suggested above, covers exactly the same ground as Gundel's description, and does so with a more restricted conceptual apparatus.

As far as simple sentences like (18) are concerned, the notion of topic thus appears to be superfluous. This becomes even clearer when we take into consideration the fact that a sentence like (20a) can serve as the answer to a question like (20b) (Gundel 1976:117).

(20)  a. I don't understand topic-comment structure  
     b. What about you and topic-comment structure

The topic of (20a), on the intended interpretation, would then be I and topic-comment structure. In other words, not only can each given element of a sentence serve as its topic, but also each distinct combination of its given elements. A sentence with two given elements will then be assigned four distinct interpretations, a sentence with three given elements will be assigned eight distinct interpretations, and so on. Accepting (17a) (and (17b), which appears to give the same results as (17a)) as a criterion of topichood thus forces us to treat simple sentences as multiply ambiguous, without gaining anything in descriptive adequacy. To me, the conclusion is obvious: the notion of topic-comment structure is not needed to describe what questions a simple sentence like (18) can answer. A description in terms of givenness is sufficient, and avoids moreover the vacuous ambiguities predicted by the topic-comment analysis.

From this rejection of Gundel's analysis of simple sentences one should not conclude, however, that her analysis of the four sentence types of (16) is equally unjustified. In Swedish, as in English, dislocated and topicalized constituents seem to have a special status. Consider the following sentences:
While all the sentences of (22) may serve as answers to (21b), only (22a) and (22b) may serve as answers to (21a).

This contrast can be interpreted in the following way: Let us call an item that is singled out by a question like (21a) or (21b) an item of current interest. What the contrast just demonstrated amounts to is that an item of current interest is not bound to any particular position in a subject-initial sentence, but is bound to initial position in a sentence with a left-dislocated or topicalized non-subject. In other words, a left-dislocated or topicalized non-subject can be used to signal what is the item of current interest, but a subject, even if left-dislocated, or a non-subject in postverbal position can not be used for that purpose.

Note that I have not used the term "topic" to characterize left-dislocated and topicalized constituents. This is because the notion of topic only partially overlaps with that of item of current interest. As current work on the problem of topic and comment (Barry 1975, Chafe 1976) have demonstrated, the topic of a sentence may also be defined as an item which
"sets a spatial, temporal, or individual framework within which the main predication holds." (Chafe 1976:50). This sense of topic is clearly distinct from the notion of item of current interest. Nevertheless, it is relevant for the analysis of left-dislocated and topicalized constituents. Thus, in cases like (23a) and (23b) the initial constituents can be said to signal the framework within which the main predication holds rather than the item of current interest.

(23) a. I Kina, där är alla barn lyckliga
   (In China, all children are happy there)
   b. På 1600-talet var dronen ännu inte utdöd
   (In the 17th century, the dodo was not yet extinct)

On the other hand, items of current interest occur not only in the positions that Gundel regards as topic positions, but also in the positions which she regards as focus positions.

Thus, in interactions like (24) and (25), the so-called focus constituents are naturally interpreted as items of current interest, since the immediate concern of the participants is to identify whatever these constituents serve to identify.

(24) - Vem spelar fiol?
   (Who plays the fiddle?)
   - Det är jag som spelar fiol
     (It is I that plays the fiddle)

(25) - Vem spelar fiol?
   - Jag spelar fiol
     (I play the fiddle)

The conclusion that I think we can draw from this discussion of topic and focus is the following: any construction that sets off a constituent from the remainder of the sentence in which it appears (by means of position or by means of prosodic
prominence) effects a division of sentences into figures and grounds. Such divisions can have a number of interpretations, one of which is that the figure is an item of current interest. Depending on whether the item of current interest is given or not, the figure will be manifested as topic or as focus. However, in Swedish, it is foundations, and not subjects, that are figure constituents. Thus, the notions of figure and ground are tied to the constructions described in chapter 2, not to those described in chapter 1.

Likewise, it seems to be the case that the contextual conditions on sentence forms, stated in terms of given and non-given information, that have been described in this chapter are conditions on the sentence forms defined by the constructions described in chapter 2. The constructions described in chapter 1 are not primarily sensitive to the contrast between given and non-given constituents, but to the contrast between categorical and thetic NP, V combinations. The direct object of a det V NP LocP sentence, which must be part of a thetic NP, V combination, can for example be both given, as in (25a) and non-given, as in (25b),

(25) a. - Det ligger en bok på bordet.  
   Är det din?  
   (There is a book on the table.  
    Is it yours?)

   b. - Har du sett min bok?  
      - Det ligger en bok på bordet.  
      Är det den?  
      (- Have you seen my book?  
       - There is a book on the table.  
       Is it that one?)

and (26a), where the indirect object can be interpreted as given, is only slightly better than (26b), where the indirect object must be interpreted as non-given. What is decisive for the status of (26a) and (26b) is thus not whether the
indirect object is given or not, but whether the verb - indirect object combination is thetic or not.

(26) a. Han brukar ge en fattig sina avlagda kläder
    b. Han brukar ge en fattig sina avlagda kläder
       (He usually gives a poor one his old clothes)

What we might call the contextual composition of a sentence, the potential contributions to an ongoing discourse that the sentence can make, is consequently partially independent of its referential composition and its structural composition. Although the NP of a categorical NP, V combination is given in the unmarked case, and the NP of a thetic NP, V combination is non-given in the unmarked case, the other two cases are certainly possible. Thus, in addition to having a linear, a structural and a referential composition, a sentence has a contextual composition as well.

The general structure of a Swedish clause can be described as M(C1), where C1 is one of the constructions described in chapter 1, and M is a modification of that construction that results in one of the constructions described in chapter 2. The structural and the referential composition of a sentence that instantiates a particular M(C1) are determined by C1, and its contextual composition is determined by M(C1). In both C1 and M(C1), the subject plays a crucial role. In the unmarked case, it is the starting-point for the structural composition of sentences (the first argument expression) as well as the starting-point for the referential composition of sentences (the referentially primary constituent) and the contextual composition of sentences (the most given constituent). This threefold character of starting-point has been codified in Swedish as a "form-feeling" (to use Sapir's phrase), a feeling that a clause is incomplete or ungrammatical unless it contains a formal starting-point (not in a linear sense, but in a conceptual
sense), either $S:NP$ or an $M$-conditioned $S:\emptyset$. The basic function of passive and impersonal sentences in Swedish is to broaden the meaning potential of sentences that conform to this "form-feeling".
REFERENCES

Andersson, L-G. 1975: Form and Function of Subordinate Clauses, Gothenburg Monographs in Linguistics 1
Anward, J. 1974: The Semantics of Noun Phrase Movement, Reports from Uppsala University Department of Linguistics 3:1-16
Beckman, N. 1916: Svensk språklära, Stockholm: Norstedts
- 1934: Västeuropeisk syntax, Göteborgs Högskolas Årsskrift XL, 1934:4
Bolinger, D. 1977: Meaning and Form, London: Longmans
Bruce, G. 1977: Swedish Word Accents in Sentence Perspective, Travaux de l'Institut de Linguistique de Lund XII
Cederschiöld, G. 1910: Om s.k. subjektlösa satser i svenskan, Om ord­lekar, 61-82, Stockholm: Norstedts
- 1978: On the Definition of the Telic/Atelic Distinction, Gothenburg Papers in Theoretical Linguistics 36
Diderichsen, P. 1946: Elementær dansk grammatik, København: Gyldendal
Ejerhed, E. 1974: The Syntax and Semantics of English Tense Markers, Monographs from the Institute of Linguistics, University of Stockholm 1

Firbas, J. 1964: On Defining the Theme in Functional Sentence Analysis, Travaux Linguistiques de Prague 1:267-280


Gazdar, G. 1979: Constituent Structures, MS, University of Sussex


Gundel, J. 1976: The Role of Topic and Comment in Linguistic Theory, reproduced by Indiana University Linguistics Club

Hammarberg, B. & Å. Viberg 1975: Platshållartvåget, SSM Report 2, Department of Linguistics, University of Stockholm


Holm, G. 1952: Om s-passivum i svenskan, Lundastudier i nordisk språkvetenskap 9


Jörgensen, N. 1976: Meningsbyggnaden i talad svenska, Lundastudier i nordisk språkvetenskap C7


Kirri, A. 1974: Diatesstudier i svenskt talspråk, Svenskans beskrivning 6, 144-159, University of Lund

Ljunggren, R. 1926: Om den opersonliga konstruktionen, Uppsala: Berlings
McCawley, J.D. 1968: Concerning the Base Component of a Transformational Grammar, Foundations of Language 4:243-269
Paul, H. 1909: Prinzipien der Sprachgeschichte, Halle: Niemeyer
Ross, J.R. 1967: Constraints on Variables in Syntax, reproduced by Indiana University Linguistics Club
Saussure, F. de 1916: Cours de Linguistique Générale, Paris: Payot
Severinson, K. 1972: Allmäna villkor för flyttning av satselement, Svenskans beskrivning 6, 184-197, University of Umeå
Wallin, I. 1935: Om det grammatiska subjektet, Stockholm: Fritzes