Chapter 4

The Structures AcI and A+I

4.1 Overview

In this chapter I argue, following Bolkema(1976, 1979a,b)\(^1\) that the structure known as AcI in Latin has two very different variants. On the one hand, object-control verbs select for two complements, an NP\(_{acc}\) and a VP\(_{np}\). These transitive verbs exercise a semantic restriction on the accusative NP. Only one kind of passive exists in which the accusative object is turned into a nominative subject. I propose to call this structure A+I.

On the other hand, there is a second structure, to which I suggest the term ‘AcI’ be restricted and which appears with intransitive verbs. No semantic restriction is exercised on the accusative NP, not even that it exist, not even tacitly. Here we have one sentential complement depending on the matrix verb. This is analysed as a nonfinite sentence. There is an impersonal passive, in which just the matrix verb takes passive form, leaving the complement clause unaffected. The semantically related group of *verba sentiendi et dicendi*—a proper subset of the AcI-verbs—allows for a second kind of passive, Nominativus cum Infinitivo (NcI)—which is a personal passive. This is explained via Raising to Subject.

The phenomenon of Raising to Subject is further explored. Instances of optional and obligatory raising are listed and discussed. A closing section addresses the copula in infinitive constructions. As it behaves differently from all the other verbs, a specification of the verbal hierarchy is suggested, separating the non-predicative verbs from the copula. A lexical specification of the copula ensures predicative case agreement. However, this is not enough to correctly predict case agreement between the subject and the predicative NP in object-control constructions with the matrix verb subcategorizing for

\(^1\)See section 9 of chapter 2
an NP_{acc} and a VP_{inf} consisting of the copula and a predicative NP_{acc}. Therefore an agreement stipulation is added to the control specification, mapping the HEAD-feature AGREEMENT of the NP subcategorized for by the matrix verb onto the specifier of the VP_{inf} with which it is semantically coindexed.

The central analysis of this work, excluding the results given in section 4.6, was already published in Schoof (2003). The fact that the material was published independently leads to some overlap with Chapter 2.

### 4.2 The Data

From chapter 2 it has become clear that the structure morphologically consisting of an NP_{acc} and a VP_{inf} which was referred to as Accusativus cum Infinitivo (Acl) by traditional grammarians, needs a finer syntactically motivated distinction. As we saw, Bolkestein (1976a) differentiates “between actual accusative cum infinitive clauses and constructions existing of an object-noun in the accusative caseform and a complementary infinitive” (1976:263). The latter construction is known as object-control. In the previous chapter we agreed to refer to this structure as A+I, so that we reserve the name of Acl to the true Acl alone. (1) illustrates the A+I-variety and (2) the Acl:

(1) cogo te abire.
   I-force you(acc) to-leave.
   ‘I force you to leave.’

(2) dico te abire.
   I-say you(acc) to-leave.
   ‘I say that you leave.’

If we take a closer look at the superficially analogous sentences (1) and (2) we realize syntactical as well as semantical differences. cogo is a transitive verb whilst dico is intransitive.²

(3) cogo te.
    I-force you(acc).
    ‘I force you.’

(4) *dico te.
    I-say you(acc).

²As we noted already in the discussion of (21) in chapter 2, dico can take a highly restricted set of direct objects. Following Cann, however, we classify dicere as an intransitive verb.
This fundamental distinction has profound consequences in structure:

- Transitive verbs such as *cogo* taking an accusative object and an infinitive verb phrase as their complements exercise a semantic restriction. The action or activity which is forced must not be perfective. It must still be possible with respect to the action of forcing. This restriction is missing in case of the intransitive verbs:

  (5) *cogo te abitum esse.*
  I-force you(acc) to-have-left.

  (6) *dico te abitum esse.*
  I-say you(acc) to-have-left.
  ‘I say that you have left.’

- The most striking syntactical difference, however, is found with regard to the formation of passive. The object control verb *cogo* offers only one form of passive, the personal passive in which the accusative NP becomes the subject:

  (7) *tu abire cogeris.*
  you(nom) to-leave are-forced(2ndsg).
  ‘You are forced to leave.’

Note that the verb agrees with the nominative subject ‘*tu*’. There is no impersonal passive in which the accusative NP would keep its case:

  (8) *te abire cogitur.*
  you(acc) to-leave is-forced(3rdsg).

This latter structure is found with Acl-verbs. Sentence (2) offers two passive variants: the impersonal passive (9) and the personal passive (10) coexist:

  (9) *te abire dicitur.*
  you(acc) to-leave is-said(3rdsg).
  ‘It is said that you leave.’

  (10) *tu abire diceris.*
  you(nom) to-leave are-said(2ndsg).
  ‘You are said to leave.’

---

3 In Latin, the subject is not always phonetically realized. Note that if a personal pronoun is the subject, this pronoun is often omitted.
(10) morphologically resembles (7). The verb *dicēris* is second person singular and thus agrees with the nominative subject *tu*. In (9), the passive *dicītur* shows third person singular inflection. There is no personal subject. The pronoun *te* shows accusative case. So it cannot be the subject of *dicītur*. There seem to be two possible ways how to analyse (9) and the correspondent active (2). We could either claim that in (2), the unit *te abīre* is subcategorized for by the matrix verb *dico* as a direct object. This would imply that in (9), *te abīre* forms the subject of the matrix verb *dicītur*. Or we could say that in (2), *dico* subcategorizes for a nonfinite clause *te abīre* which is not its object. Then we interpret the passive *dicītur* in (9) as a subjectless impersonal passive, subcategorizing for the nonfinite clause *te abīre*. In the following, we will see which analysis is more suitable.

- The *verba sentiendi* (verbs of perception) participate in both structures. Thus they govern both A+I and Aci.\(^4\) This distinction was already drawn by Bolkestein (1976a) who notices:\(^5\)

> “Apparently, if the OBJECT-function with *audīre* is filled by a single noun, there are certain semantic restrictions upon the kind of noun which is allowed as a filler. These restrictions may be expressed in the following way: the noun possible as a filler must denote either a sound [..], or some object or being which is able to produce some kind of sound [..]. This means that *audīre* when it governs a noun always refers to direct perception of sound” (1976:284).

The Aci-construction lacks these semantic restrictions. (11a,b) illustrate Bolkestein’s points. We suggest that the accusative NP is not a direct object of the matrix clause and this is supported by the ungrammaticality of (12a). In constructions such as (12b)

> “neither the referent of the accusative noun within the aci-clause, nor of the entire Aci-clause, ..., need necessarily refer to a thing, respectively event or state which is itself audible at the time referred to by the verb audīre” (Bolkestein (1976a:285)).

---

\(^4\)The situation with the *verba sentiendi* is highly complex. They participate furthermore in a third construction, the *Accusativus cum Participio* (AcP). Discussion of the use of the AcP, compared to the use of the Aci, will follow in the next chapter.

\(^5\)Cf. 1976:283-286
4.2. THE DATA

(11a) audio puellam.
I-hear girl(acc).
‘I hear the girl.’

(11b) audio puellam venire.
I-hear girl(acc) to-come.
‘I hear that the girl comes.’

(12a) *audivit hereditatem.
he-heard legacy(acc).

(12b) audivit venisse hereditatem.
he-heard to-have-come legacy(acc).
‘He heard that a legacy had come.’

Cic., Verr., 2.21
Examples (12a,b) are taken from Bolkestein(1976:284). Her examples are numbered (15a) and (15b).

Audire as an AcI-construction also allows an impersonal passive:

(13) auditum est pantheras, .. remedium quoddam habere ..
heard it-is panthers(acc), .. remedy(acc) some(acc) to-have ..
‘It is heard that panthers have some remedy ..’

Cic., N.D., 2, 126, 101

Impersonal AcI-constructions also exist in the active:

(14) constat Caesarem dictatorem esse.
it-is-certain Cesar(acc) dictator(acc) to-be.
‘It is certain that Cesar is a dictator.’

We have to note that constructions like (14) are always found with intransitive verbs that do not passivize—as, for example, oportet ‘(it) must’, notum est ‘it is known’. In section 9.2 of the second chapter we saw that Raising to Subject exists independently in the Latin language. Since it is an important point of our argumentation that we independently need a rule relating nonfinite embedded clauses with accusative subjects to similar structures in which the notional subject of the infinitive appears as the nominative subject of the matrix clause, we review the crucial evidence here. We encounter Raising to Subject with this group of impersonal verbs existing just in the third person singular. For illustration, (93) and (94) of chapter 2 are repeated here as (16) and (15):
(15) ea fieri oportet.
these(acc.pl.n.) to-happen must(sg.).
‘These things must happen.’

(16) ea oportent fieri.
these(nom.pl.n.) must(3pl.) to-happen.
‘These things must happen.’

(15) is the unraised variant. The Aci-construction *ea fieri* is subcategorized for by the matrix verb *oportet*. In (16), we encounter Raising to Subject. Here, *ea* is the raised nominative subject of the matrix verb *oportent*. Note that the Raising to Subject variants of these sentences are extremely scarce. Nonetheless, the existence of these structures in combinations with intransitive verbs demonstrates the plausibility of a syntactic category Aci, as well as the Raising to Subject rule. In (17), an attested example of Raising to Subject is given:

(17) fieri haec libertates oportuerant
to-happen these(acc.pl) liberties(acc.pl) must(3sg).
‘These liberties had had to be realized.’

*Gregorius Magnus, Epistulae, 1, 53p.78,25*

The data offer enough evidence to show that there are two different structures. Following Bolkestein, I suggest to call them **A+I** (1) and **Aci** (2). In the next section I will offer an analysis of the data presented here. The analysis will be formulated within the framework of HPSG.

### 4.3 Analysis of the A+I

The A+I, found with object-control-verbs, should be analysed as consisting of two constituents, the accusative object (NP<sub>acc</sub>) and an infinitival complement (VP<sub>inf</sub>). The (standard) object-control structure looks as follows:

```
A+I    S
  VP  NP  VP
    cogo  te abire
```

The lexical entry for *cogo* is thus:
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prefinal version:

(18) {cogo} obj-ctrl-verb

\[
\begin{align*}
\text{arg-st} & : \langle \text{NP} \text{[4]} \text{ NP} \text{[3]} \text{ VP} \rangle \\
\text{sem} & : \langle \text{index} \text{ s} \rangle \\
\end{align*}
\]

Following Pollard and Sag (1994) and Sag and Wasow (1999), I treat passive in terms of a lexical rule. A morphological function maps a transitive-verb-lexeme into the corresponding passive verb. It generates a passive lexeme to which the appropriate endings for number and person\(^6\) are added.

(19) Passive Lexical Rule

\[
\left\langle \text{tv-lvm} \right\rangle \Rightarrow \langle \text{pass}, \text{word} \rangle
\]

The results of rule (19) are specified in (20). The order of the elements on the argument-structure list is rearranged. The first element, the agent—corresponding to the subject in an active sentence—is removed and turned into an optionally adjoined PP. The second element, the accusative object, becomes the subject of the passive sentence. Due to this rule the main verb of (1) is mapped into that of (7).

\[
\begin{align*}
\text{arg-st} & : \langle \text{NP} \text{[4]} \text{ NP} \text{[3]} \text{ VP} \rangle \\
\text{sem} & : \langle \text{index} \text{ s} \rangle \\
\end{align*}
\]

\(^6\)...and gender in verb forms specifying for gender
The *verba sentiendi* partly belong to the group of object-control verbs. One of the readings of (11b) would be analogously analysed:

(21) **audio**

\[
\begin{align*}
\text{arg-st} & \quad \left\langle \text{NP}^\text{a} \quad \text{NP}^\text{a} \quad \text{VP} \right\rangle \\
\text{sem} & \quad \text{restr} \\
& \quad \text{index s} \\
& \quad \begin{bmatrix}
\text{relh} & \text{audire} \\
\text{sit} & \text{s} \\
\text{audiens} & \text{ref} \\
\text{auditus} & \text{ref} \\
\text{soa-arg} & \text{a}
\end{bmatrix}
\end{align*}
\]

The hearer as well as the object heard are referred to. The semantic restriction exercised on the embedded infinitive is structure-shared by the matrix verb.

### 4.4 Analysis of the AcI

We turn now to a construction similar to raising.

#### 4.4.1 The Syntactic Category of the AcI

We shall first inquire after the syntactic category of the AcI.

##### 4.4.1.1 Are there Two Possible Analyses?

The analysis of the A+I turned out to be relatively simple. It is evident that we have no clausal construction. The NP\textsubscript{a} is the direct object of the transitive matrix verb in active voice. In passive voice, the NP\textsubscript{a} is the subject of the matrix verb. But what about the AcI? As we saw in the discussion of the literature, there was a controversial debate amongst Latinists concerning the question of the status of the AcI. Let us briefly refer to this here: in Transformational Grammar, the AcI was taken to be a sentence in deep structure which was transformed into an accusative NP in surface structure.
4.4. ANALYSIS OF THE ACI

The distinction between deep and surface structure forced the authors to operate within terms of categorial shift. Bolkstein already argued against this analysis and made the suggestion to analyse the AcI as a nonfinite clause. But is Raising to Object really no acceptable alternative? This is what we will focus on now.

Given the ungrammaticality of (12a), we prefer not to analyse the accusative NP as the object of the matrix verb. No immediate perception of the object referred to takes place. It seems that NP\textsubscript{acc} and VP\textsubscript{inf} form one single constituent. Note that this means that we will not follow the standard analysis of HPSG object raising. What kind of structure is it?

**AcI, preliminary version**

```
S
  VP
    audire
  NP
    hereditatem
  VP
    venisse
```

The question is whether the AcI-clause *hereditatem venisse* should be analysed as an object of the matrix verb *audire* or not. The impersonal passive could then be explained as a matrix verb, taking the AcI as its subject. The AcI as direct object of the active clause and subject of the passive clause is morphologically identical. Is this analysis plausible?

### 4.4.1.2 The AcI-verb *admonere*

As noted by Bolkstein (1976) and as mentioned in section 9 of chapter 2, the verb *admonere* sometimes constructs as an A+I verb, subcategorizing for an NP as its object and a VP\textsubscript{inf} as in (22):

(22) *admonere* te venire.
    "I warn you(acc) to come."
    ‘I warn you to come.’

Below, the structure of (22) is given:

```
admonere\textsubscript{1}
S
  VP
    *admonere*
  NP\textsubscript{acc}
  VP\textsubscript{inf}
    te
    venire
```
However, *admonere* is also found subcategorizing for both an NP<sub>acc</sub>-object and an Acl-clause, as is illustrated in (23):

(23)  

\[
\begin{align*} 
\text{admoneo} & \text{ te } \text{ eum venire.} \\
\text{I-warn} & \text{ you(acc) him to-come.} \\
\text{‘I warn you that he is coming.’} 
\end{align*}
\]

We shall assume that the structure of (23) is as follows:

\[
\text{admoneere}_2 \quad \text{S} \\
\text{VP} \quad \text{NP}_{acc} \quad \text{Acl} \\
\text{admoneo} \quad \text{te} \quad \text{NP}_{acc} \quad \text{VP}_{inf} \\
\text{eum} \quad \text{venire} 
\]

Supporting this analysis is the fact that there is only one passive counterpart for (23), which is given in (24). Note that (25a) and (25b) are ungrammatical.

(24)  

\[
\begin{align*} 
\text{tu} & \text{ admoneris eum venire.} \\
\text{you(nom) are.warned him to-come.} \\
\text{‘You are warned that he is coming.’} 
\end{align*}
\]

(25a)  

\[
\begin{align*} 
*\text{admonetur} & \text{ te eum venire.} \\
*\text{is.warned} & \text{ you(acc) him to-come.} \\
*\text{‘It is warned you that he is coming.’} 
\end{align*}
\]

(25b)  

\[
\begin{align*} 
*\text{is} & \text{ admonetur te venire.} \\
*\text{he(nom) is.warned you(acc) to-come.} \\
*\text{‘He is warned that you come.’} 
\end{align*}
\]

If the Acl were an accusative object of *admoneo* in (24), sentence (25) ought to be grammatical. The ungrammaticality of (25) suggests that the Acl *eum venire* is not a direct object of the matrix verb *admoneo* in (23). With *admonere*, the Acl must have a different status than that of a direct object. We have not argued that the category of *eum venire* must be Acl, but the limited number of passive variants suggests that *eum venire* is a constituent, and the internal composition suggests that it is an Acl. As we see that the Acl is not a direct object in (23), we see no further reason to assume it is an object with other verbs subcategorizing for this structure.

\[\text{Note that rule (19) correctly blocks example (25b), as a second object does not get promoted by the rule.}\]
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4.4.1.3 Negation and Adverbial Modification of the ACI

We further explore the question of the syntactic category of the ACI constituent.\(^8\) If the ACI were assumed to be an NP, the analysis would run into difficulties with regard to the following points. The ACI has the internal syntax of a clause. Not only is it headed by a verb (as clauses but not noun phrases are in general), but it has the subconstituents NP and VP, and it can be negated (26) and modified by sentential adverbs (27).

- negation

(26) non id modo Ulixes respondet, non esse a se
not this(acc) only Ulixes replies, not to-be by self
id facinus admissum, sed sibi nullas
that(acc) crime(acc) committed(acc), but self(dat) no(acc)
cum Aiax inimiciitas fuisset
with Aiax(abl) hostilities(acc) to-have-been
‘Ulixes replies not only that he did not commit that crime, but that he had no quarrel with Aiax.’

Quint., Inst., 4, 2, 13

- adverbial modification

(27) “Poposci”, “momordi”, “pupugi”,
“I-have-demanded”, “I-have-bitten”, “I-have-pricked”,
“cucurri” probabiliter dici videtur.
“I-have-run” probably to-be-said it-is-seen
‘It is seen that “I have demanded”, “I have bitten”, “I have pricked”, “I have run” can probably be said.’

Aulus Gellius, Noctes Atticae, 6, 9, 1

These are normally clausal properties. They indicate that a sentential complement is involved, if one assumes that negation and sentential modifiers (adverbials) apply to sentences but not to verb phrases.

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\(^8\) Another problem concerns the status of the matrix clause the ACI is dependent on. Since in Latin the realization of subjects of finite clauses is optional, the question arises whether the subjectless finite VP itself should be analysed as a clause or not, i.e. whether the ACI depends on the VP-node of the matrix clause or on the S-node. I decided in favour of the second option in this place. It is a question of the status of Latin subjects of finite clauses which I will not discuss here.
4.4.1.4 Is Raising to Object Plausible within the Framework of HPSG?

Let us once again turn to (2), repeated here, for the sake of convenience as (28):

(28) dico te abire.
      I-say you(acc) to-leave.
      ‘I say that you leave.’

Although the previous subsections have already demonstrated that the Latin data speak against an analysis of the AcI involving a matrix accusative object, we will also inspect this possibility from within the perspective of HPSG. If *dico* were a raising verb along the lines generally accepted for English object raising verbs such as ‘believe’, it would have the ARG-STR indicated in (29):

(29) dico
    \[
    \begin{array}{c}
    \text{arg-st} \\
    \text{sem}
    \end{array}
    \begin{bmatrix}
    \text{vform} & inf \\
    \text{spr} & \langle \square \rangle \\
    \text{sem} & [\text{index} \langle \square \rangle] \\
    \text{index} & s \\
    \text{restr} & \begin{bmatrix}
    \text{reln} & \text{dicere} \\
    \text{sit} & s \\
    \text{believer} & \text{ref} \\
    \text{soa} & \square
    \end{bmatrix}
    \end{bmatrix}
    \]

The representation given in (29) reflects a structure in which *dicere* denotes a two-place relation between an individual, the speaker, and a proposition, expressed by the AcI. The semantic two-place relation is realized by a three-place syntactic dependency structure—holding between subject \[ \square \] and object \[ \square \] NPs together with the proposition-denoting VP. In Latin, the structure indicated in (29) is not associated with an impersonal passive. The only passive which can be associated with (29) is personal passive, in which the accusative NP would get promoted into subject position. But, as we noted emphatically in (9) above, but also in chapter 2 (8), there is likewise an impersonal passive associated with (28), and (29) leaves no room for its explanation.

Yet this is not the only difficulty a Raising to Object Analysis implies. There are impersonal verbs in Latin which are only realized in the third
person singular.9 These verbs are necessarily subjectless. For example, most verbs denoting the activities of natural phenomena are impersonal, such as *pluit* ‘it rains’, *ningit* ‘it snows’, *tonat* ‘it thunders’. If the AcI were correctly analysed in terms of Raising to Object, then (30) could not be grammatical:

(30) Inde iterum novendiale instauratum quod in Armilustro
then again nine-days-rite was-repeated because in Armilustrum
lapidibus visum pluere,
stones(abl) was-seen to-rain
‘Then again the nine days of rites were repeated, because in the
Arilustrum a rain of stones was seen.’

Liv., 27, 37, 4

The tree below illustrates the structure of (30):

**AcI sans accusative**

```
  S
 / \   /  \   /
 VP PP   AcI
   /      /
  visum in Armilustro NP_a
   \       /     VP
        lapidibus pluere
```

In (30), the impersonal matrix verb *visum (est)* subcategories for an AcI with an impersonal VP_{inf}. As *pluere* is an impersonal verb, this rules out the analysis in terms of Raising to Object, as there is no NP to control the subjectless VP_{inf} *pluere*.

Our conclusion is that the AcI is best analysed in clausal terms. The position of the AcI may not be taken by an independent NP_{acc} plus VP_{inf}, but only by a (nonfinite) clause. We note in passing that our last observation, which is novel, indicates that the traditional terminology may not be taken as defining. The accusative NP in the *Accusativus cum Infinitivo* is not strictly required. The AcI is an infinitival clause.

### 4.4.2 External Syntax of the AcI

In the previous subsection, we gave sufficient counter-evidence against an analysis of the AcI in terms of Raising to Object. If the AcI were analysed as an NP, one would have to explain the transitivization of otherwise intransitive verbs (like *dico* (2) and *constat* (14)) if one assumed that AcI were

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9See section 3.3.5
a subcategory within NP. These problems speak against an NP-analysis as
does, of course, the NP-VP internal syntax of the AcI. An analysis in terms of
two separate constituents (\(\text{NP}_{\text{acc}}\) and \(\text{VP}_{\text{inf}}\)) would not differentiate between
the two structures described in section 1.

Impersonal constructions should not be expected to appear involving the
AcI if it were composed of an accusative NP which combines with a controlled
VP. Especially the occurrence of the impersonal passive is highly problematic
for an analysis in terms of Raising to Object. The fact that matrix AcI
clauses form impersonal, and not personal passives indicates that there is no
accusative object in the matrix clause.

In Latin, impersonal passives can never take a direct object. Thus the
following structure is almost certainly not grammatical:

\[(30a) \quad \text{*dicitur fabulam.} \]
\[\quad \text{it-is-said tale(acc).} \]
\[\quad \text{‘A story is told.’} \]

If (30a) were grammatical, the existence of impersonal passives in AcI
clauses would no longer be evidence of the accusative NP being an AcI-
internal constituent and definitely not being an object of the matrix verb\(^{10}\).
The existence of impersonal passives combined with possible accusative ob-
jects was checked in the BTL corpus. Of course, it is impossible to state
with absolute certainty that such forms are ungrammatical. But we did not
find them, and they are not mentioned by Kühlner and Stegmann (1912),
Leumann, Hofmann, and Szantyr (1965), Meillet and Vendryès (1924) or
Pinkster (1984). They are likewise not mentioned in the dissertations on
the Latin passive written by Ernout (1909) and Kilpiö (1989). Therefore we
argue that the existence of such constructions is highly improbable.

The impersonal passive treats the AcI as a unit. If there were no constitut-
ent joining the \(\text{NP}_{\text{acc}}\) and the \(\text{VP}_{\text{inf}}\), one would expect the passive to promote
just the \(\text{NP}_{\text{acc}}\) to the position of passive (nominative) matrix subject. There-
fore I suggest that one analyse the AcI in clausal terms:

\[
\text{AcI} \\
\begin{array}{c}
\text{S} \\
\text{VP} \\
\text{audivit} \\
\text{NP} \\
\text{hereditatem} \\
\text{venisse} \\
\end{array}
\]

\[\text{NP}_{\text{inf}}\]

\(^{10}\)Note, however, that there are languages in which structures like (90) are grammatical.
For a discussion on Ukrainian, see Sobin (1985); for a discussion of German and Lithuanian
passives, see Nerbonne (1982).
4.4. ANALYSIS OF THE ACI

We inquire in this section after the grammatical relation which the AcI bears to its governing verb. Since AcIs do not appear freely, we prefer to identify the matrix verb as the element which licenses them. But they are no accusative objects of the matrix verbs which license them.

4.4.3 Analysis of the AcI in HPSG

From the evidence gathered in the previous subsections of this chapter we conclude that the AcI is best analysed as an infinitival clause. A grammatical rule assigns accusative case to subjects of infinitival clauses. We suggest that this be a special case of the head-specifier rule introduced in section 4.1 of the previous chapter. Subjects of infinitival clauses are generally expressed,11 unlike subjects of finite clauses which are often left unexpressed.

\[
\begin{align*}
\text{NP}_{\text{acc}} & \quad \text{VP}_{\text{inf}} \\
\text{head} & \quad \text{spr} & \quad \langle \rangle \\
\text{comps} & \quad \langle \rangle
\end{align*}
\]

With regard to the formation of passive the same lexical rule that was already used in the analysis of the A+I is applied:

\[
\begin{align*}
\left[ \begin{array}{l}
\text{itv-lxm} \\
\text{spr} \\
\text{comps} \\
\text{arg-st}
\end{array} \right] \Rightarrow \left\langle f_{\text{pass}}(\text{NP}), \right. \\
\left. \begin{array}{l}
\text{itv-pass} \\
\text{spr} \\
\text{comps} \\
\text{arg-st}
\end{array} \rightangle \\
\text{NP} \quad \langle S \rangle \quad \langle S, \ldots [PP] \rangle
\end{align*}
\]

As there is no direct object which can be promoted into subject position it follows that the matrix clause of impersonal passive constructions is neces-

11In colloquial language the subject is sometimes omitted, when it is obvious from the context cf. Leumann, Hofmann, and Szantyr(1965:362,par.198).
sarily subjectless.\textsuperscript{12} The verb form is always the third person singular. The impersonal active (14) is analysed in analogous terms:

\begin{align*}
(33) \quad \textbf{constat} \\
\begin{array}{c}
\text{head} \\
\text{arg-st}
\end{array}
\begin{array}{c}
[VFORM \text{ act}] \\
\langle S,.. \rangle
\end{array}
\end{align*}

As an impersonal construction it is subjectless and always takes the third person singular.\textsuperscript{13}

\section*{4.4.4 Chomsky’s Notion of Exceptional Case Marking}

In the section above we have given our analysis of the AcI set in the framework of HPSG. It is clear by now that this analysis is totally different from the analysis of Raising to Object, which HPSG generally invokes to handle AcI-structures in other languages such as English or German. Therefore it is interesting to note that our analysis resembles remarkably the analysis proposed by Chomsky (1986) for English verbs like believe which HPSG treats in terms of Raising to Object.\textsuperscript{14} Let us take an example:

(a) Frank believes him to be a liar.

In Government and Binding it is now argued that in (a) believe case-marks the NP \textit{him}. \textit{him} is the subject of the complement inflectional phrase (IP) \textit{him to be a liar}. The tree below illustrates the analysis of (a) in GB terms:

\textsuperscript{12}Latin disposes of no expletiva.

\textsuperscript{13}Of course, it would be more elegant and theoretically smoother to have a more general passive rule, treating personal and impersonal passives in the same way. We have not worked that out. A more refined elaboration of passive rules leading to this result should be possible in HPSG.

\textsuperscript{14}For a discussion of the Raising analysis in HPSG, see section 6 of the previous chapter.
As we see in (b), *believe* is separated from *him* by a maximal projection, infinitival IP. By assumption, infinitival IP will not constitute a barrier for outside government and hence *believe* can assign case to the relevant NP. This situation in which a matrix verb like *believe* can govern into an IP and assign case to its subject NP is referred to as **exceptional case marking (ECM)**. Although our analysis of the Latin AcI clearly differs from ECM as proposed by Chomsky (1986), there are parallels as in our analysis, case is also assigned to a subject of a clause that is not raised into its object position in the matrix clause. In our analysis the infinitival head of the embedded clause is responsible for the case marking on its subject. We thus account for the accusative case marking on the subject of the AcI when it is used outside of the canonical “raising” structures, e.g. when it is used in apposition. See (31).

### 4.5 Analysis of the NcI

The AcI offers a second passive, the personal passive, *nominativus cum infinitivo (NcI)*. At first sight (10) resembles (7). Both sentences are repeated here as (34) and (35) for the convenience of the reader:
(34) tu abire cogeris.
   you(nom) to-leave are-forced.
   'You are forced to leave.'

(35) tu abire diceris.
   you(nom) to-leave are-said.
   'You are said to leave.'

However, a closer look revealed differences: both structures consist of a passive matrix verb, its subject and an extra complement, VP<sub>mp</sub>. (34) is the only passive correspondent to (1), repeated here as (36):

(36) cogito te abire.
   I-force you(acc) to-leave.
   'I force you to leave.'

Impersonal passive is never found with A+I-verbs, only with AcI-verbs:

(37) *te abire cogituri.
    you(acc) to-leave is-forced.

(38) te abire dicituri.
    you(acc) to-leave is-said.
    'You are said to leave.'

Moreover, with respect to the AcI-verbs there is another important issue to be noticed: those licensing personal passive (NcI) form a perfect subset of the group of AcI-verbs licensing impersonal passive. There is no example of a Latin AcI-verb allowing for only NcI-passive, although—as already noticed in the previous chapter (9.4)—examples can be found that allow only for impersonal passive, as in (39):

(39a) constituì eos proficiisci.
    I-have-decided them(acc) to-leave.
    'I have decided that they should leave.'

(39b) eos proficiisci constitutum est.
    the(acc) to-leave is-decided(nom, sg, neutr).
    'It is decided that they would leave.'

(39c) *Ii constituti sunt proficiisci.
    they(nom) are-decided(nom, pl, masc) to-leave.
    'They have been decided to leave.'

(examples taken from Bolkstein(1976a:26))
So the Ncl-verbs form a subgroup of the Acl-verbs. A closer look reveals that they all belong to a single semantic group. This is traditionally called the group of verba sentiendi et dicendi. With these verbs we find two possible passive constructions, impersonal and personal. We propose that personal passives are generated via Raising to Subject. Raising to Subject explains why the second passive (35) superficially resembles the single passive of A+I-verbs (34). The subject in (35) is raised into its nominative position from the position of accusative subject of the Acl in the impersonal passive. This analysis presupposes no Raising to Object with the analysis of the active sentence (2) dico te abire. Taking the examples (39a-c) into account, it seems plausible to assume that the personal (Ncl-)passive presupposes the existence of the impersonal passive construction. All Acl-verbs licensing personal passive likewise construct with impersonal passive. The opposite, however, is not true. Therefore, the Ncl should best be interpreted as derived from the impersonal passive or as personalization of the impersonal passive.\(^\text{15}\)

The existence of two parallel passive forms with this set of verbs is definitely pragmatically/ contextually motivated, as they are semantically identical. If we compare (9) to (10) we see that the Acl-internal accusative subject (te) becomes raised to subject position within the matrix clause (tu). There is agreement of person, number (and gender in forms specifying for gender) between the matrix verb and its (raised) subject, and no agreement in the unraised case.\(^\text{16}\)

---

**Raising to Subject, passive**

![Diagram](diagram.png)

\(^{15}\)This was already the traditional interpretation, cf. Woodcock (1959:22). There is historical evidence that the impersonal passive construction is older than the personal one which gradually evolved so that two passive forms were coexisting. An analysis of the Ncl in terms of Raising to Subject as derived from the impersonal passive is also found in Pillinger (1980) (Theoretical Implications II:78 - 82). Bolkestein (1979) only discusses active Ncl-constructions (30f) which she interprets in terms of Raising to Subject, leaving the passive variant undisguised.

\(^{16}\)Bolkestein (1982) is an investigation into the differences between the use of the impersonal passive and the Ncl-passive. The pragmatic functions topic and focus play a decisive role in determining the possibility of occurrence of these two syntactic constructions which are semantically identical. The Ncl is used when only the nominative NP comes into focus. The embedded predication then is “pragmatically split up” (Bolkestein, 1982:134)). If, however, the whole predication is focused it “pragmatically functions as a unit”. This is the case with the impersonal passive.
Another lexical rule (subject raising) provides for the personalization of the impersonal passive:

(40) dicitur te abire. \(\Rightarrow\) tu abire diceris.
    it-is-said you(acc) to-leave. \(\Rightarrow\) you(nom) to-leave are-said.
    ‘You are said to leave.’

(41a) \textbf{dicitur}
\[
\begin{align*}
\text{arg-str} & \quad \langle S_{\text{obj}} \rangle \\
\text{sem} & \quad \text{RESTR} \left[ \begin{array}{c}
\text{rel} \\
\text{soa-arg} \end{array} \right. \\
& \quad \left. \begin{array}{c}
dicere \\
\text{soa-arg} \end{array} \right]
\end{align*}
\]

(41b) \textbf{diceris}
\[
\begin{align*}
\text{arg-str} & \quad \langle \text{NP} \rangle \quad \langle \text{VP} \rangle \\
\text{sem} & \quad \text{RESTR} \left[ \begin{array}{c}
\text{reln} \\
\text{soa-arg} \end{array} \right. \\
& \quad \left. \begin{array}{c}
dicere \\
\text{soa-arg} \end{array} \right]
\end{align*}
\]

As has been mentioned previously (see (15-17)), Ncl-constructions also exist in the active, although they are extremely rare. The same mechanism of Raising to Subject is effective here as in the passive case:

(42) quos praetextatos curru
    those(acc.pl) wearing-a-purple-garnished-toga(acc.pl) in-chariot
    vehi cum patre oportuerat
    to-ride with father should-have(sg)
    ‘those wearing a purple-garnished toga should have ridden with their father in the chariot’

\textit{Liv.,} 45, 40, 7

(43) fieri haec libertates oportuerant.
    to-happen these(nom.pl) liberties(nom.pl) must(3pl)
    ‘These liberties had had to be realized.’

\textit{Gregorius Magnus, Epistulae,} 1, 53p. 78, 25

(42) is an impersonal active construction with the matrix verb in the singular. This matrix verb (\textit{oportuerat}) subcategorizes for an infinitival clause
(Ac1). (43) is a personal active construction. The matrix verb (*oportuerunt*) is in the plural, there is a (nominative) subject and an infinitive. In (43) the same mechanism of Raising to Subject takes place as has already been noted in (41). Whilst (41) is passive, we find here its active counterpart. The matrix verb in (43) subcategorizes for a nominative specifier and an infinitival VP-complement.

**Rais. to Subj.,active**

\[ S \quad \Rightarrow \quad S \]

\[ \text{VP} \quad \text{S}_{\text{nfl}} \quad \text{NP} \quad \text{VP}_{\text{inf}} \]

\[ \begin{align*}
\text{oportuerat} & \quad \text{haec} & \quad \text{fieri} \\
\text{[arg-str } & \quad \langle S_{\text{inf}}, \square \rangle & \quad \text{[sem RESTR } & \quad \langle \text{rel oportuerat} \rangle \\
\text{soa-arg } & \quad \text{\square} & \quad \text{]} \end{align*} \]

\[ \begin{align*}
\text{[arg-str } & \quad \langle \text{NP}, \square \rangle & \quad \text{[sem restr } & \quad \langle \text{reln oportere} \rangle \\
\text{VP } & \quad \text{[VFORM inf]} & \quad \text{soa-arg } & \quad \text{\square} \}\end{align*} \]

We summarize here the motivation for a differentiation between A+I- and AcI-verbs and the main lines of the analysis:

- **A+I-verbs are transitive.**

---

17 For discussion of *oportere* see also Bolkestein (1979:30f.).

18 Bolkestein (1979:30f.) notices that the Raising variant appears “only under specific conditions: the nominal to be raised must be a neuter pronoun and the infinitive of the clause must be passive voice.” However, this is only true for anteclassical Latin (cf. the entry for *opertet* in Lewis and Short (1879/1966)). In the postclassical era of Gregory I (fifth century AD) Raising affects an NP consisting of a common noun specified by a demonstrative pronoun (see (43)).
• They participate in object-control constructions.

• They exercise a semantic restriction on their two complements, accusative object and infinitival verb phrase.

• In passive the accusative object becomes the subject.

• They do not form impersonal passives.

• Acl-verbs are intransitive.

• They take an infinitival clause as their oblique complement.

• No semantic restriction is exercised on this complement which consists of an accusative subject and an infinitival verb phrase.

• Passive is impersonal: the matrix verb forms a passive (third person sing.), leaving the Acl-clause unaffected.

• The accusative NP is in fact not a critical part of the construction, which may be instantiated with an obligatorily subjectless infinitival clause.

• A semantically circumscribed subset of these Acl-verbs (group of verba sentiendi et dicendi) allows an additional kind of passive. With these verbs impersonal and personal passive coexist. Personal passive (Ncl) is derived via the process of Raising to Subject.

• The verba sentiendi are structurally ambiguous. If the accusative NP designates an object of immediate perception the matrix verb behaves as an A+I-verb. In case there is no immediate perception we have an Acl-structure allowing for two different passives.
4.6 A Closer Look at Raising to Subject in Latin

The analysis of the A+I and Acl has shown us that Raising to Object does not occur in the Latin language. However, we postulated that Raising to Subject does form a part of Latin grammar. So far, two variants of a single rule of Raising to Subject have been discussed. We encounter Raising to Subject in the personal (Ncl)-passive of Acl-constructions. Acl-constructions offer two related passive constructions, impersonal and personal. Personal passive is explained via the Raising mechanism.\(^{19}\) We also find Raising to Subject marginally with impersonal matrix verbs that do not appear in passive. Here, the raised variant always co-exists with the unraised one.\(^{20}\) In this section, we have a closer look at further possible occurrences of Raising to Subject.\(^{21}\)

4.6.1 Verba Sentendi in Acl-constructions

Personal passives which involve Raising to Subject are quite frequent with the structurally ambiguous verba sentendi. Bolkestein noticed\(^{22}\) that verba sentendi participate in both A+I- and Acl-constructions. If a verbum sentendi constructs as an Acl-verb, Raising to Subject is frequently found. The following four examples give evidence of the parallel existence of (unraised) impersonal passives and raised personal passives with verba sentendi used as Acl-verbs. (46) illustrates the impersonal passive with the matrix verb videor:

(46) non mihi videtur, ad beate vivendum satis posse
not to-me(dat) is-seen to blessed living(acc,ger) enough can
virtum
virtue(acc)
‘It does not seem to me that there can be enough virtue for a blessed
living.’

Cic., Tusc., 5, 5, 12

The passive matrix verb videtur subcategorizes for an Acl-clause. virtutem is the accusative subject and satis posse is the verbal infinitive of this

\(^{19}\)See pages 146-149 of this chapter for a detailed discussion.

\(^{20}\)See page 149 of this chapter for a detailed discussion. Compare also section 9.2 of the second chapter as well as page 134.

\(^{21}\)Latin does not allow for Raising to Subject with nouns or adjectives. An interesting analysis of Raising to Subject with English nouns and adjectives is given in Flickinger and Nerbonne (1992).

\(^{22}\)See page 132.
clause. The tree structure is given below:

**structure of (46)**

```
  S
 /\   /
 NP VP S_ACI
 |   |
 mihi videtur
```

We turn now to (47):

(47) neque iste mihi videtur se ad damnationem solum
    not he(acc) me(dat) is-seen himself at condemnation mere
    offerre
to-offer
    ‘I feel, moreover, that he is not presenting himself for a mere verdict
    of condemnation.’

*Cic.*, *Verr.*, 2, 1, 8

Again, the matrix verb is the passive *videtur*. However, this time *videtur*
constructs personally. *iste* is the nominative raised subject of *videtur*, *se* is
the accusative object of the verbal infinitive *offerre*. The tree below illustrates
the structure of (47):

**structure of (47)**

```
  S
 /\   /
 NP VP VP_inf
 |   |
 iste videtur se offerre
```

The parallel existence of unraised (impersonal) and raised (personal) passive
is not restricted to the verb *videre* ‘to see’, alone. The *verbum sentiendi*
*audire*, if constructing as an Acl-verb, shows exactly the same behaviour.
(48) illustrates impersonal passive with *audire*:

(48) Tarquinios esse in exercitu Latinorum auditus est.
    Tarquinii(acc) to-be in army Latini(gen) heard is.
    ‘It is heard that the Tarquinii are in the army of the Latini.’

*Liv.*, 2, 19, 3

*auditum est* is the subjectless matrix verb. It subcategorizes for the Acl
*Tarquinios esse in exercitu Latinorum*. A personal passive is found in (49):

"
4.6. A CLOSER LOOK AT RAISING TO SUBJECT IN LATIN

(49) Bibulus nondum audiebatur esse in Syria.
Bibulus(nom) never was-heard to-be in Syria
Bibulus was never said to have been in Syria.

*Cic.* *Att.*, 5, 18

In (49), *Bibulus* is the nominative subject of the passive verb *audiebatur*. This verb subcategorizes for the VP$_{inf}$ *esse in Syria*.

So, comparison of (48) and (49) as well as (46) and (47) demonstrates that both *verba sentiendi audire* and *videre* are found in both A+I as well as in AcI-constructions.

4.6.2 More on Subject Raising

Let us once again return to Pepicello who initiated the discussion focussing on the question whether Raising to Subject occurs in Latin or not. Pepicello strangely claims “that Raising into subject position does not occur in one environment where we might expect it to... Thus, while we find examples like [(50)] where no Raising has applied, we do not find sentences like [(51)]” (1976:212f).

(50) Quid rectum sit appareat.
what(nom) right is(subj) is-obvious.
‘The right course is obvious.’

*Cic.* *Epist.*, 5, 19

(51) *Marcus apparet mortuus esse.*
Marcus(nom) he-seems dead to-be.
‘Marcus seems to be dead.’

In (50), the matrix verb *apparet* subcategorizes for a final clause, *quid rectum sit*. Although we suspect that Pepicello is right concerning the ungrammaticality of (51), he is not right in claiming that no Raising to Subject exists with *apparet*. Raising to Subject does occur if the VP$_{inf}$ subcategorized for by the matrix verb *apparet* is passive, such as in (52):
(52) ut membra ad quandam rationem vivendi data
that limbs(nom) for some reason living(gen) given(nom)
esse appareat
to-be appear(3pl)
‘that limbs appear to be given for some reason of living’

Cic., Fin., 3, 7, 23

The unraised variant of (52) is (53):

(53) ut appareat membra ad quandam rationem vivendi
that it-appears(subj) limbs(acc) for some reason living(gen)
data esse
given(acc) to-be
‘that limbs appear to be given for some reason of living.’

In (53), we have an impersonal matrix verb appareat. appareat subcategorizes
for an AcI-clause. membra is the clause-internal accusative subject and data
esse is its infinitival passive verb. In (52), the clausal structure of the AcI is
broken up, and membra is raised into the position of the nominative subject
of the matrix verb appareat. Contrary to the ungrammatical (51) listed by
Pepicello, the VP$_{inf}$ data esse in (52) is passive. The tree structure of (52) is
given below:

**structure of (52)**

```
S
  NP$_{nom}$ membra
  VP$_{inf}$ data esse appareat
```

I would also like to note here that Pepicello (1977:211) makes one further
mistake. He analyses existimare as a Raising to Object verb due to the fact
that it is found with personal passives. existimare, however, is also found
with impersonal passives, as illustrated in (53):

(53) huiic (insulae) miliar DCCC in longitudinem esse
this(dat) (island(dat)) miles 800 in length to-be
existimatur.
is-existimated.
‘This (island) is existimated to be 800 miles in length.’

Caes., B.G., 5, 13

Pepicello does not mention this highly important fact which provides
evidence for an alternative to his analysis.
4.6. A CLOSER LOOK AT RAISING TO SUBJECT IN LATIN

4.6.3 Obligatory Occurrence of Raising to Subject

So far, we only found Raising to Subject as a less frequent variant coexisting with impersonal unraised constructions. However, there are also cases where only Raising to Subject occurs and where no unraised alternative is possible.

4.6.3.1 Prolative Infinitive

With the **prolative infinitive**, Raising to Subject is obligatory. Let us examine (54):

(54) si speres quicquam prodesse potis sunt
    if hope(pl) anything(acc) to-be-useful mighty are
    ‘if hope is mighty to be useful for anything’

*Q. Ennius, Annalium fragmenta, p.333*

For (54), no unraised counterpart exists. The modal verb *potis est* does not construct with an Ac1, so that (55) is an unattested form.

(55) ??si speres quicquam prodesse potis est.
    if hope(pl) anything(acc) to-be-useful mighty is
    ‘if hope is mighty to be useful for anything.’

The lexical entry for *potis est* therefore looks as follows:

(56) **potis esse**

    arg-st  \[ NP \[ VP \[ vform \[ inf \] \] \] \]
    sem    \[ restr \[ reln \[ potis esse \] \] \]

The example of *potis esse* gives further evidence of the existence of Raising to Subject in Latin. Note that the analysis of the verb *potis esse* as well as all other appearances of Raising to Subject discussed in this chapter do not depend on any assumption of Raising to Object being a part of Latin grammar.

4.6.3.2 Phasal Verbs

Raising to Subject is also found with aspectual verbs, denoting the phase of an action, such as the beginning or the end of it. Look at (57):
(57) ut homines mortem vel optare incipiant vel certe
that men(nom) death(acc) either to-wish begin(3pl) or certainly
timere desistant
to-fear stop(3pl)
‘that men either start longing for death or certainly stop fearing it’

*Cic.* Tusc., 1.49.117

In (57), *hominis* is the nominative subject of both the matrix verbs *incipi-
ant and desistant* and the VP$_{infl}$ *optare* and *timere*. As phasal verbs, *incipere* and *desistere* indicate that the action expressed by the verbal infinitive is initiated or stopped, respectively. These verbs do not occur in combination with unraised Acl in the corpus examined.

*• Raising with *coepisse*

It should be noted that *coepisse* ‘to begin’ sometimes embeds the passive voice of the infinitive. If the infinitive is transitive the object is raised into subject position as in (58):

(58) cum lapides mitti coepissent
    when stones(nom) to-be-thrown were-started
    ‘when stones were started to be thrown’

*Bellum Africanum* (Corpus Caesarianum), 27.1

The active counterpart of (58) involves Raising to Subject, too, as we observe in (59):

(59) cum hostes lapides mittere coepissent
    when enemies(nom) stones(acc) to-throw they-started.
    ‘When the enemies started to throw stones.’

In (59), the VP$_{infl}$ *mittere* is active. The NP$_{nom}$ *hostes* is the subject of both the aspectual matrix verb *coepissent* and the VP$_{infl}$ *mittere*. *Lapides* is the accusative object of *mittere*.

In this section, we have discussed Raising to Subject in further detail. We saw that Raising to Subject sometimes is found in co-occurrence with unraised impersonal constructions. This is the case with the twofold passives involving the the Acl. Raising to Subject is rarely found as an alternative to impersonal active constructions which do not appear in passive. Raising to Subject is also found with propositive infinitives and with aspectual verbs. Here, no unraised alternative is possible.
4.7 A Note on the Copula

The auxiliary, when used as the copula, behaves differently from the other verbs as it subcategorizes for two NPs agreeing with each other in case. Predicative case-agreement occurs generally in either nominative (60a) or accusative (60b,c). It also appears in other cases, such as dative (60d), although at a quite low frequency.

(60a) Caesar dictator esse dicitur.
Cesar(nom) dictator(nom) to-be is-said.
‘Cesar is said to be a dictator.’

(60b) dico Caesarem dictatorem esse.
I-say Cesar(acc) dictator(acc) to-be.
‘I say that Cesar is a dictator.’

(60c) cogo Caesarem dictatorem esse.
I-force Cesar(acc) dictator(acc) to-be.
‘I force Cesar to be a dictator.’

(60d) licuit esse otioso Themistocli.
it-was-allowed to-be otiose(dat) Themistocles(dat)
‘Themistocles was allowed to be idle.’

_Cic., Tusc., 1.15.33_

(60d) in particular shows us that the control-verb _licet_ requires a special case, i.e. dative. Although this is only a marginal phenomenon in Latin, it cannot be neglected. The case specification must be “transferred” from the matrix verb (_licuit_ in (60d)) to the subject of the control-structure (_Themistocli_ in (60d)). The copula _esse_ has to assure that the case of its subject (_Themistocli_, dative) is instantiated on the AP _otioso_. The same phenomenon is also observed in (60a-c). We thus have to conclude that the copula serves as a kind of “case unifier”. It subcategorizes for an NP (its specifier) and either another NP or an AP as a predicative (complement). This rather surprising verbal behaviour has not been described yet within the framework of HPSG. Therefore I suggest that for Latin verbs at least the following specification must be made within the type hierarchy:

```
verb
   ∼ non-predicative copula
```
In order to make case unification possible, we have to introduce a lexical specification for the copula which instantiates the case of the specifier (i.e. the subject) on the complement.

\[
\begin{align*}
\text{esse: lexical specification} \\
\text{head verb aux} & \\
\text{spr} & \langle \text{NP [case } \text{1]} \rangle \\
\text{comps} & \langle \text{NP [case } \text{1]} \cup \text{AP [case } \text{1]} \rangle
\end{align*}
\]

We now re-examine examples (60a-d). (60a) is a Raising-to-Subject construction, (b) an infinitival clause (AcI), (c) and (d) are object-control constructions with the object bearing accusative (c) or dative (d) case. In (b) we have a one-constituent construction, in (a), (c) and (d) two constituents depend on the matrix verb.

We discuss (60b) first: both \textit{Caesarem} and \textit{dictatorem} bear accusative case. The grammatical rule (31) requires accusative case of the subject of the infinitival sentence (\textit{Caesarem}). The copula \textit{esse} ensures agreement of case between the subject and the predicative NP (\textit{dictatorem}). Impersonal passives leave the internal structure of the AcI unaffected, as predicted by rule (32). (62) is a sentence with an active verb in construction with an AcI, and (63) with the passive variant of the same verb.
4.7. A NOTE ON THE COPULA

(63)  
```
(64)  \textit{dicitur} \left[\text{arg-st } \langle S[\text{inf}] \rangle\right]
```  

(60a) arises via the process of Raising-to-Subject. In the NcI construction we have case agreement between the subject of the matrix clause (\textit{Caesar}) and the predicative subcategorized for by the \textit{VP}_{\text{inf}} \textit{esse}.

(65)  \textit{dicitur Caesarem laudatum esse}

\[\Rightarrow\]

(65a) \textit{Caesar laudatum esse diceris}

Here is the entry for the matrix verb in case of the NcI, i.e. the personal passive construction that has undergone Raising:
(66) **diceris**

\[
\begin{array}{c}
\text{syn} \\
\text{spr} \quad \langle \text{NP} \rangle \\
\text{comps} \quad \langle \text{VP}_{sr} \rangle \\
\text{arg-st} \quad \langle \text{NP,VP} \rangle \\
\text{sem} \quad \text{restr} \quad \langle \text{reln} \quad \text{dicere} \rangle \\
\end{array}
\]

In (60c), contrary to (60b), the subject of the VP_{sr} is subcategorized as a complement of the matrix verb, thus found “on a higher level”. It is straightforward to verify that the specification for object control (18) predicts the case of the matrix controller but not that of the (unrealized) embedded subject, with which it is semantically coindexed. Note however the syntactically very similar examples of ‘quirky-case’ assignment in Icelandic discussed in Pollard and Sag (1994:138f.). The authors come to the conclusion “that raising controllers share CASE values with the unexpressed subjects of unsaturated complements”.23 Entry (18) thus has to be revised as it fails to predict the case of the predicative complement of esse, even though the latter is coindexed in case with the subject of esse. We therefore add a case stipulation to the control specification, changing (18) into (67):

---

23This is the result of an article by Sag, Karttunen, and Goldberg on Icelandic Case (Sag, Karttunen, and Goldberg, 1992). In Icelandic, the case of subjects is nominative by default. However, there are some verbs which assign non-nominative case to their subjects. If Icelandic raising verbs subcategorize for a VP_{sr} that does not assign “quirky”, i.e. non-nominative case, then the raised subject of a matrix subject raising verb is nominative. However, if the VP_{sr} subcategorized for assigns quirky case, the raised subject of the matrix raising verb gets its case assigned by the VP_{sr}. The authors come up with the attributes CASE and DCase (default case). With a quirky verb, their values are different. The value of the case of an embedded verb is shared by the matrix raising verb.
final version:

(67) \[ \text{cogo} \rightarrow \text{obs-de-literal} \]

\[
\begin{align*}
\text{arg \text{est}} & \triangleright \langle \text{NP} \triangleright \text{NP \ [head \ case \ [\text{case}]} \rangle, \text{VP} \rangle \triangleright \langle \text{form \ inf} \triangleright \langle \text{NP \ [head \ case \ [\text{case}]} \rangle \triangleright \langle \text{inf} \rangle \rangle \rangle
\end{align*}
\]

Alternatively, we could hypothesize that case was part of semantics. As Latin is a language extremely rich in case and in this respect similar to Icelandic this might not be too surprising. In present versions of HPSONG only SEMANTICS encodes information that is available extra-linguistically. In this case we would not be surprised to hear it postulated that CASE could be semantic. The data clearly show that there is close interaction between case and semantics.

The predicative participle (62), (63) could be analysed in the same way as the predicative NP. This would imply that Latin verbs bear case, a conclusion easily drawn from comparison of (62) and (63):

(68) Tu laudatus es.

you(nom) praised(nom) are.

‘You are praised.’

(69) dico te laudatum esse.

I-say you(acc) praised(acc, masc\neut, sg) to-be.

‘I say that you were praised.’

The Lexical Specification (61) then has to be slightly revised, as coinexaction between the NP and the VP part subcategorized for concerns case, number and

\(^{24}\text{Notice however that Latin is not even consistent in quirky-case assignment. The verb licet ‘it is allowed’ allows for a second construction, found at a lower frequency, with the object NP in dative case and the predicative in accusative. Compare (60d) to (60c);}

(60c) quibus licet iam esse fortunatos

these(dat, pl) it-is-allowed(3sg) already to-be very-fortunate(acc, pl)

these are allowed to be already very fortunate \text{Caes., B.G., 6, 35, 8}

We leave this problem open here.
CHAPTER 4. THE STRUCTURES ACl AND A+I

gender. This is assured in (70).²⁵

(70) esse: lexical specification for participles

\[
\begin{array}{c}
\text{head} \quad \begin{bmatrix}
\text{verb aux} & \begin{bmatrix}
\text{case} \\
\square \\
\text{gend}
\end{bmatrix}
\end{bmatrix} \\
\text{spr} \quad \left\langle \text{NP} \quad \begin{bmatrix}
\text{AGR} \\
\square
\end{bmatrix} \right\rangle \\
\text{comps} \quad \left\langle \text{VP}_{past.part.} \quad \begin{bmatrix}
\text{AGR} \\
\square
\end{bmatrix} \right\rangle
\end{array}
\]

4.8 A Word on Frequency

We would like to note in this place that the ACl is found more than twice as much as the A+I. Our corpus consists of 390805 sentences. In Chapter 1 we described the search routine and the possibilities the BTL offers to look for forms and structures. This unfortunately requires a lot of manual work, as no own programming can be done. From the BTL we created a subcorpus consisting of 1000 randomly chosen sentences. We investigated the frequency of A+I and ACl within this test corpus, and we found 82 A+I- and 212 ACl-constructions. From this we conclude that we should expect to find about 32000 A+I-constructions and approximately 83000 ACl-constructions within the whole BTL. So the ACl appears about 2.6 times more often in Latin than does the A+I. Note that the same test corpus was also used to do statistical research on the frequency of the distribution of the reflexive pronoun se in A+I and ACl. The results will be presented in Chapter 6.

4.9 Conclusions

We have given sufficient evidence that two syntactically different structures formerly subsumed under the name of ACl have to be kept apart. The most crucial criterion which motivates the distinction is the behaviour of these structures with regard to passive. Object-control verbs are always compatible with the personal passive: the notional accusative object appears as the nominative subject. True ACl-verbs are intransitive verbs that take an

²⁵I leave the question open here how to deal with the auxiliary in compound tenses semantically.
infinitival sentence as their complement. A grammatical rule assigns accusative case to subjects of infinitival sentences. Passives arise in two ways: impersonal passives consist of a subjectless matrix clause, leaving the Acl-clause unaffected. A perfect subset of verbs allowing for impersonal passives displays additionally personal passives which are explained via Raising to Subject.

We have added two arguments: first, that even clauses without subjects may serve as “Acl’s”, something which an English-like analysis would not predict; and second the Acl occurs not only in constructions with appropriate governing verbs, but also as a free adjunct (see section 4.2 of this chapter).

We have shown furthermore that predicative infinitive constructions display ‘quirky case assignment’: CASE values are shared between the predicative NP and its unexpressed complement. In order to explain this we have to refine the lexical entries for control verbs, adding a case stipulation to the control specification. We leave open the question in what respect there is interaction between case and semantics.