Peter Öhl * *Institut für Kognitive Linguistik* * DFG-Projekt: *'Die Rolle Funktionaler Projektionen in Grammatikalisierungs- und Sprachwandelprozessen'*

Universität Frankfurt/ Main

Feature Structure of the C-System and the Distribution of Object Clauses

1. Parameterisation of the C-System

(1) a) Non so, a Gianni, **se** avrebbero potuto dirgli la verità . Rizzi (2001, 289)
NEG - *know*-1st sg – DAT – *G.* – *if* – AUX-PQP-SUBJ-3rd pl – *can*-PII – *say*-INF – DET – *truth*

'I do not know if they could have told the truth to John'.

b) *Credo, a Gianni, **che** avrebbero dovuto dirgli la verità]]].
think-1.sg – DAT – *G.* – *that* – AUX-PQP-KONJ-3.pl – must-PII – say-INF – DET – *truth*

'I think that they should have told the truth to John.'

(2) a) *pu*: subordination particle (cf. Roussou 2000, 65, 79)
b) *oti, an*: complementisers indicating clause mood (decl., interr.)
c) *as*: particle indicating clause mood (imperative)
d) *den, min*: negative particle
e) *na, tha*: modal particles (subjunctive, future)

(3) $[_{C}$ *pu* [Topic/ Focus $[_{Force}$ *oti/ an/ na/ as* $[_{Neg}$ *den/ min* $[_{Fin}$ *tha/* $t_{na/as}$ $[_{IP}$ CI, V . . .]···]

(4) Ik vraag me af $[_{CP}$ ***wie*** $[_{?}$ ***of*** $[_{?}$ ***dat*** $[_{IP}$ taalkunde studeert]]]] (Dutch)
I – ask – me – of – who – if – COMP – *linguistics – studies*

German ***dass*** and Dutch ***dat*** are in Fin° (cf. Grewendorf 2002, 236f).

(5) a) jeg tror $[_{CP}$ **at** $[_{TopP}$ lingvistikk $[_{FinP}$ studerer $[_{IP}$ gutten]]]] (Norwegian)
I - believe -1st sg – COMP – *linguistics – studies – boy*DET

b) Ich glaube, (***dass**) Linguistik studiert der Junge. (German)

'I think the boy studies linguistics.'

(6) She maintains $[_{CP}$ **that** [Irish stew]$_{i}$ $[_{FinP}$ $[_{IP}$ she sort of likes t_{i}.]]

(7) Ik geloof $[_{CP}$ $[_{FinP}$ **dat** ([$*_{TopP}$ deze boeken) $[_{IP}$ zij niet waarderen]]]] (Gelderen 2003)
I – think – that – this – book – they – NEG – *appreciate*

- Embedded clauses do normally not have illocutionary force. An embedded interrogative does not denote a question – it just refers to one (cf. Bayer 2004, 66).

(8) a) Non so, a Gianni, $[_{SubP}$ $[_{ModP}$ **se** [avrebbero potuto dirgli la verità]]].
NEG - *know*-1st sg – DAT – *G.* – *if* – AUX-PQP-SUBJ-3rd pl – *can*-PII – *say*-INF – DET – *truth*

'I do not know if they could have told the truth to John'.

b) *Credo, a Gianni, $[_{SubP}$ **che** $[_{ModP}$ [avrebbero dovuto dirgli la verità]]].
think-1.sg – DAT – *G.* – *that* – AUX-PQP-KONJ-3.pl – must-PII – say-INF – DET – *truth*

'I think that they should have told the truth to John.'

(9) He wonders $[_{SubP}$ $[_{ModP}$ if $[_{FinP}$ $[_{IP}$ the boy studies linguistics]]]]

(10) ***Syntactic Structure of the left periphery (C-Domain)***

Matrix: $[_{ForceP}$ [hanging topic [scene setting adv. [left dislocation [list interpr. [contr.foc1 [contr.foc2 [inform. foc $[_{FinP}$ · · ·] (Beninca&Poletto 2004, ex. 58)

embedded: $[_{SubP}$ [Topic/ Focus $[_{ModP}$ $[_{Neg}$ $[_{FinP}$ · · ·] (Öhl 2004, 165; cf. Roussou 2000, 79)

(11) ***Distribution of Particles in the C-Domain*** (cf. Grewendorf&Öhl, forthcoming)

SubP: subordination particles

ModP: elements that indicate clause mood (and may indicate subordination) (particles, complementisers, *wh*-elements(?))

FinP: elements that indicate finiteness and verbal mood (and may indicate clause mood and subordination) (particles, complementisers, *wh*-elements(?); I-elements)

Persian: particles indicating clause mood in addition to SUBs like ***ke***. German and English[1]: COMP.

(12) a) ū porsīd $[_{SubP}$ ***ke*** $[_{ModP}$ ***āyā*** $[_{IP}$ man zabānšenāsī xānde būdam]]]
he/she – asked – SUB – INT – *I – linguistics – studied-had*

'He asked if I had studied linguistics.

b) Weisst Du, ***ob*** er Linguistik studiert?

c) Do you know ***if*** he studies linguistics?

(13) kesī-***ke*** to dīde-ī emrūz raft. (Lazard 1992:229)
someone-SUB – *you – have -seen – today – went*

'Someone you saw went away today.'

(14) a) lotfan marqūm farmāīd ***ke*** bā'es-e kamāl-e tašakkor xāhad šod (Lazard 1992:244)
please – write – condescend – SUB – *cause*-EZF – *total*-EZF – *thank – will – be*

'Please send it, so I will be very thankful.' ***(consecutive)***

b) raftam ***ke*** ān ketāb-rā bexaram (Lazard 1992:218)
*went.*1SG – SUB – DEM – *book*-FOC – *buy.*1SG

'I went to buy the book.' ***(purpose clause)***

c) nazdīk ***ke*** āmad ū-rā šenāxtam (Lazard 1992:238)
near – SUB – came – *s/he*-ACC – recognised.1SG

'When s/he came near I recognised her/him.' ***(temporal adverbial)***

(15) Pesar goft (**ke**) man yek rūz zabānšenāsī xāham xānd.
*boy – said.*3SG – SUB – *I – one – day – linguistics – will.*1SG – *study*

'The boy said: One day, I will study linguistics.'

- SUB is a head specified for syntactic subordination, only.[2]

(16) embedded CDom: $[_{SubP}$ [(topic/ focus)? $[_{ModP}$ [(topic/ focus)? $[_{FinP}$ $[_{IP}$ · · ·]]]]] (cf. Öhl 2004, 165)

(17) a) Ich frage mich $[_{CP}$ ***wer*** $[_{IP}$ so etwas liest]] (standard German)
I – ask – myself – who – such – thing – reads

---

[1] We assume that, like only few languages have explicit declarative particles but particles indicating other clause moods, languages with subordination particles may lack a declarative complementiser. The reason is that declaratives are the least marked clause type and thus may be modally underspecified.

[2] An exception may be relative particles that are generated in Sub° and carry a lexical feature [+*wh*]. English *that* and Italian *che* are no relative particles, though, but subordination particles that can introduce an underspecified relative clause with a ∅-REL-operator. Otherwise, one has to pursue a polysemic approach, which we do not find advantageous.

b) I frag me [SubP [FocP ***wer*** [FinP ***dass*** [IP so äps liast]]]] (Swabian)
I – ask – myself – who – that – such – thing – reads

'I wonder who would read such stuff.'

(18) Ik vraag me af [SubP [FocP **wie** [ModP **of** [FinP **dat** [IP taalkunde studeert]]]]
I − ask − me − of − who − if − COMP *– linguistics − studies*

"I wonder who studies linguistics."

(19) men shal wel knowe **who that** I am. (Caxton, AD 1485, cf. HAEGEMAN 1991, 349)

'Men shall well know who I am.'

(20) a) ū porsīd [SubP ***ke*** [ModP ***āyā*** [IP man zabānšenāsī xānde būdam]]]
he/she – asked – SUB – INT – *I – linguistics – studied-had*

'He asked if I had studied linguistics.

b) Weisst Du, ***ob*** er Linguistik studiert?

c) Do you know ***if*** he studies linguistics?

Sentences with identical informational content should be structured of identical informative features.[3]

(21) ***LF interpretation*** (Öhl 2003, 135; cf. ROBERTS & ROUSSOU 2002, 132)

The inventory of IFs[4] in the Lexicon is universal. They are mapped to universal semantic representations on LF.

Since PF and LF are independent levels, it is a surprising accident that for those morphemes whose features have to be checked at PF (i.e., have strong features) an exactly identical requirement holds at both LF and PF. Optimally this identity relation should be captured, but even minimally, the theory should be constructed in a way that does not make this relation necessarily a curious accident. Thus the fact that strong features have identical effects at both LF and PF clearly suggests that these requirements hold at the same level of representation. BRODY (1995, 98)

(22) ***PF interpretation*** (Roberts&Roussou 2002, 132)

Structural descriptions of relations between features in a syntactic unit are idiosyncratically realised on PF.

(23) ***PF-interpretation*** (cf. Roberts&Roussou 2002, 132)

PF-interpretation applies to structural descriptions of relations between features in a syntactic unit, i.e. chains in a syntactic dependency which are idiosyncratically realised on PF.

(24) a) D is a binary relation D(x,y). (Sportiche 1998, 389)

b) One of (x,y) must command the other.

(25) **(α, β) is a WFD iff:** (Öhl 2003, 66; cf. Roberts&Roussou 2002, 128)

i. α asymmetrically c-commands β;

ii. α and β share at least one type of Fs that belong to a natural class.

iii. Minimality is respected.

[3] Note that this does not mean that clause structure must be uniform. Neither Kayne's (1993) LCA nor the assumption that the number of functional heads in clause structure is universal follow from this. Assuming bare phrase structure (Chomsky 1993), SDs can theoretically be projected by the IFs either interpreted on LF (INT, lexical case) or eliminated during the computation (SUB, structural case). The number of functional heads may also be restricted by something like Giorgi&Pianesi's Principle of *feature scattering* or the principle of *feature syncretism* from Öhl (2003, 90):

(i) ***Principle of Feature Syncretism***

F_1 and F_2 can syncretise a node F° iff there is no $F_3 \neq F_1 \vee F_2$ logically superordinate to F_1 and subordinate to F_2. F_α and F_γ may not syncretise if there is a F_β and a logical hierarchy $\alpha > \beta > \gamma$.

[4] Features that are either interpreted on LF or computationally relevant (SUB, structural case), we call *informative features* (IFs).

(26) ***Interpretability of Dependencies*** (Öhl 2003, 67)

i. there is a set of features $\{F_i \ldots F_k\}$ of the type F and

ii. α and β are co-members in a WFD by means of F,

$\Rightarrow$ F_α and F_β must be compatible.

(27) ***Agreement and Feature Sharing*** (adapted from Pesetsky&Torrego 2004, 4)

An unvalued IF at syntactic location α scans its c-command domain for another instance of IF at location β with which to agree. Replace IF_α with IF_β, so that the same IF is present in both locations.

(28) a) Fin° – Mod°: This dependency is created by means of IFs of modality.

b) Fin°– Mod° – Sub°: This dependency is created by means of IFs of finiteness.

(29) a) [?P For [IP Joseph to be the pope is a good solution]]

b) Penso, [SubP a Gianni [FinP di [IP dovergli parlare]]] (Rizzi 1997, 304)
think-1st sg – *to – G.* – COMP – *must*-INF – *speak*

?'I suppose to have to talk to Gianni.'

(30) ***PF – Realisation of IFs* (F*)** (Öhl 2003, 92; adapted from Roberts&Roussou 2002, 132)

a) **SPELL α**: Lexicalisation of a terminal node through an item expressing α, which is inserted as a head F°. In this case F* takes place as a word.

b) **SPELL (α+x):** α is part of a bundle of Fs parametrically specified to have PF interpretation as one term. F* takes place as a component of a word's semantics.

c) **SPELL ch(α,x)**: F°, the extension of X°, heads the chain F° – X°. The whole chain is spelt out in a position parametrically specified for PF realisation.

(31) a) Mi domando [SubP [ModP **perché** [FocP QUESTO [FinP [IP avremmo dovuto dirgli]]]]]. (Italian)[5]
*myself – ask*1st sg – *why – THIS* – AUX-PQP-KONJ-1st pl – *should*-PII – *say*-INF

'I wonder why we should have told him THIS.'

b) Ich frage mich, [SubC [FinP **ob** [IP 's da nicht ein besseres Beispiel gibt]]].
I – ask – myself – COMP – SCI – *there – not – a- better – example – exists*

(32) a) Jón segir [SubC **að** [TopP Þessum hring, [FinP honum hafi [IP Ólafur lofað Maríu __] (Icelandic)[6]
J. − says − SUB − this − ring$_{DAT}$ *− DEM*$_{DAT}$ *− has − Olaf*$_{NOM}$ *− promised − Mary*$_{DAT}$

b) Nomízo [TopP (ta míla) [**ModP óti** [TopP (ta míla) [NegP den [FinP **tha** [IP (ta) fai o Pétros]]]]]] (Greek)[7]
think-1st sg – *the – apples* – COMP – NEG – FUT – ObjCl – *eat-3rd sg.* – DET – *Peter*

c) Ik geloof [CP [FinP **dat** ([*TopP deze boeken) [IP zij niet waarderen]]]] (Dutch)[8]
I – think – that – this – book – they – NEG – *appreciate*

2. Distribution of Argument Clauses

(33) Früher hat Peter[VP öfter mal [V' Unsinn erzählt]].
erlier – has – P. – often – once – nonsense$_{ACC}$ *– talked*

(34) a) Ich habe niemals behauptet, [das stimmt alles].
I – have – never – claimed – this – is-true – all

'I never claimed all this is true.'

[5] Rizzi (2001, 294).

[6] Thráinsson (1979, 64).

[7] Roussou (2000, 78).

[8] Gelderen (2003, 16).

b) *Ich habe [das stimmt alles] niemals behauptet.
I – have – this – is-true – all – never – claimed

c) *[das stimmt alles] habe ich niemals behauptet.
this – is-true – all – have – I – never – claimed

(35) a) Ich habe [$_{CP}$ dass das alles stimmt] niemals behauptet.
I – have – that – this – all – is-true – never – claimed

b) [$_{CP}$ Dass das alles stimmt] habe ich niemals behauptet.

(36) *Ich habe niemals [$_{CP}$ dass das alles STIMMT] behauptet.[9]

(37) Ich habe niemals behauptet [$_{CP}$ dass das alles stimmt] .

(38) Ich habe niemals [$_{VP}$ [$_{VP}$ einem Menschen erzählt], der gutgläubig war], [$_{CP}$ dass das stimmt]
I – have – never – a – man – told – who – credulous – was – that – this – is-true

2.1. COMP-drop

- *epistemical* and *assertive* verbs (cf. Öhl 2003, 165; Meinunger 2004, 315f ; for a list see Vikner 1995, 71).

(39) a) sie sagen, der Junge studiert Linguistik
they – say – DET – *boy – linguistics – studies*

b) ich behaupte, am besten studiert der Junge Linguistik
I – claim – at – best – studies – DET – *boy – linguistics*

c) ich glaube, LINGUISTIK studiert der Junge
I - believe – linguistics – studies – DET – *boy*

(40) a) *ich erwarte, Linguistik studiert der Junge (cf. Öhl 2003, 169ff)
I - expect – linguistics– studies – DET – *boy*

b) *ich bin überrascht, Linguistik studiert der Junge
I - am – amazed – linguistics– studies – DET – *boy*

c) *ich will, Linguistik studiert der Junge
I - want – linguistics – studies – DET – *boy*

d) *sie leugnen, Linguistik studiert der Junge
they - deny – linguistics – studies – DET – *boy*

e) *ich bezweifle, Linguistik studiert der Junge
I – doubt-on – linguistics – studies – DET – *boy*

COMP-drop is subject to the following restrictions (Poletto 2000, 128):

1. The inflected verb of the embedded clause must be modally marked – either for *subjunctive, conditional* or *future tense.*
2. The predicate selecting the CP must be of a specific class. Poletto (2000, 123) identifies this class with the so called *bridge verbs* allowing embedding of V2 in Germanic languages (cf. Vikner 1995, 71f; *assertive verbs* after Meinunger 2004, 315f).

(41) Credo (**che**) abbia già parlato con te. (Poletto 2000, 119)
Glaube – COMP – PerfAUX-SBJ – *schon – gesprochen – mit – dir*
'Ich glaube, er hat bereits mit dir gesprochen'.

[9] This linear order is ungrammatical under normal sentence stress, i.e. on the direct object (cf. Höhle 1982). The sentence improves if the matrix verb or other constituents are stressed. In this case we take the object clause to be in a derived position.

- Reis (1997): V2-subordination is a case of *non-structural* Θ*-assignment.*

(42) sie haben **pro$_a$** gesagt, [$_{ForceP}$ [$_{TopP}$ der Junge$_i$ [$_{FinP}$ studiere$_v$[10] [$_{IP}$ t$_i$ Linguistik t$_v$]]]]$_a$
they – have – pro – said – DET – *boy – studies – linguistics*

(43)a) jeg hevder (at) gutten studerer lingvistikk (cf. Öhl 2003, 167ff)
I - claim -1stsg – COMP – *boy*DET – *studies – linguistics*

b) jeg vet (at) gutten studerer lingvistikk
I - know -1stsg – COMP – *boy*DET – *studies – linguistics*

c) jeg tror (at) gutten studerer lingvistikk
I - believe -1stsg – COMP – *boy*DET – *studies – linguistics*

d) de sier (at) gutten studerer lingvistikk
they – say – COMP – *boy*DET – *studies – linguistics*

(44) a) jeg hevder (at) lingvistikk studerer gutten
I - claim -1stsg – COMP – *linguistics – studies – boy*DET

b) jeg vet (at) lingvistikk studerer gutten
I - know -1stsg – COMP – *linguistics – studies – boy*DET

c) jeg tror (at) lingvistikk studerer gutten
I - believe -1stsg – COMP – *linguistics – studies – boy*DET

d) de sier (at) lingvistikk studerer gutten
they – say – COMP – *linguistics – studies – boy*DET

Nw. V not licensing COMP-drop colloquially never license embedded V2 either.

(45) a) jeg forventer *(at) gutten studerer lingvistikk
I - expect -1stsg – COMP – *boy*DET – *studies – linguistics*

b) jeg er overrasket over *(at) gutten studerer lingvistikk
I - am-1stsg – *amazed – about* – COMP – *boy*DET – *studies – linguistics*

c) jeg vil *(at) gutten studerer lingvistikk
I - want -1stsg – COMP – *boy*DET – *studies – linguistics*

d) de benekter *(at) gutten studerer lingvistikk
they - deny – COMP – *boy*DET – *studies – linguistics*

e) jeg tviler på *(at) gutten studerer lingvistikk
I - doubt -1stsg – on – COMP – *boy*DET – *studies – linguistics*

(46) a) *jeg forventer at LINGVISTIKK studerer gutten

b) *jeg er overrasket over at LINGVISTIKK studerer gutten

c) *jeg vil at LINGVISTIKK studerer gutten

d) *de benekter at LINGVISTIKK studerer gutten

e) *jeg tviler på at LINGVISTIKK studerer gutten

(47) a) jeg hevder [$_{SubP}$ at [$_{TopP}$ lingvistikk [$_{FinP}$ studerer [$_{IP}$ gutten]]]]
I - claim-1stsg – COMP – *linguistics – studies – boy*DET

b) jeg hevder ***pro*** [$_{ForceP}$ [$_{TopP}$ lingvistikk [$_{FinP}$ studerer [$_{IP}$ gutten]]]]
I - claim-1stsg pro – *linguistics – studies – boy*DET

(48) a) Ja dumaju, [$_{SubP}$ čto [$_{FocP}$ lingvistiku [$_{FinP}$ [$_{IP}$ mal'čik [$_{I'}$ budet [$_{VP}$ izučat']···]
I – think – SUB – *linguistics – boy – will – study*INF

[10] Note that like in Italian, German embedded V2 can be inflected for subjunctive - which has often been associated with indirect speech.

b) Ja dumaju, [$_{ForceP}$ [$_{FocP}$ lingvistiku [$_{FinP}$ [$_{IP}$ v Valentinov den' nikto [$_{VP}$ s'udovol'stviem učit' ne zaxočet]···]
I – think – pro – *linguistics – on – Valentine's – day – nobody – gladly − learn* – NEG − *want*(FUT)-(PRF)

(49) a) Ja otricaju, *(čto) mal'čik izučajet lingvistiku. (cf. Svetlana Poljakova)
I – deny – that – boy – studies – linguistics

b) Ja ožidaju, *(čto) mal'čik budet izučat' lingvistiku.
I – expect – that – boy – will – study – linguistics

c) Ja byl udivljon, *(čto) mal'čik izučajet lingvistiku.
I – was – surprised – that – boy – studies – linguistics

d) Ja sožaleju, *(čto) mal'cik izučajet lingvistiku.
I – regret – that – boy – studies – linguistics

e) Ja somnevajus', *(čto) mal'čik izučajet lingvistiku.
I – doubt – that – boy – studies – linguistics

f) Ja xoču, *(čto-)by mal'čik izučal lingvistiku.
I – want – that – PTC[11] *– boy – studied – linguistics*

(50) *John regrets/ expects/ understands Mary studies linguistics.

- Stowell (1981): COMPs may be PF-∅ if they are in governed position. (?!)

3. Arguments and Case Assignment

1. V2-clauses to the right of V in OV-languages are embedded, but rather in an adjunct position.[12]
2. In order to be generated in an argument position, an element must carry either a feature [+N] or SUB. The head Sub° can be PF-interpreted a COMP that is generated in a lower position.
3. In order to be licensed in object- or subject position ***of the spelt-out representation of S***, elements must be assigned case. For clauses, the ablity to receive case depends on the local realisation of the feature SUB by a particle of the category [+N].

(51) ***Case Principle*** (cf. CHOMSKY & LASNIK 1995, 561)

Every realised DP/ NP must be assigned abstract case. *A chain is visible for Θ-marking if it contains a case-position.*

(52) ***Case Principle* (amended)** (cf. Öhl 2003,)

In order to be licensed in SD, every overtly realised Argument-position must be able to represent abstract case.

- Kayne (1984), Müller & Sternefeld (1990, 37ff), Webelhuth (1989, ch. 4) C is a *potentially nominal category*

(53) *The NP-Shell Hypothesis* (Müller 1993, 60)

All embedded finite clauses are NPs with a phonetically empty head.

- Alternative: A subordination particle of the category [+N] must be present to make the clause visible for case marking.[13]

[11] *by* is a marker of modality that is attached/ clitisised to CMP.

[12] This was suggested already by Reis (1997). She gives some evidence that V2-subordination is a case of *non-structural* Θ-*assignment*.

[13] Following CHOMSKY (1995) in assuming that only exceptions from primitive properties are listed in the lexicon, it seems that *c-selection* can thus be removed from the lexical entry, if we generalise the category of structural arguments as [N] based on case assignment (cf. also PESETSKY 1982). PP-objects do not fall under c-selection either, if we assume that P is a specific realisiation of lexical case.

3.1. Case and the CP in Japanese

- Öhl (2003, 181f; 2004, 131f; for the comparative syntax of German and Japanese object clauses, see also Inaba, forthcoming).

(54) a) Mary wa John ga koohii o nomu **no o** mi-ta
Mary − TOP − *John* − NOM − *coffee* − ACC − *drinks* − CMP − ACC − *see*PST

"Mary saw that John drank coffee".

b) Mary wa John ni jibun ni hana o motteku ru **no o** tanon da

Mary −TOP − *John* – DAT − *her* − DAT − *flower* − ACC − *bring* – PRS − CMP − ACC − *ask* – PST

"Mary asked John to bring her flowers."

(55) a) Watashi wa kare ga benkyo shi-ta **koto o** shira-nakat-ta.
I − TOP − *he* − NOM − *study* − *do*PST − CMP - ACC − *know-NEG*-PST

"I did not know that he studied."

b) watasi wa anata ga gengogaku o benkyosi-nai **koto o** youkyusu-ru
I – TOP − *you* − NOM − *linguistics* − ACC − *study*Neg − CMP − ACC − *demand*

'I demand that you do not study linguistics.'

(56) a) watasi wa sono syonen ga gengogaku o benkyo-siteiru **to** it-ta
I −TOP − *this* − *boy* − NOM − *linguistics* − ACC − *study*IPF− PTC − *say*PST

'I said this boy was studying linguistics.'

b) Watashi wa watashi no seito ni shiken wo suguni saiten su-ru **to** yakusoku shi-ta.

I − TOP − *I* − GEN − *students* − DAT − *exam* − OBJ − *soon* − *correction* − *do*PRS − PTC − *promise* − *do*PST

'I promised to my students I would correct the exams soon.'

The particle ***to*** marks quotative clauses, which are licensed by assertive verbs and alike and which in many languages do not need syntactic marking of subordination at all (cf. Öhl 2003, 191).[14]

3.2. Determiners, Case Marking and CPs in Persian

(57) Man midanam [$_{CP}$ **ke** [$_{IP}$ gorbe-ha shir doost darand]]. (Öhl 2003, 182)
I – know – SUB – *cats – milk – like – have*

'I know that cats like milk.'

(58) a) Man **oon-o** didam
I – him/her – saw

b) Man **pro** didam-**esh**
I – pro – *saw-him/her*

"I saw him/her"

Note that ECM verbs like *hear* seem to be exceptions to this generalisation. This exception would have to be listed in the lexicon. But note also that they nevertheless have to assign case, which is then born by the SPEC of the complement.

(i) I heard [$_{VP}$ Caesar(ACC) [$_{V'}$ report [$_{DP}$ the [$_{NP}$ Roman [$_{N'}$ conquest [$_{PP}$ of Gaul]···]

[14] We concede that, unlike the German ones, Japanese quotative sentences precede the verb. We assume that they are not generated inside VP, though, since they can't be assigned case. Admittedly, this is a postulate based on the hypothesis we have just developped.

(59) a) (Man) ***pro*** fekr ne-mikardam [**(*ke*)** pesar-e zabanshenasi bekhoone]
I – pro - *thought* - *didn't* - SUB - *boy* –DEF- *linguistics* - *studies*SJT

"I did not think that the boy would study linguistics."

b) (Man) ***pro*** midoonesam [**(*ke*)** pesar-e zabanshenasi khahad khoond]
I – pro - *knew* - SUB - *boy* - *linguistics* - FUT - *studied*

"I knew that the boy would study linguistics."

c) Noam Chomsky ***pro*** migooyad [**(*ke*)** ghoveye zaban-e bashari fetri ast]
N.C. – pro −*says* − SUB − *human* − *lang.* − *innate* − *is*

"Noam Chomsky says (that) the human language faculty is innate."

d) Skinner ***pro*** motaghed bood [**(*ke*)** faragiri-ye zaban sharti shodan-e ashkar ast]
Skinner – pro − *believe* − *was* − SUB - *acquisition-of* − *language* − *conditioning* − *clear* – *is*

"Skinner was convinced language acquisition was mere conditioning."

This means extraposed clauses that are not in their Θ-position may lack the COMP. However, as soon as a CP is in Θ-position (i.e. the subject or a preverbal object), the COMP is obligatory. Since subjects are never extraposed, they never drop the COMP. Moreover, if argument clauses precede the matrix verb, they must also be determined by the definite determiner ***in***, and object clauses must be marked by the accusative particle ***rā*** (***ro/-o*** in Farsi)[15]- exactly like nominal direct objects.

(60) a) [$_{DP}$ **In** [$_{CP}$ ke [$_{IP}$ gorbeha shir doost daran]]] tabi'I-ye.
this − SUB – *cats* – *milk* – *like* – *have* – *natural* – *is*

'That cats like milk is natural.'

b) Man [$_{?P}$ [$_{DP}$ **in** [$_{CP}$ ke [$_{IP}$ gorbeha shir doost daran]]] **rā**] midoonam.
I – *this* – SUB – *cats* – *milk* – *like* – *have* – ACC – *know*

'I know that cats like milk'

(61) a) (***In***) pesar to ***rā*** did.
DEF – *boy* – *you* – *saw.*

'This boy saw you.'

b) Man (***in***) doxtar(***-a***) ***rā*** didam.
I – DEF – *girl* – DEF-ACC – *saw*

'I saw this girl.'

? ***rā***: *focus marker* (cf. Lazard 1989, 280f.; also Hopper&Traugott 2003, 165ff.); case particle with the feature [+spec] (cf Lotfi 1997; Ghomeshi 1997; Karimi 2003); postposition marking structural case (Öhl&Lotfi 2005).

(62) man [$_{PP}$ [$_{DP}$ **an** [$_{CP}$ **che**$_i$ [$_{IP}$ to t$_i$ maxfi mikoni]]] **rā**] midoonam. (cf. Öhl&Lotfi 2005)
I − DEF − *what* − SUB − *you* − *hide* − *do* − ACC − *know*

"I know what you're hiding"

- DET is subject to a selectional restriction [±*wh*].

(63) Man [$_{PP}$ [$_{DP}$ **in** [$_{CP}$ ***ke*** [$_{IP}$ to **che** ro maxfi mikoni]]] **rā**] midoonam
I − DEF − SUB − *you* − *what* − ACC – *hide* − *do* − ACC − *know*

(64) To ***in*** pesar-***o***[16] didi, man ***ān*** doxtar-***o*** didam.
this – *boy* –ACC *you* – *saw* – *I* – that – *girl* – ACC – *saw*

[15] ***Rā*** was grammaticalised from a more general marker of specifity that was originally used also with indirect objects (cf. Hopper&Traugott 2003, 165ff).

[16] ***o*** is the cliticised variant of the ACC-particle ***rā***.

'You saw this boy and I saw that girl.

(65) a) Man midanam ([$_{CP}$ **ke**) [$_{IP}$ gorbe-ha shir doost darand]]. (Öhl 2003, 182)
I – know – SUB – *cats – milk – like – have*

'I know that cats like milk.'

b) man midoonam [$_{CP}$ **che**$_i$ [$_{IP}$ to t$_i$ maxfi mikoni]].
I − *know* − *what* − *you* − *hide* − *do*

"I know what you're hiding"

- CPs in argument position are DPs (cf. Lotfi 1997; Öhl 2003, 181).

(66) a) *Man [$_{DP}$ **In** [$_{IP}$ gorbeha shir doost darand]] **ro**] midoonam.

b) ***Ke** gorbeha shir doost darand tabi'i-ye.

(67) a) Man [$_{PP}$ **vase** [$_{DP}$ in [$_{CP}$ ke [$_{TP}$ autobus biyad]]] vaisadam.
I – for– DET – COMP – *bus – comes – wait*

"I'm waiting for the bus to come."

b) Man [$_{PP}$ **be** [$_{DP}$ in [$_{CP}$ ke u nayoomad]] e'teraz daram
I − to − this − that − s/he − not-came − objection − have

"I have an objection to him/her not showing up."

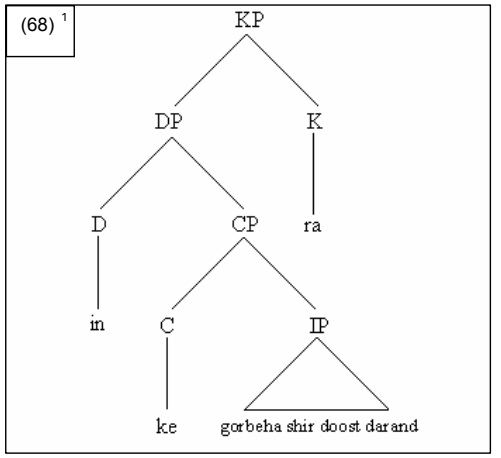
c) Man [$_{PP}$ **az** [$_{DP}$ in [$_{CP}$ ke u nayoomad asabani shodam]]
I − from − this − that − s/he − not-came − angry − became

"I got angry as s/he didn't show up."

d) Man mimoonam [$_{PP}$ **ta** [$_{DP}$ in [$_{CP}$ ke [$_{TP}$ to biyayi]···]
I – stay – till – DP – COMP – *you – come*

"I wait till you come."

(68) [1]



(69) a) I am expecting [$_{KP}$ ACC [$_{DP}$ the bus]]

b) I am waiting [$_{KP}$ for [$_{DP}$ the bus]]

(70) a) John asked the time.

b) John wondered *(about) the time.

(71) a) John asked what time it was.

b) John wondered (*about) what time it was.

4. Conclusion

(72) C is *visible* for its governor V iff either one of (i) through (iv) holds: (Bayer 1995, 54)

(i) V governs a trace of CP.

(ii) V is head adjacent to C.

(iii) Due to SPEC-head-agreement, a feature appears on SPEC/C which satisfies V's s-selection requirements.

(iv) The head C has nominal features and can (under certain conditions such as brevity) optionally be treated as NP.

(73) *Ich habe immer [$_{DP}$ (das) [$_{CP}$ dass das stimmt]] geglaubt

There are four logical options for structural complements of verbs selecting clauses:

1. CPs that are complements of non-assertive Verbs. These are always generated in argument position, do not project TopP or FocP and must have a nominal extension.
2. CPs that are complements of assertive Verbs and are generated in argument position. These project TopP and FocP and also have a nominal extension.
3. CPs that are complements of assertive Verbs but are not in argument position. These project TopP and FocP and may lack a nominal extension.
4. CPs that are complements of any kind of Verb, have a nominal extension that is locally realised. These CPs can be selected by the category D° and be assigned case. Only these CPs can stand in the basic argument position in the spelt-out representation of SD.

5. References

1. Bayer, Josef (1995). On the origin of sentential arguments in German and Bengali. In: Haider/ Olsen/ Vikner, 47 - 76.
2. Bayer, Josef (2004). Decomposing the left periphery. Dialectal and cross-linguistic evidence. In: Lohnstein/ Trissler, 59-95.
3. Beninca, Paola & Cecilia Poletto (2004). Topic, Focus and V2. Defining the CP-Sublayers. In: Rizzi (Hg.).
4. Brody, Michael (1995) Lexico-Logical Form. A Radically Minimalist Theory. Cambridge, London: MIT Press.
5. Chomsky, Noam & H. Lasnik (1995) Principles and Parameters in Syntactic Theory. In: Jacobs, J./Stechow, A.v./Sternefeld, W./Vennemann, T. (eds.) Syntax: An International Handbook of Contemporary Research. Vl. I. Berlin, de Gruyter. I, 506-569.
6. Chomsky, Noam (1995). The Minimalist Program. Cambridge, Mass.: The MIT Press.
7. Cinque, Guglielmo & C. Salvi (2001) Current studies in Italian syntax: essays offered to Lorenzo Renzi. Amsterdam: North Holland.
8. Culicover, Peter (1997) Principles and Parameters. An Introduction to Syntactic Theory. Oxford etc.: Oxford University Press.
9. Gelderen, Elly van (2003). The CP and split-CP cross-linguistically. Manuscript, Arizona State University.
10. Ghomeshi, Jila (1997). Topics in Persian VPs. Lingua 102, 133-167.
11. Grewendorf, Günther & Peter Öhl (forthcoming). Komplementierertypen und Grammatikalisierung. Manuscript, Universität Frankfurt.
12. Grewendorf, Günther (2002). Minimalistische Syntax. Tübingen: UTB/Francke.
13. Haegeman, Liliane (1991, 21994) Introduction to Government & Binding Theory. Oxford, Cambridge (MA): Blackwell.
14. Haider, Hubert & Susan Olsen & Sten Vikner (eds.) (1995). Studies in Comparative Germanic Syntax. Dordrecht: Kluwer.
15. Hartmann, Katharina (1998). Right Node Raising and Gapping. Interface Conditions on Prosodic Deletion. Doctoral Disseratation, Frankfur/ Main.
16. Höhle, Tilman (1982). Explikation für 'Normale Betonung' und 'Normale Wortstellung'. In: Werner Abraham (ed.). Satzglieder des Deutschen. Tübingen: Narr. 75-153.
17. Hopper, Paul J. & Elizabeth Closs Traugott (1993, 22003). Grammaticalization. Cambridge: Cambridge University Press
18. Inaba, Jiro (forthcoming). Die Syntaktische Distribution von Komplementsätzen im Deutschen und Japanischen. Dissertation, Universität Frankfurt/ Main.
19. Karimi, Simin (2003). On Object Positions, Specifity and Scrambling in Persian. In: Simin Karimi (ed.), Word Order and Scrambling. Amsterdam: Benjamins.

20. Kayne, Richard S. (1984). Connectedness. Linguistic Inquiry 14. 223-49.
21. Kayne, Richard S. (1994) The Antisymmetry of Syntax. Linguistic Monographs 25. Cambridge (MA),London: MIT Press.
22. Korn, Agnes & Peter Öhl (2005). Zur Entwicklung der Fragesatzmarkierung im Zusammen-hang mit der Subordination im Mittel- und Neupersischen. Manuskript, Universität Frankfurt/ Main.
23. Lazard, Gilbert (1992). A Grammar of Contemporary Persian. Costa Mesa etc.
24. Lohnstein, Horst & Susanne Trissler (Hgg.) (2004). The Syntax and Semantics of the Left Periphery. Berlin, New York: Mouton de Gruyter.
25. Lotfi, Ahmad R. (1997) Word Order and Accusative Case Assignment in Modern Persian. Proceedings of the 4th Conference of Linguistics, Allameh Tabataba'i University, Tehran.
26. Lotfi, Ahmad R. (2001) Semantico-Phonetic Form: A Unitarianist Grammar. Ms., University of Esfahan. Available online: http://www.minimalism. linguistics.arizona.edu/AMSA/PDF/AMSA-186-1200.txt
27. Meinunger, André (2004). Verb position, verbal mood, and the anchoring (potential) of sentences. In: Lohnstein&Trissler (Hgg.), 313-42.
28. Müller, Gereon & Wolfgang Sternefeld (1990). Improper Movement. Universität Konstanz Working Papers in Linguistics # 28.
29. Müller, Gereon (1993). On Deriving Movement Type Asymmetries. Dissertation, Universität Tübingen. (SfS-Report-05-93).
30. Öhl, Peter & Ahmad Lotfi (forthcoming). Parametric Variation and Syntactic Subordination: Evidence from the Comparative and the Diachronic Syntax of Persian. Manuscript, Universities of Frankfurt and Khorasgan/ Isfahan.
31. Öhl, Peter (2003). Economical Computation of Structural Descriptions in Natural Language. PhD. Dissertation, University of Stuttgart.
32. Öhl, Peter (2004). Satztypen und Hypotaxe im typologischen Vergleich. In: Pittner & al. (Hgg.), 159-170.
33. Öhl, Peter (in preparation). Argument clauses: (how) many of them may be DPs. Manuscript, University Frankfurt/ Main.
34. Pesetsky, David (1982) Paths and categories. Cambridge: MIT Working Papers in Linguistics.
35. Pesetsky, D. & E. Torrego (2004). The Syntax of Valuation and the Interpretability of Features. Manuscript, MIT & Umass/ Boston.
36. Pittner, Karin & al. (Hgg.) (2004). Beiträge zu Sprache & Sprachen 4. Vorträge der Bochumer Linguistik-Tage. Lincom (Edition Linguistik 48).
37. Poletto, Cecilia (2000). The higher functional field: Evidence from Northern Italian dialects. New York [u.a.]: Oxford Univ. Press.
38. Reis, Marga (1997). Zum syntaktischen Status unselbständiger verbzweit- Sätze. In: Dürscheid & al., 121 -147.
39. Rizzi, Luigi (1997). The Fine Structure of the Left Periphery. In: L. Haegeman (Hg.). Elements of Grammar: Handbook in Generative Syntax. Dordrecht: Kluwer, 281-337.
40. Rizzi, Luigi (2001). On the Position "Int(errogative)" in the Left Periphery of the Clause. IN Cinque/Salvi, 287-96.
41. Rizzi, Luigi (Hg.) (2004). The Structure of CP and IP. The Cartography of Syntactic Structures. Vol. 2. Oxford University Press.
42. Roussou, Anna (2000). On the left Periphery. Modal Particles and Complementisers. Journal of Greek Linguistics 1, 65-94.
43. Sportiche, Dominique (1998). Sketch of a reductionist approach to syntactic variation and dependencies. In: D. Sportiche. Partitions and atoms of clause structure : subjects, agreement, case and clitics. London [u.a.]: Routledge.
44. Stowell, Tim (1981). Origins of Phrase Structure. Ph.D. Dissertation, MIT.
45. Suzuki, Satoko (2000). De dicto complementation in Japanese. In: Horie, 33-58.
46. Thráinsson, H. (1979). On Complementation in Icelandic. New York: Garland.
47. Vikner, Sten (1995). Verb movement and expletive subjects in the Germanic languages. New York, NY : Oxford.
48. Webelhuth, G. (1989). Syntactic Saturation Phenomena and the Modern Germanic Languages. Diss., University of Massachusetts, Amherst.
49. Shin, Hyo-Shik (1993). Kasus als funktionale Kategorie. Tübingen: Niemeyer