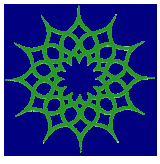
Cleft Constructions in Persian

A Role and Reference Grammar Analysis

Farhad Moezzipour



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CLEFT CONSTRUCTIONS IN PERSIAN

A ROLE AND REFERENCE GRAMMAR ANALYSIS

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A Thesis Submitted to
Postgraduate Faculty of Linguistics of the
Institute for Humanities and Cultural Studies
in partial fulfillment of the requirements
for the degree of
Master of Arts

March-2010

To my father for his wisdom and my mother for her love

ACKNOWLEDGEMENT

No pleasure could taste more than when I learned I could be honoured the help which came from Professor **Robert Van Valin**. I don't really remember what it was which first drew me toward the theory of RRG. Maybe it was a quite accidental visit to the great Website. Just a review triggered all my interest toward the contents and I managed to have a perfect digest.

Now the time was ripe for a formal visit to the great scholar himself. Formality brings cautiousness. But soon I learned it was to be an intro to a mutual friendly scientific transaction.

Now I have a very short statement for him. Thanks many many times for all you gave me personally and for all you gave me through the many uncountable harvests others have been able to appropriate before I had my turn.

Just one person, in my own particular environment, was competent enough to put his energies to disambiguate the complexities I came across now and then, Professor **Mohammad Dabir-Moghaddam**. He was so great and benevolent to help me find my way through all the ups and downs of the scientific research. My very sincere thanks to him.

And I cannot finish this acknowledgement without appreciating the friendly gesture, the many profound helps of, and the unceasing moment-to-moment encouragement of another friendly figure, Professor **Mostafa Assi**. I had to follow the light which came from the lamp he was holding before my trembling legs so that, little by little, I learned quite well to take my firm unswerving steps.

ABSTRACT

This thesis is concerned with the study of Persian cleft constructions within the Role and Reference Grammar (RRG) framework. RRG, a structural- functional theory of language, intends to investigate the interaction of syntax, semantics, and pragmatics through the constituent, logical, and focus structure as independent, but interrelated domains of the paradigm. In this thesis, both the literary corpus-based and intuition-based data of Persian will be analyzed in order to display the specificational nature of the construction throughout the syntactic, semantic and informational domains. In Persian clefts, despite the fact that the clefted constituent is the semantic argument of the predicator of the relative clause, it bears the role of pragmatic predicate assigned by the matrix predicator and also the optional presence of the cleft pronoun (in case of clefted constituent being an NP). This fact originates from the non-isomorphic property of the cleft construction which expresses a single proposition via biclausal syntax. The agreement feature of copula with the clefted constituent and the focalizing function of matrix grammatical elements give rise to the consideration of the so-called demonstrative as emphatic pronoun which is projected in the $\text{PERIPHERY}_{\text{N}}$. The distinction between the syntactic *in* 'this' in the extraposed sentences and the discoursally-interpreted *in* 'it' in the cleft sentences proves inevitable in this thesis.

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List of Abbreviations

AAJ	Argument Adjunct
ABS	Absolutive
ACC	Accusative
ACS	Accessible
ACT (A)	Actor
ACT	Active
ADV	Adverb
AFD	Actual Focus Domain
ANTI	Anti-Passive
ARG	Argument
ASP	Aspect
CLM	Clause Linkage Marker
CL	Classifier
COMP	Complementizer
CONJ	Conjunctive
DAT	Dative
DEC	Declarative
DEF	Definite
DEIC	Deictic
DEM	Demonstrative
DN	Derived Nominal
DP	Detached Position
det	Determiner
DCA	Direct Core Argument
DIR	Directional
E	Entity
ERG	Ergative
EZ	Ezafe
EVID	Evidential
GEN	Genitive
HS	Hearsay
IF	Illocutionary Force
IMP	Imperative
IMPF	Imperfective
INA	Inactive
INF	Infinitive
INGR	Ingressive
INT	Interrogative
IRR	Irrealis
IU	Information Unit
LDP	Left Detached Position
LFP	Leftward Focus Position

LS	Logical Structure
LSC	Layered Structure of Clause
LSNP	Layered Structure of NP
MOD	Modality
MR	Macrorole
MT	Macrorole Transitivity
NASP	Nominal Aspect
NEG	Negation
NEG(INT)	Internal Negation
NMR	Non-Macrorole
NOM	Nominative
NP	Noun Phrase
NPFP	Noun Phrase Final Position
NPIP	Noun Phrase Initial Position
NRRC	Non-Restrictive Clause
NUC	Nucleus
Num	Number
OCA	Oblique Core Argument
OBLG	Obligatory
OM	Object Marker
P	Predicate
PC	Pronominal Clitic
PERF	Perfect
PFD	Potential Focus Domain
PL	Plural
PN	Pronoun
PoCs	Post-Core Slot
PP	Prepositional Phrase
PRED	Predicate
PEEV	Preverbal Particle
PRES	Present
PrCS	Pre-Core Slot
PRO_{DEM}	Demonstrative Pronoun
PRO_{EMPH}	Emphatic Pronoun
PROG	Progressive
Prox	Proximate
PSA	Privileged Syntactic Argument
PSPT	Past Participle
QNT	Quantifier
RDP	Right Detached Position
Rel CL	Relative Clause
RRC	Restrictive Relative Clause
RRG	Role and Reference Grammar
S	Sentence

SEML	Semelfactive
SFH	Semantic Function Hierarchy
SG	Singular
ST	Syntactic Transitivity
STA	Status
SUB.CL.	Subordinate Clause
SUBJ	Subjunctive
UND	Undergoer
V	Verb

CHAPTER

1

INTRODUCTION

1.1. Scope and purpose

The present thesis intends to study the Persian cleft construction within the framework of Role and Reference Grammar (RRG) theory that was initially put forth by Robert D. Van Valin and William A. Foley (1980) to the linguistics realm. This theory focuses on the interaction of syntax, semantics and pragmatics domains which is the primary notion of the paradigm. As opposed to the formal grammar theories in which the prominence of the different syntactic levels of representation such as D-structure, S-structure, logical form, merge and spellout is fundamental, Role and Reference Grammar displays only two levels of syntactic and semantic representations which means that the formal grammars like Government and Binding/Principles and parameters bear a derivational nature compared to the non-derivationality of RRG theory.

Cleft construction is a biclausal grammatical construction bearing a single semantic proposition in order to specify a value for a variable in line with Declerck's definition (1988). The explication of the syntactic and pragmatic properties of clefts is utterly bound to the linguistic approaches in which the form-function iconicity is inescapable, and the intended RRG is one of those.

Linguistics has long been under the influence of the formal treatments of language, specially the Generative-Transformational Grammar, the beginning of which takes on through the introduction of Chomsky's syntactic structure of Standard Theory (1965) and

still lives on via minimalism. In this theoretical framework, language is considered to be a biological organ the sentences of which are to be analyzed independently of psycholinguistic, communicative, sociocultural considerations and so on. Syntax is the central facet of grammar and the other linguistic domains such as phonology, morphology and semantics bear a secondary prominence with respect to the priority of syntax. The sheer formality of this paradigm paves the way for the functional orientations including the extreme functionalism of Emergent Grammar in which the grammar of a language consists not of "a single delimited system but rather, of an open-ended collection of forms that are constantly being reconstructed and resemanticized during actual use" (Hopper 1998: 159). In the same vein, there exist linguistic theories that can be placed along the continuum of sheer formalism and mere functionalism like Functional Grammar (Dik 1978, 1980), Systemic Functional Grammar (Halliday 1985, 1994 ; Halliday & Matthiessen 2004) and Role and Reference Grammar (Foley and Van Valin 1984), to name a few. Given that the syntactic, semantic and pragmatic features of cleft constructions will be explained just by neither formal nor functional models, resorting to the theories which reconcile form and function is undoubtedly inevitable. It is fortunate to know that what distinguishes RRG from the other approaches is its ability to elucidate the grammatical constructions in relation to the pragmatic and informational motivations behind them.

Another crucial point about the RRG is the capability to propose a wide range of typological adequacy which holds true not only for languages like English, German, French, Italian, Spanish but also for the ones such as Dyirbal, Tagalog, Lakhota enjoying a free word order structure. Having been one of the relatively free word order languages, Persian needs to embrace the RRG tenets in order for the grammatical constructions to shed light on.

The present study plans to answer the two following questions:

1. To what extent can the RRG framework describe and explain the syntactic, semantic, and pragmatic properties of Persian cleft constructions?

2. How can we formalize and elaborate the discourse function of Persian cleft constructions in terms of information structure as independent module of grammar in RRG?

In reply to the above questions, I propose the following hypotheses:

1. Role and Reference Grammar is definitely a useful and mandatory framework for the analysis of Persian Cleft constructions.
2. Cleft pronoun, copula and complementizer in Persian clefts are syntactic elements that do not enter into the semantic composition of clefts. To account for the discourse behaviour of clefts, I take the presence of these elements in the matrix clause as assigning a pragmatic role (that of focus) to the shared cleft constituent while the embedded cleft clause functions to assign a semantic role to the cleft constituent.

1.2. Data collection methodology

The data used in the present study comes from some Persian literary sources. It is worth mentioning that I, now and then, have to use some sentences that are based on my language intuition so as to show the appropriateness of RRG in regard to the Persian cleft sentences.

1.3. Organization of thesis contents

This thesis includes five chapters. In chapter 1, I describe the scope and purpose of study along with the research questions and hypotheses and also discuss some key terms. Chapter 2 provides a useful introduction to the syntactic, semantic and pragmatic structuring of cleft constructions plus other comparative, detailed analyses carried out by various linguists. Chapter 3 is devoted to the historical background and theoretical assumptions of RRG based on Van Valin and Lapolla (1997) and Van Valin (2005). In Chapter 4, it will be shown that the theory of RRG allows new insights into the analysis of Persian Cleft constructions. In conclusion, this thesis displays RRG theory to be superior to other syntactic theories on the grounds that it explains and accommodates

many syntactic, semantic and pragmatic considerations to analyze the different aspects of the Persian Grammar.

1.4. Definition of key terms

In this section, I will present the definitions of some central key terms with which the clear understanding of the analysis of cleft construction is possible.

1.4.1. Cleft Construction

Lambrecht (2001) considers the cleft construction as a complex sentence structure consisting of a matrix clause and a relative-like clause that collectively express one single semantic proposition which can also be expressed in the form of a single clause without a change in truth conditions. Matrix clause is headed by a copula whose predicative argument (focus constituent) is coindexed with the shared relativized argument of the relative clause.

(1) It was the blonde woman$_i$ who___$_i$ fired Saul.

Declerck (1988) defines cleft constructions as a series of 'specificational' sentences the semantic role of which is to assign a value to a variable. In (2), *John* is a value occupying the position x in the variable[1] "x opened the door".

(2) It was John who opened the door.

1.4.2. Role and Reference Grammar

As I mentioned before, the first Role and Reference Grammar literature goes back to the works of Robert Van Valin and William Foley (1980, 1984) and interestingly the evolved version of it (Van Valin 1993, Van Valin & LaPolla 1997, Van Valin 2005) attracted the linguists' attention. RRG is a moderate functionalist theory in which language must be studied in relation to its role in human communication (Foley & Van Valin 1984: 7). Another salient point that RRG is attempting to accentuate is associated

[1] . The variable in the cleft constructions is similar to the pragmatic presupposition.

with the centrality of Hymes' 'communicative competence', not just Chomsky's syntactic competence, as Foley and Van Valin put it:

> Because speaking is a form of social behavior and the different activities in which speaking plays a role are governed by sociocultural norms and conventions, a speaker's knowledge of language also includes knowledge of these social constraints. Hence what the functionalist seeks to characterize is what Hymes […] calls a speaker's communicative competence, a notion which subsumes Chomsky's concept of grammatical competence and which explicitly involves both linguistic and social knowledge. (1984: 11)

1.4.3. Information structure

One of the remarkable outcome achieved by the Prague Circle is the concept of Functional Sentence Perspective (FSP) which is concerned with the distribution of information by all meaningful elements and the sentence segmentation into the theme and rheme parts (Dabir Moghaddam 2008: 43). The Prague School employs the gradient notion of Communicative Dynamism (CD) to account for information structure. The Prague school argued that CD determines the linear arrangement of syntactic constituent within sentences. The degree of CD of a sentence element is the extent to which it pushes the communication forward and the elements with least CD precede those that have more CD (Erteschik-Shir 2007: 2). The elements with least CD are the notions of topic or theme and the ones with the most CD are rheme or comment viewed as predicated of topic. Halliday (1967) advances the concept of information structure at the outset. In his opinion, the clause can be regarded as the domain of three main areas of syntactic choices: Transitivity, mood and theme.

Theme is concerned with the information structure of the clause; with the status of the elements not as participants in extralinguistic processes but as components of a message; with the relation of what is being said to what has gone before in the discourse. Given the clause as domain, transitivity is the grammar experience, mood is the grammar of speech function and theme is the grammar of discourse. Chafe (1976) views 'information packaging' as speaker's assessment of hearer's ability in processing the new information conveyed to hearer in contrast to the background information in a specific context. Prince (1981) takes information structure as tailoring of an utterance by a sender to meet the

particular assumed needs of the intended receiver. That is, information packaging in natural language reflects the sender's hypotheses about the receiver's assumptions and beliefs and strategies. According to Vallduvi, information packaging is a small set of instructions with which the hearer is instructed by the speaker to retrieve the information carried by the sentence and enter it into her/his knowledge-store. These instructions are meant to optimize the update of hearer's knowledge-store by singling out the informative part of the sentence and articulating the ground in such a way as to indicate how this information fits the hearer's knowledge-store (1990: 66). Lambrecht mentions that information structure is the formal expression of the pragmatic structuring of a proposition in a discourse and can be understood as:

> That component of sentence grammar in which propositions as conceptual representations of states of affairs are paired with lexicogrammaical structure in accordance with the mental states of interlocutors who use and interpret these structures as units of information in given discourse contexts. (1994: 5)

The important parts of information structure fall into three categories following Lambrecht (1994): (1) presupposition and assertion, which deal with the structuring of propositions into portions which speaker assumes an addressee already knows or does not know yet; (2) identifiability and activation, which have to do with a speaker's assumption about the status of the mental representations of discourse referents in the addressee's mind at the time of utterance; and (3) topic and focus, which relate to a speaker's assessment of the relative predictability vs. unpredictability of the relations between propositions and their elements in given discourse situations.

1.4.4. Given-new information

Halliday (1985) regards tonicity as determining factor in the distribution of information. In his view, discourse comprises of informational units which are realized as tonic groups/units from phonological perspective. Each informational unit is made of two functions, those of given and new. In idealized form, each information unit consists of a given element accompanied by a new element. Halliday believes that the structure of a sentence is in such a way that the existence of the new element is considered to be

necessary as apposed to the permissive existence of the given one (1985: 277). In an informational unit, the linguistic element containing tonic prominence is said to be carrying 'information focus'. In the meanwhile, the last linguistic element which is protected against the domain of the tonic is decided to be the given. In unmarked cases, the last lexical item in the tonic group is marked by the tonic as new and the status of the rest of information in the tone unit is not specified. In marked cases, the tonic falls upon some items other than the last lexical item, and the following information is assigned the status of given. For Halliday (1967: 208) given is defined as complement of marked focus; thus, in an informational unit with unmarked focus, nothing is given. The better understanding of this would be facilitated by the blatant examples drawn from Collins (1991) in which it is shown that an information unit with unmarked focus does not imply a specific wh-question, as in (3), and the one with marked focus does imply a specific question, as in (4):

(3) # David bought the PAINTING # (What happened?)
(4) # DAVID bought the painting # (Who bought the painting?)

In (3), being the last lexical item in the informational unit, *painting* bears the unmarked focus; consequently, the new element and the other lexical items can not be informationally decided. In (4), *David* is the marked focus containing the new information and the rest, the given.

Prince (1981) characterizes the general notion of given-new in three levels. In the first level, Givenness_p in his terminology, the criterion for distinguishing the given from the new correlates with the 'predictability' of information through the preceding context in which discourse is flown. Halliday is one of those linguists who substantiates the significance of predictability or recoverability as the only criterion by which to judge the newness of a lexical item is possible. In Halliday (1967: 208) what is labeled new is the information that the speaker presents as not being recoverable from the preceding discourse. In Halliday and Hasan (1976: 326), given is described as "expressing what the speaker is presenting as information that is recoverable from some source or other in the

environment – the situation or the preceding text". Kuno adopts the same approach and defines the given-new dichotomy in terms of recoverability as follows:

> An element in a sentence represents old, predictable information if it is recoverable from the preceding context; if it is not recoverable, it represents new, unpredictable information. (1978: 282-3)

In the second level, Givenness_s is roughly described in the sense of 'saliency' which is in accord with the speaker's consciousness of the cognitive status of discourse referents in the mind of the hearer. Chafe's idea of given-new information falls under this rubric:

> Given information represents that knowledge which the speaker assumes to be in the consciousness of the addressee at the time of utterance and new information is what the speakers assumes he is introducing into the addressee's consciousness by what he says. (1976: 30)

The third level of Givenness_k pivots around the notion of 'shared knowledge'. From this point of view, given information can be described in relation to what speaker assumes that the hearer knows, assumes, or can infer a particular thing (but is not necessarily thinking about it). Clark and haviland argue:

> Given is the information the speaker believes the listener already knows and accepts as true, and new is the information the speaker believes the listener does not yet know whether the hearer knows the information directly for having been explicitly told it, or indirectly via inference. (1977: 4)

To give a more vivid picture, it is urgent to focus on the examples, taken originally from Clark and Haviland (1974), cited in Prince (1981):

(5) We got some beer out of the trunk. The beer was warm.
(6) We got some picnic supplies out of the trunk. The beer was warm.

In (5), the hearer is directly informed of *beer* while in (6), the knowledge of *beer* is obtained indirectly by inference. It is surprising to know that *beer* is given in both examples according to the third level of description, although it is, on the basis of second level, given in (5) and new in (6), because in (6), *beer* is not at the center of hearer's consciousness. Prince also believes that the understanding of givenness in the sense of shared knowledge is a prerequisite for understanding of givenness in the other two senses, but he discards the term shared knowledge and replaces it with that of 'assumed familiarity', to avoid confusion.

1.5. Summary

In this chapter, the scope and purpose of study were put forward. I discussed four major key terms necessary to the description and explanation of the study. It was argued that since clefts are subsumed under the complex grammatical constructions in which the semantic and pragmatic complexities are dominant, adopting an interface theory such as the present approach, RRG, would open up a new horizon for unraveling the mysterious boundaries of Persian Syntax.

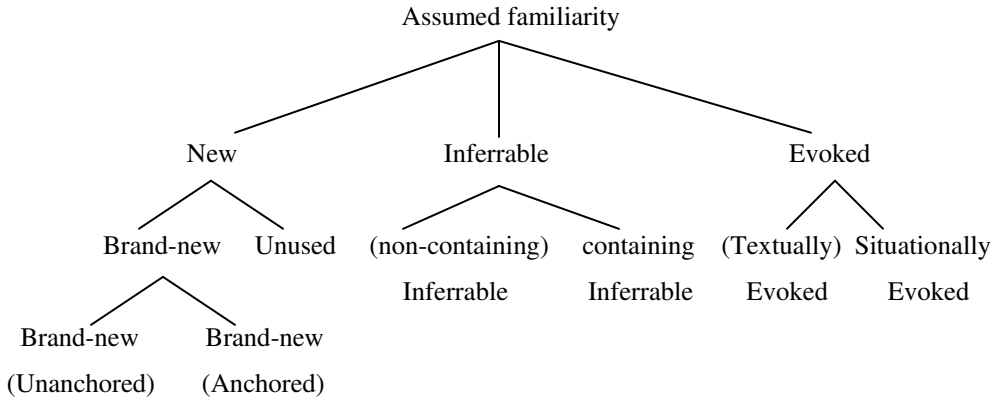


Figure 1.1 Taxonomy of given-new information (Prince 1981)

CHAPTER

2

AN OVERVIEW OF *IT*-CLEFT CONSTRUCTIONS

Taking into account the literature of cleft constructions, this chapter seeks to characterize the syntactic, semantic and pragmatic features of the construction and also presents the previous studies relevant to their analysis. Since these analyses suffer from their own drawbacks, RRG helps to illuminate the puzzling and the so-called insoluble aspects of cleft constructions. Section 2.1 provides us with the overall structure of cleft constructions. Section 2.2 is devoted to the investigation of the syntactic, semantic and pragmatic characteristics of clefts drawn from various sources. In section 2.3, I then describe the cleft constructions within the general category of copular constructions. Finally, section 2.4 details the different approaches adopted in relation to the cleft analysis.

2.1. *It*-clefts and *Wh*-clefts

As mentioned in section 1.4.1, *it-cleft* is a marked syntactic bi-clausal sentence which expresses a simple semantic proposition; in terms of information structure, the construction places an element in focus position within a copular matrix clause (Pavey 2004). The constituent accompanying copula is called 'focus'. Some linguists (Huddleston 1984, Collins 1991, among others) employ the term 'highlighted element' in order for the term focus not to be confused with what concerns Halliday (1985) as the climax of new information in an informational unit**.** . The term 'clefted constituent' is also favored by other linguists (Hedberg 1990, Lambrecht 2001 and Pavey 2004, among others). The complementizer or relative pronoun is followed by a constituent that contains the pragmatic presupposition, named the embedded or cleft clause. The example in (1) provides the terms used for the components of *it-cleft* construction.

(1) It is John who is responsible for the accident.
cleft pronoun copula clefted constituent cleft clause

In case of the information being referred to in the prior cotext or context, the cleft clause can be omitted. This gives rise to the appearance of truncated *it-cleft*s.

(2) A: Who broke the window?
B: I don't know but it wasn't me [who broke the window]. (Huddleston 1984: 465)

The cleft clause contains either a relative pronoun or a complementizer; however, these elements can be omitted if the element missing from the cleft clause is not the subject, as shown in (3a) and (b):

(3) a. It was the blonde woman $_i$ who / * zero ____ $_i$ fired Saul.
b. It was Saul that / who / zero the blonde woman fired ___ $_i$.

(Pavey 2004: 17)

Huddleston, of course, believes the complementizer deletion to be possible in informal English.
(4) It was John did it. (1984: 460)

Wh-clefts fall into two general divisions, i.e. basic wh-cleft and reverse *wh*-cleft. Huddleston regards *wh*-clefts to be within the category of identificational sentences in which the headless relative clause plays the role of identified. Identificational sentence is defined as bearing 'identity' relation between two linguistic units. Reversibility of these units enables us to distinguish between identificational and attributive sentences. To clear this up, we need to consider the examples in (5a) and (b).

(5) a. <u>What people are going to be voting on</u> is <u>the economy</u>.
Identified /given identifier/ new (identificational *Wh*-cleft)
b. <u>The economy</u> is <u>what people are going to be voting on</u>.
Identifier/ new identified/ given (identificational reverse *Wh*-cleft)

The difference between attributive and identificational can be displayed by two points. First, reversibility in attributive sentences, as mentioned above, causes them to be ungrammatical as shown in (6b).

(6) a. What Tom offered Sue was too sweet. (Attributive sentence)

b. * Too sweet was what Tom offered Sue.

The second difference lies in the number of involved participants (Collins 1991). Regarding the examples in (6) and (7) leads us where the understanding of the aforementioned difference is vividly clear. The number of participants in (6a) and (7) is respectively 1 and 2. This delicacy can be diagrammed according to the trees in RRG that will be shown in detail in chapter 3.

(7) a. What Tom offered Sue was a cherry.

b. A cherry was what Tom offered Sue.

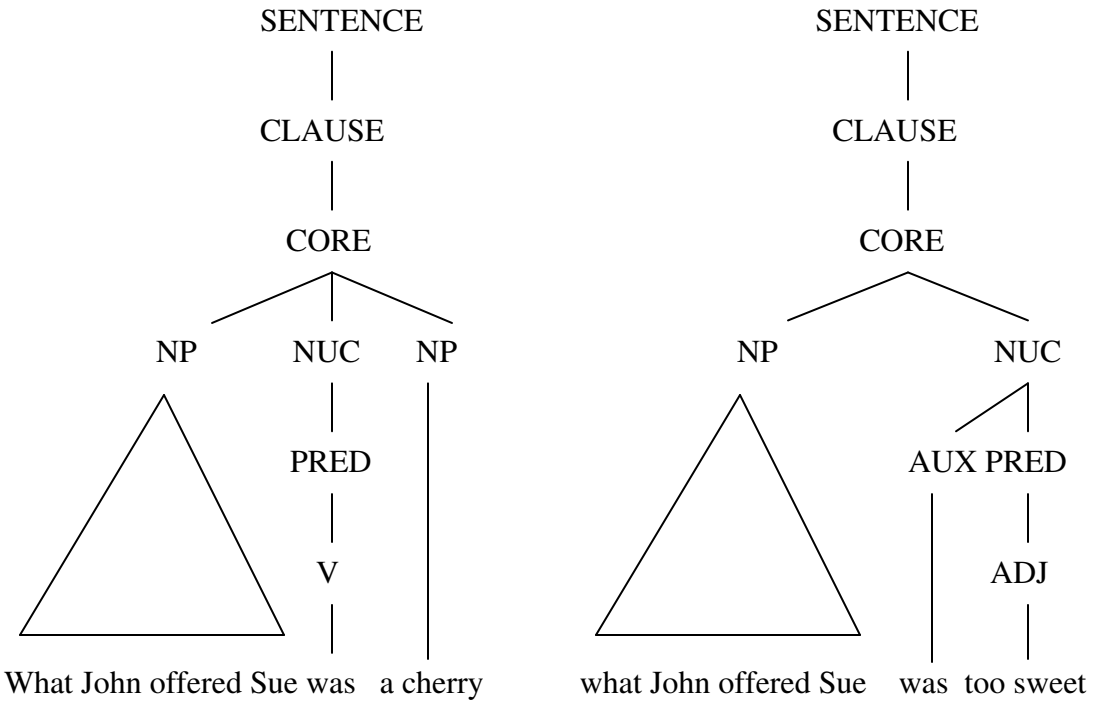


Figure 2.1 Layered structure of clause in identificational and attributive sentences.

It is worth mentioning despite that *it*-clefts are not reversible, they are grouped under the head of identificational sentences. However the relation between the clefted constituent and cleft clause is not that of equation, namely the equation of two lexical items shown as x = y. The reason behind this terminology is that the function of *it*-cleft is disclosing the identity of the referent included in the semantic proposition of cleft clause. That is why Declerck (1988) uses the term 'identity statement' for the sentences in which the equational relation of two NPs by means of copula (NP be NP) holds. Declerck, in compliance with Akmajian (1970), is interested to use the binary distinction of specificational vs. predicational instead of identificational vs. attributive (Gundel 1970) and equative/equational vs. attributive (Halliday 1970).

2.2. Characteristics of *It*-cleft and *Wh*-cleft

*It-cleft*s and *Wh*-clefts belong to category of marked grammatical constructions due to the fact that their existent semantic proposition bears resemblance to the existent semantic proposition of nonclefts. This similarity runs where the clefts are often regarded as derivation of *wh*-clefts (Akmajian 1970).

2.2.1. Pragmatic and informational characteristics

Huddleston (1984: 466) shows that the kind of non-given information we get in the relative clause of the basic *wh*-cleft is somewhat different from that in the cleft construction, that is to say, communicative dynamism in the latter is higher than the former. Now consider examples in (8a) and (b) which are supposedly produced after an energetic exercise.

(8) a. What I need now is a long cool drink.
b. It's a long cool drink that I need now.

To Huddleston, it would be likely to say the first sentence although the information in the relative clause has not been explicitly mentioned, but the hearer, by means of inference can process the sentence. In other words, the cognitive status for the relative clause and the highlighted element in (8a) is inferable-new while that for the same elements in (8b)

is new-inferable. In regard to the issue of communicative dynamism in which the elements with lower informational load are much probable to thematize than the elements with lower one, we draw the conclusion that the first sentence is much probable to utter. This fact originates from the linear sequence or thematic structure of elements. In the *wh*-cleft, relative clause and highlighted element are respectively theme and rheme; however, the reverse comes true with respect to the thematic structure of *it-cleft*. The syntactic dependency of relative clause upon matrix clause along with the expressed proposition being semantically presupposed triggers the relative clause to slip into background.

Other discrepancy between *it*-cleft and *wh*-cleft sentences can be informationally accounted for. Hedberg and Fadden (2007) assume that the pattern of informational distribution in *it*-clefts and reverse *wh*-clefts is different from basic *wh*-cleft. To account for this, they take the notions of 'referential givenness' and 'relational givenness' into consideration (Gundel and Fretheim 2004). Relational givenness involves a partition of the semantic/conceptual representation of a sentence into two complementary parts, X and Y, where X is what the sentence is about and Y is what is predicated about X. In respect of relational givenness, the distribution of information in cleft and pseudo-cleft sentences is presented as in tables 2.1 and 2.2.

Focus Constituent/theme	Relative clause/rheme
comment	topic
topic	comment
comment	comment

Table 2.1 Relational givenness in it-clefts and reverse wh-clefts

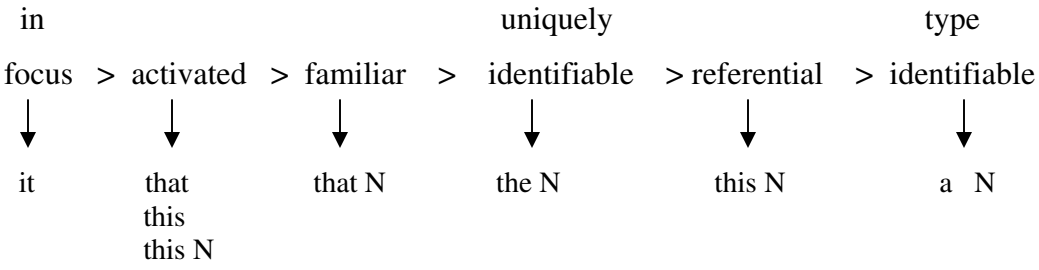
Relative clause/Theme	Focus constituent/Rheme
topic	comment

Table 2.2 Relational givenness in basic wh-clefts

Regarding the above tables, we conclude that the formalization of information structure on the basis of relational givenness in *it*-clefts and reverse *wh*-clefts enjoys greater liberty. The exclusive topic-comment pattern enforces tight constraints on the information packaging of the basic *wh*-clefts.

Referential givenness involves a relation between a linguistic expression and a corresponding non-linguistic entity in the speaker/hearer's mind, the discourse model, or some real or possible world, depending on where the referents or corresponding meanings of these linguistic expressions are assumed to reside. Having used The Givenness Hierarchy (Gundel, Hedberg and Zacharski 1993), Hedberg and Fadden present 10 categories for cognitive status that an entity mentioned in a sentence may have in the mind of the addressee.

(8) The Givenness Hierarchy (Gundel, Hedberg and Zacharski 1993)



Discourse Old	Activated
	Recently activated
	Inferrable from activated situation
	Inferrable from activated proposition
	Inferrable from recently activated proposition
Discourse New	Familiar
	Inferrable from familiar proposition
	Informative
	Cataphoric
	Question word

Table 2.3 Relational givenness categories (Hedberg and Fadden 2007)

Hedberg (1990) also adopts Gundel's (1985, 1988) proposal that a pair of independent but conflicting principles universally regulates the order in which a syntactic topic with a particular cognitive status is expressed in relation its associated comment:

(9) **Given Before New Principle:** state what is given before what is new in relation to it.
First Things First Principle: Provide the most important information first.

She believes that the order of clefted constituent and cleft clause in clefts and pseudo-clefts can be determined by putting together the principles above. So, because of relative clause in the basic *wh*-cleft carrying given information, the topic-comment structure is always predictable which is in conformity with the Given Before New Principle. As for the unmarked *it*-cleft and reverse *wh*-cleft[2], they violate the first principle, but follow from the First Things First Principle that topic can felicitously follow the comment if topic is less 'important' than the comment. The cognitive coding of the clefted constituent in (10) is completely new whereas the cleft clause has been recently activated. Accordingly, the thematic structure of this case is regarded as Comment-topic which is notated as Ct, as shown in Hedberg and Fadden (2007).

(10) What these warnings have achieved is political coverage for OFFICIALS.

(Hedberg and Fadden 2007: 61)

Now consider the example in (11).

(11) And it's not only the ACLU that is going to be at the barricades on this one, but conservative Republicans who do not want the governments taking their guns are not going to like the way this case is handled either.

(Hedberg and Fadden 2007: 59)

The clefted constituent is cognitively coded as 'familiar' and the cleft clause is cognitively coded as 'inferrable from a recently activated proposition'. Based upon the

[2] . In unmarked *it*-cleft and reverse *wh*-cleft, the clefted constituent carries new information whereas the cleft clause carries given information (Collins 1990: 510)

First Things First Principle, the clefted constituent is comment and the cleft clause is topic, so the informational pattern for (11) is regarded as Ct.

One of the most important arguments Lambrecht (2001) makes is that information structure in *it*-clefts and *wh*-clefts is the same, because one simple semantic proposition is formalized differently from the lexicogrammaical perspective. As Lambrecht illustrates, the information structure pattern in all cleft types in (12) is as in (13).

(12) a. It's the use of CLEFTS that he wants to explain.
b. What he wants to explain is the use of CLEFTS.
c. The use of CLEFTS is what he wants to explain.

(13) Presupposition: "he wants to explain x"
Assertion: "x= the use of clefts"
Focus: "the use of clefts"

It is important to note that what is new in an assertion in not necessarily new information, but it is the 'relation' between that information and the presupposition. As Lambrecht explains, " to make an assertion is to establish a relation between a presupposed set of propositions …and a non-presupposed proposition, the latter being in some sense … superimposed on the former" (1994: 58).

Collins clarifies that *it*-clefts and reverse *wh*-clefts are comprised of a single informational unit with respect to Halliday's (1967, 1985) definition of the term. In this respect, basic *wh*-clefts consist of at least two informational units. Upon his data, Collins reaches the conclusion that information distribution in the vast majority of basic *wh*-clefts is in such a way that the highlighted element contains new information while the cleft clause carries the given information. However, it is sometimes the case that primary stress falls on an element in the relative clause by which the speaker intends to sharpen the contrastive focus carried in the relative clause. In (14) *appeal* is synonymous with *like*, yet carries a falling-rising nucleus. The function of the nucleus is to reinforce the

positiveness of the response by suggesting a contrast between strong appeal and mild appeal.

(14) A: Do you LIKE Latin?
B: Yes, I do #What APPEALS to me about it# is that you have a great long string of ENGLISH# (Collins 1991: 489)

There is also a widespread misconception that the highlighted element always carries contrastive focus. Harries- Delisle (1978) shows that what universally lies beneath all the grammatical structures with a formulation of contrastive focus is cleft sentences. However, while the cleft sentences are associated with culmination of contrastive focus by placing the nucleus upon some item other than the last element of clause in the informational unit, the highlighted element may not be focal. In (15), if the demonstrative is read as focal, it can only be interpreted contrastively; otherwise, it would be considered as non-focal anaphoric demonstrative.

(15) He'd rushed to the surgery and was breathing heavily but it wasn't that which disturbed me. It was the time he took to recover. (Collins 1991: 489)

Collins (2006), to use Huddleston and Pullum's (2002: 1365) term, regards *it*-clefts and *wh*-clefts to be one of the information packaging constructions , which differ from their basic counterparts, and from each other, in the way the information they convey is presented. He argues that information packaging in cleft constructions is dependent on at least four interrelated factors: informativity, topicality, weight and presupposition. Informativity deals with the cognitive representations of the highlighted element and relative clause in the addressee's mind and is identical with the concept of referential givenness. Topicality is the pragmatically-driven arrangement of sentences into an initial section, topic or theme, and a final section, comment or rheme. Presupposition in the cleft construction will be discussed in the next section. Weight as length and grammatical complexity of constituents is a factor whose relevance to the communicative dynamism between types of cleft should be investigated. As Collins explains, the relative clause of

it-clefts is slightly longer than the highlighted element while that of basic *wh*-clefts is considerably shorter than the highlighted element. Given the weight-disparity in the case of *wh*-cleft, it is not surprising that the information in the relative clause should be lacking in communicative dynamism. His findings agree with what Huddleston and Pullum (2002: 1371) assert that the entities that have already been introduced into the discourse and hence are old can typically be referred to by relatively short and simple expressions.

2.2.2. Semantic characteristics

'Presupposition of existence' is a semantic property of cleft constructions. In *it*-clefts and *wh*-clefts, the relative clause being imbued with given information is considered to be carrying both the logical and pragmatic presupposition. Thus, in (16) it is both logically and pragmatically presupposed that someone who exists committed the murder and the value for this underspecified entity is *John*.

(16) It was John who committed the murder.

Presupposition: "there is some x who committed the murder"

Given that the relative clause of the cleft constructions is presupposed to exist, Declerck (1988: 14) maintains that the presupposition can not be negated as a part of the assertion of the sentence. The existential presupposition, namely "someone exists who built the tree house" in (17) is an undeniable fact; nevertheless, what is negated by the negative marker is *Jack* as incorrect and inconsistent value for the variable "someone built the tree house".

(17) It was not John who built the tree house.

As Pavey (2004: 34) shows it is also the case that the relative clause can be internally negated; however, the presence of existential presupposition can not be denied. In other words, (18) has the presupposition that someone exists who did not build the tree house.

(18) It was Jack who did not build the tree house.

Presupposition: "someone exists who did not the tree house"

Another striking characteristic of cleft construction is 'exhaustiveness implicature' (Halvorsen 1978, Horn 1981, Declerck 1988, Kato 2004, Pavey 2004 among others) which excludes from the set the elements other then the one(s) appearing in the focus position of these constructions. Halliday (1985: 43) explains the meaning of this feature as follows:

> The meaning of *what the duke gave my aunt was that teapot* is something like 'I am going to tell you about the duke's gift to my aunt: it was that teapot- and nothing else'. Contrast this with *the duke gave my aunt that teapot*, where the meaning is 'I am going to tell you something about the duke: he gave my aunt that teapot' (with no implication that he did not other things as well).

Examples in (19a), taken originally from Halliday (1967), are the London brewer's actual slogan, which envisages the possibility that we want other items as well. Thus, it was soon replaced by the *wh*-cleft sentence in (19b).

(19) a. We want Watney's.

b. What we want is Watney's.

Since the exhaustive understanding of cleft constructions relies on this fact that these constructions give a full list of values satisfying the variable, there will be no exhaustiveness implied in cleft sentences in which negation forms part of the focus constituent. On the contrary, in case that the negative marker is placed in the presupposition part of the sentence, the exclusiveness feature still remains. Thus, there is no exhaustiveness in (20), because what is expressed in the sentence is merely that *John* does not figure on the list of people who kissed Mary.

Following Halvorsen (1978), Collins (1991: 69) argues that exhaustiveness can be regarded as conventional implicature**.** Conventional implicature is determined by conventional meanings of linguistic expressions. Conversational implicature, as opposed to conventional implicature, is determined by linguistic and non-linguistic context in

which an expression is used. Put in a nutshell, the former is part of linguistic system, whereas the latter falls within the zone of pragmatics. (20b) represents the entailment and (c) represents the conventional implicature for (20a). The conversational implicature for (21) is shown in (22).

(20) a. John managed to write a paper to present at the conference.
b. John wrote a paper to present at the conference.
c. It's difficult to write a paper to present at the conference. (Halvorsen 1978 cited in Collins 1991: 69)

(21) A: Smith doesn't seem to have a girlfriend these days.
B: He has been paying a lot of visits to New York.

(22) Smith has or may have a girlfriend in New York.

Taking presupposition of existence and exhaustiveness implicature into account, I can show the semantic features of *it*-clefts as in (23).

(23) a. It was John that Mary kissed. (It-cleft sentence)
b. Mary kissed John. (Entailment/assertion)
c. Marry kissed somebody. (Existential presupposition)
d. Marry kissed only one person. (Exhaustiveness implicature)

'Non-negotiability' is also a semantic feature of cleft constructions. Delin (1992: 299) claims that *it*-cleft presupposed propositions contain information that is treated by speaker and hearer as non-negotiable at the time of utterance. This feature prevents functional categories i.e. negation, epistemic modality and interrogative modality from affecting *it*-cleft presuppositions, whereas the non-cleft presuppositions are entirely subject to the operation of these categories.

(24) a. It was John who ate beans

b. It wasn't John who ate beans.

c. It is possible that it was John who ate beans.

d. Was it John who ate beans?

Presupposition: 'someone ate beans'

(25) a. John ate beans.

b. John did not eat beans.

c. John possibly ate beans.

d. Did John eat beans?

'Anaphoricity' as a semantic feature of *it*-clefts prompts the non-negotiability of *it*-cleft presuppositions. It is commonly accepted in the theories of presupposition to treat it as a species of propositional anaphora, that is, the presupposed proposition is seen as requiring an antecedent in the discourse context to be felicitous. Delin puts this as follows:

> Non-negotiability arises from anaphoricity because anaphora implies the existence of prior references to the same information. Participants in a discourse are, with each utterance, placing propositions 'on the table' for acceptance or rejection by interlocutors. If a proposition is placed on the table along with a marking to say that this is not the proposition's original appearance the speaker is indicating that the time for any negotiation- or, more specifically for rejection- is past. (1992: 289)

The evidence for the anaphoricity of cleft presupposition is of three types. Delin (1992) categorizes them as below:

1. Elements that are ambiguous between anaphoric and emphatic use take on their anaphoric reading when placed within an *it*-cleft presupposition.

(26) a. Then there was the Test Act which insisted that all civil and military officers should take the oath of supremacy and allegiance and receive the Holy

Communion according to the church of England such an artificial observance for so many in the following century.

b. Such realistic hamfistedness was to make the life of the Church of England such an artificial observance for so many in the following century. (Delin 1992: 287)

The underlined elements in (26a) have anaphoric reading because of being placed within the *it*-cleft presupposition, while the same elements in (b) conform to their emphatic reading.

2. *It*-cleft presuppositions enable the anaphoric relation upon which contrast depends to be established, in contexts where information that is simply given does not have the same effect.

The anaphoric function of *it*-cleft presupposition allows the contrastive relation to be settled between the focus constituent and the prior context. Contrast is a correlation of comparison or opposition between two discourse elements in regard to some predicate. In this way, contrast by itself can be considered a device to preserve the coherence of text. As it is shown in (27) contrast holds between *angel* and its preceding element *Boaz* with respect to the predicate '*use this form of greeting'*.

(27) To this reply is given that from the verse dealing with Boaz. There is no proof of divine approval, only that Boaz used this form of greeting but in the second verse, it is the angle that uses this form of greeting. (Delin 1992: 288)

3. Information placed within an *it*-cleft presupposition appears to 'remind' rather than 'inform', regardless of its objective status in the discourse.

In some cases, the hearer could have former knowledge of the presupposed information in *it*-clefts. However, he is not necessarily thinking about it at the time utterance; consequently, the function of *it*-cleft presupposition is a marking to remind the hearer of

what has recently gone in the discourse. The clefted constituent in (28) acts as reminder, but the underlined constituent in (29) does as informer.

(28) A: To be frank, I've heard from a member of sources that when you were interviewed for a job here that you think that you didn't get the job because of me.

B: Oh no, I never said that … I went to great pains to tell people that you were the only one supporting me.

A: In fact, it was very shortly after that interview that I sent my circular letter around to various scholars and I sent you a copy.

(29) In fact, very shortly after that interview I sent my circular letter around to various scholars and I sent you a copy. (Delin 1992: 290)

2.2.3. Syntactic characteristics

According to Leech (2006), *it-cleft* sentences consist of two major components. He takes complement going after the copula as essential constituent within the sentence that is called 'focus'. The second part is a relative pronoun or a zero relative pronoun after which comes a clause from which the focus constituent is extracted.

First component	Second component
It+ be + complement	That,who,which,zero+relative pronoun
It was my uncle	Who gave this book to Sue

Table 2.4 Components of an it-cleft Sentence

Wh-clefts are, in the same way, composed of two parts. The first part is a nominal relative clause[3] and the second part is the predicate which is made of the copula and a noun phrase or other phrases that are semantically identical with the first part. Based on what followed, the constituent structure of *it*-cleft constructions can be illustrated in figure 2.2.

[3] . Trask (1993), Akmajian (1970) and Huddleston respectively use the terms 'headless relative clause', 'reduced clause' and 'fused relative clause' for Leech's 'nominal relative clause'.

First component	Second component
Nominal relative clause	predicate
What you really need	is another credit card

Table 2.5 Components of a Wh-cleft sentence

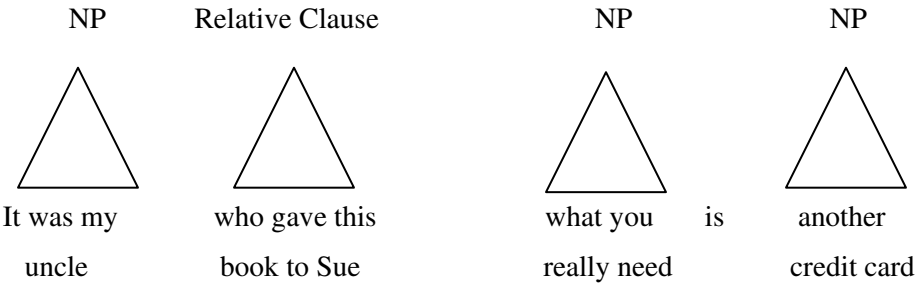


Figure 2.2 Constituent Structure of it-cleft and wh-cleft

Declerck (1988) shows that the presence of negative items in *wh*-cleft presupposition gives rise to the elicitation of negative polarity in the focus constituent. This matter cannot be true with *it*-clefts and reverse *wh*-clefts (Pavey 2004: 24 citing Gundel 1977)[4].

(30) a. What I never noticed is any/* some sign of satisfaction.

b. * It's any eggs that we don't need.

c.? Any eggs is what we don't need.

Similarly, a quantifier operating on a noun phrase in the cleft clause can be shifted to focus constituent in *wh*-cleft constructions (Pavey 2004 citing Declerck 1988: 52). There is no contingency for the quantifiers to be within the focus constituent in *it*-clefts.

(31) a. What the new students do is all pick the same course.

b. * It's all pick the same course that the new students do.

[4] . I think that the intended example below would cast doubt on the claim that negative polarity items cannot be placed in the *it*-clefts.

(i) It is seldom that we receive any help. (Declerck 1988: 52)

Huddleston (1984: 463) differentiates between *it*-cleft and *wh*-cleft sentences by exploring some examples in which pro-verbs, infinite and finite clauses may lie in the *wh*-clefts, but this syntactic feature is withdrawn from *it*-clefts. What is noteworthy is that Davidson (2000: 1106) considers finite clauses to be placed within the focus constituent zone as complement of the copula in *it*-clefts, as shown in (33).

(32) a. What John had done was (to) obtain the data.

b. * It's (to) obtain data that john had done.

c. What annoyed me was that she was so slow.

(33) It was because he was ill that we decided to return.

Hedberg and Fadden (2007) declare that focus particles like 'only' to be in focus position is a irrefutable evidence in favor of exhaustiveness implicature, while 'even' and 'also' which presuppose non-uniqueness cannot be clefted.

(34) It's * also/ * even/ only Muriet who voted for Hurbert.

E. Kiss's (1998) contribution to the analysis of cleft construction is the distinction between informational focus vs. identificational focus. Identificational focus singles out from a group of potential elements a specific set current in the linguistic or situational context and the predication phrase (focus constituent) in the matrix clause predicates every individual element in the specific set. Put it the other way, identificational focus equates the semantic feature of exhaustiveness noted above. Identificational focuses share two distinctive features: [+ exhaustive] and [+ contrastive].

These predominant features in the cleft constructions strengthen the claim that cleft construction reflects identificational focus. As can be seen in (35), *a new battery* is identificational focus as the speaker has selected it from a potential set of elements which may occupy the x position in the variable 'the car needs x'. Furthermore, *a new battery* as focus has both the [+exhaustive] and [+ contrastive]. I can clarify the exhaustiveness in (35) by saying that *a new battery* is the only value that remains valid with respect to the

variable. In the same vein, the contrastiveness is vindicated by hearer's inferencing that *a new battery* contrasts with some potential, but unspecified elements in terms of its compatibility with the intended variable. It should be noted that informational focus carries new information. Keep in mind that informational focus exists within every sentence, but not every sentence can have identificational focus.

(35) It is a new battery that the car needs.

In arguing the claim that an *it*-cleft sentence can not have 'also' to accompany the focus constituent, E. Kiss adopts a more moderate policy in which a cleft *also*-phrase appears to be acceptable precisely in a context where it can be understood to identify a member of a relevant set in addition to one or more members previously identified for which the predicate holds, with the rest of the set still excluded. She presents the example in (36) in support of her judgment. In (36), Kiss depicts that B identifies *Sam* as the member of the set present at the party who danced with *Mary*, excluding the rest of them. C adds *John* to the man identified by B, excluding everybody but 'Sam' and 'John'.

(36) A: Bill danced with Mary.
B: No, it was Sam that danced with Mary.
C: It was also John that danced with Mary.

The next issue in this section is associated with coreference between a pronominal item and a lexical noun phrase. *It*-clefts with their bi-clausal syntactic structure expressing a simple semantic proposition which appears in different syntactic constituents provide sufficient grounds for the issue of coreference. In case that clefted constituent is a pronominal item that corefers with a lexical NP in the cleft clause, then the pronominal must take on the appearance of a reflexive in *it*-cleft and basic *wh*-cleft sentences. Otherwise, the pronominal is referentially interpreted differently from the lexical NP. Reverse *wh*-clefts cannot follow this issue. Look at the examples in (37), (38) and (39), taken from Pavey (2004: 25).

(37) a. It was himself$_i$ that Oscar$_i$ loved the most.

b. It was him$_{*i/j}$ that Oscar$_i$ loved the most.

(38) a. The one who Henry$_i$ hurt the most was himself$_i$.

b. The one who Henry$_i$ hurt the most was him $_{*i/j.}$

(39) * Himself$_i$ was the one who Henry$_i$ hurt the most.

If the pronominal occupies a position in the cleft clause and corefers with the lexical NP in the focus position, then the reflexivization is triggered and the corresponding reflexive appears in the cleft clause. This issue subsumes all the cleft constructions including *it*-clefts, basic *wh*-clefts and reverse *wh*-clefts.

(40) a. It was Oscar $_i$ that loved himself $_i$ the most.

b. It was Oscar $_i$ that loved him $_{*i/j}$ the most.

(45). a . The one who loved himself $_i$ the most was Oscar $_i$.

b .The one who loved him $_{*i/j}$ the most was Oscar $_i$.

(46). Oscar $_i$ was the one who love himself $_i$ the most.

As with reflexives, reciprocals can appear either in the clefted constituent (47a) or in the cleft clause (47b). Pavey (2004: 26) shows that a distinctive feature of basic *wh*-clefts is the acceptability of a reciprocal to coindex with the 'subject' argument of the predicate in headless relative clause. This fact in case of *it*-clefts and non-cleft counterparts results in ungrammatical sentences, as indicated in (48).

(47) a. It's each other that Jennifer and Brad love the most.

b. It's Jennifer and Brad that love each other the most.

(48) a. What$_i$ amuses them is each other$_i$.

b. *Each other$_i$ amuses them$_i$.

c. * It's each other$_i$ that amuses them$_i$.

Of the intriguing syntactic phenomenon is the issue of verb agreement in the matrix and cleft clause of *it*-clefts. To begin with, I shall argue it in the cleft clause. If the subject of the verb in the subordinate clause is clefted in the copular matrix clause, then the verb in the cleft clause is marked for number not person, as noted by Pavey (2004: 27). This verb agreement pattern holds for the other types of cleft constructions (50).

(49) a. It's me that likes hand gliding.

b. It's you $_{SG}$ that likes hand gliding.

c. It's you $_{PL}$ that like hand gliding.

(50) a .The one that likes/*like hand gliding is me.

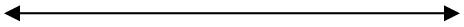
b. I am the one that likes/*like hand gliding

Akmajian (1970: 156) believes that the agreement pattern in *it*-cleft sentences in which the first reflexive pronoun appears in the cleft clause and coindexed with its antecedent in the matrix clause is interesting in such a way that the reflexive pronoun agrees with its pronominal antecedent both in number and person, while the verb in the cleft clause agrees with the clefted pronominal constituent only in number.

Agreement in number

(51) It's me $_i$ who has /* have to protect myself $_i$.

Coreference in terms of number and person



In case of pronominal antecedent being a first or second singular pronoun in the matrix clause, Akmajian adds that it is allowed to use first, second or third reflexive pronoun in the cleft clause in order to establish coreference.

(52) a. It's me who has to protect myself / himself / herself.

b. It's you $_{SG}$ has to protect yourself / himself / herself.

As for the verb agreement pattern in the matrix clause of *it*-clefts, copula is always singular as it agrees with initial NP. However, there are interesting cases of basic *wh*-clefts and reverse *wh*-clefts where verb agrees with the focus clefted constituent (Pavey: 2004: 28).

(53). a. It's /* are Posh and Beck that moved to Spain.

b. Theft and robbery is/are what I despise most.

c. What we can't have here is/? are theft and robbery.

2.3. Copular Construction

Declerck (1988) recognizes five types of copular sentences. Section 2.3.1 will introduce specificational sentences. Predicational sentences are the main subject of study in section 2.3.2. To get a better understanding of copular constructions, it is strongly recommended to have a look at Declerck (1988).

2.3.1. Specificational Sentences

Declerck (1998) distinguishes between specificational and predicational sentences. The semantic function of specificational sentences is to specify a value for a variable. Following this definition, we can classify cleft sentences as being located within the category of specificational constructions. As mentioned before, there are other equivalents, like *identificational, identifying, equational, and equative* that Declerck claims to be infelicitous. Naming specificational sentences as identificational sentences arises from the view that the functional contribution of such sentences is to determine the true identity for the value to be in harmony with the assumed variable. This naming is rejected by Declerck (1988: 12), as not every identificational sentence can have the specifying role, as in (54). What motivates the use of identificational sentences is their tendency to form up a balanced relationship between two linguistic items. Correspondingly, a specificational sentence can perform an identifying role which is

meant to enable the speaker to pick up an appropriate value for the variable, not to satisfy a semantic equation of two lexical items. Thus, the notation 'x=y' for an specificational sentence implies that 'x' must be allocated to 'y'. The interpretation 'x equals y' or vice versa is evidently unacceptable.

(54) A: Mike? Who's Mike?
B: He's our neighbor's son. (Declerck 1988: 2)

Declerck proposes three decisive factors to identify specificational sentences. 'Listing Paraphrase' is the first means by which rewording of an specificational sentence in form of 'x be: y' strikingly works out.

(55) a. The only people that can help you are the prime minister and the queen herself.
b: The list of people that can help you contains only two people : the prime minister and the queen herself. (Declerck 1988: 5)

The occurrence of implied of *wh*-question sentences searching for valid values is the second way to recognize these sentences.

(56) a. It was a book that I got.
b. What did you get?
Presupposition: 'you got x'

As noted by Declerck, the prime example of specificational sentences is an *it*-cleft sentence. Thus, when a sentence has an *it*-cleft counterpart, there comes with it the specification function.

(57) a. The bank robber is John Thomas.
b. It's John Thomas who is the bank robber.

2.3.1.1. Variable and value in specificational sentences

Variable is the both logically and pragmatically presupposed part of the sentence that contains given information. Value, on the other hand is asserted information. Pavey (2004) asserts that it is not required that the referent in the focus position be necessarily new to the discourse; however, what makes the referent new is the 'relation' established between the value and the presupposition in the variable.[5] In other words, the constituent is 'new' in the sense that it is this constituent that satisfies the value for the variable. The relationship between *oil* and *weapons* in regard to the presupposition "x is the issue" in (58) is what makes 'oil' new, although it has been previously mentioned in the discourse.

(58) The fact is that, if the oil that Iraq has were our concern we most probably cut a deal with Saddam tomorrow in relation to the oil. It's not oil that is the issue, it's the weapons. (Pavey 2004: 31)

Prince (1978) presents a case of cleft constructions termed informative-presupposition *it*-cleft in which variable does not contain given information, but the speaker is invited to process the information as background knowledge (Johansson 2001: 554).

(58) It was just fifty years ago that Henry Ford gave us the weekend. (Prince 1978: 898)

Declerck believes that informative presuppositions are not merely accessible in *it*-clefts. This kind of information packaging remains also in *wh*-clefts and non-cleft specificational sentences.

(59) a. <u>What I have often asked myself</u> is how other linguists manage to keep abreast with the rapid developments in the different fields of linguistics.

(Declerck 1988: 213)

[5] . This view has been formerly held in Gundel (1977), Declerck (1988) and Lambrecht (1994, 2001).

b. We certainly hope to have the bridge finished before next week. The problem is that the weather forecast is none too good. (Declerck 1988: 219)

Value is in congruence with focus. However, it is interesting to note that neither the value not the variable in a specificational sentence necessarily corresponds to a whole constituent (Pavey 2004: 34). Cases can be found where the variable appears partially both in the focus constituent and the cleft clause. It is only some part of the focus constituent which performs as value/focus.

(60) A: The student in which hat came in first?
B: It was the student in the GREEN hat that came in first.

(61) focus constituent: 'the student in the green hat'
value/focus: 'green'
cleft clause: 'that came in first'
variable: 'the student in the x hat'

Existential presupposition, as mentioned before, characterizes *it*-clefts as a subcategory of specificational sentences. Thus, the presence of some elements as value, like 'somebody', 'someone', 'no one' and 'nobody' is prevented in the focus position. The first two elements are in advance present in the presupposition and their repeated occurrence does not add further information. The other two are in direct contradiction to the existential presupposition.

2.3.2. Predicational Sentences

Predicational sentences derive their name from the fact that instead of specifying a value for a variable, they merely predicate something of the referent of the subject NP. In most cases this 'something" is a characteristic, a role, a function, or an indication of class membership.

(62) a. John is a teacher.

b. Rose is a pretty girl.

c. John is the cleverest of them all.

Halliday (1970) and Gundel (1977) term this kind of copular constructions 'attributive sentence'. Contrasting with the specificational sentences, the predicational sentences cannot be questioned by implied *wh*-question words. If a sentence can be used as a reply to a *wh*-question, then that is a specificational sentence not a predicational sentence even if the value and variable parts of that sentence hold on to their predicative role, viz. to attribute a property to a subject NP. For example, when *John is a good student* is uttered outside the question-answer context, it is a predicational sentence. In case of a response to the question *What's John like?* the intended sentence is a specificational sentence as the value *a good student* satisfies the variable *John is x*, albeit *a good student* predicates a good characteristic of *John*.[6] The listing paraphrase possibility consolidates the founded claim.

(63) John is the following: a good student.

The noteworthy point here is that property-denoting NPs do not refer at all. For that reason, they cannot establish discourse referents. They are non-referential in the universe of discourse. In the case above, *a good student* is a property-NP which denotes no specific referent, except for a property in the universe of discourse; it can potentially refer to everyone in the discourse context. That is why Declerck (1988: 57) points out that the referring expressions cannot have property-NPs as antecedents, as in (64a). If we want to use a pronoun that does have the predicate NP as antecedent, we use *that* as in (64b).

(64) a. Carter $_{i}$ is a politician $_{j}$. I'm glad I'm not him $_{i/*j}$.

b. Carter is a politician $_{i}$. I'm glad I'm not that $_{i}$.

(Declerck 1988: 57)

[6] . Property-NP (Declerck 1988: 56) is the term assigned to the value in the predicational sentence like *John is a good student.*

It-cleft sentences per se have specificational reading as claimed by Declerck (1988: 141). In majority of cases, the clefted constituent is a non-predicative element, such as a noun phrase. Nonetheless, if a predicative element, like an adjective is clefted, it takes on a referential quality. For this reason, *flat* in (65a) can not appear as clefted constituent, while *blue* in (65b) can be clefted because the former cannot be referentially interpreted. In the latter, the predicative clefted constituent falls under the category *paint*, thus coded as noun phrase. This is what Davidse (2000) refers to as 'rankshifting to nominal'.

(65) a. It's blue that they painted the house.
b. * It's flat that they hammered the nail. (Pavey 2004: 36 citing Heggie 1993: 55)

The mere specificational reading for *it*-clefts does not seem unyielding. A case such as (66) is a fair example of predicational *it*-clefts where the clefted constituent is a predicative element which provides a contrastive meaning by placing a nucleus on the focus.

(66) It is AMBITIOUS that John is, not haughty. (Declerck 1988: 150)

However, it is confirmed that the linear order of [it is + focus] in *it*-clefts generally concurs entirely with the overall structure of specificational sentences despite the fact that value and variable may have their own predicational qualities. Thus, the nature of value and variable could be predicative elements, but only the specificational interpretation is purely achievable. *Wh*-clefts are no exception in this respect.

(67) What John is is ambitious.

Placing the property-NPs in the focus position of *wh*-clefts leads to ambiguity where both the specificational and predicational are allowed. To resolve the ambiguity, it should be noted that the former can be rephrased in the shape of an *it*-cleft sentence whereas this issue is subject to denial concerning the predicational *wh*-clefts.

(68) a. What happened was a catastrophe. Ambiguous *wh*-cleft

b. It was a catastrophe that happened. Specificational reading

c. The following happened: a catastrophe. Listing paraphrase

d. What happened was disastrous. Predicational reading

Here follows another point raised in direction of *wh*-clefts. The *wh*-question word *who* cannot be used in a *wh*-question the aim of which is to ask for a property-ascribing reply (Declerck 1988: 57). A question with *who* fulfills the hearer's need for identifying a referent. To receive information about the referent's properties, it is urgent to pose a wh-question with *what.*

(69) a. What John is? He is a doctor.

b. What John is like? He's a very nice young fellow.

c. What /*Who did she become?

It automatically follows that it is not possible to use *who* in the *wh*-clefts in which focus constituent is a property-NP. Consequently, *what* is not used in the *wh*-clefts which tend to discover the referent's identity.

(70) a. *Who / What I'd like to be is chairman of the club.

b. *What / The one who is the murderer is John. (Declerck 1988: 58)

The clear-cut specificational interpretation of *it*-clefts would look suspicious if we consider the proverbial sentences as cleft constructions. It is somewhat believed that proverbial sentences in spite of having an identical structure with *it*-clefts do not highlight any specification value. Examples in (71) are cases of proverbial sentences, apparently without specificational reading.

(71) a. It's a poor heart that never rejoices.

b. It's a long lane that has no returning.

(Declerck 1988: 151, originally from Jespersen 1961: 88)

The predicational reading for (71a) follows in (72).

(72). A heart that never rejoices is a poor heart.

However, there are a couple of remarks made by Declerck that separate proverbial sentences from *it*-cleft sentences.

1. When *it*-clefts retrieve their original form viz. non-cleft sentences, there will be no change in meaning, whereas this modification in relation to proverbial sentences would bring about a shift of meaning.

(73) a. It was John who did it. (*It*-cleft sentence)
b. John did it.

(74) a. It's a long lane that has no returning. (Proverbial sentence)
b. A long lane has no returning.

2. It is widely claimed that the relative clause in *it*-clefts is not restrictive. Personal pronouns and proper nouns provide proof that they can reside in focus position of copular matrix clause. Nevertheless, it is not the case with restrictive relative clauses. It is interesting that the relative clause in proverbial sentences is restrictive. To support this view, there is a conditional test that the restrictive relative clauses undergo.

(75) If a poor heart never rejoices, it is poor.

To sum up, Declerck offers examples in which the mere specificational reading of *it*-clefts is blurred, as in (76). The predicational readings for (76) are accessible in (77).

(76) a. Was it an interesting meeting you went to last night?
b. Gee, It's a nice dress you're wearing. (Declerck 1988: 158 citing Ball 1977)

(77) a. Was the meeting that you went to last night interesting?

b. Gee, the dress you're wearing is nice.

2.4. Theoretical approaches to the analysis of *it*-cleft constructions

Studies of cleft constructions with derivational basis fall into two broad approaches. To start with, I shall argue the extrapositional approach in section 2.4.1. The expletive approach will be touched in section 2.4.2. In continuation, Section 2.4.3 provides us with other approaches which do not fit neatly into the extrapositional or expletive analyses.

2.4.1. Extrapositional approach

This approach focuses on the copular nature of cleft constructions and seeks to draw out the issue that the emphasis should be laid on the copular matrix clause. According to this analysis, the cleft pronoun and the cleft clause are taken together as a discontinuous semantic constituent which correlates with the clefted constituent via the copula. The copula on its own puts these constituents in an identity-statement relationship and *it* is interpreted referentially. Labeling of this approach as extrapositional results from the cleft clause being extraposed to the end of sentence. This approach has been endorsed by linguistics such as Jespersen (1927), Akmajian (1970), Bolinger (1970), Emonds (1976), Gundel (1977) and Borkin (1984).

(78) It was John that I saw. ⟶ [it+ that I saw] was [John]

2.4.1.1. Jespersen's analysis (1927)

The extrapositional analysis of *it*-clefts was initiated by Jespersen in his book entitled *A modern English grammar on Historical Principles*. There is no mention of the term 'cleft' in this work. However, these sentences are categorized as restrictive relative constructions made of the copular clause, [it is]. Jespersen in his definition of the clefts points out:

> Restrictive clauses introduced by *it is* are interesting from a logical point of view because it is not really the antecedent (or what looks like the antecedent) that is restricted by a

> relative clause. When we say "it is the wife that decides" or "it was the colonel I was looking for" what we mean is really "the wife is the deciding person" and "the colonel was the man I was looking for": the relative clause thus might be said to belong rather to "it" than to the predicative following after "it is" (Jespersen 1927: 88f cited in Lambrecht 2001: 464)

The validity of Jespersen's analysis is confirmed by the example in (79) where the constituent following the copular clause is a definite noun which does not need to be restricted. Thus, the cleft clause describes not the clefted constituent but rather the cleft pronoun which retains a referential value.

(79) It was the battle of Waterloo that decided the fate of Europe

2.4.1.2. Akmajian's analysis (1970)

In his analysis, Akmajian shows that the *wh*-clefts and *it*-clefts are synonymous on the grounds that both types contain the same presupposition and can be uttered in reply to the same wh-question (1970: 149).

(80) Who did Nixon choose?

a. The one who Nixon chose was Agnew.

b. It was Agnew who Nixon chose.

Presupposition: 'someone exists who Nixon chose'

Moreover, Akmajian views *it*-clefts as derived from the *wh*-clefts. The derivational account of *it*-clefts from *wh*-clefts is explained by the transformational framework of Generative Grammar. The complicated structural properties of cleft constructions will be removed by employing what Akmajian terms 'Cleft-extraposition Rule'. The first evidence for derivational nature of *it*-clefts is the verb agreements pattern according to which the verb concord in the cleft clause is with the clefted constituent just in number. To account for this, Akmajian puts forth the underlying pseudo-clefts in (82) as generation base for the *it*-clefts in (81).

(81) a. It's me who *am/ is responsible.

b. It's you who does/* do this job.

(82) a. The one who is responsible is me.

b. The one who does this job is you.

In another dialect of English (Akmajian's label: Dialect II) the verb agreement pattern is the same as the one in (81), but what differs is the disagreement pattern with regard to case marking.

(83) a. It is I who is sick.

b. It is me whom John is after.

The discrepancy attached to the case marking disagreement in (83) is justified by the hypothesis that when there is a surface subject in the cleft clause, the focus constituent is marked for accusative case. In case of absence, the focus constituent is marked for nominative case. However, in (81) the clefted constituent because of its occurrence after the copula is always assigned accusative case. The derivation procedures for (83a) are given in (84).

(84) a. The one who is sick is me.

Cleft-extraposition Rule →

b. It is me who is sick.

Case-marking Rule →

c. It is I who is sick.

Akmajian offers more complicated data in Dialect III. Apparently, in this dialect, the case marking of the clefted constituent pronoun can be either nominative or accusative.

The interesting point is that if the clefted constituent is nominative, the verb in the cleft clause agrees with it in person; in case of accusative, the verb is third person.

(85) a. It is I who am/*is responsible.
b. It is me who *am/is responsible.

Akmajian suggests that the speakers of Dialect III would produce such sentences by analogy to the pattern associated with appositive clauses. In appositive constructions, when the appositive clause refers to a pronoun in nominative case, there is person agreement between the verb of the clause and the pronoun. However, when the appositive clause is associated with a pronoun marked for accusative case, then the verb of the clause is consistently third person (1970: 154).

(86) a. I, who am/*is tall, was forced to squeeze into that VW.
b. He had the nerve to say that to me, who has/*have made him what he is.

Following appositive correction rule, the derivation process for (86a) can be depicted as follows:

(87) a. The one who is responsible is me.

Cleft-extraposition Rule

b. It is me who is responsible.

Case-marking Rule

c. It is I who is responsible.

Appositive Correction

d. It is I who am responsible.

The second evidence concerns the agreement pattern which occurs between the clefted constituent and the reflexive pronoun in the cleft clause. As we can see in (88a), the

reflexive pronoun is third person and the focus pronoun is first person. This incongruity leads us to assume the pseudo-clefts to be the generation base for the *it*-clefts. Besides, the third person verb in (88a) indicates that the cleft clause has a third person subject; thus, the derivation assumption is once again invalidated.

(88) a. It's not me that shaves himself with a straight razor.

b. The one who shaves himself with a straight razor is me.

There are certain cases in Akmajian's data in which some syntactic paradox is conspicuous. Example in (89) presents the agreement pattern between the reflexive and focus pronoun in person along with the agreement of the verb in the cleft clause with the focus pronoun in number.

(89) It's me who has to protect myself.

In this case, reflexive correction is the key to the solution of this intricate issue. It seems that under certain circumstances without any specified reasons, the succession of two personal pronouns would be impeded; therefore, the rightmost occurrence of the first pronoun is inverted to a reflexive agreeing with the pronoun on the left (Akmajian 1970: 158).

(90) * It's me who cut me. —Reflexive Correction→ It's me who cut myself.

The generation process of (89) in consideration of reflexive hypothesis is shown as in (91).

(91) a. The one who has to protect me is me.

—Cleft-extraposition Rule→

b. It's me who has to protect me.

—Reflexive Correction Rule→

c. It's me who has to protect myself.

On closer inspection we can notice that *it*-clefts as opposed to their non-cleft counterparts raise a sort of ambiguity which seems removable in light of the derivation hypothesis.

(92) a. It was himself $_{i/j}$ that John wanted Bill $_{j}$ to describe.

b. The one John wanted Bill to describe was John/ Bill himself.

(93) John $_{i}$ wanted Bill $_{j}$ to describe himself $_{*i/j}$.

Akmajian assumes that the pseudo-cleft sentences which consolidate the basis for *it*-clefts derivation are of *wh*-cleft kinds, not of *Th*-cleft kinds. Th-clefts are pseudo-cleft sentences in which the referent of the relative clause is nominal heads such as *one, time, reason, place, way and thing.*

(94) a. The *one* Nixon chose was Agnew.

b. The *time* at which I met John was four.

c. The *reason* that John came was to irritate me.

d. The *place* where I saw John was Boston

e. The *way* John did that was by standing on the ladder.

f. The *thing* that John bought was a car.

Th-clefts (Akmajian 1970: 160-1)

(95) a. Who Nixon chose was Agnew.

b. When I met John was four.

c. Why John came was to irritate me.

d. Where I saw John was Boston.

e. How John did that was by standing on the ladder.

f. What John bought was a car.

Wh-clefts (Akmajian 1970: 161)

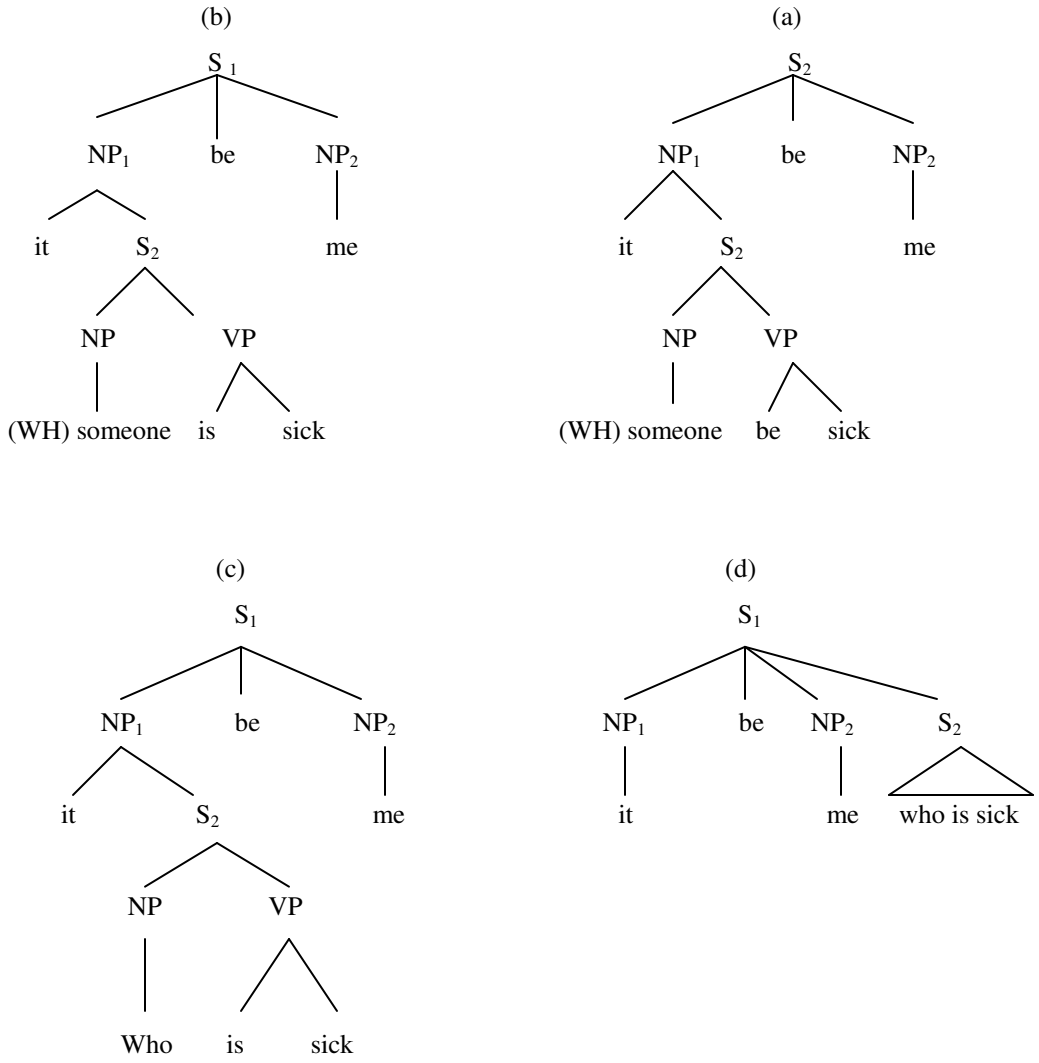
To support his claim, Akmajian presents proof which attests the validity of his assumption. For example, the sentences in (96a) and (b) have the same meaning while the sentence in (c) prompts the addressee to come up with another meaning.

(96) a. It was in the garden that I found John.

b. Where I found John was in the garden.

c. The place where I found John was in the garden.

The syntactic processes concerning the derivation of cleft sentences from headless relative clauses have been diagrammed below.



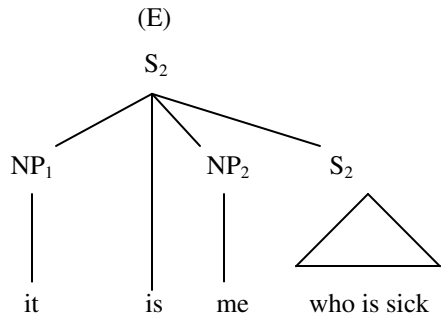


Figure 2.3 Derivation of it-clefts from wh-clefts (Akmajian 1970)

a to b: Verb Agreement Rule b to c: Cleft-extraposition Rule

c to d: Relativization Rule d to e: Verb Agreement Rule

2.4.1.3. Gundel's Analysis (1977)

Gundel provides the second example of extrapositional approaches. She takes the view that cleft sentences are "reduced form of right-dislocated pseudo-clefs, where *it* is a pronominal reference to the topic which appears at the end of the sentence" (1977: 543). Hence, the cleft pronoun is not semantically inert. The derivation procedure is included in (97).

(97) a. What I heard was an explosion. Pseudocleft sentence

b. It was an explosion, what I heard. Right-dislocated sentence

c. It was an explosion that I heard. Cleft sentence

She assumed that in sentences with identity-statement relationship established by copula in the form of *NP be NP,* the first noun phrase is replaced with a pronoun which has the minimal agreement with it in number and gender (1977: 555). The fact is that relative clause in right-dislocated sentence above is replaced by the pronominal reference *it.* This pronominalization is authenticated by the data in (98).

(98) a. The one I dislike is Mary, it/*she isn't Alice.

b. It's / * They're apples, what I had enough of.

c. The first man who orbit around the earth was John Glenn, wasn't it?

There are other issues in the derivation of *it*-cleft sentences like (97c) from right-dislocated pseudo-cleft sentences like (97b) that we should bring up. The fact that there is an intonational difference between *it*-clefts and right-dislocated pseudo-clefts where there exists a pause between the main sentence and the dislocated NP. It is also necessary to account for the fact that a pseudo-cleft sentence like (98b) has a final noun phrase headed by *what* (what *I heard)* and the cleft clause (*that I heard*). To shed light on this, Gundel (1977: 557) speaks of an optional rule which deletes the variable head of the dislocated relative clause deleting simultaneously the sentence boundary that precedes it. This rule holds only with right-dislocated NPs in identificational sentences that Gundel refers to as 'Variable Head Deletion'. The operation of the rule is shown in Figure 2.4.

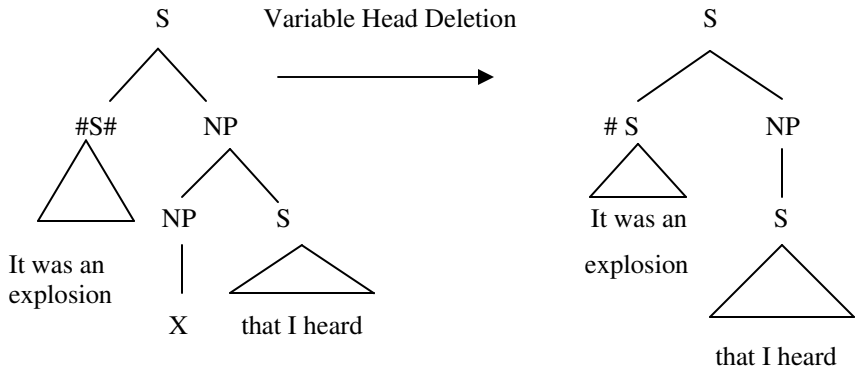


Figure 2.4 Variable Head Deletion Operation

Derivation hypothesis can be invigorated regarding some functional considerations. Gundel (1977: 552) argues that the topic-comment order follows the pattern in which the topic or given information precedes the comment or new information. The difference between right-dislocated pseudo-clefts and *it*-clefts is to a great extent a matter of style. In fact, the former is clearly more colloquial and used in spoken language but the latter is much probable to be observed in the written language and formal contexts. The predictability of topic from the preceding discourse context builds a secure base for topic to be ellipted in both sentences. Furthermore, the stoppage of negation in the focus part of the sentences in another step to cement the putative hypothesis.

(99) a. I guess you're leaving for New York, soon. ---- Yes, It's on Saturday [that I'm leaving].

b. I guess Bill's sister will be here. ---- Yes, she's coming on Saturday, [Bill's sister].

(100) a.* It's any eggs that that we don't need.

b. * It's any eggs, what we don't need.

The derivation hypothesis is called into question by Schacter (1973: 28). If a prepositional phrase is placed in the focus position of an *it*-cleft sentence, there will be no pseudo-cleft to be considered as the generation base for the *it*-cleft as in (102 b).

(101) a. It was Matt that I gave the cat to.

b. The person that I gave the cat to was Matt.

(102) a. It was to Matt that I gave the cat.

b. * The person that I gave the cat was to Matt.

Gundel finds out the solution by expressing a new transformational rule which she refers to as 'preposition copying'. Based upon this rule, the stranded preposition is copied into the focus constituent of a cleft sentence and its original copy is deleted.

Of Gundel's interesting findings it is the semantic ambiguity present in the *wh*-clefts which were discussed in detail in section 2.3.2. It is both the predicational and specificational readings possible in *wh*-clefts, while *it*-clefts are disambiguative devices to avoid such ambiguity.

(103) What I heard was an explosion.

Predicational reading: What I heard was loud.

Specificational reading: It was an explosion that I heard.

Hedberg (2000: 908) provides the syntactic structure for an *it*-cleft sentence based on Gundel's analysis in figure 2.5. It is similar to the proposed tree diagram of Akmajian's (1970) except that the matrix clause forms an S, which is itself a daughter of another S.

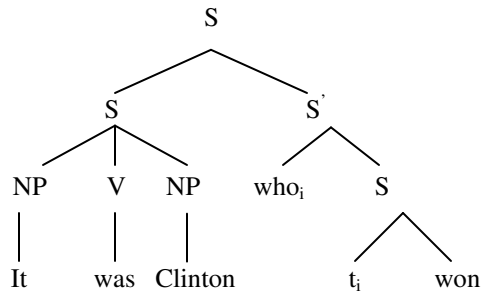


Figure 2.5 Syntactic structure of an it-clef sentence (Gundel 1977)

In conclusion, it seems that all the extrapositional approaches sideline the relationship between the clefted constituent and the cleft clause and concentrate on the copular matrix clause alongside the referential status of the cleft pronoun which holds an anaphoric relation to the extraposed cleft clause. In the meanwhile, we can observe many transformational contortions which instead of being helpful drive us to more baffling complexities. Pavey demonstrates the contingency for a relation between the clefted constituent and the cleft clause. The agreement of verb in the cleft clause with the clefted constituent along with the possibility for a part of the presupposition to be included in the clefted constituent (as in 104), although being excluded from the focus domain , can be considered as evidence in confirmation of the association of clefted constituent and cleft clause.

(104) It was [Jack] and LORNA [that visited Mongolia].

2.4.2. Expletive approach

The other major approach to the analysis of *it*-clefts relates to the expletive approach which assumes that the cleft pronoun and the copula are 'dummy' elements and semantically inert. Against the extrapositional approach, the semantic relation is held between the clefted constituent and the cleft clause as it is shown in (105). This analysis has been favored by linguists, such as Chomsky (1977), Delin (1989), Delahunty (1982),

Heggie (1988) and Kiss (1988). Under this analysis, the focus is on the relation borne by the *it*-clefts to their non-cleft counterparts rather than being on the copular matrix clause as with the extrapositional approach.

(105) It was [John + that I saw].

2.4.2.1. Jespersen's Analysis (1937)

The beginning of such analysis takes root in Jespersen's 1937 book, *Analytic Syntax* where he strongly criticizes his own earlier extrapositional account. On the basis of some typological observations[7], he comes to the conclusion that the type of relative clause found in *it*-cleft sentences is not restrictive due to the close connection between the cleft clause and the clefted constituent. In his view, Jespersen (1937: 86) considers the sequence of cleft pronoun and the copula along with the relative pronoun or complementizer as if they were not present in the sentence. This kind of representation aptly captures our semantic intuition that the cleft sentences are semantically equivalent to their canonical non-cleft counterparts. Thus, in an *it*-cleft sentence, the clefted constituent is not regarded as predicative element but is marked as subject predicated by the verb in the relative clause. The rest of sentence, namely the expletive pronoun, copula and complementizer or relative pronoun are taken as zero or pleonastic, shown in the brackets. [3 ^{c}] and [s ^{c}] signify respectively complementizer and relative pronoun.

(106) a. It is the wife that decides: [sv] S [3 ^{c}] V
b. It is the wife who decides: [sv] S [s ^{c}] V

Jespersen also offers a remarkable typological explanation for cleft construction as follows:

> In some, though not in all cases, this construction may be considered one of the means by which the disadvantages of having a comparatively rigid grammatical word-order (SVO)

[7] . For example, i. the relative clause and the preceding predicative element must be adjacent to each other. ii. Focus and relative clause cannot be separated by intonation break. iii. Verb in the relative clause agrees with the clefted constituent in number and person.

> can be obviated. This explains why it is that similar constructions are not found, or are not used extensively, in languages in which the word-order is considerably less rigid than in English, French, or the Scandinavian languages, thus German, Spanish and Slavic. (1937: 85 cited in Lambrecht 2001: 465)

The discourse-functional account of Jespersen for the use of *it*-clefts is interesting. He believes that the cleaving operation of a simple sentence by means of *it is* and occasional complementizer or relative pronoun is to reflect a contrastive connotation accomplished by singling out one particular element of the sentence and placing it into the post-copular slot.

2.4.2.2. E. Kiss' Analysis (1998)

E. Kiss distinguishes identificational focus from informational focus as mentioned in section 2.2.3. Informational focus carries new information and is marked phonologically for nucleus, involving no non-canonical syntax. On the other hand, identificational focus expressing exhaustive identification occupies the specifier of a functional projection and is realized through the clefted constituent in the cleft construction. This process is explained by focus moving from IP into spec-FP through spec-CP as diagrammed in figure 2.6.

Identificational focus, as indicated in the diagram, is associated with movement whereas informational focus is not and considered to be focus-in-situ. E. Kiss (1998: 248) puts this difference as "an information focus is present in every sentence, but not every sentence contains an identificational focus". In general, semantically, the constituent called 'identificational focus' represents the value of the variable bound by an abstract operator expressing exhaustive identification. Syntactically, the identificational focus itself acts as an operator moving into a scope position in the specifier of a functional projection and binding a variable.

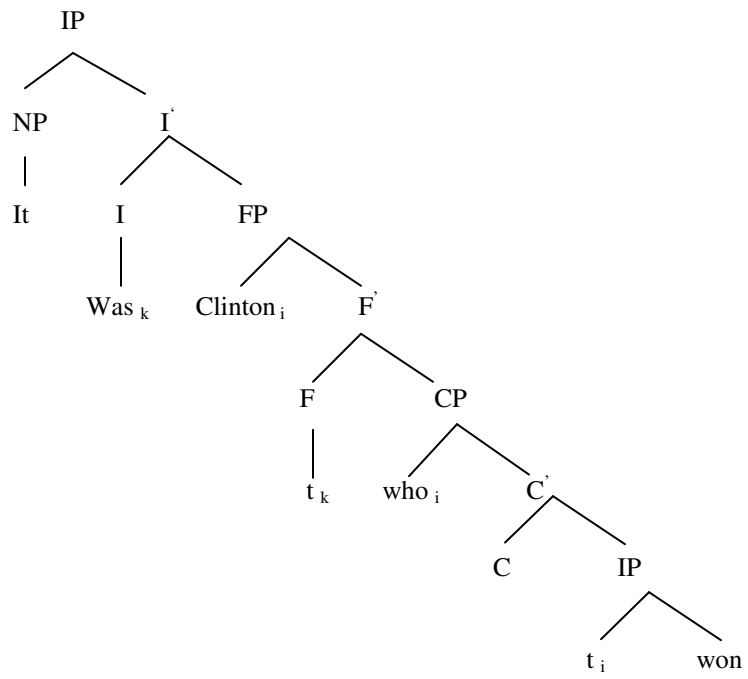


Figure 2.6 Syntactic structure of an it-cleft sentence (E. Kiss 1998)

E. Kiss also displays that identificational focus is subject to some distribution restrictions. It is a well-known fact that the focus position of an *it*-cleft sentence is not reachable for universal quantifiers, like *all* and *every*, existential quantifiers, like *somebody* and *something*, and emphatic additives such as *also* and *even*. However, the focus position of an informational focus is exempt from such restrictions and can be occupied by these elements. It was mentioned before that *also* can be placed within the focus domain under certain circumstances (see example in 36).

(107) a. It was *everybody/? also/*even John that Mary invited to her birthday party.

b. Mary invited everybody/ also/ even John to her birthday party.

The additive particles, in spite of being focus-in-situ, have the capability to be topicalized. Keep in mind that the clefted constituents accompanied by *only* are exclusively identificational focus and cannot be fronted. Thus, the focus movement in information-focus bearing sentences is a distinctive criterion by which to distinguish these types of focus is possible.

(108) a. Also John / Even John Mary invited to her birthday party.

b. * Only John, Mary invited to her birthday party.

Exhaustive identification as an abstract semantic operator triggers the identificational focus to have a scope position with respect to the variable following it. E Kiss predicts that exhaustive identification has narrow scope over an operator c-commanding identificational focus, and has wide scope in connection with an operator c-commanded by the identificational focus (1998: 255). Accordingly, the exhaustive identification associated with the clefted constituent in (109), i.e. *Mary* is in the scope of the universal quantifier *always* which itself takes scope over the universal quantifier *every*. This sentence means that from among all the girls present at that party, it is *Mary* and no one else that every boy wants to dance with.

(109) It is always Mary that everybody wants to dance with.

The implication conveyed by exhaustive identification is defined as E. Kiss says:

(110) *The function of identificational focus*:

> An identificational focus represents a subset of the set of contextually or situationally given elements for which the predicate phrase can potentially hold; it is identified as exhaustive subset of this set for which the predicate phrase actually holds.

It might be objected that the mere realization of identificational focus by means of *it*-cleft sentences is too stringent to depend on. Pavey (2004: 63) asserts that the sentences with accent on the sentence-final elements have ambiguous focus structure. If they have predicate focus structure, there would be no identificational focus; if they have narrow focus, thus they initiate exhaustive identification that must be motivated by an established contrastive context. At any rate, the identificational focus can be instigated by the non-cleft narrow focus constructions, too.

(111) a. Mary ate Pie and chips.

b. No, Mary ate a PIZZA.

⟶ Identificational focus

Pavey raises an objection against expletive approach. She poses a question concerning the expletive approach that proposes that the clefted constituent and the cleft clause altogether form a syntactic constituent needs to account for the fronting of the clefted constituent.

(112) a. It was John who broke it.

b. John it was who broke it.

c. * john who broke it it was. (Pavey 2004: 65)

One point made in regard to the example in (112 a) is that the clefted constituent *John* is a proper noun which does not need to be restricted by the cleft clause. It is assumed by some that the cleft clause function is to restrict the antecedent of the presupposed value in the cleft constructions. This is, nonetheless, untrue in light of Huddleston' remark that we would better take the cleft construction as a kind non-embedded subordination in which the antecedent for the relative element is the highlighted element, but the relative clause does not form a constituent with its antecedent (1984:462). Huddleston somehow adopts the expletive approach, but acknowledges his analysis largely ad hoc as the status of the cleft clause being 'sui generis', unique to the cleft construction. He also treats the cleft pronoun and the copula as "fully grammaticalized features of the construction whose contribution to the meaning is not directly predictable from their use in other kinds of clause".

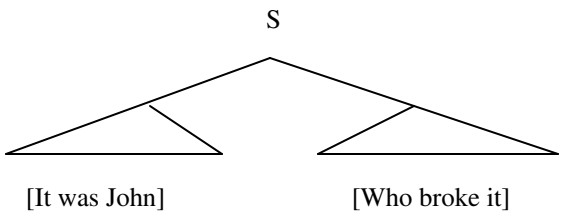


Figure 2.7 Syntactic structure of an it-cleft sentence (Huddleston 1984 cited in Pavey 2004:66)

2.4.3. Alternative approaches

Most studies in relation to cleft constructions are widely concerned with extrapositional or expletive approaches which take the derivational theories into consideration. The analyses which are to be discussed in this section are to a lesser or greater degree associated with non-derivational accounts. In this section, we proceed with the cleft construction within the analyses of Hedberg (2000), Lambrecht (2001) and Davidse (2000).

2.4.3.1. Hedberg's Analysis (2000)

Hedberg argues that neither the extrapositional nor the expletive approaches can provide us with a thorough analysis for examining the semantic and syntactic properties of *it*-clefts. She is inclined to present a comprehensive analysis using both extrapositional and expletive approaches. In Hedberg's analysis, against the expletive approach, the cleft pronoun is not syntactically and semantically pleonastic. In fact, the cleft pronoun in association with the cleft clause forms a discontinuous semantic constituent which is pragmatically interpreted as a definite referring expression in which the cleft pronoun plays the role of the definite article. Following Abney (1987), Hedberg divides the definite description into indexical and descriptive parts. The former is expresses by the determiner head and determines the relation of the referent to the context while the latter, expressed by a nominal complement, describes the referent (2000: 894). Having illustrated the parts of a determiner phrase within the Minimalist framework below (figure 2.8), I need to highlight two points. First, the definite pronominals are specifically intransitive DPs viewed as comprised solely of a determiner head (figure 2.8b). Second, determiners and the definite pronominals are in complementary distribution; hence analyzed as allomorphs. The importance of Hedberg's analysis pivots around the assumption that the cleft pronoun and the cleft clause collectively indicate a definite referring expression where the cleft pronoun pragmatically functions as determiner and the cleft clause functions as its nominal complement (2000: 898), as shown in figure 2.9.

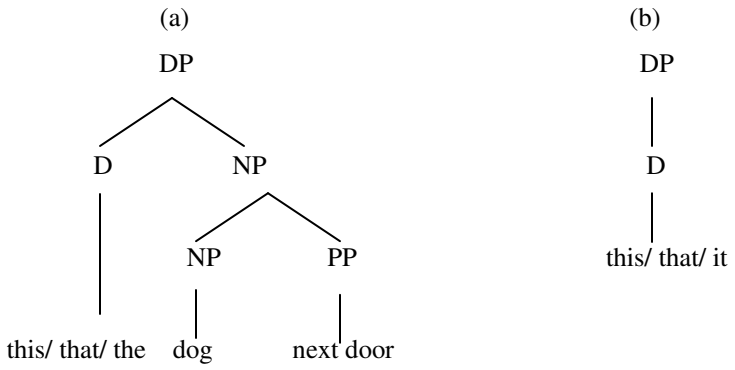


Figure 2.8 Determiner Phrase and definite pronominals

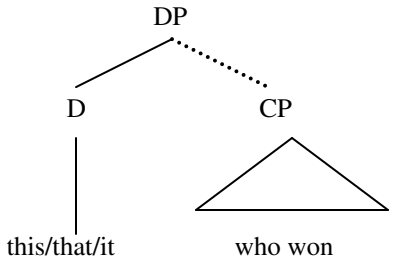


Figure 2.9 Cleft Pronoun and cleft clause as discontinuous referring expression

Hedberg believes that the speakers of natural languages can determine the form of referring expressions in the discourse by means of cognitive status categories in the Givenness Hierarchy (see 8) in such a way that the addressees will not encounter any problems in the course of comprehension. Now consider the following examples in which the referring expressions have been formalized on the basis of their cognitive statuses.

(113) I couldn't sleep last night.

a. A dog kept me awake.	Type identifiable
b. This dog (next door) kept me awake.	Referential
c. The dog (next door) kept me awake.	Uniquely identifiable
d. That dog (next door) kept me awake.	Familiar
e. This dog / this / that kept me awake.	Activated
f. It kept me awake.	In focus

The unilateral entailment relation, as noted by Hedberg (2000: 896) requires that every referring expression with the utmost level of informativeness, namely in-focus is logically activated, familiar, uniquely identifiable, but the reverse is not true. This unilateral relation explains why the NP *the fish* the cognitive status of which is in-focus can be substituted by alternative referring expressions such as *that fish*, *this fish* and *it*.

(114) The man wins this time, and the fish that he selects is a big gold fish which is, at the point when he selects it, hidden in a rocky formation in the tank, and it's position for the man conducting the game to get at the fish with the net.

(Hedberg 2000: 896)

In the same manner, Hedberg makes use of the Givenness Hierarchy in order to specify which item *it, this, or that* is chosen as cleft pronoun regarding the cognitive status of the cleft clause. Since the cleft pronoun and the cleft clause act as a definite referring expression, then by being aware of the givenness category of the cleft clause, the speaker will end up with the most appropriate form of the cleft pronoun.

(115) My heart beats fast, for I had thought that as the discoverer of the body, I would be the first to be called but to my surprise, It was Marcel. He stopped forward, neat, dark, debonair … (Hedberg 2000: 899)

The presupposition in (115) is that 'someone would be the first to be called'. Because of being at the center of hearer's consciousness and bearing the cognitive status of in-focus, the perceived presupposition, embodied in the cleft clause, has been deleted. The most appropriate form of referring expression regarding the in-focus status would be *it*. Selecting other pronouns like *that* or *this* might raise difficulties with respect to the comprehension processing.

(116) ? This /? That was Marcel who was called.

It is possible to make a comparison between an *it*-cleft with missing cleft clause (truncated cleft) and determiner phrase lacking nominal content. As with *it* which can take the place of a determiner phrase in the discourse when the cognitive status of its nominal complement is in focus or activated, it is also the case with the cleft clause to be ellipted in case of containing the in-focus or activated information. That is the reason why Hedberg (2000: 899) argues that cleft pronouns function as determiners in full clefts or as referential pronominals in truncated clefts. Now, we can understand why *the* and *it* are treated as allomorphs on Givenness Hierarchy.

(117) a. [It] was Marcel [who was called].

b. [It] was Marcel [Ø].

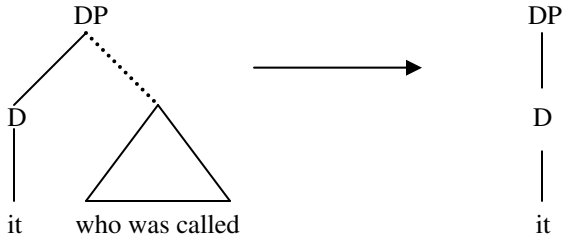


Figure 2.10. Conversion of a full it-cleft into a truncated it-cleft constrained by Givenness Hierarchy

Hedberg presents a new insight to the syntactic analysis of *it*-cleft sentences which captures both the extrapositional and expletive accounts along with the simultaneous semantic and pragmatic analysis of *it*-clefts in terms of the analogy drawn between definite determiner phrase and cleft pronoun plus cleft clause. Hedberg interprets cleft clause as directly related semantically and pragmatically to cleft pronoun and directly related syntactically to clefted constituent (Hedberg 2000: 907). In syntactic terms, cleft clause is "a complement extraposed from the subject DP and adjoined to the clefted constituent" (2000: 912) as shown in the figure 2.11. The adjunction premise is a beneficial contribution of Hedberg's analysis not only to abandon the conjecture that the cleft clause in cleft constructions is restrictive, but also to stiffen the non-restrictiveness nature of the cleft clause.

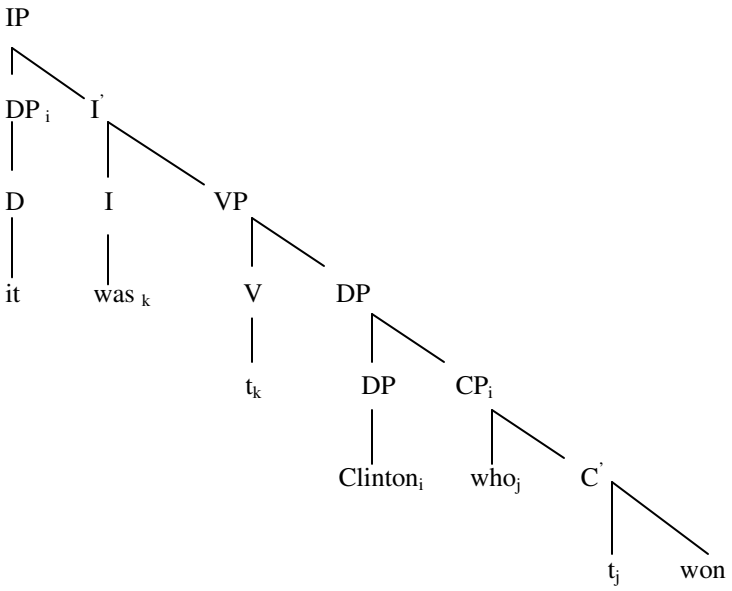


Figure 2.11. Syntactic structure of an it-cleft sentence (Hedberg 2000)

Hedberg maintains that the cleft pronoun and cleft clause function as a discontinuous semantic unit set in an identity relationship with clefted constituent via copula. Contrary to Kiss' analysis, she believes that assuming that the exhaustiveness effect is contributed by the copula is not necessary (cited in Pavey 2004: 71). Hedberg suggests that cleft pronoun, like the definite determiner, acts as a definite quantifier, carrying with it the existential and exhaustiveness conditions (2000: 905; see 118). Thus, the exhaustiveness condition as well as existential condition originates in the definite description affected by the semantic combination of the cleft pronoun and cleft clause.

(118) a. The present queen of France lives in Ithaca.

exhaustiveness condition → existential condition

b. There is a unique present queen of France.

2.4.3.2. Lambrecht's analysis (2001)

Lambrecht proposes a discourse-functional framework for the analysis of cleft constructions. He takes as its point of departure Jespersen's second analysis (1937), a non-derivational approach, in which "the matrix sequence *it is* and the relative pronoun or

complementizer are analyzed as grammatical elements that do not enter into the semantic composition of the sentence" (2001: 463). He seeks to accommodate a construction grammar basis for the explanation of the non-compositionality of *it*-clefts which implies that the matrix clause and the cleft clause constitute together a constructional unit the meaning of which does not correspond to the meanings of individual semantic units in cleft constructions. In his constructional account, Lambrecht (2001: 468) considers the cleft pronoun as an empty category, but as he mentions "it is not devoid of all meaning but merely that it does not play a semantic role in its clause". On the other hand, since the bi-clausal realization of *it*-clefts denotes a single semantic proposition, one of the two existent predicators in the matrix and relative clause must be semantically empty and that is the copula in the matrix clause. Therefore, copula in the matrix clause of *it*-cleft sentences cannot assign theta roles to its argument. However, the only indirect way to assign a theta role to copular predicative element is through the relative clause predicator.

Lambrecht regards the headless relative clause of *wh*-clefts as a composite element "combining in a single word the function of the morphemes *it* and *that* which in *it*-clefts appear in discontinuous form" (2001: 469). He presents some empirical data from French and English. In French, *what* is expressed by the sequence of *ce que* or *ce qui* which are equal to 'it that'. In English, the clauses with *the one* head along with *that* necessitate the compositionality of *what* in *wh*-clefts. Assuming *what* and other headless relative markers as composite elements, Lambrecht establishes the following equivalence between *it*-clefts, basic *wh*-clefts, and reverse *wh*-clefts. X represents focus phrase and Y represents open proposition.

(119) a. I like CHAMPAGNE.
Y X

b. It is CHAMPAGNE that I like.
[it] [is] X [that] Y

c. What I like is CHAMPAGNE.
[it+that] Y [is] X

d. CHAMPAGNE is what I like.
X [is] [it+that] Y

The main question with respect to Lambrecht's account is that if cleft pronoun and copula are semantically empty and clefted constituent receives its theta role from the relative clause predicator, then what is the function of cleft pronoun and copula? To answer this, Lambrecht hypothesizes that the clefted constituent bears a pragmatic role viz. focus or 'pragmatic predicate', assigned by the cleft pronoun and the matrix predicator, while the clefted constituent receives its semantic role by the relative clause predicator. More specifically, the sequence of *it is* must be regarded as 'focus marker' which only affects the information structure of cleft constructions, not their semantic structure. What differentiates Lambrecht's analysis from Jespersen's analysis is that the former interprets *it is* sequence as both semantically and syntactically expletive as if it were not present. Conversely, Lambrecht takes the matrix predicator as a bivalent predicate by which the focus phrase receives the role of syntactic predicate.

Crosslinguistically, there are three ways to realize the focus-presupposition relation as Lambrecht indicates: argument focus, predicate focus and sentence focus. In predicate focus structure (as in 120a), the speaker is expected to set out his verbal mission by a 'given' argument to which a 'new' predicate is added. Argument focus structure (as in 120b) is when the speaker adds a new argument to a given predicate. Sentence focus structure (as in 120c) simultaneously adds a new argument and a new predicate to the discourse.

(120) a. A: Have you recovered from your accident? How's your foot and Knee?
B. My foot still HURTS.

b. A: Is your knee hurting?
B: My FOOT hurts. It's my FOOT that hurts.

c. A: Why are you walking so slowly?
B: My FOOT hurts.

Lambrecht explains the functional motivation lying behind the use of *it*-clefts as follows:

> Cleft constructions are focus-marking devices used to prevent unintended predicate-focus construal of a proposition. Clefts serve to mark as focal an argument that might otherwise be construed as non-focal, or as non-focal a predicate that might otherwise be construed as focal, or both. (2001: 489)

Lambrecht believes that Jespersen 'unwittingly' captures the pragmatic relation, dependent upon the speaker's pragmatic intuition, between the *it*-cleft argument focus construction and fronted focus construction (cited in Pavey 2004: 73). The examples in (121) show consistency to their non-cleft argument focus structure counterparts in (122).

(121) a. It is the wife that decides: [sv] S [3 ^{c}] V

b. It was John we saw: [sv] OSV

(122) a. The WIFE decides.

b. JOHN we saw.

To summarize, Jespersen's structural analysis of *it*-clefts meets Lambrecht's discourse-functional explanation where clefts are considered to be one of several devices languages can use to express derivations from the unmarked predicate-focus type.

2.4.3.3. Davidse's Analysis (2000)

Davidse takes a constructional approach to the analysis of *it*-clefts. She argues that there are two semantic relations in *it*-clefts. The first one is coded between the relative clause and the clefted constituent as the antecedent which displays a 'value-variable' relation rather than a head-modifier or restrictive relation. The second one is the coded semantic relation within the matrix clause. In Davidse's account, the cleft pronoun is not expletive and the matrix clause imposes a specific 'quantificational value' on its complement. In order to dig the constructional foundation of *it*-clefts, Davidse adopts the Huddleston's analysis in which the basic distinctive feature of an *it*-cleft sentence is the fact that the postverbal complement of the matrix clause and the relative clause do not form a grammatical unit, albeit the complement has an anaphoric relation to the relative clause. Davidse compares *it*-clefts with 'ordinary' identifying sentences (as in 123a) the

relative clause of which bears a restrictive function. We can observe this difference in the following examples.

(123) a. A: Who was that on the phone?

B: It was [the boy [who/ that caused all the$^{\backslash}$ trouble] $_{RRC}$] $_{NP.}$

b. A: Who caused all the trouble?

B: It was [$^{\backslash}$ the boy] $_{NP}$ [(who/that) caused all the $^{/}$ trouble] $_{RC}$.

(Davidse 2000: 1103)

The identifying sentence in (123a) specifies the NP *the boy* plus the restrictive relative clause who*/ that caused all the trouble* as the identifying value of the sentence. However, the cleft sentence in (123b) specifies that the person who caused all the trouble is only the NP complement (*the boy*) and the relative clause is excluded from the complement domain. The distinctive intonational pattern in identifying and cleft sentences is a criterion which supports the view that the relative clause in the *it*-clefts is not by its very nature restrictive. As Halliday (1967: 237) shows, *it*-clefts are uttered on a compound fall-rise tone. This enables the speaker to mark the NP complement as information focus denoting a contrastive meaning. In contrast, the identifying sentences are normally spoken with one falling tone-final salient element. The conclusion drawn is that the restrictive relative clause cannot constitute a single tone unit (Halliday Ibid: 205). Davidse believes that the presence of existential clefts as subset of cleft constructions has been largely ignored in the cleft literature. *There*-clefts, however, highlight the non-restrictiveness property of the relative clause in the cleft constructions on the basis of the analogous formal as well as intonational features that are common in both cleft types.

(124) a. A: What can you see on the table?

B: Well, there's [one thing [that has a funny$^{\backslash}$ shape] $_{RRC}$] $_{NP}$.

(Existential sentence)

b. A: Could it be anything else?

B: No, there's [only one$^{\backslash}$ thing] [that's that $^{/}$ shape]. (existential cleft)

(Davidse 2000: 1104)

Pronominal clefts (*it*-cleft, demonstrative clefts) and existential clefts have other properties in common which are missing in the restrictive relative clause constructions: 1. in *it*-cleft sentences it is possible for syntactic constituents of various types to be placed in the complement slot (see 125). 2. the occurrence frequency for the complementizer and zero relative pronoun is more common than *wh*-forms. With some types of antecedents, *wh*-forms are even ungrammatical (see 126). 3. the zero realization of the subject in the relative clause which is permitted only in informal register in restrictive relative clauses, occurs unproblematically in *it* and *there* clefts (see 127). 4. pronouns as well as proper names can be the antecedent of the relative clause in cleft constructions (see 128).

(125) a. It was [because he was ill] that / zero we decided to return.
b. There's [when you were away] that it might have happened

(126) a. It is in November that/ *you should prune the roses.
b. There's only on the platform that/ *where you can wait.

(127) a. It was the boy caused all the trouble.
b. There's only one thing is that shape.

(128) a. It's Tom/ you who/ that caused all the trouble.
b. There's only Humpty Dumpty/ him that's that shape.

(Davidse 2000: 1106)

In her discussion, Davidse explains that the previous studies concerning restrictive relative clauses interpret the whole NP complement including determiner and head noun as the antecedent of the relative clause. This view stems from the fact that the relative clause functions as presenting information which makes it possible for the hearer to identify the appropriate referent of the NP. In light of some examples like the one in (129) Davidse proves them wrong on the grounds that the NP in complement slot is

indefinite; even the occurrence of the relative clause does not help the hearer 'pick up' the intended referent.

(129) She was wearing a dress [that I'd never seen before] $_{RRC}$.

(citing Quirk et al, 1972: 558)

As mentioned above, the relative clauses in cleft constructions allow for a wider range of antecedents than restrictive relative clauses, but following Langacker (1991: 430f), Davidse shows that the antecedent of the restrictive relative clause is the nominal head minus the determiner (2000: 1108). Moreover, he states that the restrictive relative clause modifies only the nominal head, and that complex is 'grounded' or identified by the determiner.

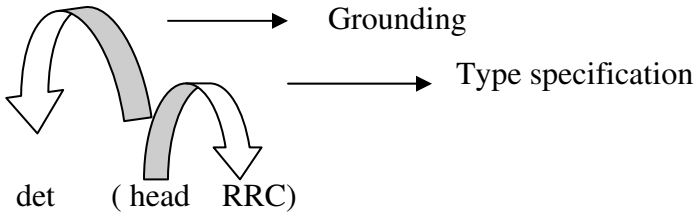


Figure 2.12. Internal dependency structure of a NP with a restrictive relative clause

Langacker analyzes the restrictive relative clauses as a 'type specification' element which restricts the head noun (Langacker 1991: 432 cited in Davidse Ibid: 1109). Notice that the internal assembly of the head noun and the restrictive relative clause precedes their grounding by the determiner. Thus, the antecedent of a restrictive relative clause is the nominal head, designating the type (e.g. *dress*), not the full NP, designating the instance (e.g. *a/the dress*). In contrast, the antecedent of the relative clause in *it*-clefts is the full NP viz. the head noun as well as the determiner. The point here is that the cognitive-semantic relation between the relative clause and its antecedent in restrictive constructions and in cleft constructions can be respectively type-specification and grounding.

(130) at the meeting last night,

a. I didn't like the [man $_i$]$_N$ [who $_i$ spoke first] $_{RRC}$.

b. It was [the man$_i$]$_{NP}$ [who $_i$ spoke first]$_{RC}$ (Davidse 2000: 1111)

The behavior of relative quantifiers strengthens this view. The relative pronoun in (131) does not point to *all students*, but it conveys that *all students who attended* will receive a bonus point. *All* also quantifies relatively the nominal head and the restrictive relative clause in (131) and only the full NP in (132). In other words, the antecedent of the restrictive relative clause excludes relative quantifier whereas that of relative clause in *it*-cleft includes it (Davidse 2000:1114).

(131) a. All [students$_i$] who$_i$ attended will receive a bonus point.

b. It was [all the passengers$_i$] who$_i$ had committed the murder.

Davidse explains the difference between the relative clause in *it*-clefts and non-restrictive relative clauses using the notion of 'rankshifting". The antecedents of relative clauses in the former can be various syntactic constituents other than noun phrases such as prepositional phrases, adjective, adverbs and clauses which can occupy the postcopular position in the matrix clause. This position imposes on these constituents the set of properties that nominal complements possess. Put it another way, the non-NP units functioning as complement in clefts are rankshifted into the nominal complement slot and are in this sense 'nominalized'(Halliday 1985: 219 cited in Davidse Ibid: 1116).
The ungrammaticality in (132b, in case of *when*) shows the PP tendency to keep its prepositional value and not to accept the nominal properties.

(132) a. They talked about it [on Monday] $_{pp}$, [when they vetted all the applications] $_{NRRC}$.

b. It is [in September] $_{pp}$ *when / that [you should plant them] $_{RC}$.

As mentioned above, Davidse regards *it*-clefts as a type of value-variable construction the semantic function of which is specifying an exhaustive value for a variable. Against this, the semantic import of *there*-cleft and *have*-cleft is 'enumeration' (Quirk et al 1972) interpreted as giving an incomplete list of items corresponding to that described by the relative clause. The identifying, existential and possessive matrix clauses found in the

clefts correspond exactly to the clause types in a context such as following. In (133b&c) *spaghetti* is one of the non-exhaustive values congruent with the variable expressed by the relative clause, while *spaghetti* in (133a) is interpreted exhaustively as the only value matching the variable.

(133) what's for supper?

a. It's spaghetti. (Identifying sentence)

b. Well, there's spaghetti. (Existential sentence)

c. We have spaghetti. (Possessive sentence)

In conclusion, clefts are exclusively grammatical constructions the semantic properties of which originate non-iconically from their syntactic structures viz. the bi-clausal ordering of a single proposition. This contrasts with Halliday's (1967) view that the expletive pronoun as well as the cleft clause, as a discontinuous semantic unit, functions as 'identified' and associates with the clefted constituent as 'identifier' which brings about the demotion of a complex sentence to a simple one.

2.4.3.4. Pavey (2004)

Pavey integrates the foundations of Role and Reference Grammar theory into the examination of *it*-clefts as a value-variable patterning following the predecessors of constructional approach to *it*-cleft analysis such as Davidse (2000) and Lambrecht (2001). To account for the constructional architecture of *it*-clefts, she makes use of the interlink between syntax, semantics and pragmatics modules of RRG so as to illustrate the adequacy of an interactional framework to explore the non-isomorphic substance of cleft constructions. She contends that the derivational approach to *it*-clefts, either extrapositional or expletive, focuses only on one aspect of clefts, namely the copular nature of matrix clause in terms of the former analysis and the affinity shared with the non-clefts in terms of the latter analysis. She also maintains that a monostratal approach to *it*-clefts transparently mirrors the similarities as well as differences found on one hand between *it*-clefts and other types of copular sentences, and between *it*-clefts and relative clause constructions on the other (see Pavey 2004: section 5.2).

In her syntactic representation of *it*-cleft sentences, Pavey interprets the cleft pronoun as a syntactic core argument the semantically 'dummy' nature of which is represented in its absence in the semantic representation of the construction (2004: 207). *It* is dummy in the sense that in does not denote or describe a referent. Regarding a discourse-deictic function for the cleft pronoun with respect to the cognitive status of the cleft clause based on Hedberg (2000) along with the quantificational role of cleft pronoun specifying an exhaustive value for the clefted constituent based on Davidse (2000), Pavey asserts "it is simplistic to characterize the cleft pronoun as 'dummy', expletive element" (2004: 154). Further, she presents a structural comparison between the existential clefts and specificational clefts concerning the cleft pronoun (*it* in specificational clefts and *there* in existential clefts) to draw the conclusion that we should include the participation of cleft pronoun in marking the basic semantic/pragmatic function of the construction. Moreover, the referential status of the cleft clause which leads to the selection *this, that*, or *it* as cleft pronoun attributes a determiner-like function to the cleft pronoun, also demonstrates again that the function of cleft pronoun is more than a dummy syntactic place-filler.

Pavey employs the semantic/pragmatic predicate distinction, as exhibited by Lambrecht (1994, 2001) in order to argue the mismatch between the syntax and semantics of *it*-clefts. Pavey believes that the traditionally semantic definition of predicate as 'what is said about the subject/topic' sets aside the pragmatic considerations as the clefted constituent in the *it*-cleft narrow focus construction has a "pragmatically predicative function and yet is not semantically predicational" (2004: 174). 'Pragmatic predicate' in the specificational sentences is defined as a predicate the designatum of which "is construed simultaneously as an argument on the level of semantics and as a predicate on the level of information structure" (Lambrecht 1994: 231). Thus, there is no constraint against the claim that a referring expression as clefted constituent plays the role of identification/specification rather than of predication. As for the referential status of clefted constituent, Pavey raises an issue where the clefted constituent might be a definite or an indefinite noun phrase. In case of definite noun phrase, the clefted constituent takes on a specific, referential, identifiable interpretation stemming from inclusiveness in the clefted constituent as the only value corresponding to the description

expressed in the cleft clause. However, when an indefinite noun phrase appears as the clefted constituent, it is interpreted as specific but not as referential despite that the clefted constituent is already identifiable to some degree by the connection it holds to the cleft clause through coindexation. For example, in (134) what is being accentuated is that something 'specific' (a dog not a cat) meets the description in the cleft clause, not that a specific dog whose identity is clear to the hearer is involved in the eating act. Notably, the use of a referential indefinite noun phrase as clefted constituent triggers the rendering that the speaker gives only descriptive not identifying information about an identifiable entity due to his probable reluctance or unawareness in revealing the full identification of the referent at the time of utterance, not that the speaker assists the hearer to build up a new representation for a previously unidentifiable entity (Pavey 2004: 166). Pavey argues that on one hand, the clefted constituent is identifiable because of its coindexed relationship to the generally presupposed variable, and its identifiability is not, to some degree, tied to the cognitive status of the variable, on the other. She suggests that the cleft constituent and the cleft clause, though coreferentially related, are semantically separate referring expressions.

(134) It is a dog that is eating your shoe.

As opposed to the non-clefts and pseudo-clefts that contain two syntactic constituents, one corresponding directly to the value and one to the variable, the *it*-clefts lack such syntactic ordering where the solely alignment of the presupposition does not directly overlap with the semantic content and syntactic constituent of the cleft clause. Pavey illustrates that the presupposition of *it*-clefts, containing the existential condition (Hedberg 2000: 906) relies not only on the open proposition of the cleft clause but also is based on the clefted constituent and the wider context (Pavey 2004:178).

(135) It was $[\text{Lee}]_{\text{NP}}$ [who got a perfect score on the semantics quiz]$_{\text{CLAUSE}}$.

VALUE (VARIABLE) (Hedberg 2000: 905)

Presupposition: someone got a perfect score on the semantics quiz.

Open proposition: 'x' got a perfect score on the semantics quiz.

Therefore, Pavey (2004: 179) discusses that the description of the variable is represented by a syntactically and semantically incomplete subordinate clause in which the variable may not be expressed; nonetheless, the variable is presented in the construction as an identifiable discourse referent through its role in the specificational function of the construction. This observation prompts Pavey to interpret the variable as a referring expression and its referential status as identifiable, specific and non-referential on the grounds that the variable as a 'pragmatic constituent' performs its pragmatic function in the utterance instead of representing solely a syntactic constituent.

The syntactic representation of *it*-clefts is diagrammed through the use of constituent and operator projection that are iconic by nature. The cleft pronoun is headed by the NP node. The node NUC anchoring the copula and the clefted constituent depicts the predicational nature of the clefted constituent. The cleft clause stands as periphery to the core in the matrix clause. One reason for the peripheral position of the cleft clause lies in that the cleft clause can be ellipted (see figure 2.14)[8]. In order to clarify the difference between the relative clause in *it*-clefts and the restrictive relative clause constructions, Pavey uses the operator projection to picture the scope of the grounding operator of definiteness according to Davidse's account where the clefted constituent is regarded as referential, grounded by the definite determiner prior to being modified by the relative clause in the *it*-cleft constructions. On the contrary, a restrictive relative clause firstly modifies the nominal head and the resulting unit falls under the scope of definite determiner.

[8] . In case of relative pronoun in *it*-clefts, Pavey (2004: 206) assigns the pre-core slot to the relative pronoun. The syntactic structure of *it*-clefts with relative pronoun is not within the scope of the Persian clefts analysis and has been factored away for the sake of simplicity.

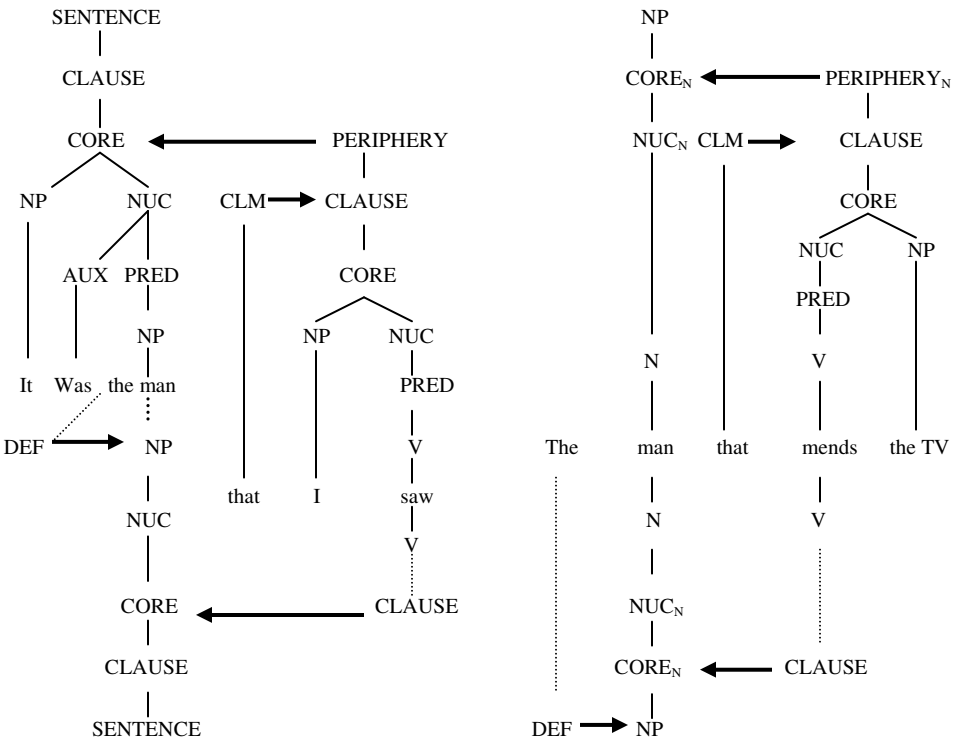


Figure 2.13 Operator scope in it-clefts and restrictive relative clauses

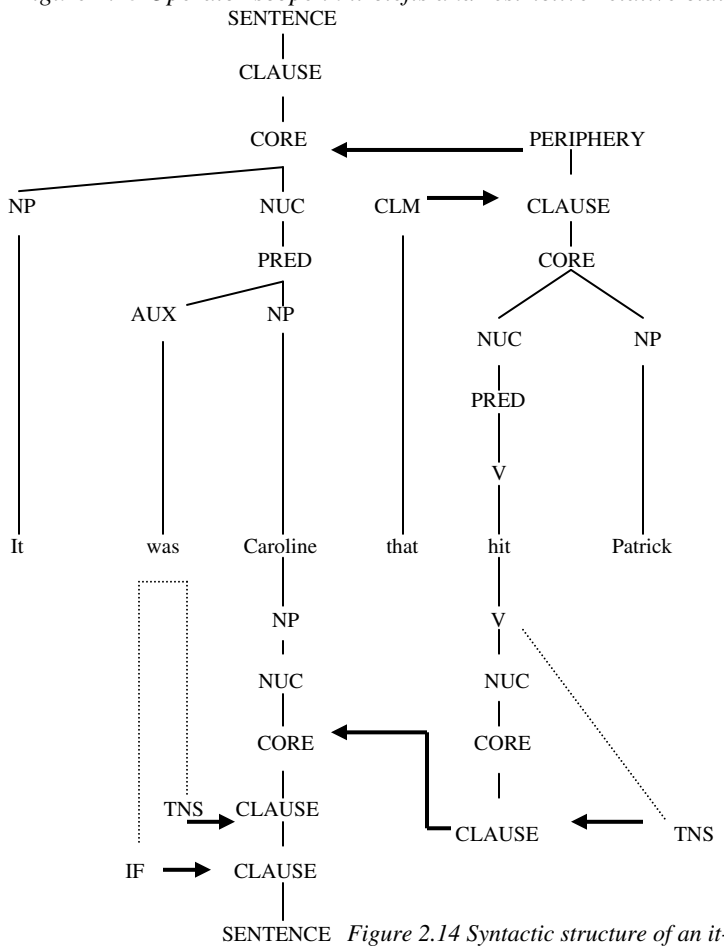


Figure 2.14 Syntactic structure of an it-clef (Pavey 2004)

Pavey also proposes the following logical structure for *it*-clefts in which the main predicate is **be´** rather than the predicate in the subordinate cleft clause. The main predicate owns two arguments; the first one matches the semantic content of the cleft clause containing a coindexed element which corresponds to the second argument in the logical structure and is realized in the form of the clefted constituent. The logical structure with two distinct arguments concurs with the specificational function of *it*-clefts as specifying a value for a variable. A point I should get across is that the logical structure of *it*-clefts roughly parallels their information structure despite that such straightforward equivalence does not necessarily arises in a sentence(Pavey 2004: 217).

(136) a. Its' Martha that eats octopus.

be ´ ([**do´** (x_i, [**eat´** (x_i, octopus)])], $Martha_i$)

b. It's Martha who eats octopus.

be´ ([**do´** (who_i, [**eat´** (who_i, octopus)])], $Martha_i$) (both, Pavey 2004: 215)

The **be´** predicate is also used in the logical structure of restrictive relative clauses, as shown in (137). The structural difference between these is displayed by the underlining of the head noun because the logical structure in the *it*-clefts represents a sentence while that of the restrictive clause represents a noun phrase. This issue will be discussed in detail in the next chapter. Moreover, the intrinsically different logical structure between these is coincidentally reflected also in the succession of the arguments where the semantic content of the restrictive relative clause fills the predicate slot in the attributive logical structure, i.e.it is the second argument of the predicate.

(137) a. the student who knows the answer

be´ (<u>student</u>$_i$, [**know´** (who_i, answer)])

As for the information structure in *it*-clefts, the cleft clause is syntactically subordinate, thus interpreted as presupposition, and the clefted constituent is regarded as asserted information representing argument/narrow focus structure. The peripheral status of the cleft clause in relation to the matrix core gives rise to its placement outside the

actual focus domain. This can be shown by the infelicity occurring if an element within the cleft clause is questioned. The information structure in complex sentences is governed by a general constraint that Van Valin and Lapolla (1997: 485) put as in (139).

(138) Q: Was it Kim that arrived at the party late?

A: NO, Pat.

A: ?? NO, early.

A: ?? No, the concert.

(Pavey 2004: 234)

(139) *The potential focus domain in complex sentences*

A subordinate clause may be within the potential focus domain if it is a direct daughter of (a direct daughter of…) the clause node which is modified by the illocutionary force operator.

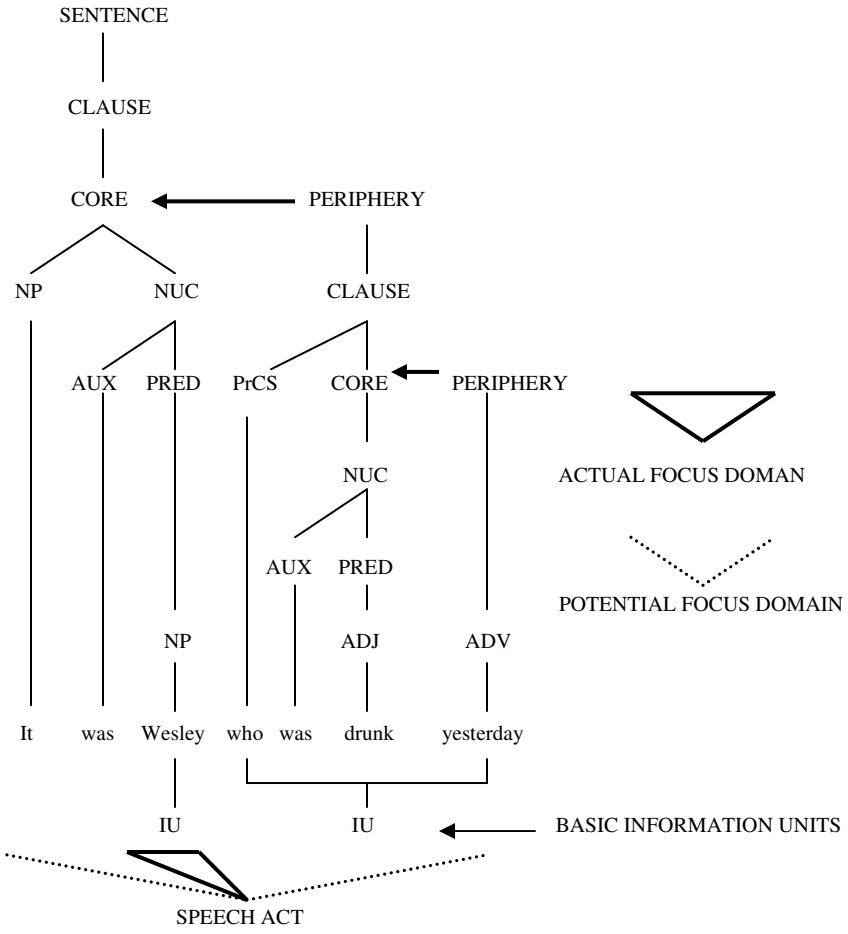


Figure 2.15 The formal expression of information structure in it-clefts.

In conclusion, adopting RRG as a theory of syntax, semantics and pragmatics interface accounts for the *it*-cleft sentences as an exclusive construction the basically non-iconic nature of which is iconically reflected.

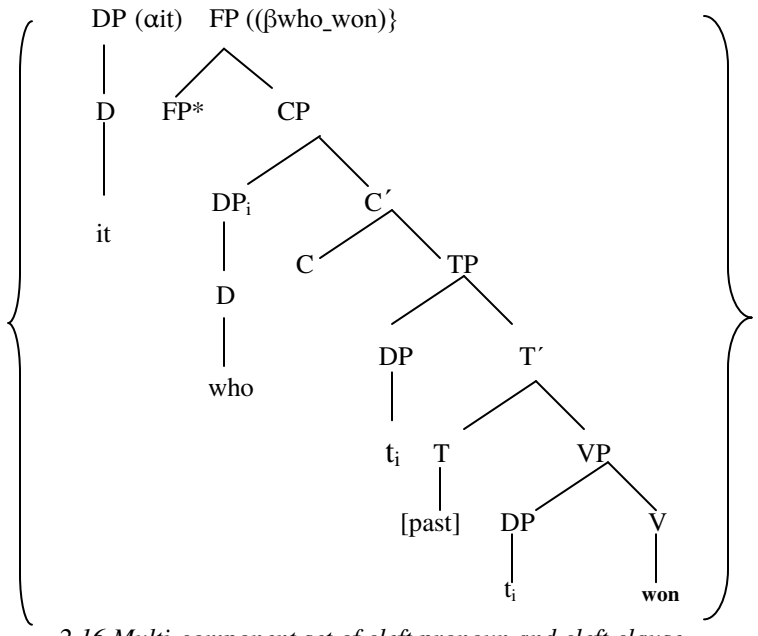
2.4.3.5. Hedberg's Analysis (2008)

Hedberg (2008) examines the syntax and semantics if *it*-clefts, following her previous study (Hedberg 2000, see section 2.4.3.1) by applying the Tree Adjoining Grammar (TAG)(Josh et al. 1975) to mingle the two traditional approaches viz. the expletive and discontinuous constituent approaches in order to account for the direct relation of cleft clause to the clefted constituent in terms of the first analysis as well as the semantic content of the cleft pronoun and the direct syntactic as well as semantic relation of the cleft clause to the cleft pronoun based on the second analysis. To capture both analyses, she uses the distinction made between the derivation tree, on which the syntactic dependency of the cleft clause and the cleft pronoun as in discontinuous constituent approach along with the compositional semantics of the sentence (the account that the cleft pronoun and the cleft clause act as a definite determiner phrase, as discussed in Hedberg (2000)) are defined, and the derived tree where the surface syntax of *it*-clefts as in the expletive approach is shown in the way that the cleft clause is adjoined to the cleft constituent to form a syntactic constituent. This view on the clefts reduces the syntax and semantics of *it*-clefts to the ordinary copular sentences such as 'the one who won was Ohno'. Inspired by the intuition that the cleft clause and the cleft pronoun in light of the extrapositional analysis constitute syntactically a single unit, Hedberg makes use of an extension of TAG viz. Multi-Component Tree Adjoining Grammar (MC-TAG) (Kroch and Joshi 1987; Abeille (1994)) where all the trees in a multi-component set are restricted to adjoin or substitute simultaneously into a single elementary tree, at each step in a derivation. In regard to the extrapositional account which takes the cleft clause and the clefted constituent as a syntactic unit, Hedberg places them in a single multi-component set which are able to substitute or adjoin onto different places in the derivation process. This is what produces 'the effect of discontinuity'. This multi-component set includes two parts, one is the functional projection of a determiner and one is a lexical domain on

which the determiner has scope as an operator. This formulation results from the view (Hedberg 2000) that the cleft pronoun and the cleft clause collaboratively are considered as a definite determiner phrase in which the cleft pronoun is the determiner and the cleft clause is its nominal complement. The multi-component set is shown below in (139) and diagrammed in figure 2.16.

(139) a. It was Ohno who won.

b. {(αit), (βwho_won)



2.16 Multi-component set of cleft pronoun and cleft clause

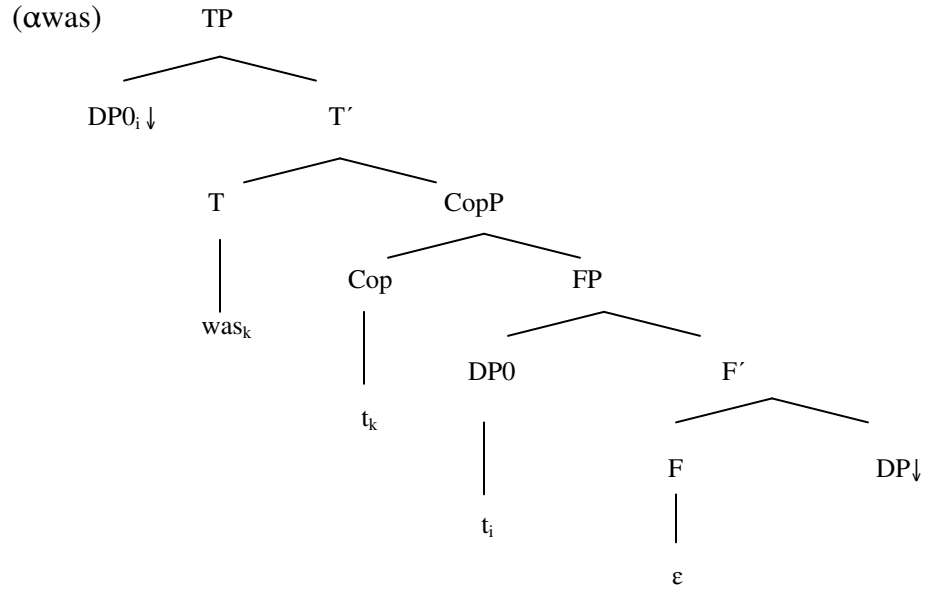
Pavey in line with the definition of *it*-clefts as carrying the equative/specificational reading (posed by Declerck (1988), Hedberg (1990, 2000)) argues that the clefts can reduce to ordinary copular sentences under the discontinuous constituent analysis. Accordingly, the semantic representation in (140) can explain the cited equality.

(140) a. It was Ohno who won

b. The one who won was Ohno.

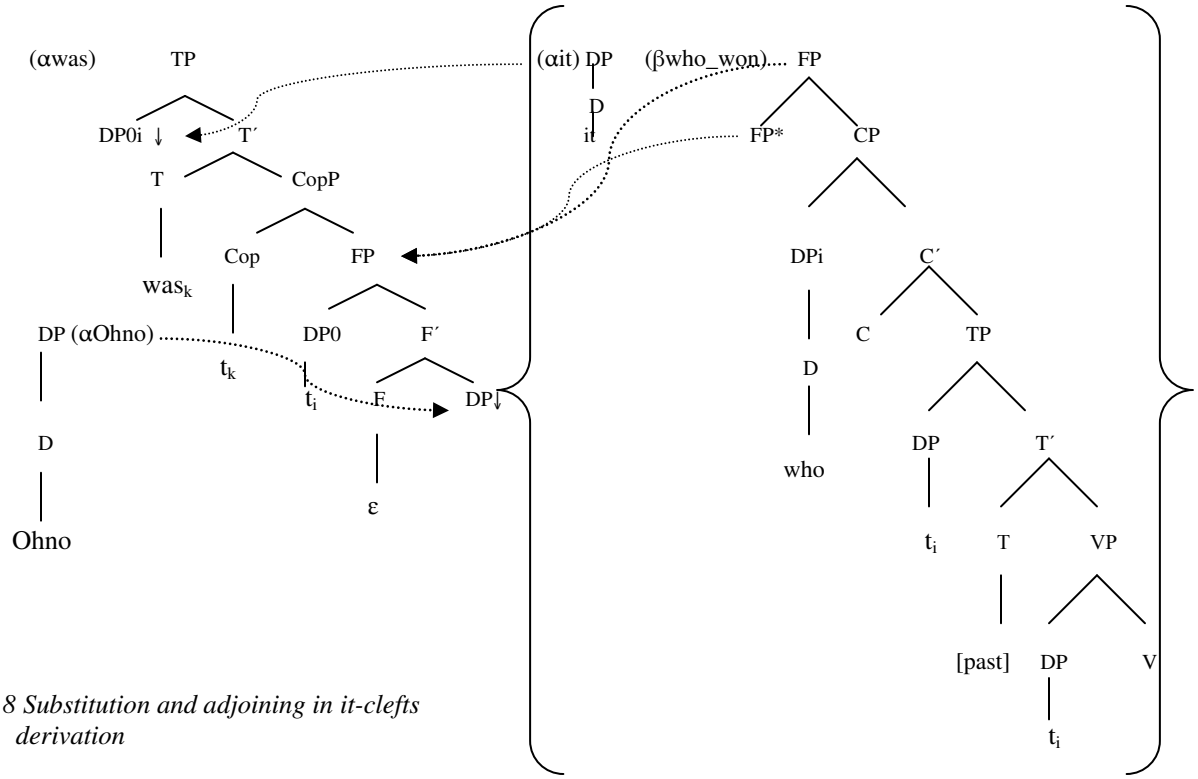
c. THE z [won (z)] [z = Ohno] (Pavey 2000: 349)

The equative copular tree in *it*-clefts, as shown in figure 2.17, comprises of a FP as a clause of the copula from which the two DPs being equated originate.



2.17. Equative copula elementary tree

In the derivation process (αit) is substituted into DP0 in (αwas); (βwho_won) is adjoined into FP in (αwas) and eventually, (αOhno) is substituted into DP1 in (αwas).



2.18 Substitution and adjoining in it-clefts derivation

To show the history of composition of the elementary trees, Hedberg presents the following derivation tree which 'records' the all substitutions and adjunctions in the derivation process.

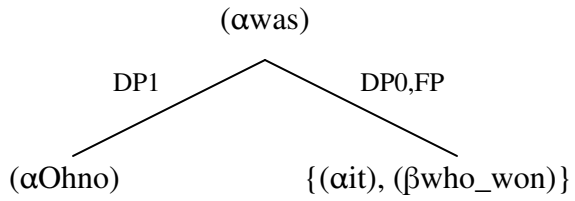
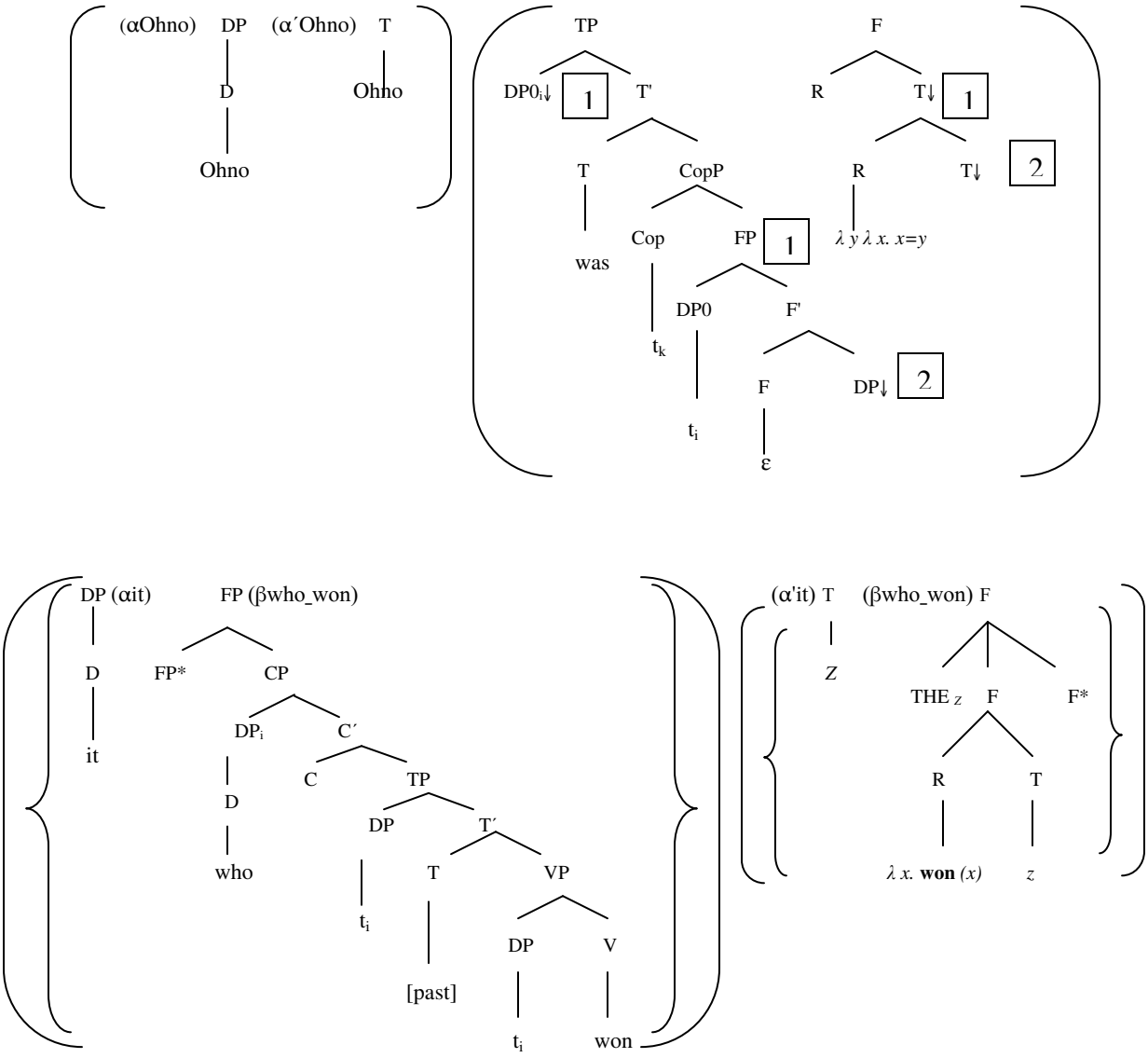


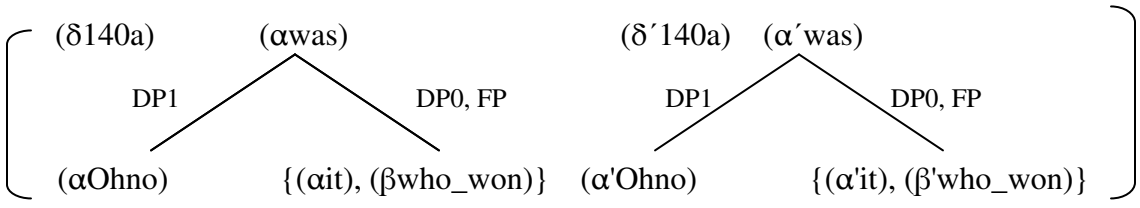
Figure 2.19 The derivation tree for it-clefts

To the semantic analysis of *it*-clefts Hedberg uses the Synchronous Tree Adjoining Grammar (STAG) as specified by Shieber and Schabes 1990; Abeille 1994; Shieber 1994) to provide a compositional semantics where each syntactic elementary tree has a corresponding semantic representation "computed by combing the semantic representations of the elementary tree" (Hedberg 2008: 363), following the history of how the elementary trees are put together to derive the sentence structure. In STAG-based compositional semantics, the semantic representation includes some structural tree nodes on which the substitution and adjoining of other semantic elementary trees take place. To achieve a compositionally semantic analysis, an essential requirement must be fulfilled; it entails an isomorphic syntax-semantics mapping which guarantees that the derivation tree in syntax determines the meaning components necessary for semantic composition, and the way these meaning elements are combined. In this sense, "each syntactic elementary tree is paired with one or more semantic trees that represent its meaning with links between matching nodes; then, a synchronous derivation proceeds by mapping a derivation tree from syntax side to an isomorphic derivation tree on the semantics side, and synchronized by the links specified in the elementary tree pairs" (Shieber 1994 cited in Hedberg 2008: 363). The syntax-semantics mapping in (140a) has been shown below[9].

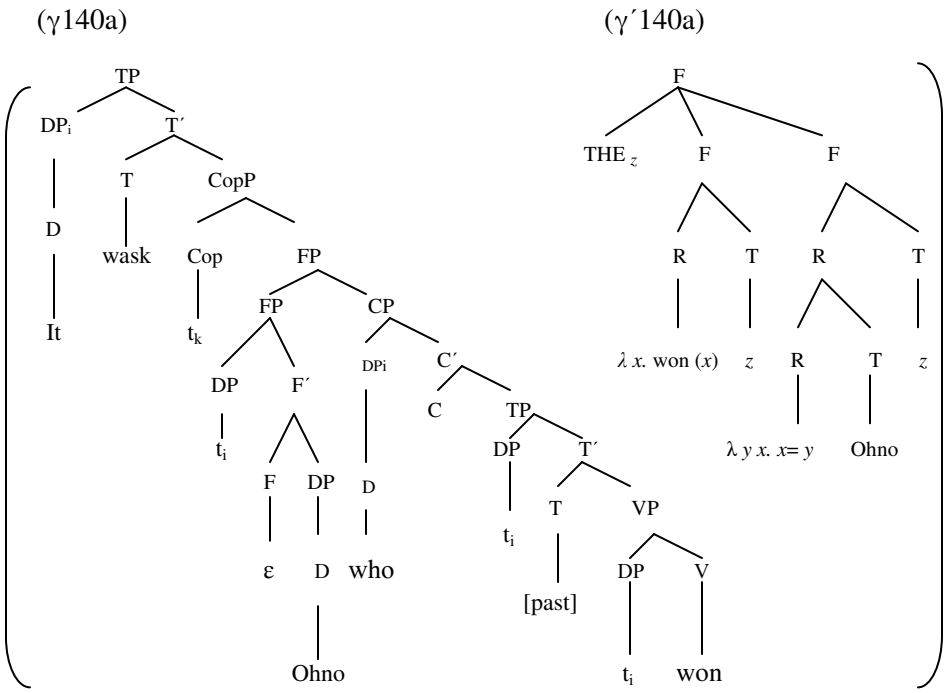
[9] . In the following figures, 'T', 'F' and 'R' stand for terms, formulas and predicates respectively. Moreover, names of semantic elementary trees are prefixed with (α') or (β'), names of semantic derivation trees are prefixed with δ′ and names of semantics derived trees are prefixed with γ′. The link nodes are also shown with boxed numbers.



2.20. Syntactic and semantic elementary trees for (140a)



2.21 Syntactic and semantic derivation trees



2.22. Syntax –semantics mapping in it-clefts

2.5. Summary

In this chapter, I presented the syntactic, semantic and pragmatic features of *it*-cleft construction as well as its structural-informational differences with other types of copular constructions. Afterwards, I proceeded to explain two traditional approaches regarding the analysis of *it*-clefts. It was mentioned that the extrapositional approach views the assembly of the cleft pronoun and the cleft clause as a discontinuous syntactic unit which holds an identity relation to the clefted constituent via the copula. In this sense, the cleft pronoun is not dummy; conversely, it is interpreted as having an anaphoric relation to the cleft clause. The proponents of this analysis are Jespersen (1927), Akmajian (1970), and Gundel (1977) whose discussions were included in section 2.4.1. The expletive approach, on the other hand, makes a comparison between *it*-clefts and non-cleft copular sentences. E. Kiss (1998) views that the cleft pronoun is both syntactically and semantically expletive and the copula functions as assigning exhaustiveness identification to the clefted constituent in order for the addressee to pick a specific referent out of a set of potential referents. In succession, some alternative approaches were discussed which cannot fall merely onto the expletive or extrapositional account. Among those, Hedberg

(2000), Davidse (2000), Lambrecht (2001), Pavey (2004) and Hedberg (2008) were given. Hedberg (2000) provides a moderate analysis because she takes the cleft pronoun and the cleft clause as a definite determiner phrase in which the former is the determiner and the latter is the nominal complement. She thus interprets the cleft pronoun as referential not as expletive. The speaker's options in terms of the cleft pronoun type viz. the pronominal *it* and the demonstratives with respect to the cognitive status of the cleft clause support this claim. Davidse (2000) explains the structure if *it*-clefts on the basis of constructional view that regards the nature of *it*-clefts as a value-variable construction. According to her analysis, the cleft pronoun quantifies the clefted constituent through the grounding procedure. Lambrecht (2001) again adopts a constructional account where the cleft pronoun is both syntactically and semantically empty, but contributes pragmatically as focus marker in association with the copula. The main issue arising is that the clefted constituent bears a semantic role to the propositional content of the cleft clause simultaneously bearing the role of pragmatic predicate due to its post-copular slot. Pavey (2004) makes use of the constituent projection, operator projection, logical structure as well as the focus structure projection of the Role and Reference Grammar to analyze the interactions within the elements of clefts stemming from the ad hoc non-isomorphism along with the concomitant constructional architecture of *it*-clefts. Hedberg (2008) seeks to characterize the prevailing syntax-semantics mapping in *it*-clefts using the syntactic and semantic derivation and derived trees found in the Tree Adjoining Grammar (TAG). Under the extrapositional/ discontinuous constituent approach, Hedberg argues that the cleft clause and the cleft pronoun form a multi-component set either of which is capable of being substituted or adjoined into the specified node in the derivation process. The compositional semantics for each semantic elementary tree is computed synchronically by the corresponding syntactic representation. The next chapter investigates the tenets of RRG as the theory for exploring the Persian clefts.

CHAPTER

3

AN OVERVIEW OF ROLE AND REFERENCE GRAMMAR

The aim of this chapter is to present an overview of the fundamental tenets and basic notions of RRG as the framework in this thesis. The theoretical assumptions and the general principles underlying RRG to be laid out in this chapter are based on Van Valin and LaPolla (1997) along with the recently updated versions, Van Valin (2005). Section 3.1 introduces the theoretical foundations of RRG. Section 3.2 and 3.3 are concerned with the syntactic and semantic representations in the theory. In section 3.4, the information structure which represents the focus structure projection will be detailed. Section 3.5 will look at a brand new theory of grammatical relations. I explore the structure of complex sentences central to the analysis of Persian *it*-clefts in section 3.6. And finally, the linking algorithm as the depiction of these basics will be portrayed.

3.1. Theoretical foundations of RRG

Van Valin and Lapolla (1997) postulate two major linguistic treatments within the wide mainstream of linguistic theories. Firstly, the formal theories of language in which syntax is thought to play crucially with respect to the sentence analysis; consequently, these theories are labeled as 'syntactocentric'. The typical exemplar of the syntactocentric perspective is the generativist theory of Chomsky (1965) and its successors. Chomsky neglects entirely the communicative role of language, takes it as "a system for the free expression of thought, essentially independent of stimulus control, need satisfaction or instrumental purpose" (1980: 239). The distinctive property of the generative view is the undertaking to envisage the clear-cut formal, algebraic descriptions as well as explanations for the linguistic structures (Dabir Moghaddam 2008: 18). The mentalist

disposition prevails over this school of linguistics in the way that language is isolated from the pragmatics, meaning and from other cognitive processes in general (Chomsky 1977:4). The endeavour to unearth the linguistic universals has always been an obsession for the generativists proposing that universals are generalizations about I-language. The language acquisition in the generative theory has been chained up to the philosophical outlook that language is an abstract object acquired by the operation of two forces, one is the Language Acquisition Device (LAD) or Universal Grammar (UG) determined by the genesis of grammar and the other is the environmental input of the specific language the child is exposed to (Dabir Moghaddam 2005a: 120).

On the other hand, the second view of language rejects the autonomy of syntax and concentrates on the communicative and cognitive factors in linguistic analysis (Van Valin 1993b: 12). Further, the role of language as a means of communication and its role in broader cognitive fields such as reasoning, conceptualization, and its relation to the other cognitive processes such as perception and knowledge are relevant to the study of language. That is why Van Valin and LaPolla (1997) refer to this view as 'communication-and-cognition' perspective. The theories which adopt such a view include Functional Grammar (FG; 1978, 1991, 1997), Systemic Functional Grammar (SFG; Halliday 1985, 1994; Halliday and Matthiessen 2004), Lexical-Functional Grammar (LFG; Bresnan 1982, 2001), Role and Reference Grammar (RRG, Foley and Van Valin 1984, Van Valin 1993b, Van Valin and LaPolla 1997, Van Valin 2005), Cognitive Grammar (CG; Langacker 1987, 1991), among others. The theories can be placed along a continuum according to whether they highlight the communicative or cognitive aspect of language. In Cognitive Grammar, it is argued that language is meant to be a mental and cognitive system, not viewed as independent of the other cognitive forces. Thus, the comprehensive apprehension of the language is in debt to the holistic knowledge of cognitive system (Dabir Moghaddam 2008: 66). The communicative-based theories develop a framework in which the language speakers do not communicate with each other in a vacuum but rather in socioculturally defined activities and situations in which the participants take on socially defined roles and statuses (Foley and Van Valin 1984:8). Functionalist theories on their own terms are divided into three groups of

extreme, moderate and conservative functionalism. (Rezai 2003: 7 citing Yung 1994). According to the extreme version such as Hopper (1987, 1988) grammar is reducible to discourse and any apparent structural system being taken as an epiphenomenon of current discourse patterns, formulaic expressions and etc. In Kuno's (1987) viewpoint as adherent of conservative functionalism, the separation of syntax and discourse is attainable. Moreover, the discoursal and pragmatic explanations of grammatical structures enjoy superiority over the mere formal confrontations. In other words, discourse and syntax interact insofar as the formal analyses fail to account for a particular grammatical structure and a workable solution can be achieved by taking the semantic and pragmatic prospects into consideration. Therefore, the belief that discourse takes the responsibility to shape the form of language can be abandoned. This kind of functionalism is referred to as 'formal functionalism' in the letter (Newmeyer 2001). Between the formalist and functionalist extremes, there are moderate theories which have an eye on both the formal and functional aspects of language. SFG perhaps takes the most radical discourse-pragmatic view that language has evolved to satisfy human needs; the elements and structures of language are created, converted, deleted, and acquired to meet the communicative needs of the participants. To account for the grammatical structures, it is urgently needed to approach how the language is used in the different sociocultural contexts. In Dik's FG, language is in the first place conceptualized as an instrument of social interaction among human beings (1997: 3) and the ultimate goal of FG is to reveal the communicative competence of the natural language users. However, FG does accept that the grammar of a language is a system in the structuralist sense denoting that the rules and principles underlying the construction of linguistic expressions are governed and explained, whenever possible, in functional terms (Butler 2007: 37). RRG as a moderate functionalist theory is firmly committed to the study of language in communication and attempts to characterize in the first place the functional aspects of language with reference to the structural patterns in the second place. RRG primarily claims language to be a communication tool and this function is what shapes language structures. In consequence, Butler (2007) labels such a functionalist approach as 'structural-functional' in the sense that "collections of grammatical constructions are explored from the perspective of how they achieve a certain communicative end" (Foley

and Van Valin 1984: 347). RRG the same as FG and SFG rejects the autonomy of syntax in favour of the idea that function motivates form as Foley and Van Valin state:

> One of the basic principles of functional linguistics is that clause-internal morpho-syntax can be understood with reference to the semantic and pragmatic functions of its constituent units, and consequently the major task is to describe the complex interaction of form and function in language. (1984: 14)

Van Valin argues explicitly that syntax is relatively rather than completely motivated by semantic, pragmatic and cognitive concerns which weaken to a larger extent the arbitrariness of syntax; thus, it is not reducible totally to semantics and pragmatics domains. Above all is the RRG propensity to move in line with three types of psychological, pragmatic and typological adequacy, as noted in Dik (1978, 1991). As mentioned, RRG adopts a communication-and-cognition perspective on language and commits itself to explain how linguistic expressions are acquired, processed, produced, interpreted, and memorized. There is also an indication of language acquisition in RRG that Van Valin takes a constructionist approach to the language acquisition where the child's mission is to "construct a grammar based on its inborn cognitive endowments and information from experience" (Van Valin 1991). RRG also lays considerable emphasis on the typological adequacy and seeks to uncover those facets of grammar found in all human languages. One of the main questions out of which the RRG clause structure arises is that what linguistic theory looks like if it is based on the analysis of Lakhota, Tagalog and Dyirbal rather than on the analysis of English (Van Valin 1995: 461). Last but not the least, there is no mention of abstract levels of representation as in the generativist paradigms in RRG model, rather there are a syntactic representation and a semantic representation arising from the non-derivational nature of the theory.

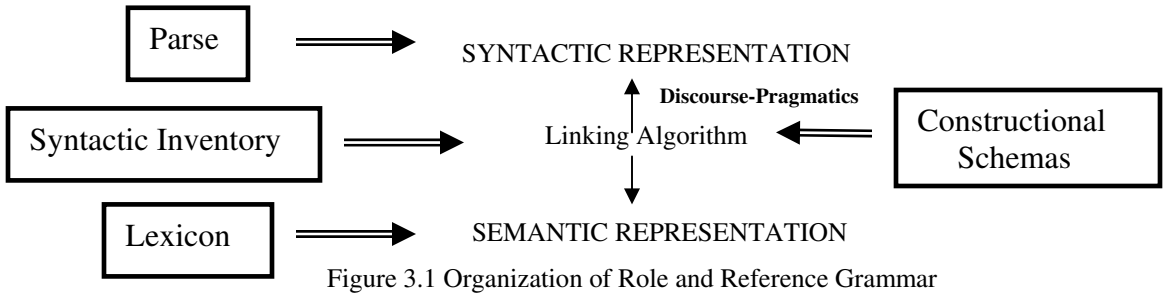


Figure 3.1 Organization of Role and Reference Grammar

3.2. Syntactic representation

The first step in the exploration of RRG is to deal with the level of syntactic representation in simple sentences. Van Valin objected to the generativist theories like Government and Binding/ Principles and Parameters concerning the view that these theories cannot meet the typological adequacy with respect to languages such as Dyirbal. In regard to the data taken from Dixon (1972), verb and its following NP does not form a VP node (a basic rule adopted by generativists) in Dyirbal, because this language has a free word order and the major constituents can appear in any order. Also, the rich case assignment system in Dyirbal prepares the grounds for any changes in meaning if one wishes to code the relational and non-relational structure of the clause. From an RRG point of view (Van Valin and LaPolla 1997: 22), there are two general considerations that a theory of clause structure must meet which are given in (1).

(1) a. A theory of clause structure should capture all of the universal features without imposing features on languages in which there is no evidence for them.
b. A theory should represent comparable structures in different languages in comparable ways.

These considerations result in a very different conception of clause structure in RRG. Firstly, since it relates to the interplay of syntax, semantics and pragmatics in grammatical systems, the representation of clause must allow for the representation of all of these factors where necessary. Secondly, the theory is greatly devoted to uncover those structures which are found in all human languages; RRG is applicable to free-word order, flat syntax languages such as Dyirbal and Malayalam, to head-marking[10] languages like

[10] . There are two notions- endocentric vs. exocentric- mentioned by Nicolas (1992), which are shown to correlate with the notions of head- and dependent-marking posited in Van Valin and LaPolla (1997: 23). The distinction follows the syntactic behaviour of the dependent nominals. In head marking languages like Dyirbal and English, the syntactic relation between a head and its dependent(s) is coded morphologically on the dependent(s). Head-marking languages such as Lakhota Tzotzil have the ability to drop any nominal argument cross-referenced by a suffix on the head. It is noteworthy that Farsi (modern Persian) is considered to be a dependent-marking language with some head-marking features e.g. verb agreement, signaling the possibility for the dependent nominals to be dropped (Rezai 2003: 57). Consider the data from Rezai (Ibid).

(i) ānhā šiše=rā šekast-and.
they glass=OM break-PAST-3pl
'They broke the glass.'

(ii) šiše=rā šekast-and.
glass=OM break-PAST-3pl
'They broke the glass.'

Lakhota and Tzotzil, and to fixed-order, configurational, dependent-marking languages like English and Icelandic.

3.2.1. Layered structure of clause (LSD)

The RRG notion of clause structure is marked out by the contrast, on one hand, between the predicate and non-predicating elements, and, among the non-predicating elements, between the arguments and non-arguments, on the other. Strictly speaking, Non-predicating elements are the NPs and adpositional phrases which are the arguments of the predicate and those which are not. The syntactic constituents in the LSD are 'nucleus', 'core' and 'periphery' which contain predicate, predicate and its argument(s) and non-arguments respectively. The periphery modifies the core node. Both core and periphery are subsumed under the clause node. Periphery includes non-argument NPs and adpositional phrases as well as adjuncts such as adverbs.

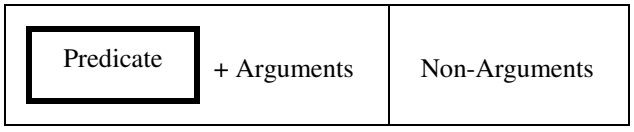


Figure 3.2 Universal oppositions underlying RRG clause structure

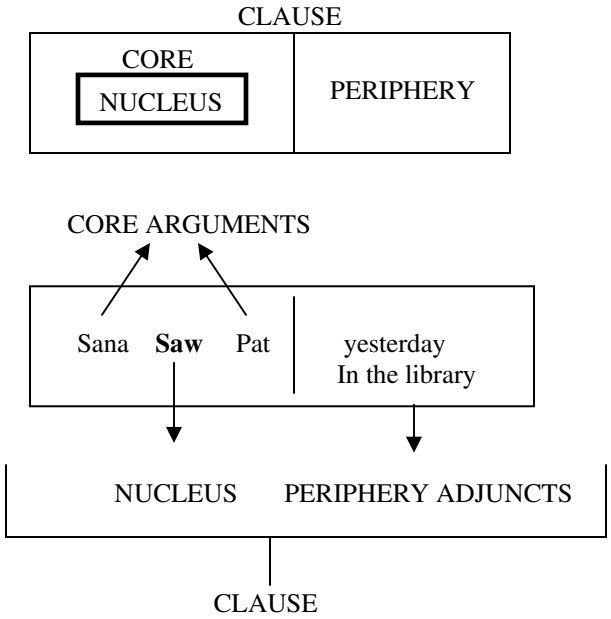


Figure 3.3. Components of the LSC

Semantic element(s)	Syntactic unit
Predicate	Nucleus
Argument in the semantic representation of predicate	Core argument
Non-arguments	Periphery
Predicate + Arguments	Core
Predicate + Arguments + Non-arguments	Clause (= Core + Periphery)

Table 3.1 Semantic units underlying the syntactic units of the LSC

This scheme is universal because every language makes a distinction between predicate and arguments, and every language distinguishes between the NPs/PPs which are arguments of the predicate and those which are not (Van Valin and LaPolla 1997: 27). It is also necessary to distinguish between the direct core arguments (DCAs) and oblique core arguments (OCAs) which are adpositionally marked. The difference between the OCAs and adpositional adjuncts is made clear by the fact that the OCAs can appear without the adpositions. This is shown below in (2).

(2) a. John gave the book to Mary.

DCA OCA

b. John gave Mary the book.

DCA DCA

The RRG tree diagrams differ from those of constituent-structure trees. Since the hierarchical units are defined semantically and not syntactically, the immediate dominance or linear precedence of units does not play a role in their projection and they may occur in any order if a given language permits it. A single-clause sentence may include non-universal slots in the layered structure of the clause. These slots are pragmatically motivated; therefore, they are dependent on the linear word order of the constituents. The first is the 'pre-core slot' [PrCS], the position in which the question

words appear in languages in which they do not occur in-situ. It is also possible for the fronted non-wh NPs or PPs to appear in the same position, e.g. (3). This position is clause-internal but core-external.

(3) Bean soup I can't stand.

There is also a 'postcore slot' [PoCS] in some verb-final languages, e.g. Japanese, Dhivehi where the WH-words and non-WH NPs can occur in the postcore slot (see Van Valin 2005: 6). In addition to the PrCS and PsCS, there are positions which are outside the clause but inside the sentence viz. the 'left-detached position' [LDP], a location for the dislocated constituents that are set off from the clause by a pause, as in (4), and the 'right-detached position' [RDP] which belongs to the dislocated elements that function as semantic arguments of the verb and most commonly, there is a resumptive pronoun in the core referring to them, as in (5). The abstract constituent projection of the layered structure of the clause is given in figure 3.4.

(4) a. Yesterday, I bought myself a new car.
b. As for John, I haven't seen him in a couple weeks.

(5) I know them, those boys.

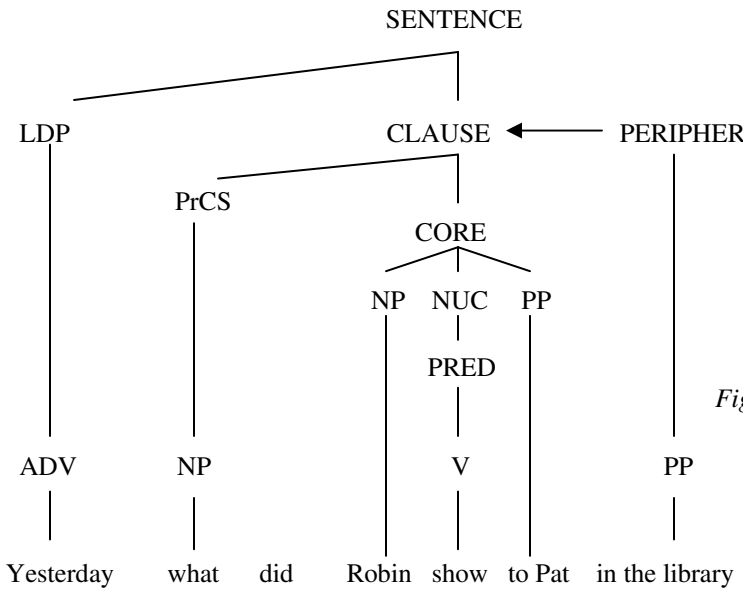


Figure 3.4. LSC in English

There is an interesting difference between the universal and non-universal aspects of clause structure. The universal aspects (the nucleus, core, periphery and clause) are all semantically motivated, rather the non-universal aspects (the detached phrases and extra-core slots) are pragmatically motivated which are represented in the languages with strong pragmatic conditions on the occurrence of the elements. Another point regarding the LCS is the omission of the VP node, which plays a central role in Chomskyan approaches.

3.2.2. Operators of the LSC in RRG

There are two projections in the RRG representation of the clause. First is the constituent projection such as the one illustrated in figure 3.4. Second is the operator projection. Grammatical categories like tense, aspect, negation, modality, status, illocutionary force, directionals and evidentials are operators which modify the different layers of the clause. Each of the clause levels may be modified by one or more operators. The nuclear operators have scope over the nucleus; they modify the action, event or state itself without reference to the participants (Van Valin 2005: 9). Among the aforementioned operators, nuclear operators include aspect, negation and directionals that modify only the direction of the action or event. In *he shouted up*, *up* is a nuclear directional describing the action of the predicate. Core operators modify the relation between a core argument, normally the actor, and the action. Core operators are modality, event quantification, found in languages like Amele[11], internal negation and the directionals which indicate the direction of motion of one of the core arguments. In German, for example, there are particles, *hin* and *her*, which can be put on verbs to indicate whether the motion is away from (*hin*) or toward (*her*) the speaker. Clausal operators modify the whole clause, as the name implies. There are two groups of clausal operators. The first group includes the tense and status operators which situate the proposition within the temporal and realis-irrealis scale. The second group includes the

[11] . In Amele, the morpheme *-ad-* signals that there are multiple actions of the verb, as in (i), if it is omitted, yielding (ii) meaning that there is only one event of going.

(i) Age bel-ad-ein.
3pl go-DSTR-3plREMPST
'They went in all directions.'

(ii) Age be-ein.
3pl go-3plREMPST
'They went in one direction.' (Van Valin : 2005: 11)

evidentials and illocutionary force. Evidentials mark the epistemological basis of the proposition (that is, how the speaker came to know the information being uttered) while the illocutionary operator specifies the speech act. Modality is used in RRG operator projection to refer to the root, deontic sense of modal verbs. Deontic modality encompasses the original meaning of modal verbs including request (may), strong obligation (must or have to), ability (can) and weak obligation (should, ought to). The status operator includes epistemic modality, external negation and categories like realis and irralis. The distinction between the deontic and epistemic modality arises from the dual interpretations of the modal verbs; for example, in English, modals can signify obligation vs. necessity or ability vs. possibility.

(6) John must win the race.

a. John is obliged to win the race. (Deontic interpretation)

b. It is necessary for John to win the race. (Epistemic Interpretation)

(7) John can win the race.

a. John is able to win the race. (Deontic interpretation)

b. It is possible for John to win the race. (Epistemic Interpretation)

Negation is the only operator that can occur at all three levels. It could be nuclear operator, hence modifies the nucleus such as the morpheme *-un-* in *unhappy*. Core/ internal negation has one or more arguments (and possibly also the nucleus) in its scope and is realized by *not* or *never* in English. Clausal/ external/ propositional negation has the entire clause in its scope and can be normally paraphrased by *it is not the case*. Except the negation and illocutionary force operators, the other operators are not necessarily universal. Another point is that the operator projection mirrors the constituent projection since operators appear at the level corresponding to the unit they modify. Further, when an ordering relationship is established among operators with respect to the predicating element, they are always ordered in the same way crosslinguistically, such that their linear order reflects their scope (Van Valin and LaPolla 1997: 49). There come in (80)

some English examples with the scope of operators in accordance to their linear arrangement.

(8) a. he may be leaving soon. (IF/ TNS-STA-ASP-V)

b. She was able to see him. (IF/TNS-MOD-V)

c. Will they have to be leaving? (IF/TNS-MOD-ASP-V)

Figure 3.5 illustrates how the operator projection reflects the constituent projection along with the operator scope. Figure 3.6 represents the LSC with constituent and operator projection.

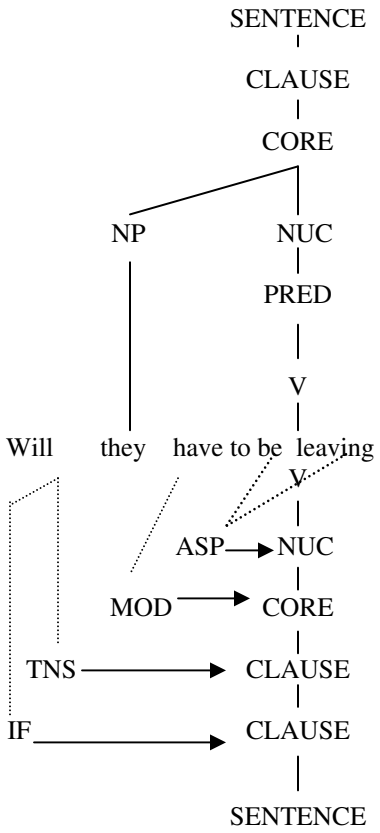


Figure 3.5 Operator scope in RRG

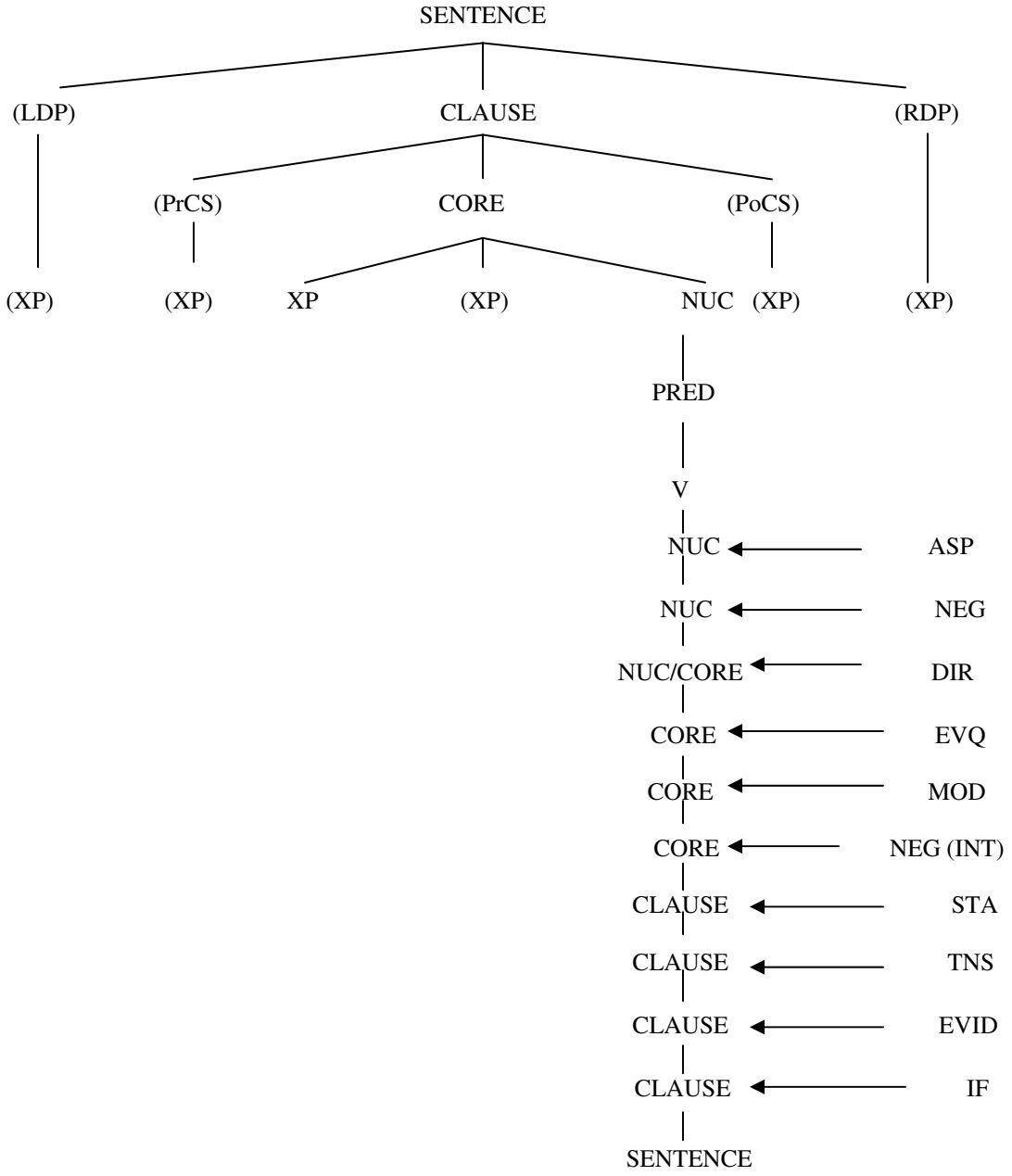


Figure 3.6. LSC with constituent and operator projections

3.2.3. The layered structure of adpositional and noun phrases

From an RRG point of view, the predicative vs. non-predicative distinction has implication in order to draw an analogy to distinguish the behaviour of adpositions. The peripheral adpositions which function as predicates and license their object will be referred to as predicative adpositions and therefore have a layered structure in which

there is an adpositional predicate in the nucleus, and its semantic argument is treated as a core argument structurally. On the other hand, the adpositions which mark the oblique core arguments are considered non-predicative; hence, they lack a layered structure. They are essentially case markers and nothing more. It is interesting to note that some adpositions can be classified according to which verbs they appear with; for example, *from*. When it occurs with a verb like *take*, which licenses a 'source' argument, it is predicative, as in (9a), whereas it is predicative with verb like *die*, as in (9b). The syntactic representation of the predicative and non-predicative adpositions is given in figure 3.7.

(9) a. Sally took the book from the boy.

b. She died from malaria.

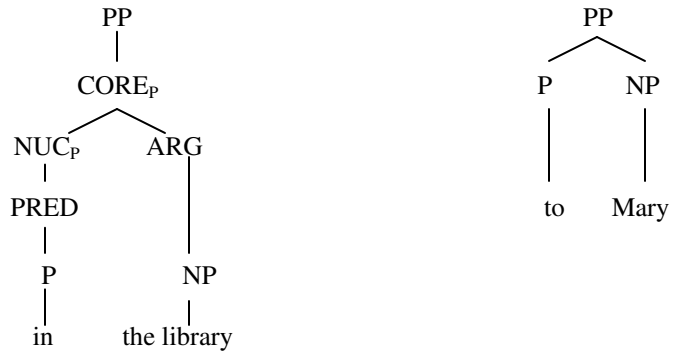


Figure 3.7 Predicative and non-predicative prepositional phrases

Van Valin and LaPolla (1997: 53) argue that noun phrases bear structural parallel to clauses because of the fact that both can be said to have arguments. This is clear in the English relational nouns like *father of Sam* in which *Sam* is the core argument of the nominal core. Moreover, clauses sometimes have clauses within them as arguments and the same is true of NPs, as in the pair in (10).

(10) a. Fred believed that pollution isn't a problem.

b. Fred's belief that pollution isn't a problem

Another point of similarity is the assumption that the complex derived NPs share a great resemblance with clauses, such that the distinction of nucleus, core and clause is also applicable to the structure of NPs. In (11), *Bill* and *FBI agents* are the arguments of the clause as well as the NP alongside the prepositional phrase *in New York* stands as periphery adjunct to both of them.

(11) a. Arrest of Bill by FBI agents in New York

b. Bill was arrested by FBI agents in New York.

The parallel between clauses and NPs are somewhat rejected in RRG because English is quite an unusual language in permitting the double genitive constructions to take place; hence, the English derived nominal (DN) is treated as a particular case on which a universal account cannot be based. In the DN *FBI agents' arrest of Bill in New York,* it would be inaccurate to regard the genitively-marked NP as the argument of the nominal core, albeit it is interpreted as the subject argument of the DN, the view which is central in the X-bar syntax in Government and Binding theory. The RRG view of the layered structure of the NPs is represented below.

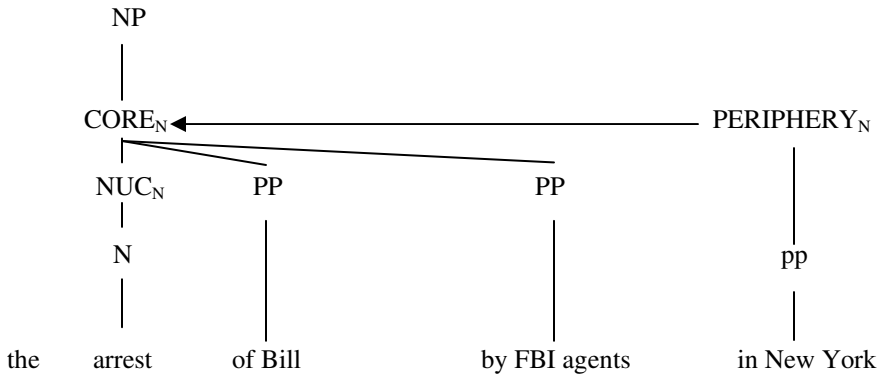


Figure 3.8 The layered structure of the DN in (11a)

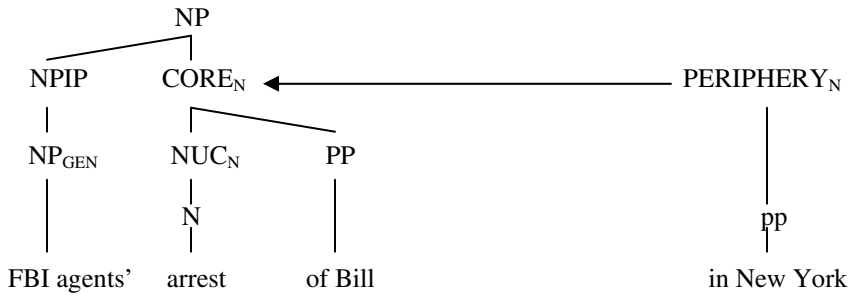


Figure 3.9 The layered structure of the NP with NP-initial position in English

NPs like clauses have operators that modify the different levels of the NPs. The operators in the layered structure of the NP have the nominal nucleus (NUC_N), the nominal core ($CORE_N$) or the whole NP in their scope. Nominal aspect which distinguishes between count and mass nouns is the only nominal nucleus operator. Numbers, quantifiers and negation (as in *no* in English) are nominal core operators. Definiteness as well as deixis is NP-level operators. The discourse-pragmatic properties of the NPs are determined by the definiteness and deixis operators which are functionally analogous to the illocutionary force operator in the layered structure of the clause (Van Valin and LaPolla 1997: 58). Adjectives, in earlier work in RRG, were taken to be $nuclear_N$ operators, but they would be the only lexical category functioning as an operator in either the clause or the NP (Van Valin 2005: 26).

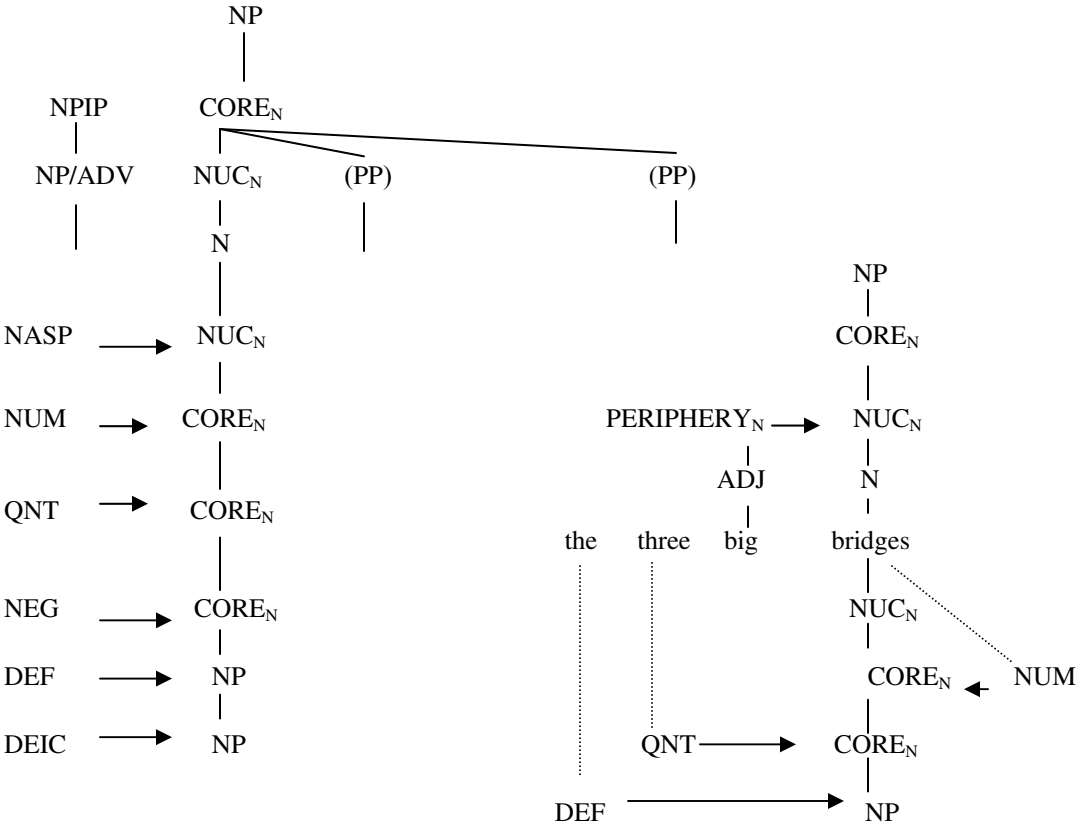


Figure 3.10 Operators in the layered structure of the NP

There is an initial-NP position [NPIP] in the layered structure of the NP which plays a role in both constituent and operator projections; for example, it marks the definiteness operator in English. Demonstratives, possessive pronouns and possessor phrases in English are placed within the NPIP.

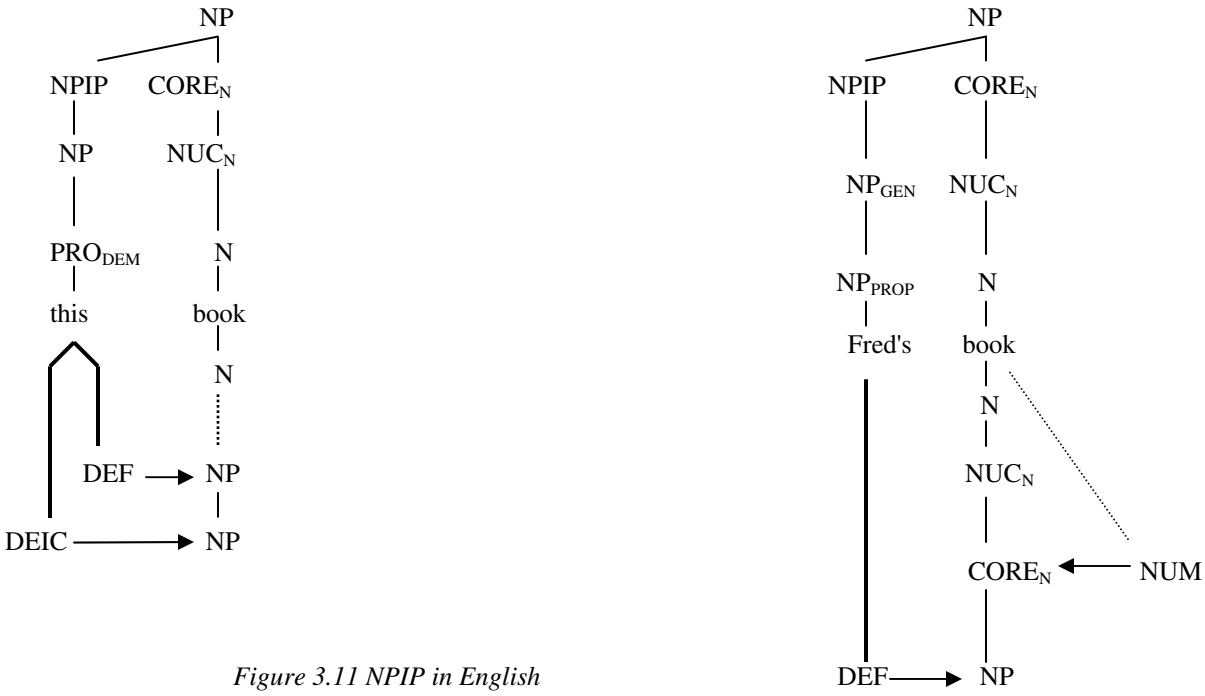


Figure 3.11 NPIP in English

3.3. Semantic representation

The next step in the RRG exploration is to present a semantic representation of sentences which is based on the interactive nature of the lexicon, as a major component of the RRG theory, and the lexical decomposition of the predicating elements. The semantic representation serves a purpose regarding two aspects of the communicative function of language viz. predication and reference. Predication and reference which are based on the semantic relation, established between the predicating elements and their arguments, set up the semantic structure foundation in RRG. To understand the semantic content of the predicating elements and their syntagmatic relationships to the arguments, it is necessary to offer a typology of the states of affairs following a tradition dating back to Aristotle in which there are four basic types of states of affairs: situations, events, processes and actions. According to the organization of the RRG, given in figure 3.1, the

lexical representation of the verbs (and the other predicating elements) is stored in the lexicon and provides the input to the semantic representation. It is the utmost importance that the semantic function of an argument referring to a participant in the state of the affair should follow the representation of the verb, or any other predicate it occurs with. This fact highlights the semantic roles of the RRG theory.

3.3.1. Verb classes

The system of lexical decomposition employed in RRG is based on the distinctions in Aktionsart proposed originally by Vendler (1967). He argues that verbs and other predicating elements can be grouped in terms of their inherent temporal properties and proposed a fourfold classification of the verbs: states, achievements, accomplishments and activities. States depict static situations which are inherently temporally atelic (unbounded). Activities are dynamic and temporally atelic. Achievements code instantaneous, hence telic changes of sates as well as activities leading to an inherent terminal point. Accomplishments are temporally telic (bounded) and extended (not instantaneous) states of affairs leading again to a terminal point. Examples of English verbs from each of the Aktionsart classes are given in (12).

(12) a. Sates: *be sick, be tall, be dead, love, know, believe*
b. Achievements: *pop, explode, shatter* (the intransitive versions)
c. Accomplishments: *melt, freeze, dry* (the intransitive versions); *learn*
d. Activities: *march, walk, roll* (the intransitive versions); *swim, think, snow, write*

(Van Valin 2005: 32)

Smith (1997) adds another category to this classification that she refers to as semelfactive which are punctual events with no result state (example in (13)). There is a derivational relation between two classes which is very important crosslinguistically, namely that between activities and what are called 'active accomplishments', the telic use of activity verbs (Van Valin 2005: 32). This general pattern relates activity verbs of motion (e.g. *run*), consumption (e.g. *eat*) and creation (e.g. *paint*) to the corresponding active accomplishment verbs. This is illustrated in (14) and (15) for English. The classification

of verbs on the basis of four features of [+/- static], [+/- dynamic], [+/- telic] and [+/- punctual] is given in table 3.2. Each of the verb classes has a causative counterpart, as exemplified in (16).

(13) a. The light flashed.
b. Chris coughed.
c. The tree branch tapped on the window.
d. Dana glimpsed Kim.

(Semelfactive verbs)

(14) a. The soldier marched in the park.
b. Dana ate fish.
c. Leslie painted for several hours.

(Activity verbs)

(15) a. The soldier marched to the park.
b. Dana ate the fish.
c. Leslie painted Mary's house.

(Active accomplishment verbs)

(16) a. The boy is afraid. (state)
a′.The dog frightens/scares the boy. (Causative state)

b. The balloon popped. (Achievement)
b′. The cat popped the balloon. (Causative achievement)

c. The pencil tapped on the table. (Semelfactive)
c′.The teacher tapped the pencil on the table. (Causative semelfactive)

d. The ice melted. (Accomplishment)
d′.The hot water melted the ice. (Causative accomplishment)

e. The soldiers marched in the park. (Activity)

e´.The sergeant marched the soldiers in the park. (Causative activity)

f. The soldiers marched to the park. (Active accomplishment)

f´.The sergeant marched the soldiers to the park. (Causative active accomplishment)

Verb class	static	dynamic	telic	punctual
state	+	-	-	-
activity	-	+	-	-
achievement	-	-	+	+
semelfactive	-	-/+	-	+
accomplishment	-	-	+	-
active accomplishment	-	+	+	-

Table 3.2 Verb classes

3.3.2. Logical Structure

In order to represent the four basic types of Aktionsart formally, Van Valin makes use of the lexical decomposition proposed by Dowty (1979). According to the system of lexical decomposition, state and activity predicates are considered as basic and other classes are derived from them. State verbs contain bare predicates while the logical structure of activity verbs contains the element **do´**. Achievements, which represent punctual changes of state or activity, are displayed as state or activity predicate plus an **INGR**essive operator. Accomplishments, which are non-punctual changes of state or activity verbs, are represented as state or activity predicate plus a **BECOME** operator. This captures the fact that if state or activity predicates have the features of [- punctual] and [- telic], they are interpreted as accomplishments. The SEML element is found in the formal representation of semelfactive predicates, which are likewise dependent on the logical structure of state or activity predicates. A point of difference between Van Valin and LaPolla (1997: 109) and Van Valin (2005: 45) lies in the view that the logical

structure of active accomplishments in the former version of RRG has a BECOME operator whereas in the latter, the INGR operator is used because the active accomplishments denote an action the result of which is the establishment of a state. Following the convention of formal semantics, predicates are presented in bold face followed by a prime whereas the arguments are presented in normal typeface. The logical structure of Aktionsart types and its English examples are given in the table 3.3 and in (17) respectively.

Aktionsart	**Logical Structure**
state	**predicate′** (x) or (x, y)
activity	**do′** (x, [**predicate′**(x) or (x, y)])
achievement	INGR **predicate′**(x) or (x, y), or INGR **do′** (x, [**predicate′**(x) or (x, y)])
semelfactive	SEML **predicate′** (x) or (x, y) SEML do′ (x, [**predicate′** (x) or (x, y)])
accomplishment	BECOME **predicate′**(x) or (x, y), or BECOME **do′** (x, [**predicate′**(x) or (x, y)])
active accomplishment	do′(x, [**predicate′$_1$** (x,(y))]) & INGR **predicate$_2$′**(z, x) or (y)
causative	α CAUSE β, where α, β are logical structures of any type.

Table 3.3 Lexical representations for Aktionsart classes

(17) a. Pat is a fool. **be′** (Pat, [**fool′**])

b. Carl ate pizza. **do′** (Carl, [**eat′** (Carl, pizza)])

c. The window shattered. INGR **shattered′** (window)

d. Dana glimpsed the picture. SEML **see′** (Dana, picture)

e. Mary learned French. BECOME **know′** (Mary, French)

f. Carl ate the pizza to the child.

do′ (Carl, [**eat′** (Carl, pizza)]) & INGR **consumed′** (pizza)

g. Mary fed the pizza to the child.

[**do′**(Mary, Ø)]CAUSE [**do′**(child,[**eat′**(child, pizza)])& INGR**consumed′**(pizza)]

3.3.3. Semantic roles

The next step in the development of the semantic representation is the specification of predicate-argument relations which is discussed in three distinct revels. The first is the verb-specific semantic roles such as runner; killer, hearer, etc. The second is the thematic relations, which are generalizations across the verb-specific roles, e.g. agent, instrument, experiencer, theme, patient. The third is the generalized semantic roles, the semantic macroroles, actor and undergoer, which are generalizations across thematic relations. Actor subsumes agent, experiencer, instrument and other roles, while undergoer is a generalization across patient, theme, recipient and other roles. Agent is the prototype for actor, and patient is the prototype for undergoer.

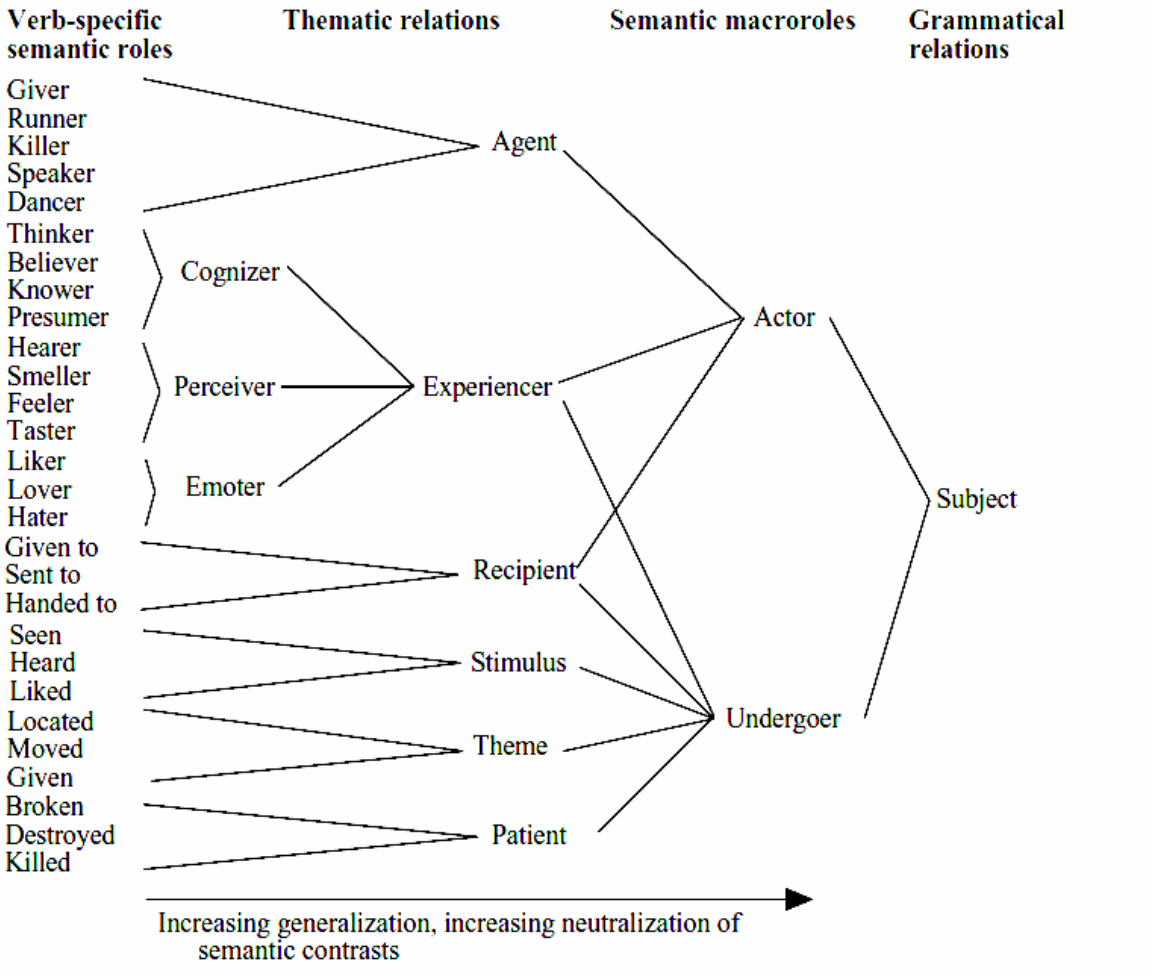


Figure 3.12 Continuum from verb-specific semantic roles to grammatical relations

3.3.3.1. Thematic relations

The semantic relations between a predicate and its arguments which express the participant roles in the state of affairs denoted by the verb are thematic relations. In fact, thematic relations are linguistic identities, i.e. they are part of natural-language semantics, while participant roles are properties of states of affairs in the world. Thematic relations are defined in terms of the argument positions in the decomposed logical structure representations (Van Valin 2005: 53). For example, *Pat* is the 'identified' in (18), which is defined as the first argument of the identificational predicate regarding its position in the logical structure.

(18) Pat is a fool. **be´** (Pat, [**fool´**])

Thematic relations in RRG are organized on a continuum according to which there are only five distinctive categories by which we can characterize the thematic relations. The two endpoints of the continuum belong to the agent and patient and the other thematic relations are placed within the continuum with regard to the degree of agent- or patent-likeness. In the second column of thematic relations (from the left), the degree of agentivity of the first argument is higher than that in the other thematic relations of the continuum because x refers to the argument of the activity predicates, as the **do´** element implies. The thematic relations in the middle of the continuum demonstrate lower agentivity due to the fact that the involved dynamicity in the state predicate, like *see, think*, *love*, etc is lower than that in the activity predicates such as *speak, do, move, consume*, etc. The forth column describes the second argument of the state or activity predicates. Put it more accurately, because of the higher degree of patient-likeness of the second argument of state predicates than that of activity predicates, it is necessary to place the second arguments of the former upper than those of the latter hierarchically. The rightmost column presents the single argument of the state predicate; thus, we can justify the acceptance of the patient as typical of affectedness by predicator. DO´ signals lexicalized agency defined as agent's willful, controlling, instigating participation in the states of affairs like *murder,* Murder: DO (x, [**do´** (x, Ø)] CAUSE [BECOME **dead´**(y)]

Another point regarding the continuum is the hierarchical order of the thematic relations at a specified point where the agent- or patient-likeness will decrease downwards.; for example, THEME is more agent-like than STIMULUS in the forth column.

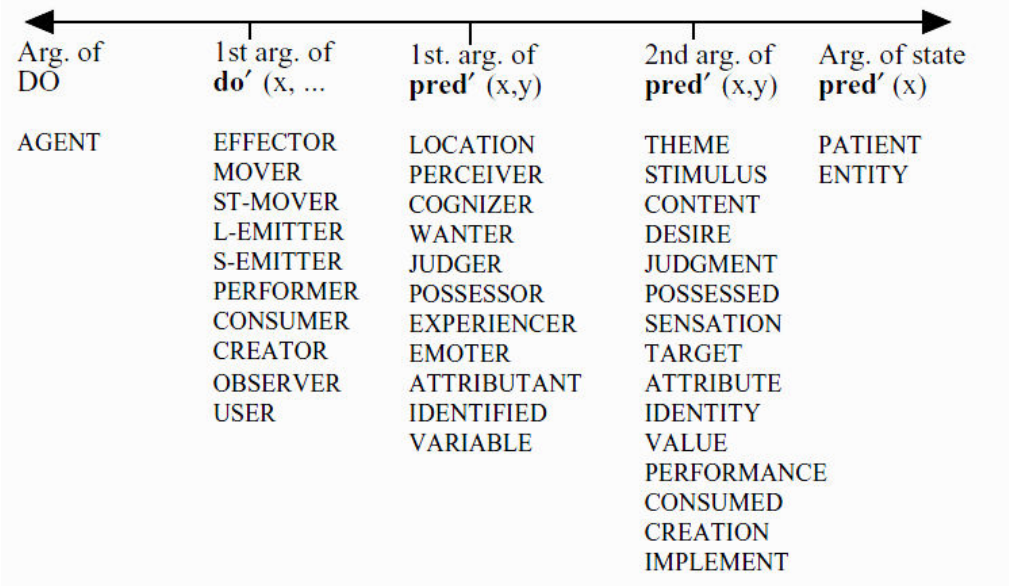


Figure 3.13 Thematic relations continuum in terms of logical structure argument positions

3.3.3.2. Semantic macroroles

'Actor' and 'undergoer' are one of the key notions in RRG analysis. The interaction of logical structure and syntactic representation is displayed by semantic macroroles (Van Valin 1996: 287). These macroroles are the two primary arguments of a transitive verb, either of which may be the single argument of an intransitive verb. They correspond to what are conventionally called 'logical subject' and 'logical object', but these terms are not applicable to RRG because 'subject' and 'object' used to refer to syntactic not semantic relations. Generally speaking, the actor is the most agent-like argument, while the undergoer is the most patient like argument (Van Valin 2005: 60). The implication of the macroroles is grasped experimentally by their sameness in the English passive sentences, i.e. a list of various thematic relations such as agent, effector, experiencer, perceiver, possessor, judger, etc, can be the subject of an active verb, while patient, theme, stimulus, possessed, location, etc, can be the direct object, but in English passive sentences, the second list can be treated as subject, while the firs list can be located in the

periphery licensed by the preposition *by*. The generalization here is recaptured semantically by macroroles in the way that in an active clause, the actor is subject and the undergoer direct object, while in a passive clause, the undergoer is subject and the actor occurs in the periphery marked by the preposition.

(19) a. Fred broke the window.
Actor/ subject undergoer/ direct object
b. The window was broken by Fred.
Undergoer/ subject actor/ prepositional object

In (20), x is the actor and y is the undergoer, but from the thematic relations viewpoint, x in (a) is the agent and y the patient. In (b), x is the experiencer and y the stimulus. In (c), x is the agent, y the theme and z the location. It is obvious that these semantic roles are named **macro**roles because each subsumes a number of specific thematic relations.

(20) a. kill: [**do**´ (x. Ø)] CAUSE [BECOME **dead**´(y)]
b. see: **see**´(x, y)
c. put: [**do**´(x, Ø)] CAUSE [BECOME **be-LOC**´ (z, y)]

'Actor-undergoer hierarchy' is what makes the relation between the macroroles and the logical structure argument positions. Accordingly, in the logical structure of a transitive verb, the leftmost argument will be the actor and the rightmost argument will be the undergoer.

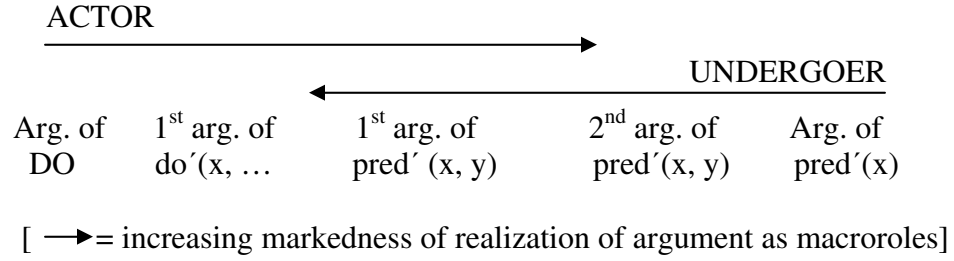


Figure 3.14 Actor-undergoer hierarchy

There is also a marked case of macrorole assignment as in 'dative shift' where the first argument of the two-place state predicate, not the second, is undergoer, as in (21). Van Valin (2005: 62) states that with transitive predicates which take possessor-possessed type arguments, it is the possessed argument that is the unmarked choice for undergoer.

(21) a. [**do´** (Pat, Ø)] CAUSE [BECOME **have´** (Chris, book)]
b. Pat [actor] gave the book [undergoer] to Chris.
c. Pat [actor] gave Chris [undergoer] the book.

Given that the nature of macroroles is a function of the verb's logical structure, the default macrorole assignment is summarized as in (22).

(22) *Default Macrorole Assignment Principles*
a. Number: the number of macroroles a verb takes is less than or equal to the number of arguments in its logical structure.
1. If a verb has two or more arguments in its logical structure, it will take two macroroles
[**do´** (Pat, Ø)] CAUSE [BECOME **have´** (Chris, book)]
2. If a verb has one argument in its logical structure, it will take one macrorole
[SEML **do´** (Sally, [**cough´** (sally)])]
b. Nature: for verbs which take one macrorole,
1. If the verb has an activity predicate in its logical structure, the macrorole is actor.
[**do´** (Charlotte, [**run´** (Charlotte)])]
2. If the verb has no activity predicate in its logical structure, the macrorole is undergoer.
[INGR **shattered´** (window)]

'Macrorole transitivity' [MT] and 'syntactic transitivity' [ST] are the relevant issues in the next step to the examination of semantic representation. Transitivity can be defined in terms of the number of syntactic arguments or the number of semantic macroroles. For example, in the logical structure of *rain,* there is no semantic macrorole; hence, the MT is

zero. However, since English is a non-pro-drop language, the presence of the expletive increases the ST by one. Some grammatical constructions can be explained by the predicate valence, e.g. passivization, according to which the number of ST, not necessarily that of MT, decreases. In a sentence like *John was killed by the man*, the number of ST has been decreased by 1, while MT remains constant. *Man* is still the actor, but it appears as peripheral adjunct in the syntactic representation and is not included in the core argument set. MT is formalized as [MRα] in which α would equal 0, 1, or 2.

	Semantic valence	No. of MRs	MT
snow	0	0	atransitive
die	1	1	intransitive
$drink_A$[12]	1 or 2	1	intransitive
$drink_{AA}$	2	2	transitive
set	3	2	transitive
send	3	2	transitive

Table 3.4 MT in some of the English verbs

A crucial difference between activity and active accomplishment verbs is the fact that both types of predicate have two syntactic arguments, but the second syntactic argument of the activity verbs is not regarded as macrorole because it cannot take on a referential interpretation (Van Valin and LaPolla 1997: 149).

(23) a. The boy drank milk. (Activity verb)

b. The boy drank the bottle of milk. (Active accomplishment verb)

The logical structure in the semantic representation plays a vital role in the lexicon. As mentioned before, thematic relations are determined by the logical structure argument positions. As for the MT, only those predicates which do not follow the principles in (22)

[12] . 'A' and 'AA' respectively stand for activity and active accomplishment.

are stores in the lexicon, e.g. *seem,* **seem´** (x, y). The interesting point is that neither of the arguments in the logical structure of *seem* is not considered as direct core argument, hence not macrorole because the condition to be met with respect to being a macrorole in the logical structure is to be a direct core argument in the syntactic structure. The first argument of *seem* is preceded by a preposition and the second argument is realized by an extraposed clause.

(24) It seems to me that Harry will win the race.

3.3.4. Semantic representation of adjuncts

Adjuncts fall into two categories: adpositions and adverbs. In this section, I proceed with the semantic representation of peripheral PPs and adverbs.

3.3.4.1. Adpositions

Jolly (1991, 1993) posits three types of prepositions from a typological perspective. The first types are 'adjunct prepositions', which are predicative and have a layered structure. Since they modify the total core of the clause, they have the logical structure of the verb as the second argument in their own logical structure. The syntactic representation for the adjunct prepositions was given in figure 3.7.

(25) Sam baked a cake in the kitchen.

be-in´ (kitchen,[[**do´** (Sam, Ø)] CAUSE [BECOME **baked** ´(cake)]])

The second types are 'argument-adjunct prepositions', which are predicative and share an argument with the logical structure of the verb, not the whole verb logical structure. In (26), *John* is the shared argument between the logical structure of the activity verb and state verb. The syntactic representation for argument-adjunct prepositions is given in figure 3.15.

(26) John ran to the store.

do´ (John, [**run´** (John)] & INGR **be-at´** (store, John)

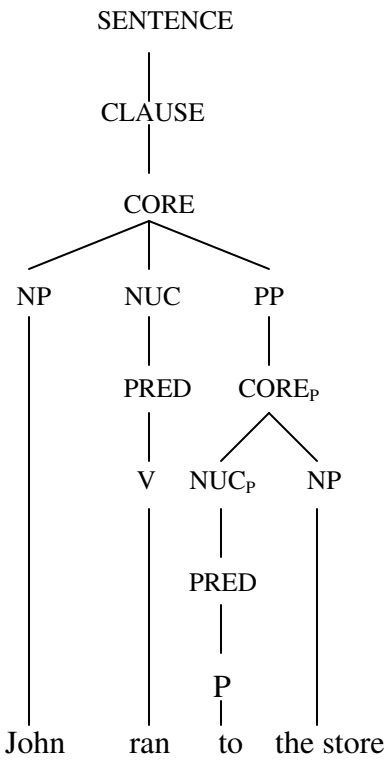


Figure 3.15 The syntactic representation of argument-adjunct prepositions

The third types are the 'argument-marking prepositions', which are non-predicative and only have case-marking function. The syntactic representation for argument-adjunct prepositions was given in figure 3.7. In the logical structure of verbs like *give* and *take,* there is a third argument which does not have a specified macrorole function; neither the actor nor the undergoer. This argument is called 'non-macrorole argument' which is case-marked by an argument-marking preposition. The rules in (27) express the assignment of specific prepositions to the non-macrorole arguments.

(27) a. Assign *to* to non-macrorole *x* argument in logical structure segment:

... BECOME/INGR **pred´** (x, y)

[**do´** (Bill, Ø)] CAUSE [BECOME **have´** (Fred, book)]: Bill gave the book to Fred.

b. Assign *from* to non-macrorole *x* argument in logical structure segment:

... BECOME NOT **have´**(x, y)

[**do´** (Bill, Ø)] CAUSE [BECOME NOT **have´** (Fred, book)]: Bill took the book from Fred.

3.3.4.2. Adverbs

Semantically, adverbs behave like one-place predicate which take a logical structure or subpart of that based on the verb type. Temporal adverbs like *tomorrow* and *yesterday* take the whole logical structure as their argument.

(28) Sam baked a cake yesterday.

yesterday´ ([**do´** (Sam, Ø)] CAUSE [INGR **baked´** (cake)])

Manner adverbs modify activity predicates primarily, while pace adverbs can modify any kind of durational predicate, as it is shown in (29); aspectual adverbs modify the basic state or activity predicate, as in (30).

(29) Pat elegantly closed the door slowly.

[**elegant´** (**do´** (pat, Ø)] CAUSE [**slow´** (BECOME **closed´** (door))]

(30) The ice melted completely/The ice completely melted.

BECOME (**complete´** (**melted´** (ice)))

3.3.5. Semantic representation of nouns and noun phrases

Non-derived nouns like *dog* or *tree* do not have a logical structure like a verb or predicative prepositions, but they have semantic properties which contribute significantly to the interpretation of a sentence. Nouns are analyzed semantically in accordance to the nominal qualia of the Generative Lexicon theory, developed in Pustejovsky (1991, 1995). The theory is summarized in (31).

(31) Qualia Theory (Pustejovsky 1991: 426-7 cited in Van Valin 2005: 51)

a. Constitutive role: the relation between an object and its constituents, or proper parts
   1. Material
   2. Weight
   3. Parts and component elements

b. Formal role: that which distinguishes the object within a larger domain

1. Orientation
2. Magnitude
3. Shape
4. Dimensionality
5. Color
6. Position

c. Telic role: purpose and function of the object

1. Purpose that an agent has in performing an act
2. Built-in function or aim that specifies certain activities

d. Agentive role: factors involved in the origin or "bringing about" of an object

1. Creator
2. Artifact
3. Natural kind
4. Causal chain

Pustejovsky gives the following representation for *novel* and asserts that the 'reading' interpretation stems from the telic role of *novel,* whereas the 'writing' interpretation comes from the agentive role of it.

(32) John began a new novel.

a. John began reading a new novel.

b. John began writing a new novel.

(33) novel (y)

a. Const: **narrative´** (y)

b. Form: **book´** (y), **disk´**(y)

c. Telic: **do´** (x, [**read ´**(x, y)]

d. Agentive: **artifact´** (y), **do´** (x, [**write´** (x, y)] & INGR **exist´** (y)

Alienable possessive constructions are represented as **have´**(x, y) with the nominal head underlined.

(34) the woman's book: **have´** (woman, book)

In a possessive predication, the first argument of **have´** is the possessor and the second argument is the possessed, and therefore within the NP the possessed is normally selected as the head of the NP. However, it is possible to have the possessor as head, as in (35).

(35) the woman with the book: **have´** (woman, book)

Noun phrases which take adjuncts have the same logical structure in (35), as it is shown in (36). Inalienable possessive constructions and kin possessions are represented as in (37) and (38) respectively. Reflexive and personal pronouns are represented directly in the logical structure in which they occur, as in (39).

(36) the table in the library: **be-in´** (library, table)
(37) the woman's arm: **have.as.part´** (woman, arm)
(38) the woman's sister: **have.as.kin´** (woman, sister)
(39) He saw himself: **see´** (3SG, himself)

The semantic representation of the NP operators in RRG is depicted as follows.

(40) < PROX < + < Ø < ∃ < SG < COUNT < LS >>>>>>>
DEIC DEF NEG QNT NUM NASP

The logical structure for *scarf* would be as in (41).

(41) < + < Ø < ∃ < SG < COUNT < (scarf) >>>>>>
DEF NEG QNT NUM NASP

3.3.6. Semantic representation of clausal operators

Operators in the layered structure of the clause have a very complex representation. In order to distinguish clausal operators from the other element in the semantic representation, they are represented in italicized caps inside angled brackets indicating their scope in logical structure. The range of operators depends on the operator system of the language in study. The operator scheme is given in (42).

(42) <DEC < HS < PAST <IRR < Ø < OBLG < SG < Ø < PERF<LS >>>>>>>>>>
IF EVID TNS STA NEG MOD EVQ DIR ASP

The semantic representation of clausal operators in *has the tall man been crying* is presented in (43).

(43) Has the tall man been crying?

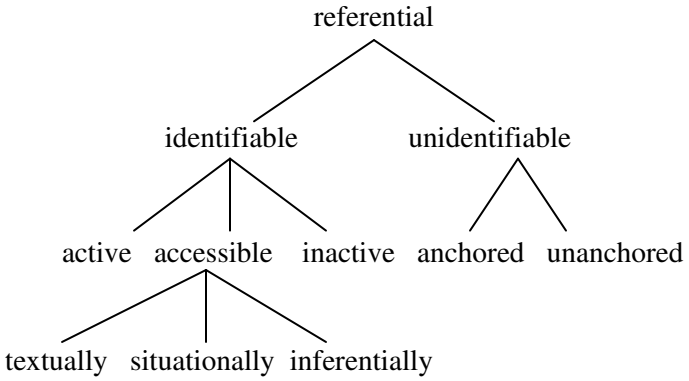
< INT< PRES< PERF PROG < **do´** (x, [**cry´** (x)]])>>>>
IF TNS ASP

< + < ∃ < SG < COUNT < **be´** (man (x), [**tall´**])>>>>>
DEF QNT NUM NASP

3.4. Information structure

The final step in the exploration of syntax-semantics-pragmatics interface after dealing with the syntactic and semantic structures is the characterization of information structure. How the information flow affects the structure of a sentence has been a challenging question for those linguists who study the form-function interaction. The theory of information structure adopted in RRG is the same theory proposed by Lambrecht (1994). Approaching the information structure of sentences involves two significant relationships between the cognitive status of discourse referents and the pragmatic affiliation established between the referents and the propositions in which they play the role of predicates or arguments. These concepts are the similar notions of referential and relational givenness posited by Gundel and Fretheim (2004), which were discussed in section 2.2.1. Lambrecht presents the cognitive status of referents in figure 3.16, taking the 'anchored' and 'unanchored' from Prince (1981) and the terms falling under the heading of 'identifiable' from Chafe (1987). Lambrecht believes that the

speakers of natural languages seek to select the best well-configured structure of sentences in regard to the addressees' state of consciousness.



3.16 The cognitive states of referents in discourse

Active referents are defined as being at the center of the addressee's consciousness, while inactive referents are the ones in the hearer's long-term memory. Accessible referents are not at the focus of attention, but available textually, situationally or inferentially (Van Valin and LaPolla 1997: 200).

(44) a. John loves a girl.
Unanchored

b. John loves a girl I know from school.
Anchored

(45) a. A: Did you hear about Jim getting the sack?
Inactive

b. B: I heard he was in danger of it. Doesn't his brother own the company?
Active accessible

c. A: No, Richard Branson owns the company.
Inactive (Pavey 2004: 133)

3.4.1. Topic, focus, presupposition and assertion

Lambrecht (1986, 1994, and 2000) identifies topic and focus as the two primary information statuses that referring expressions may have in an utterance. These notions do not depend on their syntactic positions in the structure of the sentence; rather they are

only discourse-pragmatic functions manifested in the information structure of the sentence, following the definition posed by Gundel (1988).

> An entity, E, is the topic of a sentence, S, iff in using S the speaker intends to increase the addressee's knowledge about, request information about, or otherwise get the addressee to act with respect to E. A predication, P, is the comment of a sentence S, iff in using S the speaker intends P to be assessed relative to the topic of S. (1988:210, cited in Van Valin 2005: 68)

There are three important points. First is that the notion of 'comment' is related to that of focus. Second is that not every utterance has a topic, and last is that topic need not be the first element in a sentence (Van Valin 2005: 68).

Lambrecht (1994) gives the following definitions for the terms 'pragmatic assertion' and 'pragmatic presupposition' used in RRG.

> Pragmatic presupposition: The set of propositions lexicogrammatically evoked in an utterance which the speaker assumes the hearer already knows or believes or is ready to take for granted at the time of speech. (52)

> Pragmatic assertion: The proposition expressed by a sentence which the hearer is expected to know or believe or take for granted as a result of hearing the sentence uttered. (52)

Pragmatic presupposition is closely related to topic because "the topic is contained in the pragmatic presupposition or is an element of the pragmatic presupposition" (Lambrecht 1986, cited in Van Valin 2005: 69). Lambrecht's pragmatic assertion corresponds to Gundel's notion of comment. That part of assertion which is not within the pragmatic presupposition is called the 'focus'. In other words, it is in the frame of presupposition and assertion that the notions of topic and focus are defined; the topic is an element of presupposition domain, its referent is active or accessible in discourse, while focus is the

part that is asserted, questioned, considered, or denied (Abdoulaye 1992: 46). With respect to this view Lambrecht (1994) states:

> Focus, or focus of the assertion: The semantic component of a pragmatically structured proposition whereby the assertion differs from the presupposition. (213)

The cognitive status of discourse referents cooperates with the focus structure of the sentence to code the form of noun phrases representing those referents. This is shown in figure 3.17.

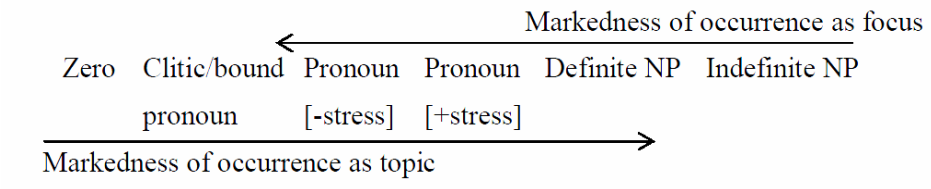


Figure 3.17 Coding of referents in terms of possible functions

Correspondingly, zero coding is the least marked coding for topic marking, while realization as an indefinite NP is the least marked means for focus marking. According to information structure, selecting an inactive referent as topic would be a linguistic abnormality, but focal marking of an active referent would be acceptable because focus is not an indicator of a referent, rather it is construed as a semantic relation holding on the sentence level as a whole (Van Valin and LaPolla 1997: 205). For example, *John* is an active referent in the following sentence, but accepted as focus because of its relation to the pragmatic presupposition 'speaker saw x'.

(45) a. A: Did you see John or Bill?

b. B: Bill.

3.4.2. Focus taxonomy

Lambrecht (1994) presents a taxonomy of different types of focus structure in the world's languages. He offers the definition of focus structure as "association of a focus meaning [distribution of information] with a sentence form" (222). The major contrast made in his theory is the distinction between broad and narrow focus. In narrow focus, only a single constituent is focally emphasized, while in broad focus, the range of focus extends over more than one constituent. There are two kinds of broad focus, predicate focus and sentence focus. Predicate focus is the unmarked, universal pattern of topic-comment and the sentence focus which places the entire clause within the focus domain. Lambrecht gives the following characterization of predicate focus constructions.

> *Predicate focus structure*: Sentence construction expressing a pragmatically structured proposition in which the subject is a topic (hence within the presupposition) and in which the predicate expresses new information about this topic. The focus domain is the predicate phrase (or part of it). (2000:615 cited in Van Valin 2005: 70)

(46) Q: How's your car?
A: My car/ it broke DOWN
Sentence: *My car broke DOWN.*
Presupposition: 'Speaker's car is available as a topic for comment x'
Assertion: 'x= broke down'
Focus: 'broke down'
Focus domain: Verb plus remaining post-verbal core constituents

(Lambrecht 1994: 226)

Lambrecht also defines sentence focus structure as below and exemplifies this focus type with (47).

> *Sentence focus structure*: Sentence construction formally marked as expressing a pragmatically structured proposition in which both the subject and the predicate are

in focus. The focus domain is the sentence, minus any topical non-subject arguments (2000: 617, cited in Van Valin 2005: 71)

(47) Q: What happened?
A: My CAR broke down.
Sentence*: My CAR broke down*.
Presupposition: Ø
Assertion: 'Speaker's car broke down'
Focus: 'speaker's car broke down'
Focus domain: clause

(Lambrecht 1994: 226)

Van Valin (2005: 71) claims presentational constructions to be the most common type of sentence focus.

(48) a. Once upon a time, there was an old man and a dog.
b. Then out from under the bed ran a mouse.

As discussed above, narrow focus is a single constituent that might be subject, object, oblique, or the verb.

(48) Q: I heard your motorcycle broke down?
A: My CAR broke down. / It was MY CAR that broke down.
Sentence: *My CAR broke down.*
Presupposition: 'Speaker's x broke down'
Assertion: x= 'car'
Focus: 'car'
Focus domain: NP

(Lambrecht 1994: 228)

Lambrecht (1986) draws a distinction between the unmarked and marked narrow focus which is dependent on the position of narrow-focused constituent in the sentence. In English, the unmarked focus position is the final position in the core, which may or may not be the final position in the clause, whereas the marked focus position could be any position in the clause other than the unmarked focus position. The distinction can be seen in the following sentences all of which are cases of marked focus position except the one in (a).

(49) a. Leslie sent the book to DANA yesterday.
b. Leslie sent the book to Dana YESTERDAY.
c. Leslie sent THE BOOK to Dana yesterday.
d. Leslie SENT the book to Dana yesterday.
e. LESLIE sent the book to Dana yesterday. (Van Valin 2005: 72)

Van Valin introduces Wh-questions as well as their related answers as the commonest examples of unmarked narrow focus, but in a yes-no question like *Did JOHN leave?* and the response *No, Fred did*, *John* and *Fred* are marked narrow foci. He also makes a further distinction between two types of narrow focus; completive focus, which is the answer to a Wh-question or yes-no, and contrastive focus, which is the speaker's explicit choice among alternatives (Van Valin 2005: 72).

(50) a. Who did Bill give THE BOOK to and who did he give THE MAGAZINE to?
b. He gave THE BOOK to MARY and THE MAGAZINE to SALLY.

3.4.3. The formal expression of information structure

Focus domain is the concept which makes a major contribution to the formal expression of focus structure. There are basically two kinds of focus domain. One is the 'potential focus domain' [PFD], that is the syntactic domain the focused element is probable to occur in, and one is the 'actual focus domain' [AFD], representing the actual

in-focus constituent(s). Focus structure constituent is a separate projection in RRG which holds a close connection to constituent and operator projection, such that nucleus, predicate and periphery in the constituent projection form the basic informational units in the focus projection. Put it differently, the minimal focus domain extends over the nucleus, a core argument, or a peripheral PP (Van Valin 2005: 77). Further, since focus structure influences the speech act of a sentence, therefore the focus projection and operator projection are tied up closely by means of the illocutionary force operator. That is why speech act is the node that anchors focus structure projection. I should highlight the point that the minimal informational units equal the minimal phrasal categories, that is, focus needs to be a noun phrase, predicate phrase, prepositional phrase, etc. Figures 3.18 and 3.19 represent the focus structure projection of some of the English sentences.

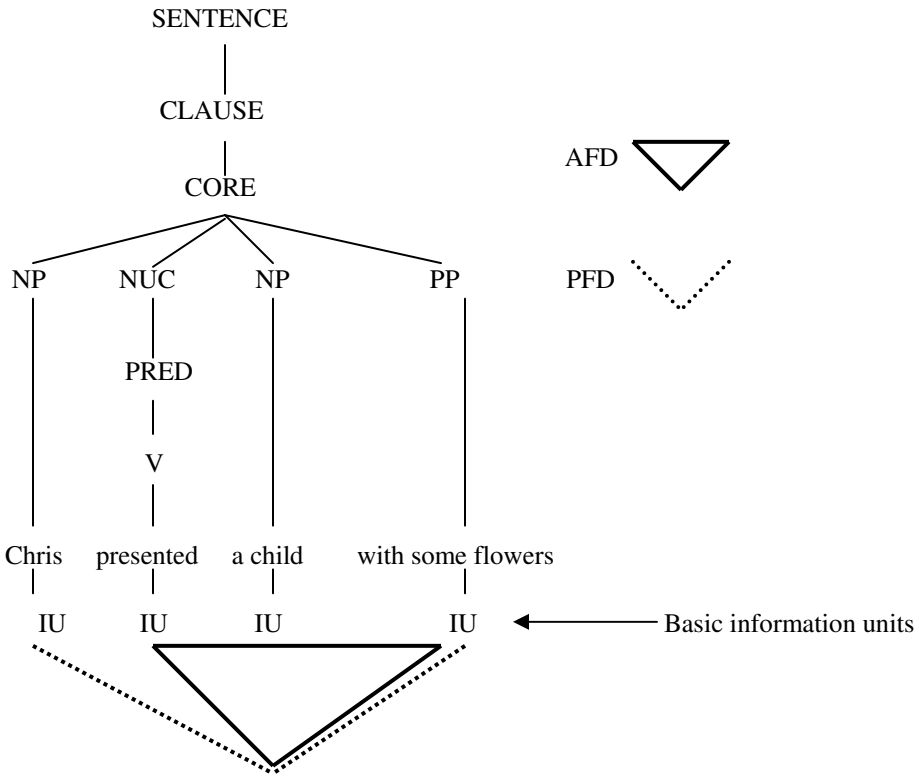


Figure 3.18 Predicate focus in English

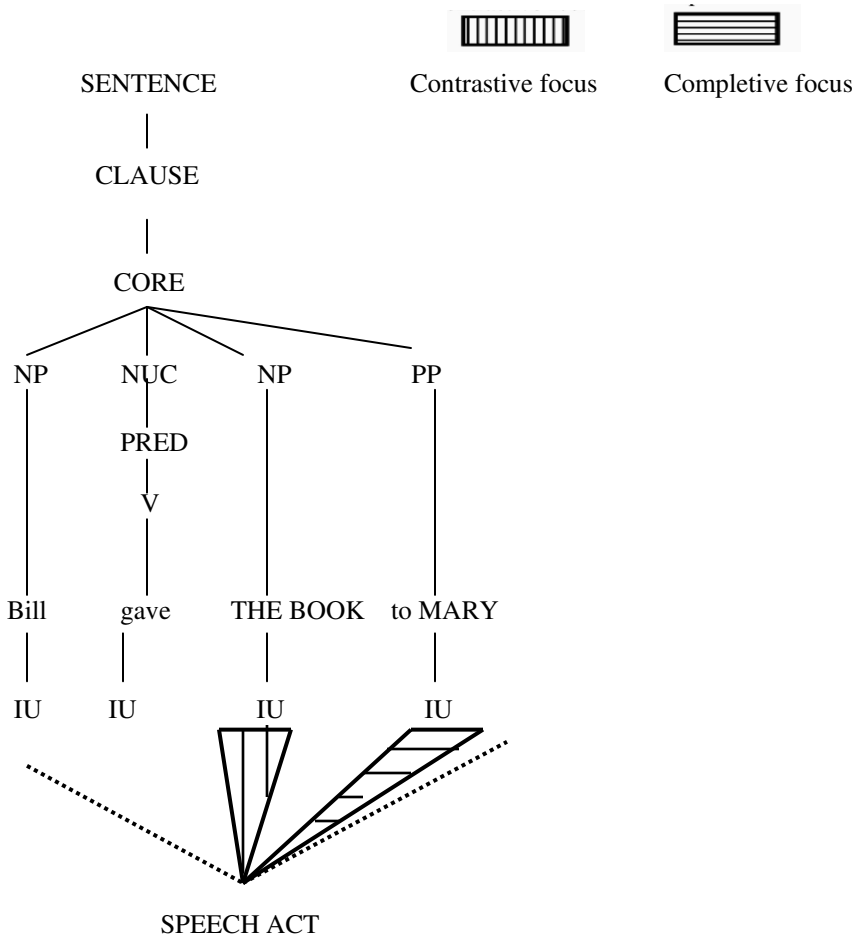


Figure3.19 Two types of narrow focus

3.5. Grammatical relations

Subject, direct object and indirect object are the basic grammatical relations in the traditional approaches to grammar because many syntactic phenomena such as passivization, verb-agreement, etc can be explicated by the syntactic relations. However, there are no corresponding notions for traditional grammatical relations in RRG. RRG has a very unique stance vis-à-vis grammatical relations, as Van Valin states:

> RRG takes a rather different view of grammatical relations from other theories. In the first place, it does not consider them to be basic, nor does it derive them from structural configurations. Second, it recognizes only one syntactic function, not up to three like other theories; there is nothing in RRG corresponding to notions like direct object and indirect object. The syntactic function posited in RRG is not, therefore, part of the same system of

> oppositions as the traditional notions of grammatical relations (i.e. subject vs direct object vs indirect object), and consequently it is not really comparable to the traditional notion that is its closest analogue, subject. Third, RRG does not assume that grammatical relations are universal, in two senses. On the one hand, it does not claim that all languages must have grammatical relations in addition to semantic roles, which are universal. On the other hand, in those languages in which a non-semantic grammatical relation can be motivated, the syntactic function posited need not have the same properties in every language; that is, the role of this syntactic function in the grammar of language *X* may be very different from that played by the syntactic function in language *Y*, and, consequently, the two cannot be considered to be exactly the same. (2005:89)

Van Valin and LaPolla (1997) divide the syntactic theories into two groups concerning their approach to the grammatical relations. The first group introduces a series of theories taking the grammatical relations as 'primitives', which play a role in the formulation of the basic principles of the theory, e.g. Relational Grammar. The second group comprises of the theories according to which the grammatical relations are taken to be 'derived' notions, e.g. Generative Grammar, Functional Grammar, Lexical-Functional Grammar, and Cognitive Grammar. In early Generative Grammar (Chomsky 1965), grammatical relations are defined in terms of the positions they occupy in the syntactic phrase structure, that is, the NPs which are immediately dominated by the S node and the VP node are subject and direct object, respectively. Later on, Chomsky (1986) uses the terms 'external argument' and 'internal argument' to refer to the notions of subject and direct object, which are defined as 'the syntactic argument external to the VP' and 'syntactic argument internal to the VP'. In other words, VP is considered as configurationally universal and has to be necessary in order to distinguish subject from direct object. But as we know, RRG does not assume a VP in the syntactic structure of languages. It is worth mentioning that external and internal arguments remained unchanged with the presentation of the VP-internal subject hypothesis employed in Chomsky (1992). In the minimalist program representation of the grammatical relations, the internal argument is still the sister to the verb, but the external argument is initially internal to the VP (external to V-bar, though) and directly dominated by VP, not IP. In Dik's Functional grammar, the different choices of grammatical relations are up to

represent different 'perspectives' or 'vantage points' (Van Valin and Lapolla 1997: 246). Dik (1978: 87) defines subject as "that constituent which refers to the entity which is taken as a point of departure for the representation of the state of affairs in which it participates" and object as "a further specification of the perspective" (cited in Van Valin and LaPolla Ibid).

As mention before, RRG adopts a new approach to the definition of the grammatical relations. Van Valin uses the term 'privileged syntactic argument' [PSA], which is a 'construction-specific' concept as grammatical relations are not found in all languages. From an RRG point of view, in order for a PSA to exist, there must be a restricted neutralization of semantic roles for syntactic purposes associated with a specific construction (Van Valin 2005: 94). If a language does not have such restricted neutralization, there would be no reason to claim that that language has primitive grammatical relations. A very simple example of this can be in English where the semantic macroroles can be neutralized to code the verb-agreement pattern in passive- or active-voice verbs; verb agrees with the first core argument regardless of its semantic role, be it an actor or undergoer.

(51) a. The teacher has read the words. (Actor of transitive V)

b. The teacher has sung. Actor of intransitive V)

c. The teacher has fainted. (Undergoer of intransitive V)

d. * The teacher have read the words. (*Undergoer of transitive V [active voice])

e. the words have been read by the teacher. (Undergoer of transitive V [passive voice])

Looking at the examples in (51) reveals the fact that the verb-agreement issue in English is not semantic because sentences in (d) and (e) show that the word triggering agreement is the undergoer of *read*. On the contrary, the issue is the syntactic function of the first core argument bearing the privileged syntagmatic function. Also, the determination of the verb-agreement trigger is specified by a restricted neutralization of semantic roles, viz. actor or undergoer, not a general neutralization that every argument bearing a thematic relation to the predicate is involved in determining the PSA. Therefore, this observation

prepares the grounds for claiming that the grammatical relations exist in English in addition to the postulation of semantic roles with respect to the different grammatical constructions. This is also the case with control constructions in English. There is restricted neutralization with regard to the omitted argument in the infinitival core. This argument can be the actor of a transitive verb (as in 52a), actor of intransitive verb (as in 52b), undergoer of an intransitive verb (as in 52c), or undergoer of a transitive, active verb (as in 52 e).The ungrammaticality of (52d) vis-à-vis the grammaticality of (52e) results from the differently syntactic reasoning that the missing element in the linked core must be the core-initial argument in the matrix core.

(52) a. Chris wants to drink a beer. (Actor of transitive V)

b. Chris wants to sing in the park. (Actor of intransitive V)

c. Chris wants to be strong. (Undergoer of intransitive V)

d.*Chris$_i$ wants the journalist to interview___ $_i$ (Undergoer of transitive V [active voice])

e. Chris wants to be interviewed by the journalist (Undergoer of transitive V [passive voice])

PSAs differ in terms of the grammatical structure they occur in; for example, the PSA in (51) is a syntactic controller, while that in (52) is a syntactic pivot.

3.6. Complex sentences

The interaction of syntax, semantics and pragmatics in complex sentences is dependent on the units of the layered structure of each clause in the complex sentence. To begin with, I introduce the notions of 'nexus' and 'juncture' in the RRG analysis of complex sentences.

3.6.1. Nexus relations

Nexus is the syntactic relation established between the linked units in the structure of a complex sentence. Traditional structural and generative grammar assume that there are two types of clause linkage or nexus relation, coordination and subordination. Coordination is the linkage of two or more units of the same status and size, while subordination involves embedding of a unit of different size and status within an

independent main clause. Nonetheless, crosslinguistic study of languages like Kewa, Chuave, Amele, etc provided a body of evidence suggesting that there is another type of nexus which can be referred to as 'cosubordination' and characterized as having the properties of both coordination and subordination. The central difference between cosubordination and the other two is the obligatory sharing of operators among the structural units which Van Valin and LaPolla (1997: 455) label as 'operator dependence'. Nexus relations are summarized in figure 3.20.

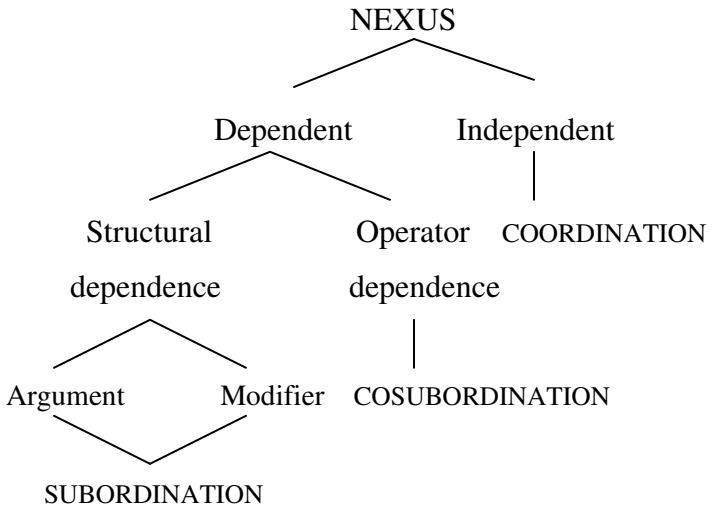


Figure 3.20 Nexus types

3.6.2. Juncture

Nexus relations are only a half of a syntactic theory of clause linkage; the other half deals with nature of units which are to be linked. For traditional or generative grammar, only clauses cab be conjoined or subordinated, but according to the RRG treatment of the clause linkage type, referred to as 'juncture', the sub-clausal unites presented in the LSC of the simple sentences viz. core and nucleus are thought to be involved in a nexus relation.

(53) a. [CORE … [NUC …] … + … [NUC…] …] Nuclear juncture

b. [CLAUSE… [CORE …] … + … [CORE …] …] Core juncture

c. [SENTENCE… [CLAUSE…] … + … [CLAUSE …] …] Clausal juncture

Nuclear, core and clausal junctures represent symmetrical linkage since the involved units are of the same size. In asymmetrical linkage, units of different size take the opportunity to combine; for example, a core is possible to embed within a clause. A nuclear juncture involves two or more nuclei put together to form a single core. Further, the arguments of the combining predicates provide a unified set of arguments belonging to the single core, as in (54a). In a core juncture there are two nuclei, each with its own set of core arguments, constituting two distinct cores, as in (54b). A clausal juncture launches the combination of two or more independent clauses constituting a sentence, as in (54c). Some English and Barai cases are found where two independent sentences with which there is a LDP are combined. This is called 'sentential juncture', as in (54d).

(54) a. Kim painted the table red.
b. I ordered Fred to leave the party.
c. Mary called Fred yesterday, and she asked him to paint her room white.
d. As for Sam, Mary saw him last week, and as for Paul, I saw him yesterday

(55) [TEXT … [SENTENCE …] … + … [SENTENCE …] …] Sentential juncture

3.6.3. The interaction of nexus and juncture

Combining the different levels of juncture (nuclear, core and clausal) with the three types of nexus exhibit nine possibilities for nexus-juncture types. Considering sentence as a potential juncture level will increase the possibilities to twelve, but it should be noted that sentential cosubordination does not exist because there are no sentential operators at the level of sentence that could be shared (Van Valin 2005: 192). Likewise, there is no obligation for a language to possess all existent possibilities; for example, English exhibits nine juncture-nexus types. In fact, nexus-juncture types bring in a concatenation of syntactic relations which is ordered in terms of tightness of the syntactic relations. The strongest type of nexus-juncture is nuclear cosubordination that is the last syntactic construction before the domain of morphological processes. In other words, at this stage of syntactic combination two nuclei can be analyzed as stem and suffix (Abdoulaye 1992:

34). Sentential coordination, on the other hand, posits the weakest nexus-juncture type, as represented in (55).

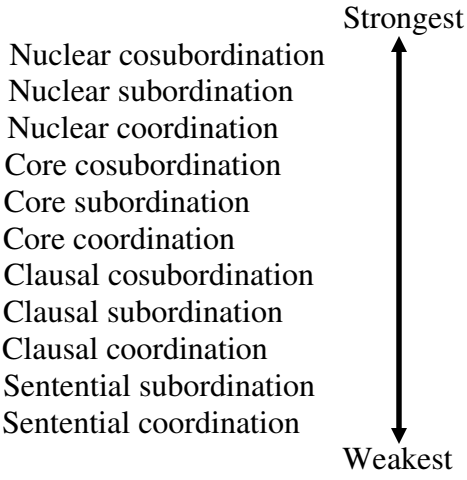


Figure 3.21 Nexus-juncture types

Examples in (56) show the different types of nexus-juncture relations. Van Valin (2005: 197) presents two distinct type of subordination, daughter subordination, in which the subordination junct is a daughter of a higher node (see figure 3.22), and peripheral subordination, in which the subordinate junct is a modifier occurring in the periphery of a layer of the clause (see figure 3.23). Peripheral subordination subsumes ad-nuclear, ad-core and ad-clausal subordination.

(56) a. Max seemed tired. — Nuclear cosubordination

b. Sam sat playing the guitar. — Core cosubordination

c. Louisa told Bob to close the window. — Core coordination

d. To wash the car would be a mistake. — Core subordination (daughter)

e. Pat went to the party after he talked to Chris. — Ad-core subordination

f . Pat ran down the hall laughing loudly. — Clausal cosubordination

g. Pat told Leslie after the party that she talked to him. — Clausal cosubordination

h. Kim cried, because Leslie didn't call. — Ad-clausal subordination

j. Anna read for a few minutes, and then she went out. — Clausal coordination

k. After Anna finished her work, she went out to the party. — Sentential subordination

l. As for Tom, Mary talked to him, but as for Sam, she refused. — Sentential coordination

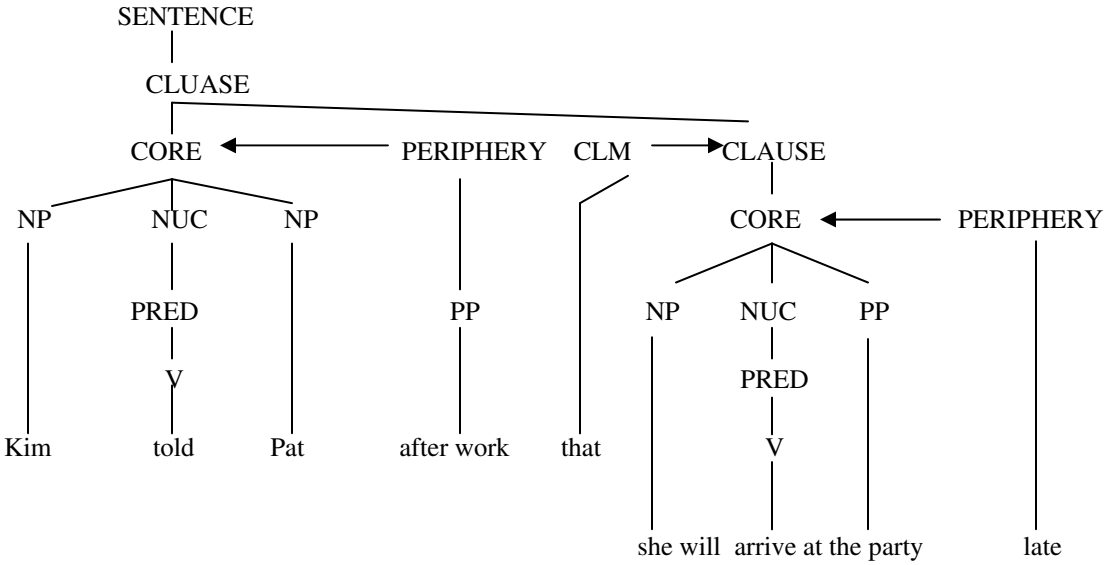


Figure 3.22 Clausal subordination (daughter) in English

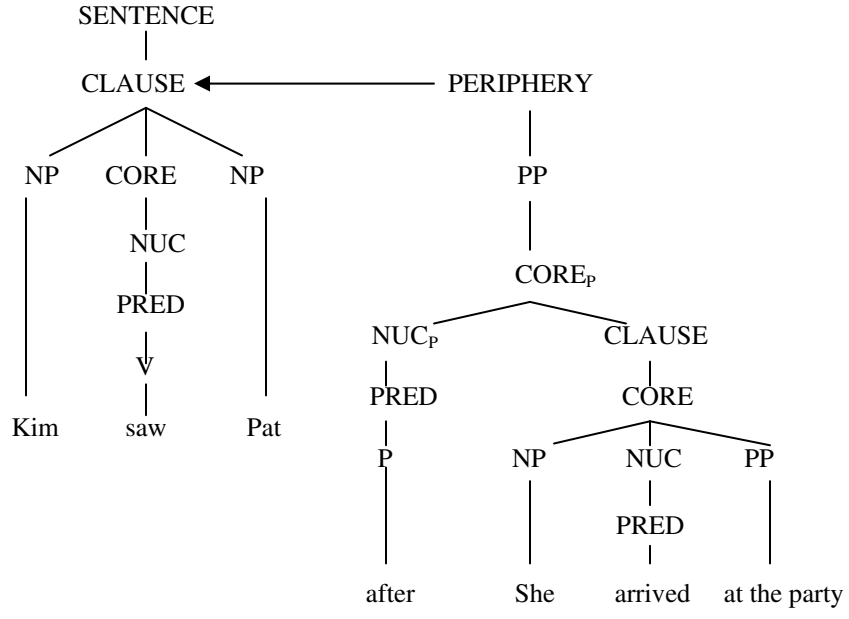


Figure 3.23 Ad-core subordination in English

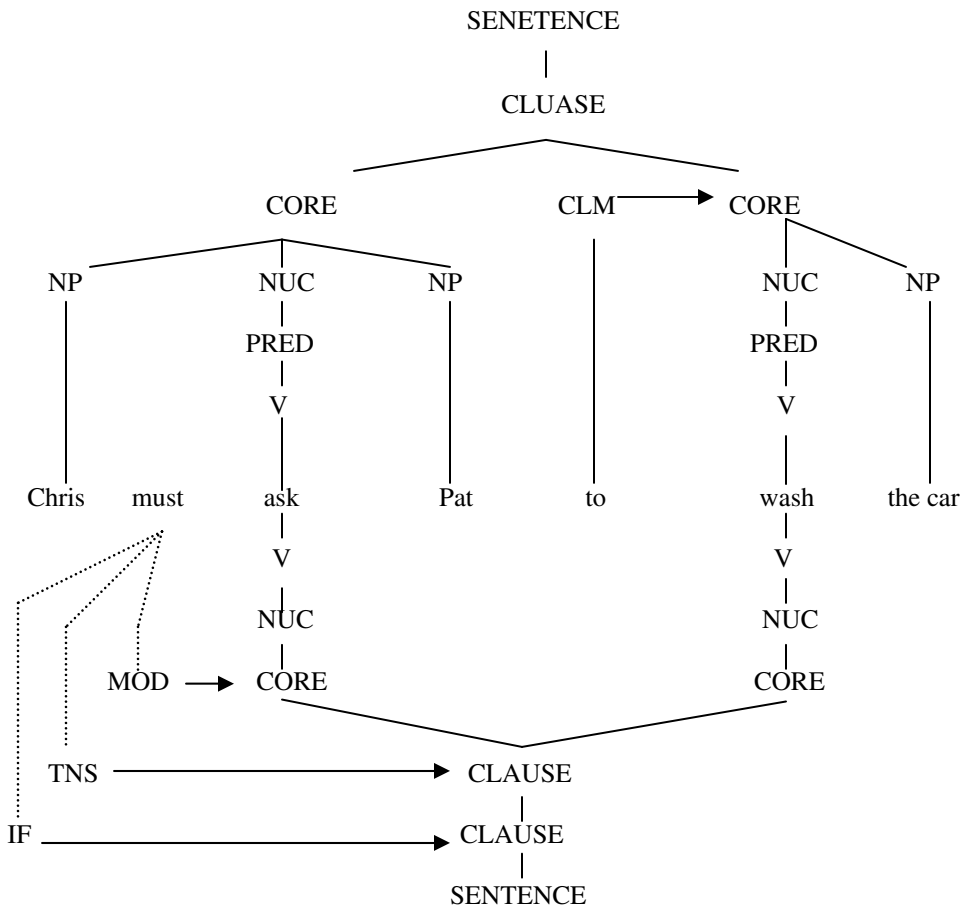


Figure 3.24 Core coordination as well as the operator projection in English

3.6.4. Symmetrical vs. asymmetrical linkage

It was mentioned that there are two types of linkage, symmetrical and asymmetrical. Symmetrical linkage involves the combination of the units at the same level of juncture, i.e. nucleus with nucleus, core with core, clause with clause, sentence with sentence. Asymmetrical linkage involves the combination of the units at the different level of juncture, namely a larger unit being linked to a smaller unit, i.e. a clause embedded in a core such as complementation, the use of clauses as core arguments. However, languages have some grammatical devices at their disposal to cope with such asymmetrical linkages, i.e. extraposition. The figures in 3.25 represent examples of symmetrical and asymmetrical linkage.

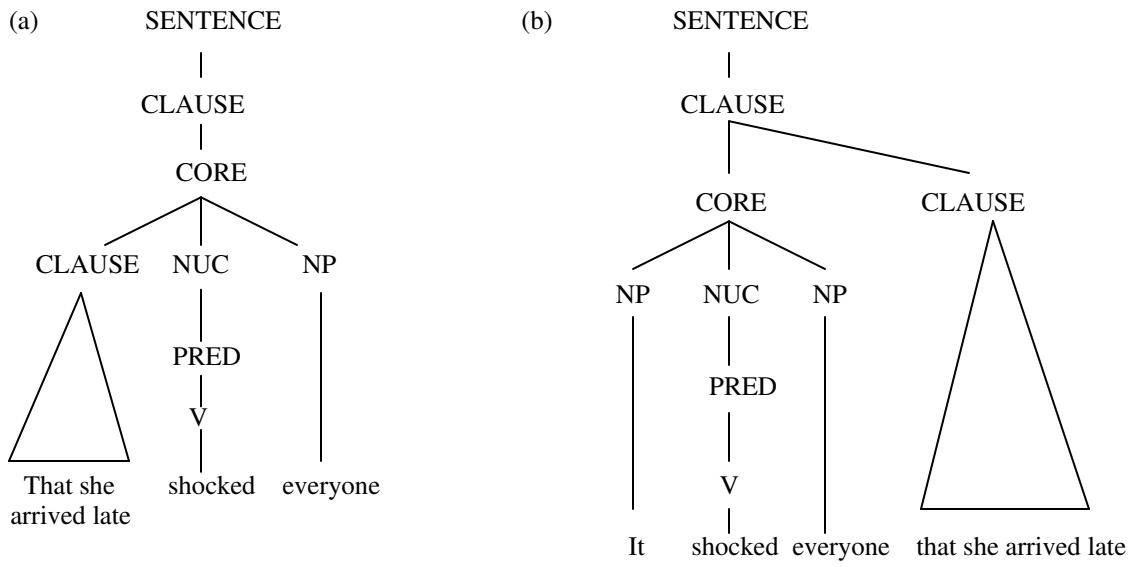


Figure 3.25 Asymmetrical (a) and symmetrical (b) linkage in English

3.6.5 Interclausal semantic relations

The eleven types of nexus-juncture are completely syntactic. The exploration of the semantic relations within the linking units is not possible without taking the degree of strength of the syntactic relation into account. Semantic relations form a continuum expressing the degree of semantic cohesion between the propositional units linked in the complex structure, i.e. "the degree to which they express facets of a single action or event or discrete actions or events" (Van Valin 2005: 208). This is represented as in figure 3.26.

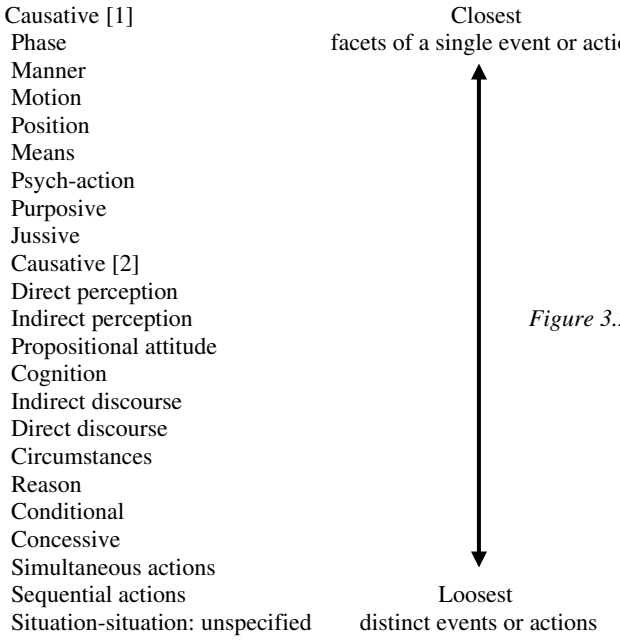


Figure 3.26 Interclausal semantic relations

Examples in (57) concern the interclausal semantic relations in English.

(57) a. Kim painted the table red. (Causative [1])

b. Chris started crying. (Phase)

c. Bill entered the room skipping. (Manner)

d. John sat reading the book. (Position)

e. Sam opened the box by slicing it with a knife. (Means)

f. Sally forgot to open the window. (Psych-action)

g. Juan went to the store to buy milk. (Purposive)

h. The king ordered the troops to attack the city. (Jussive)

i. Chris forced Dana to leave the party. (Causative [2])

j. Rex saw the child open the door. (Direct perception)

k. I see that John has one home early. (Indirect perception)

l. Carl believes that UFOs are a menace to the earth. (Propositional attitude)

m. Aaron knows that the earth is round (Cognition)

n. Frank said that his friends were corrupt. (Indirect discourse)

o. Frank said, 'my friends are corrupt.' (Direct discourse)

p. Kim saw Pat after she arrived at the party. (Circumstances)

q. The baby cried, because she was hungry. (Reason)

r. If it rains, we won't be able to have a picnic. (Conditional)

s. Bill made it to work, even though it was snowing heavily. (Concessive)

t. Max was dancing, and at the same time, Susan played the piano.

(Simultaneous states of affairs)

u. Juan finished reading the newspaper. And then Carlos walked into the room.

(Sequential states of affairs)

v .Tyrone talked to Tanisha, and Yolanda chatted with Kareem.

(Situation–situation [Temporally unordered states of affairs]

(Van valin 2005: 206-7)

On the one hand, the syntactic linkage relations are ranked hierarchically in terms of the strength of the syntactic bond between the units, i.e. in terms of how integrated the

units are into a single unit or how distinctly they are coded as separate units; on the other hand, semantic linkage relations are ranked hierarchically as such in terms of the degree of semantic cohesion between propositional units which are realized as single, inseparable or compound, separable actions or events. Thus, it is obvious that there is a correlation between the strength of the nexus-juncture relation type and the relevance of semantic functions expressed by the units. This correlation is captured by the interclausal relations hierarchy, given in figure 3.27. According to this, the more coherent the propositional units are, the stronger the syntactic linkage relations, which are tools for the formalization of propositions, will be, that is, the semantic relations at the top of the hierarchy in figure 3.26 should be expressed by the syntactic linkage relations at top of the hierarchy in figure 3.21 and the semantic relations at the bottom of the hierarchy should be realized by the syntactic categories at the bottom of the hierarchy. It is interesting to know that there is not a one-to-one correspondence between the semantic relations and the syntactic categories. Put it the other way, a semantic proposition can be realized by different syntactic configurations as it is shown in (58).

(58) a. That Chris will win the election is likely. (Core subordination)
b. It's likely that Chris will win the election. (Clausal subordination)
c. Chris is likely to win the election. (Core coordination)
(Van Valin 2005: 210)

To understand the interclausal relations hierarchy, the following example (taken form Van Valin 2005: 210) is illustrated in which *persuade* has two basic implications, one as a psych-action verb, and one as a propositional attitude verb. The logical structure of the two senses is represented as below.

(59) a. Persuade Psych-action: [**do´** (x, Ø)] CAUSE [**want´** (y, […])]
b. Persuade Propositional attitude : [**do´** (x, Ø)] CAUSE [**believe´** (y,[…])]

In psych-action sense, *persuade* takes a non-subordinate core juncture as its complement realized by an infinitive construction (60a). Likewise, in propositional attitude sense it takes a subordinate clause as its complement realized by a *that*-clause (60b).

(60) a. Leslie persuaded Dana to leave. (Core coordination)

b. Chris persuaded Kim that a quantum theory of gravity is possible.
(Clausal subordination)

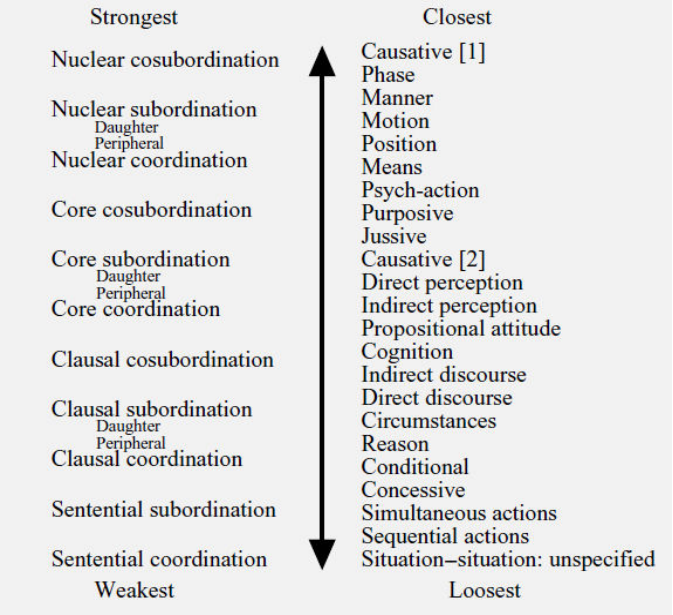


Figure 3.27 Interclausal relations hierarchy

3.6.6. Focus structure in complex sentences

Focus structure constituent in complex sentences akin to that in simple sentences makes a close connection to operator projection because sentences with different speech act are produced with the help of illocutionary force. Subordinate clauses may not have independent illocutionary force operators, and they are either outside the domain of illocutionary force operator, i.e. are presupposed, or have the same force as the main clause (Van Valin and LaPolla 1997: 485; Van Valin 2005: 214). However, subordinate clauses may be placed within the potential focus domain in case of the principle in (61), governing the potential focus domain in complex sentences.

(61) The potential focus domain extends into a subordinate clause if and only if the subordinate clause is a direct daughter of (a direct daughter of) the clause node which is modified by the illocutionary force operator. (Van Valin 2005: 214)

In principle there is no limit to the number of direct daughters involved. Notably, only the clause node which is immediately governed by the sentence node can have illocutionary force operator. In daughter clausal subordination (see figure 3.28), the subordinate clause is the direct daughter of the clause node immediately governed by the sentence node, therefore both the main and subordinate clause can be in the potential focus domain. Moreover, the subordinate clause itself may be functioning as a single informational unit in the focus structure since it can be replaced by a Wh-question, as in (62). Regarding that the subordinate clause can be in the potential focus domain, its internal constituents can be solely brought into actual focus. This emphasizes that the subordinate clause is in the potential focus domain, as shown by (63).

(62) a. What did Kim tell Pat?
b. Kim told Pat after work that she will arrive at the party late.

(63) a. Did Kim tell Pat that she will arrive at the party LATE?
b. No, EARLY.

In ad-core subordination (see figure 3.29), the subordinate clause is not the direct daughter of the clause node; thus, the potential focus domain does not extend into that, but since the subordinate clause modifies the matrix core and can be replaced by *when,* it is within the potential focus domain as a whole. The fact that the internal constituents of the subordinate adverbial clause can not be replaced by wh-words backs up the intended claim.

(64) a. Did Pat see Kim after she arrived at the party late?
b. No, before. /?? No, early.

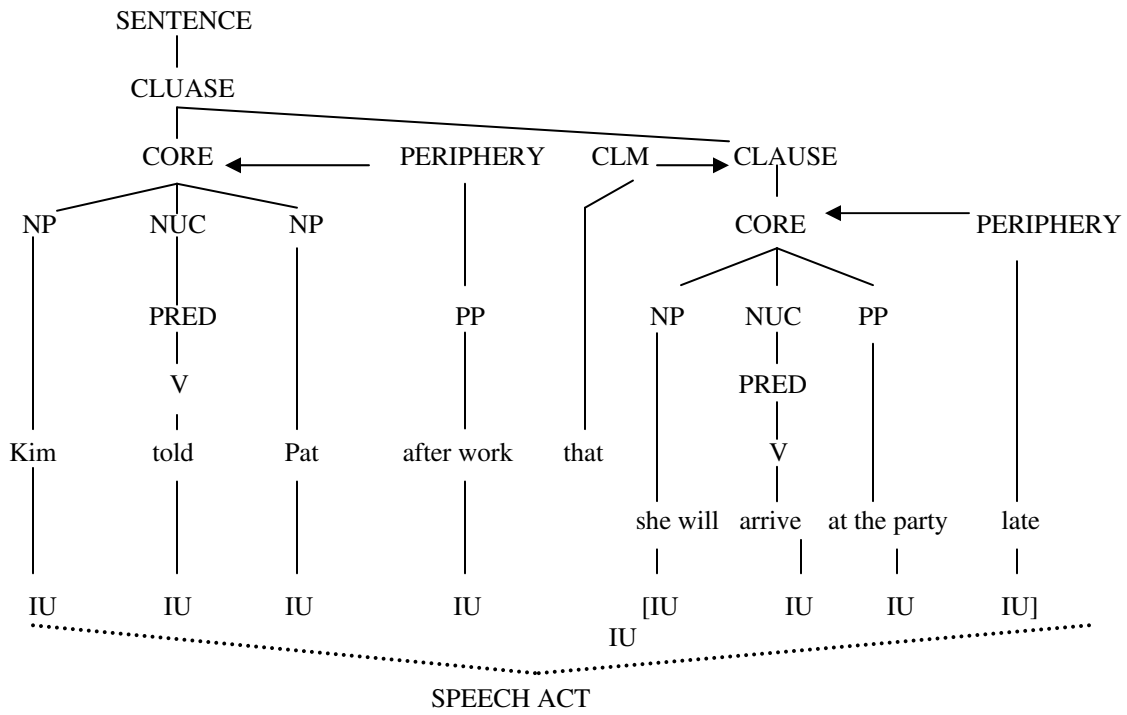


Figure 3.28 Potential focus domain in daughter clausal subordination

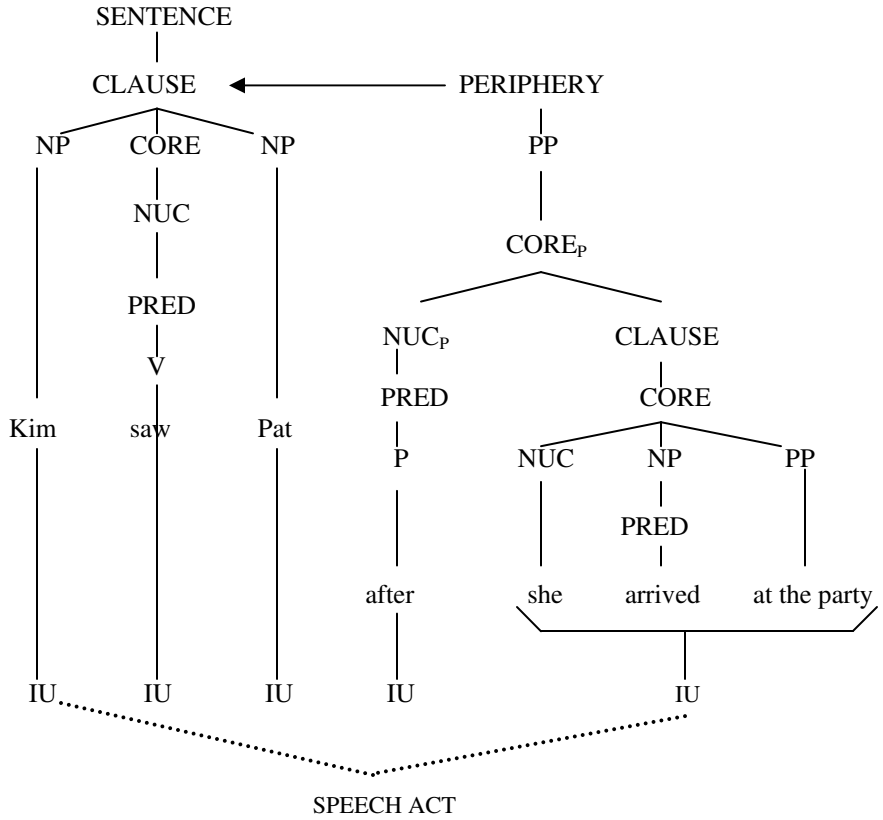


Figure 3.29 Potential focus domain in ad-core subordination

3.7. Linking algorithm

The various components of RRG such as layered structure of clause, lexical representation and semantic roles, syntactic functions and focus structure are basically related by linking algorithm. Linking algorithm is central to RRG theory that posits only one syntactic and semantic representation, for it must be able to deal not only with canonical clause patterns, but also with non-canonical patterns as well (Van Valin 2005: 128). The RRG organization was sketched out in figure 3.1. The relation between logical structure and semantic macroroles is captured by actor-undergoer hierarchy (figure 3.14). Macroroles and morpho-syntactic relations within the clause are subject to crosslinguistic variations and their relation is affected by the privileged syntactic argument selection hierarchy in (66) and selection principles in table 3.5.

(66) *Privileged syntactic argument selection hierarchy (Van Valin and LaPolla 1997: 282)*

Arg. of DO> 1st arg. of do´ > 1st arg. of pred´ (x, y) >2nd arg. of pred´ (x. y)> arg. of pred´ (x)

Syntactic system	Default choice for PSA	Choice for PSA requiring special construction
Accusative	Actor	Undergoer
Ergative	Patient	Actor

Table 3.5 Defaults in accusative and ergative systems (Van Valin 2005: 100)

According to the table, in nominative-accusative like English, the unmarked choice for the selection of PSA is the highest ranking direct core argument in terms of (66), i.e. the actor. However, in passive-voice constructions, it is the lowest ranking argument, i.e. the undergoer, which is selected as the marked PSA. The reverse holds with the languages with absolutive-ergative grammatical system. For example, in Dyirbal undergoer is the unmarked choice and actor is the marked choice for PSA in anti-passive constructions, as in (67) and (68), which represent active and anti-passive sentences in Dyirbal.

(67) Ba-yi yaɽa-Ø ba- ŋgu-n ɖugumbi-Ju- buɽa-n.
DEIC-ABS-I man-ABS DEIC-ERG-II woman-ERG see-TNS
'The woman saw the man.'

(Van Valin and LaPolla 1997:266)

(68) ba-la-n ɖugumbil-θ ba-gu-l yaɽa-gu buɽal-ŋa-ɲu.
DEIC-ABS-II woman-ABS DEIC-DAT-I man-DAT see-ANTI-TNS
'The woman saw the man.'

(Van Valin and LaPolla 1997: 268)

Following the data given, in active sentences of Dyirbal, undergoer is the PSA and in the absolutive, but in the anti-passive sentences, the actor in the absolutive is the PSA. Actor in (67) is in the ergative and direct core argument; while in (68) undergoer has dative case and functions as oblique core argument in the periphery of the clause.

A distinctive feature of linking algorithm in RRG is that it is bidirectional; that is, it links the semantic representation to the syntactic representation, and it also links the syntactic representation to the semantic representation (Van Valin 2005: 129). The semantics-to-syntax linking is adaptable to the production process, while the syntax-to-semantics is an aspect of the comprehension process. In the comprehension process, linguistic input is taken apart into the structured syntactic constituents by parser, and then the grammar takes the responsibility to map the syntactic constituents into a semantic representation where the syntax-to-semantics linking algorithm is required. Reversely, in the production process, the logical structure of a predicate is retrieved from lexicon, and it is then the semantics-to-syntax task to map the logical structure into the syntactic templates stored in the syntactic inventory. Selection of the appropriate syntactic template is made by the syntactic template selection principles, which are given in (69)

(69) a. *Syntactic template selection principle (Van Valin 2005: 130):*

The number of syntactic slots for arguments and argument-adjuncts within the core is equal to the number of distinct specified argument positions in the semantic representation of the core.

b. Language-specific qualifications of the principles in (a):

1. All cores in the language have a minimum syntactic valence of 1.
2. Argument-modulation voice constructions [e.g. passive construction] reduce the number of core slots by 1.
3. The occurrence of a syntactic argument in the pre/postcore slot reduces the number of core slots by 1 (may override (1) above).

The principles in (69) point out that the words 'specified' and 'distinct' are of great importance. It is possible to encounter the unspecified argument slot in a logical structure; for example, the logical structure in (70) manifests three argument slots one of which is unspecified, therefore the two specified arguments are represented in the syntactic representation. Similarly, the logical structure in (71) has three specified arguments each one is allocated a syntactic slot in the syntactic representation.

(70) Max loaded the minivan.

[**do´** (Max, Ø)] CAUSE [BECOME **be-in´** (minivan, Ø)]

(71) Max loaded the minivan with boxes.

[**do´** (Max, Ø)] CAUSE [BECOME **be-in´** (minivan, book)]

As for the distinctiveness of the arguments, in the following logical structure there are five arguments only three of which are considered distinct. Naturally, three syntactic slots go to three distinct arguments.

(72) Bill took the book from Fred.

[**do´** (Bill, Ø)] CAUSE BECOME **NOT have´** (Fred, book) & BECOME **have´** (Bill, book)

The linking between syntactic and semantic representations is governed by the completeness constraint in (73).

(73) *Completeness constraint (Van Valin 2005: 129):*

All of the arguments explicitly specified in the semantic representation of a sentence must be realized syntactically in the sentence, and all of the referring expressions in the syntactic representation of a sentence must be linked to an argument position in a logical structure in the semantic representation of the sentence.

The linking system in RRG is summarized as in figure 3.30.

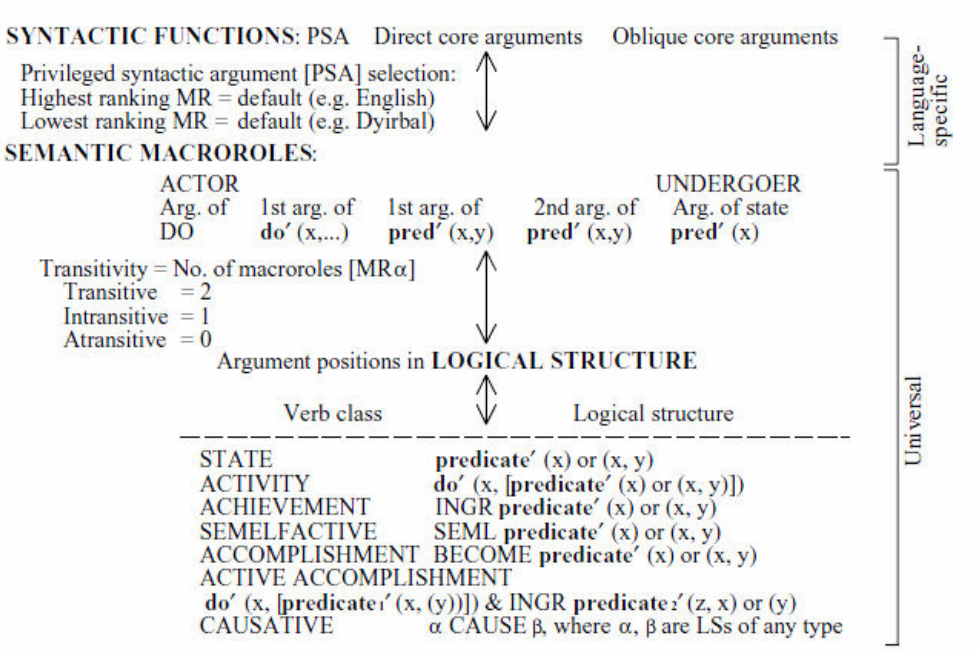


Figure 3.30 Summary of RRG linking system

3.7.1. Semantics-to-syntax linking

The general semantics-to-syntax linking principles take the logical structure of the main predicate as the base and proceed through the steps given in (74) below to link up eventually with the syntactic representation of the sentence. These steps are general, which may be overridden by the specific requirements of a construction (Van Valin 2005: 136).

(74) Linking algorithm: semantics → syntax (Van Valin 2005: 136)

1. Construct the semantic representation of the sentence, based on the logical structure of the predicator.
2. Determine the actor and undergoer assignment, following the actor-undergoer hierarchy in figure 3.14.
3. Determine the morphosyntactic coding of the arguments
   a. Select the privileged syntactic argument, based on the privileged syntactic argument selection hierarchy (66) and principles in table (35).
   b. Assign the arguments the appropriate case markers and/or adpositions.
   c. Assign the agreement marking to the main or auxiliary verb, as appropriate.
4. Select the syntactic template(s) for the sentence following the principles in (69).
5. Assign arguments to positions in the syntactic representation of the sentence.
   a. Assign the [-WH] argument(s) to the appropriate positions in the clause.
   b. If there is a [+WH] argument of a logical structure,
      1. assign it to the normal position of a non-WH-argument with the same function , or
      2. assign it to the precore or postcore slot, or
      3. assign it to a position within the potential focus domain of the clause (default = the unmarked focus position)
   c. A non-WH argument may be associated to the precore or postcore slot, subject to focus structure restrictions (optional).
   d. Assign the [-WH] arguments of logical structure(s) other than that of the predicator in the nucleus to
      1. a periphery (default), or
      2. the precore or postcore slot, or
      3. the left- or right-detached position.

If a speaker of English intends to utter a proposition like *Sandy's transferring of some flowers at the party to Chris*, there are a number of verbs among which he most probably

chooses *present* in this instance. The mapping steps from semantics to syntax are summarized and shown in figure 3.31.

1. The logical structure retrieval of present from lexicon

< DEC<PAST<**be-at´**< (party$_{ACS}$, [[**do´** (Sandy$_{ACV}$, Ø)] CAUSE BECOME
IF *TNS*
have´ (Chris$_{ACS}$, flower$_{ACV}$)]])>>>

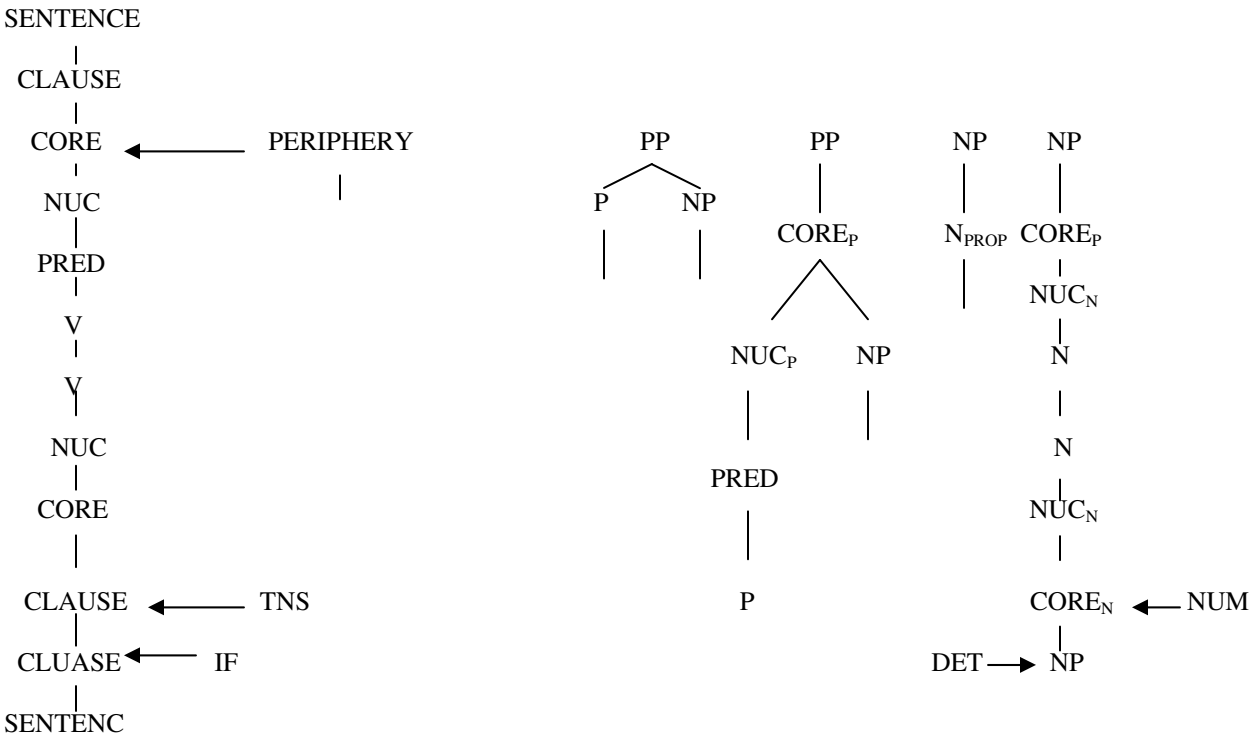
2. Actor and undergoer selection

… [**do´** (**ACT**: Sandy$_{ACV}$, Ø) CAUSE BECOME **have´** (NMR: Chris$_{ACS}$, UND: flowers$_{ACV}$)]…

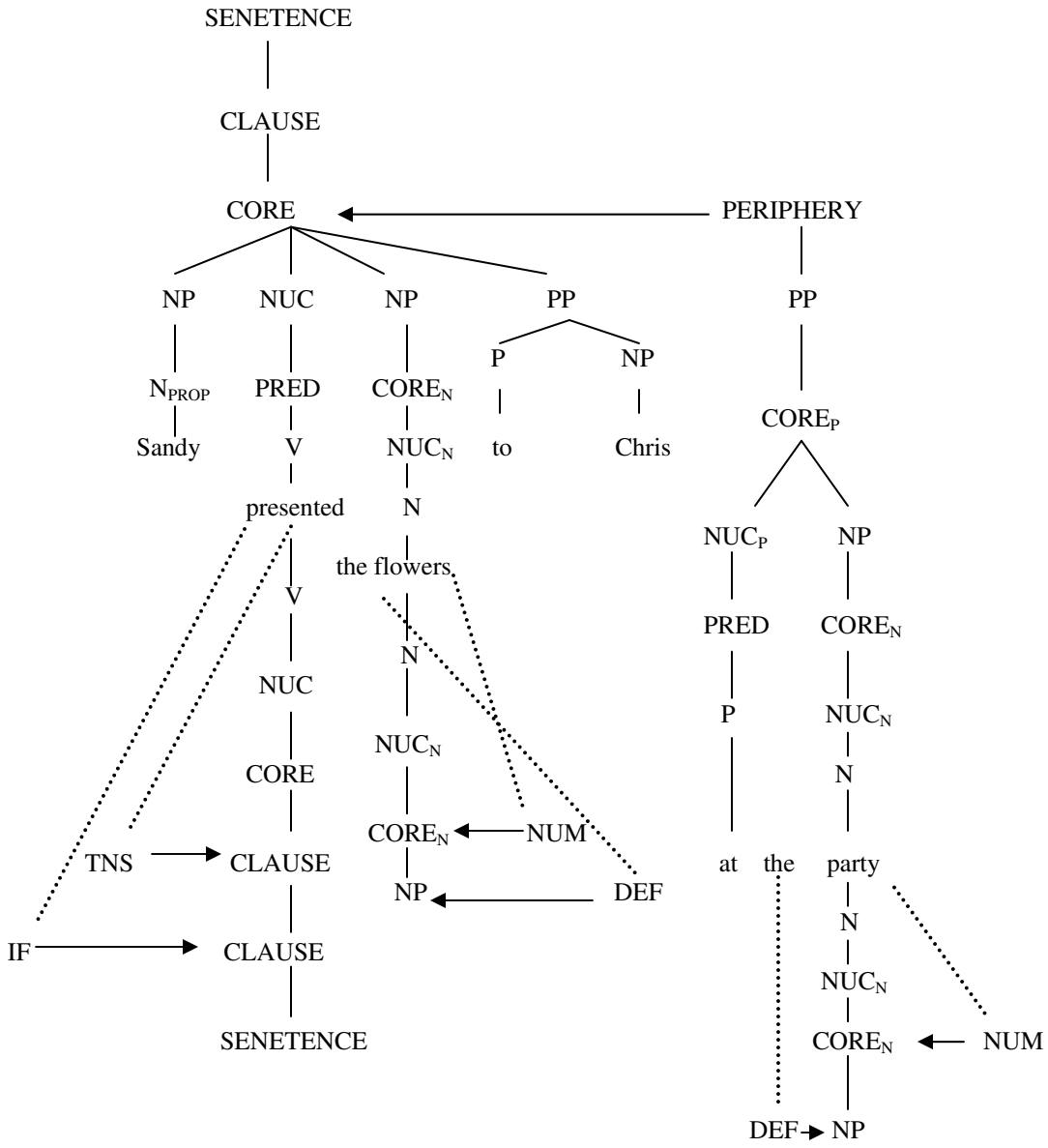
3. PSA selection, Case marking, selection of the verb voice and agreement

… [**do´** (ACT: Sandy$_{ACV}$, Ø) CAUSE BECOME **have´** (NMR: Chris$_{ACS}$, UND:
[PSA: NOM] Active, 3SG [ACC]
flowers$_{ACV}$)]…
[ACC]

4. Syntactic template selection



5. Assigning the argument slots in the logical structure to the syntactic slots in the layered structure of the clause



3.31 Linking from semantics-to-syntax steps in English simple sentences

3.7.2. Syntax-to-semantics linking

The syntax-to-semantics linking steps convey more complexity than those in the semantics-to-syntax liking partly because they involve interpreting the complex process of deducing semantics from the syntactic form of the sentence and partly because they need to cover a crosslinguistic range of grammatical phenomena. It is imperative to know

that the linking algorithm for any particular language needs to contain only those steps relevant to it. The procedure for grafting a sentence into its semantic representation is summarized in (75).

(75) Linking algorithm: syntax→ semantics (Van Valin 2005: 149-50)

1. Determine the macrorole(s) and other core argument(s) in the clause.
   a. If the verb is intransitive, then assign the privileged syntactic argument either macrorole or direct core argument status, depending upon the language (language-specific).
   b. If the verb is transitive and the language lacks voice oppositions, determine the macroroles from case marking and/or word order (language-specific).
   c. If the language has a voice opposition, determine the voice of a transitive verb (language-specific):
      1. If the construction is syntactically accusative:
         a. If it is the unmarked voice, the privileged syntactic argument is actor.
         b. If it is passive, the privileged syntactic argument is not the actor of the predicate in the nucleus;
            1. the actor may appear as a direct core argument(language-specific); or
            2. the actor may appear in the periphery$_{CORE}$ marked by an adposition or an oblique case (language-specific); or
            3. if there is no actor in the core or the periphery, then replace the variable representing the highest ranking argument in the logical structure with 'Ø'.
      2. If the construction is syntactically ergative:
         a. If it is the unmarked voice, the privileged syntactic argument is undergoer.
         b. If it is antipassive, the privileged syntactic argument is actor;
            1. the undergoer may appear as a direct core argument or as an oblique element (language-specific);
            2. if there is no undergoer in the core or the $_{CORE}$, then replace the variable representing the lowest ranking argument in the logical structure with 'Ø'.
            3. Assign macrorole status to the other direct core argument, if it is not dative or in an oblique case (language-specific).

d. If the language is head-marking and there are independent NPs in the clause, associate each NP with a bound argument marker (language-specific).

2. Retrieve from the lexicon the logical structure of the predicate in the nucleus of the clause and with respect to it execute step 2 from (5.5), subject to the following proviso:

a. If the language allows variable undergoer selection and if there is more than one choice for undergoer, do not assign undergoer to an argument in the logical structure.

b. Determine the linking of the non-macrorole core argument:

1. If there is a two-place state predicate in the logical structure and if the non-macrorole core argument is marked by a locative adposition or dative or a locative-type case, then link it with the first argument position in the state predicate in the logical structure and link the other non-actor core argument (if there is one) to the second argument position in the state predicate, or

2. If there is a two-place state predicate in the logical structure and if the non-macrorole core argument is not marked by a locative adposition or dative or a locative-type case, then link it with the second argument position in the state predicate and link the other non-actor core argument (if there is one) to the first argument position in the state predicate.

3. Otherwise, link the animate NP with the first argument position in the state predicate in the logical structure.

3. Link the arguments determined in step 1 with the arguments determined in step 2 until all core arguments are linked.

4. If there is a predicative adpositional adjunct, then retrieve its logical structure from the lexicon, insert the logical structure of the core as the second argument in the logical structure and the object of the adposition in the periphery as the first argument.

5. If there is an element in the pre- or postcore slot (language-specific),

a. Assign it the remaining unlinked argument position in the semantic representation of the sentence.

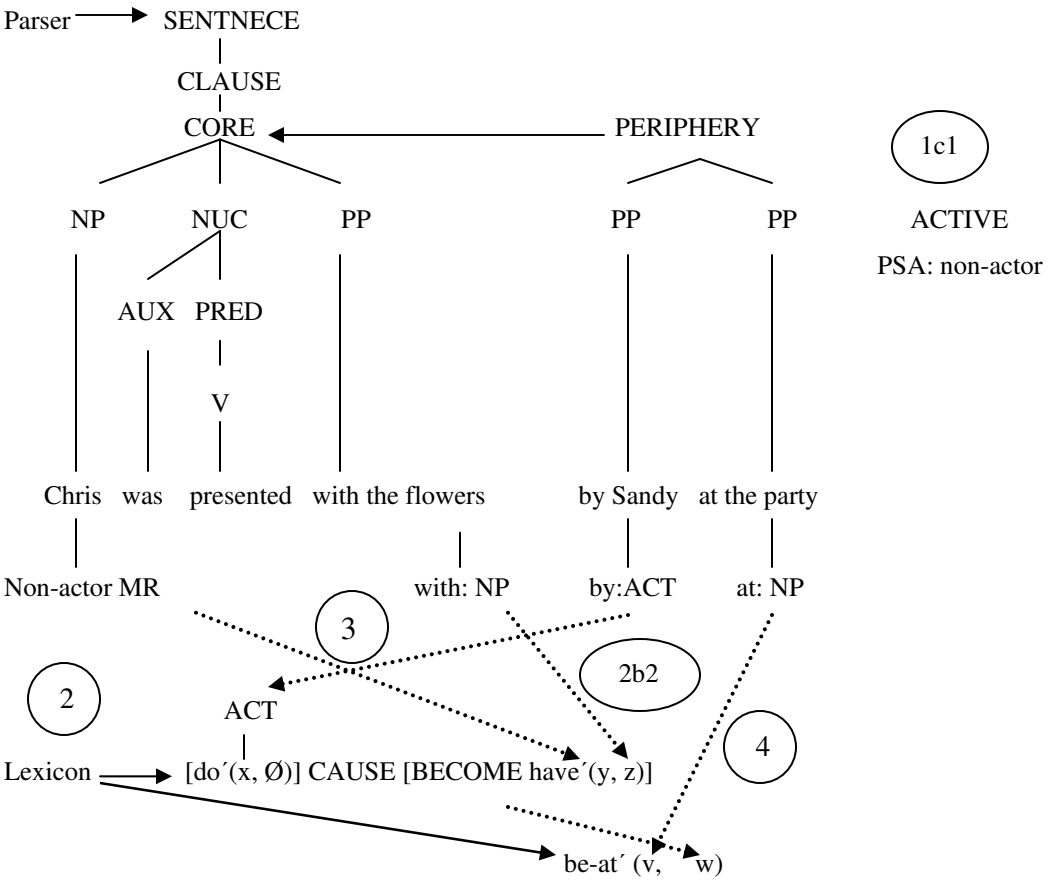
b. and if there are no unlinked argument positions in the sentence, then treat the WH-word like a predicative preposition and follow the procedure in step 4, linking the WH-word to the first argument position in the logical structure.

The application of this linking to the sentence in (76) can be illustrated as below.

(76) Chris was presented with the flowers by Sandy at the party.

Step 1 is to identify the verb and its voice. In accusative languages with passive voice, the PSA is not the actor. The postverbal NP which is marked by *with* is oblique and the final NP which is marked by *by* is the actor, following 1c1b2 in 75. Step 2 involves constructing the logical structure of *present* which is [**do´**(x, Ø)] CAUSE [BECOME **have´**(y, z)]. This logical structure introduces x as actor, but since the possessive logical structure encompasses two arguments, there will be two choices for the selection of undergoer. Here it is necessary to put the steps in 2b2 in (75) into practice. Consequently, the prepositional marker of *flower* leads us to match it with the second argument slot in the possessive predicate as *with* represents non-locality. By step 3 the non-actor macrorole is linked to the first argument slot in the possessive predicate and the actor is linked to the first argument slot in the activity predicate, to meet the completeness constraint. The result of linking is *Sandy* = actor, *Chris* = undergoer, and *the flower* = z. Step 4 includes the retrieval of the logical structure of **be-at´** (v, w) for the predicative preposition *at.* The verb logical structure functions as the second argument in the prepositional logical structure and the NP *party* functions as the first argument yielding the logical structure in (77). The overall linking can be represented graphically as in figure 3.32.

(77) **be-at´** (party, [[**do´** (sandy, Ø) CAUSE BECOME **have´** (Chris, flowers)]])



3.32 Linking from syntax-to-semantics in English passive constructions

3.8. Persian RRG literature

To date, not much RRG research has been undertaken into Persian syntax so as to examine the RRG adequacy for the investigation of Persian. However, since Persian enjoys a free word order, it seems that RRG would offer an effective framework within which both the canonical and non-canonical aspects of Persian syntax and its connection to discourse can be explored. In this section, I shall start with the introduction of Rezai's (2003) work on the RRG analysis of Persian simple sentences, then I will proceed with two works by Roberts (2005) concerning the discourse function of the postposition *rā*, formally represented by the RRG tree diagrams as well as the dislocated elements of Persian discourse occurring through scrambling operation.

3.8.1. On RRG treatment of Persian simple sentences (Rezai 2003)

The main purpose of Rezai's dissertation (2003) is to present an RRG treatment of the morphsyntactic phenomena in simple sentences of modern Persian/Farsi. To do so, he exerts the four postulated grammatical representations in RRG, namely linking from semantics to clause structure and vice versa, constituent projection, operator projection as well as focus structure projection. The thesis includes seven chapters. Chapter 1 involves the historical background and the general assumptions of RRG along with the essential features of Persian. Chapter 2 deals with the syntactic structure of simple sentences in Persian; the LSC of simple sentences together with its language-universal and language-specific aspects, prepositions, simple NPs and syntactic templates are discussed. Rezai argues that RRG can explicitly illustrate the various linear order of the constituents in a Persian clause regarding the distinction that the pragmatically-motivated aspects of the sentence is dependent on the non-canonical arrangement of the elements. The following examples present different possible word orders in Persian.

(78) a. **S-O-IO-V** (the basic word order)

man ketāb=rā be minā dād-am.

PN.1SG book=OM to Mina give.PAST-1SG

'I gave the book to Mina.'

b. **O-S-IO-V**

ketāb=rā man be minā dād-am.

Book=OM PN.1SG to Mina give.PAST-1SG

c. **O-IO-V-S**

ketāb=rā be minā dād-am man.

book=OM to Mina give.PAST-1SG PN.1SG

d. **IO-S-O-V**

be minā man ketāb=rā dād-æm.

to Mina PN.1SG book=OM give.PAST-1SG

e. **O-S-V-IO**

ketāb=rā man dād-am be minā.

book=OM PN.1SG give.PAST-1SG to Mina (Rezai 2003: 42)

To formalize LSC of sentences, Rezai makes a distinction between intransitive and transitive sentences. Similarly, he proposes two subcategories for intransitive sentences, i.e. verbal and copular sentences. A verbal intransitive sentence has a verb as its predicate, while a copular sentence has a noun, an adjective, or a prepositional phrase. Here, I refer only to the LCS representation of the copular sentences which is central to the analysis of Persian clefts.

(79) mā xoshāl-im

PN.1SG happy-be.PRES-1PL

'We are happy.'

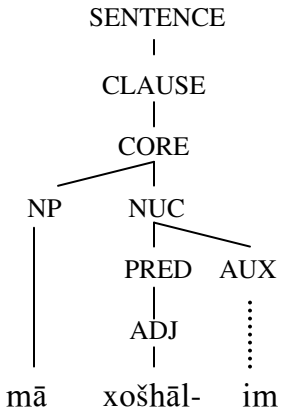


Figure 3.33 The LSC of copular sentences with an adjective as predicate

The peripheral elements consist of the prepositional phrases as well as adverbs like *diruz (yesterday), emruz (today), fardā (tomorrow), etc.* Wh-words and fronted core argument NPs and PPs are probable to place in the precore slot. Phrases such as *darvāqeʔ (in fact), beharhāl (anyway), benazar-eman (in my opinion)* and adverbs such *as mosallaman (certainly), maʔmulan (usually),xošbaxtāne (fortunately), etc* are placed in the LDP and separated by a pause from the clause.

Chapter 3 presents the semantic representation of simple sentences as well as the classification of the Persian verbs on the basis of Actionsart, semantic macroroles, and thematic relations. Rezai uses five tests to recognize verb classes, which are mentioned briefly here. He applies the periphrastic progressive aspect to distinguish an action from a

state, on one hand and a process from an event, on the other (2003: 92). State and achievement verbs cannot be used with *darhāl-e* or *mašqul-e (in the process of)* as an expression of progressive aspect which serves as the head of an EZAFE construction followed by the infinitive form of the verbs as its dependent. This is illustrated by the examples in (80).

(80) a. * dānešju-(y)ān dar hāl=e fahm-idan hast-and.
Students-PL in process=EZ understand-INF be.PRES-3PL
* 'The students are knowing.'
b. mā mašqul=e xord-an hastim.
PN.1PL in process=EZ eat-INF be.PRES-1PL
'We are eating.'
c. *mariz mašqul=e mord-an bud.
patient in process=EZ die-INF be.PAST-3SG
'The patient was dying.'
d. yax-hā dar hāl=e āb šod-an ast.
ice-PL in process=EZ water become-INF be.PRES.3SG
'The ice is melting.'

The adverbs like *bešeddat(vigorously), bājeddiyat(actively), etc* can also make the same classification mentioned above.

(82) *a. ahmad mādar =aš=rā bājeddiyat dust dār-ad.
Ahmad mother =PC=OM actively like have.PRES-3SG
'*Ahmad likes his mother actively.'
b. ali bājeddiyat be ostād guš mi-dah-ad.
Ali actively to professor ear IMPF-give.PRES-3SG
'Ali listens to the professor actively.'
c.*šiše bešeddat šekast.
glass vigorously break.PAST.3SG

'*The glass broke vigorously.'

d. dast=e farid bešeddat suxt.
hand=EZ Farid vigorously burn.PAST.3sg
'Farid's hand burnt vigorously.'

Accomplishments and activities can occur with *āheste (slowly)* and *besorʔat (quickly)*, whereas achievements and states cannot occur with these two adverbs. It is important to note that *besorʔat* often seems acceptable for achievements; however, its presence does not contribute to the sentence informatively because instantaneity is the inherent property of the achievements, as in (84) (Rezai 2003: 97).

(84) tup besorʔat tarak-id
ball quickly pop.PAST-3sg
'The ball popped quickly.'

(85) a. u javāb-hā rā āheste mi-dān-est.
PN.3sg answer-PL OM slowly IMPF-know-PAST.3SG
'*S/he knew the answers slowly.'

b. gozārešgar besorʔat mi-nevešt.
reporter quickly IMPF-write.PAST.3SG
'The reporter was writing quickly.'

c. *tup āheste tarakid.
ball slowly pop-PAST.3SG
*'The ball popped slowly.'

d. ānhā besorʔat zendāni=rā āvard-and.
PN.3PL quickly prisoner=OM bring.PAST-3PL
'They brought the prisoner quickly.'

Adverbs like *barāy-e yeksāʔat (for an hour)* identifies verbs with [-punctual]. Thus, all verb classes other than achievement can be used with it.

(86) a. mā yek sāʔat dar madrese hast-im.

PN.1PL one hour in school be.PRES.1PL

'We are in school for an hour.'

b. man yek sāʔat be rādiyu guš dād-am.

PN.1SGH one hour to radio ear give.PAST-1SG.

'I listened to the radio for an hour.'

c. *pesar-hā šiše=rā yek sāʔat šekast-and.

boy-PL glass=OM one hour break.PAST-3PL

'* The boys broke the glass for an hour.'

d. ostād yek sāʔat dars mi-dah-ad.

Professor one hour lesson IMPF-give.PRES-3SG

'The professor teaches for an hour.'

Adverbs like *dar yek sāʔat (in an hour)* can work with verbs that have an inherent terminal point when the action will be completed. Achievements and accomplishments in Persian are compatible with an *in*-phrase. However, the achievements form may only work with an adverb that denotes an extremely fast time interval like *dar yek læhze (in a moment), dær yek češm beham zadan (in a twinkling of an eye)* (Rezai 2003: 99).

(87) a. *man dar yek sāʔat aks=rā xāst-am.

PN.1SG in one hour picture=OM want.PAST-1SG.

*'I wanted the picture in an hour.'

b. *u dar yek sāʔat qadam mi-zan-ad.

PN.3SG in one hour step IMPF-hit.PRES-3SG

'He walks in an hour.'

c. divār dar yek lahze foru rixt.

wall in an instant down pour.PASR.3SG.

'The wall collapsed in an instant.'

d. kār=e man dar yek sāʔat tamâm šod.

work=EZ PN.1SG in one hour finish become. Past.3SG

'My work was finished in an hour.'

Rezai (2003, 2007) employs the syntactic-macrorole transitivity in Persian. Accordingly, if there is one macrorole in the logical structure of a verb, that verb is intransitive, while in case of two macroroles in the logical structure, the verb is transitive. Following Van Valin (1999a), semantic transitivity is defined in terms of the number of macroroles, and syntactic transitivity in terms of the number of morphosyntactically coded core arguments. In Persian, some activity verbs such as verbs of creation (*neveštan* '*to write', sāxtan 'to make'*), verbs of consumption such as (*xordan 'to eat', nušidan 'to drink', kešidan 'to smoke'*), and verbs of performance such as (*xāndan 'to read/ recite'*), *kardan 'to do')* may take a second argument depending on the referential or non-referential status of it. If these predicates have a non-referential second argument, they behave like activity predicates. On the other hand, if the second argument takes a marker of specificity (*rā* marking in direct objects) or quantity, they are considered active accomplishments (Rezai 2007: 268-9; Rezai 2003: 132-133). This is illustrated by the examples in (88).

(88) a. ahmad sib xord.
Ahmad apple eat.PAST.3SG
'Ahmad did apple-eating.'
a′. (Ahmad, [**eat**′ (Ahmad, apple)] (Activity interpretation)
b. ahmad sib= rā xord.
Ahmad apple=OM eat.PAST.3SG
'Ahmad ate the apple.'
b′. (Ahmad, [**eat**′ (Ahmad, apple)]) & BECOME **consumed**′ (apple)
(Active accomplishment interpretation)

The distinction made between macrorole transitivity and syntactic transitivity employed in Persian appears to confirm the direct object being incorporated into a lexical verb to form, as a whole, a compound verb. Dabir Moghaddam (2005b: 174) argues that in the incorporation of a direct object into a lexical verb, the direct object loses its grammatical marker, be it an object marker (*rā*), indefinite marker (*-i 'one/a'*), demonstratives (*in 'this', ān 'that'*), plural marker(*-hā '-s'*); thus, it is incorporated into the verb bearing no

grammatical relation to the verb. Structurally, the result is a compound verb and a whole semantic unit. Rezai asserts the validity of such claim stating that incorporation is grammatically an intransitivization process by which the semantic valence of an activity verb reduces by 1 due to some pragmatic factors (2007: 272). The incorporated argument is thought to be an internal argument of the activity verbal predicate.

Chapter 4 is concerned with the presentation of grammatical categories in Persian in light of the operator projection of RRG. The analysis of Persian operators shows that this language follows Bybee's (1985) Relevance Principle, which dictates that a morpheme whose meaning is more relevant to the semantics of the verb is positioned closer to the verb stem, and RRG's assumption that the ordering of the morphemes expressing operators with respect to the verbs indicates their relative scope (Rezai 2003: 150). Of his finding it is also the distinction between lexical aspect (Aktionsart) and grammatical aspect which proposes that the aspectual categories introduced by Mahootian (1997), i.e. 'habitual', 'ingressive', 'terminative', and 'punctual' are not a clear-cut classification of aspectual categories and mainly ignore the view that grammatical aspect receives overt morphological coding, whereas lexical aspect is a matter of the type or class of the predicate, hence falls under the typology of states of affairs (Rezai 2008: 6; Rezai 2003: 153 citing Siewierska (1991: 116). The Persian operator projection is illustrated in figure 3.34.

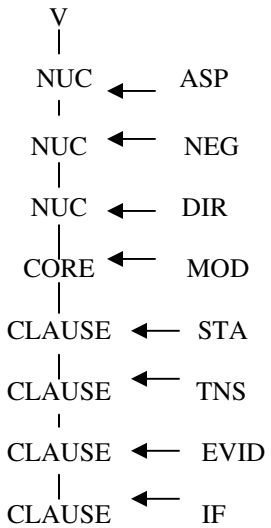


Figure 3.34 Operator projection in Persian (Rezai 2003: 169)

Chapter 5 is devoted to the taxonomy of focus structure in Persian as well as its relation to the syntactic ordering of the constituents. Persian predicate focus structure takes prosodic prominence. The subject NP is topic as well as given information and its presence is not obligatory because Persian is a pro-drop language (Rezai 2003: 189; Rezai and Tayyeb 2006: 6). Moreover, the dropped subjects can often easily be deduced by the listener because of the fact that the verbal morphology indicates person and number agreement with the non-overt NP.

(89) Q: māšin=et či šod-e?
car=PC what become-PSPT.
'What happened to your car?'
A: a. māšin=am **xarāb** šod-e.
car=PC broken-down become-PSPT
'My car broke **down**.'
b. **xarāb** šod-e.
'It broke **down**.'

In Persian sentence focus structure, both subject and predicate are in actual focus domain and the initial subject NP is not topical anymore; on the contrary, it is regarded as a part of new information and its deletion will bring about a pragmatic infelicity. Therefore, the asserted subject and predicate are intonationally marked by a nucleus/primary stress (Rezai and Tayyeb 2006: 7; Rezai 2003: 191-2).

(90) Q: či šod-e?
what become-PSPT
'What happened?'
A: **māšin=am xarāb** šod-e.
a. car=PC broken-down become-PSPT
'My **car** broke down.'
*b. **xarāb** šod-e.
'It broke down.'

In contrast to sentence focus, Persian narrow focus structure brings a single constituent into focus carrying a contrastive nucleus. To demonstrate the contrastive or identificational reading of a single constituent, it is possible in Persian akin to other languages like English, Italian, and French to use the syntactic means of clefting (Rezai and Tayyeb 2006: 9). It is interesting to know that the contrastive focal NP in Persian cannot follow the predicate, as shown below.

(91) Q: māšin=et xarāb šod-e?
car=PC broken-down become-PSPT
'Did your car break down?'
A: a. na, **motor=am** xarāb šod-e.
no, motorcycle=PC broken-down become-PSPT
'No, my **motorcycle** broke down.'
b. * na, xarāb šod-e **motor=am**
c. motor=am-e ke xarāb šod-e
motorcycle=PC-AUX COMP broken-down become-PSPT
'It is my **car** that broke down.'

Having discussed the focus types in Persian, Rezai proceeds to capture the interaction of focus structure and syntax. Following Lambrecht (1994), he argues that the information structure cannot determine the differences in formal structure between sentences on its own. As stated by Van Valin and Foley (1980), syntax cannot be reduced entirely to semantics and pragmatics; some aspects of the morphosyntactic structure of a language cannot be described in purely functional terms (cited in Rezai 2003: 200). From an RRG point of view, languages are comparable with respect to the flexibility vs. rigidity of their word order and the flexibility vs. rigidity of their focus structure (Van Valin 1999b). The table in 3.6 represents a typology of the interaction of syntax and information structure in some of languages.

	Rigid focus structure	Flexible focus structure
Rigid syntax	French	English
Flexible syntax	Italian	Russian, Polish

Table 3.6 Typology of syntax and focus structure (Van valin 1999b)

Here I summarize Rezai's findings on the interaction of linear arrangement of the constituents and the type of focus structure. In narrow focus structure with intransitive verb, the focal subject can only appear preverbally, whereas the topical subject has unlimited access to pre- or postverbal position. In predicate focus structure, since the verbal predicate is in focus, the topical subject can appear pre- or postverbally. In sentence focus structure, focal subject and predicate are reversible regarding the linear order, that is, subject may occupy the preverbal or postverbal position in the sentence.[13] Table 3.7 provides a summary of possible word orders observed with various focus types in Persian intransitive sentences. In Persian transitive sentences, Rezai points out that the focal subject occurs in-situ viz. clause initially, while the focal object may appear in-situ viz. preverbally or initially viz. in precore slot, which is a marked position for focal objects (2003: 206). Table 3.8, figures 3.35 and 3.36 provide the syntax-focus structure

[13] . Rezai and Tayyeb (2006) state that the preverbal occurrence of a focal subject results in pragmatic inappropriateness as they offer the example in (i). I personally believe that the preverbal or postverbal occurrence of a focal subject in a sentence focus structure with intransitive verbs will be syntactically and pragmatically appropriate on intuitive judgment. Further, there is no need to establish a specific situational context for a focal subject to occur postverbally.

(i) Q: či šod-e? 'What happened?'
A: a. raʔis umad-e. 'The boss has arrived.'
boss come-PSPT
b. *umad-e raʔis.

umad-e raʔis ordering is also pragmatically appropriate. In contrast, Rezai (2003: 204) claims such ordering to be felicitous, as the example in (ii) validates it.

(ii) Q: či šode? 'What happened?'
A: a. rāmin raft-e. 'Ramin has gone.'
Ramin go-PSPT
b. rafte Râmin.

interaction in Persian transitive sentences, unmarked and marked narrow focus structures in Persian respectively.

Word order	Focus type
S**V** or **V**S	Predicate
SV or **VS**	Sentence
S**V** or **S**V or **V**S	Narrow

Table 3.7 Syntax-focus structure interface in Persian intransitive sentences (Rezai 2003: 205)

Word order	Focus type
S**OV** or **OV**S	Predicate
SOV or **OSV**	Sentence
VO**S or** S**O**V or SO**V**	In-situ narrow focus
OSV	Marked narrow focus

Table 3.8 Syntax-focus structure interface in Persian transitive sentences (Rezai 2003: 217)

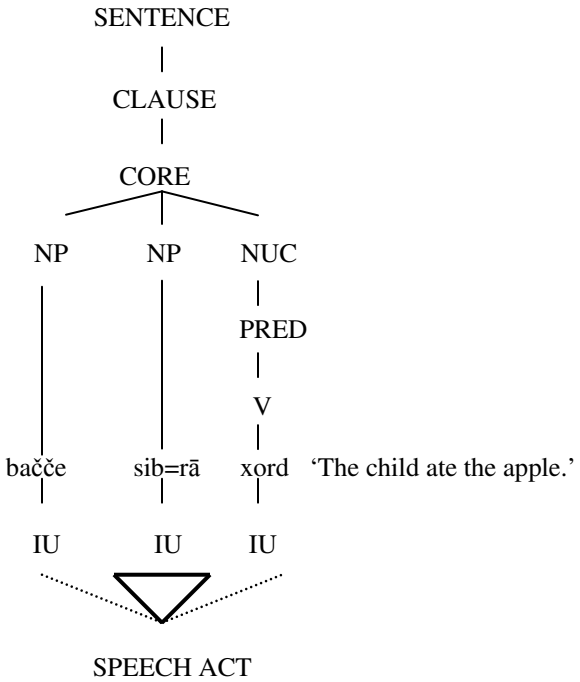


Figure 3.35 The unmarked narrow focus structure in Persian

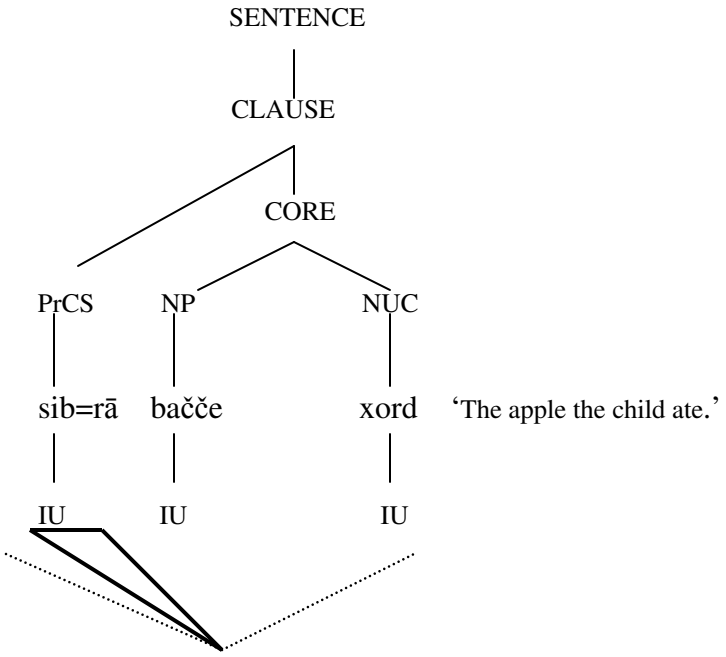


Figure 3.36 The marked narrow focus structure in Persian

3.8.2. Scrambling in Persian: an RRG approach (Roberts 2005a)

Roberts (2005a) accounts for scrambling in Persian using the focus structure projection as well as the notions of pre- and postcore slot as well as left-detached position. He believes that the relative free word order in Persian must be explained by the notions of topic and focus. After analyzing the Persian data extracted from both spoken and literary written sources, Roberts summarizes his findings as in table 3.9, 3.10, and 3.11.

	In-situ (clause initial)	Postverbal	Preverbal
Topical SU.NP	+	+	_
Focal SU.NP	+	_	+

Table 3.9 Subject NP placement possibilities

Table 3.9 shows that when the subject NP functions as topic, it can occur in clause initial position (in-situ) or in postverbal position for non-contrastive emphasis, as in (92), while

when it functions as a constituent of focus structure, it can occur clause-initially (in situ) or preverbally in order to highlight a narrow focus, as in (93) (Roberts 2005a: 24-5).

(92) **šām=am=o** xor-d-am man
dinner=PC.1SG=OM eat-PAST-1SG PN.1SG
'I ate **my dinner**.'

(93) u=rā **man** bozorg kard-am
PN.3SG=OM PN.1SG big do.PAST-1SG
'It is **I** who brought him up.'

	In-situ (preverbal)	Pre-PP	PrCS	PoCS	LDP
Topical DO.NP_{DEF}	_	_	+	_	+
Topical DO.NP_{IND}	_	_	+	_	_
Focal DO.NP_{DEF}	_	+	+	_	_
Focal DO.NP_{IND}	+	+	_	_	_

Table 3.10 DO.NP placement possibilities

Roberts shows that the indefinite direct object has a more limited access fro non-canonical placement; it can precede the indirect or oblique object but only if it represents contrastive focus (2005a: 26).

(94) kimiyā aqlab (ye) **ketāb=e dāstān** barā bačče-hā mi-xun-e.
Kimea often (one) book=EZ story for child-PL IMPF-read.PRES-3SG
'Kimea often reads (a) **storybook** for children (rather than a poetry book).'

For a definite focal DO.NP, the unmarked position precedes immediately the indirect or oblique object. In marked position, the DO.NP can occur in the precore slot for the purposes of contrastive focus, as in (95) or topical emphasis, as in (96) (Roberts 2005a:

25). Pre-Core slot can be occupied by a topical DO.NP, either definite (96) or indefinite (97).

(95) **sag=o** bačče-hā azziyat kard-and.
dog=OM child-PL tease do.PAST-3PL
'The children pestered the **dog**, [but they didn't do anything to the **cat**.]'

(96) asb-hā=ro lor-hā be qārat bord-e bud-and.
horse-Pl=OM Lor-PL to booty take-PSPT be.PAST-3PL
'The horses, the Lors had taken (them) for booty.'

(97) māhi beh-tar=e na-xor-i
fish good-MORE=be.PRES.3SG NEG-buy.PRES.-2SG
'As for fish, it is better you don't buy it.'

No type of DO.NP can occupy the Postcore slot for the sentence to be felicitous but a definite topical DO.NP can occupy the left-detached position, as in (98).

(98) unjā$_i$=ro ne-mi-xā-m to be-bin-i=š$_i$
that.place =OM NEG-IMPF-want.PRES-1SG 2SG SBJN-see.PRES-2SG=PC.3SG
'That place, I don't want you to see it.'

	Pre-DO	Post-DO	PrCS	PoCS	LDP
Topical IO.NP	+	–	(+)	–	–
Focal IO	+	+	+	+	–

Table 3.11 IO placement possibilities

Table 3.11 summarizes the IO.NP placement possibilities. It appears that focal indirect objects have more varied placement possibilities than topical indirect objects. Focal indirect objects can occur in PrCS, as in (99), and in the PoCS, as in (100).

(99) be minā man gol=rā dād-am.
to Mina PN.1SG flower=OM give.PAST-1SG
'To Mina I gave the flower.'

(100) gol=rā man dād-am be minā.
flower=OM PN.1SG give.PAST-1SG to Mina
'I gave the flower to Mina.'

Roberts states that a contrastive marked narrow focus can also be placed on the subject in Persian, as in (101), provided that the subject occurs immediately preverbally; hence, it is necessary to consider a specific syntactic template for it (2005a: 33).

(101) šām=eš=o bačče xord.
dinner=PC.3SG=OM child eat.PAST.3SG
'The child ate its dinner.'

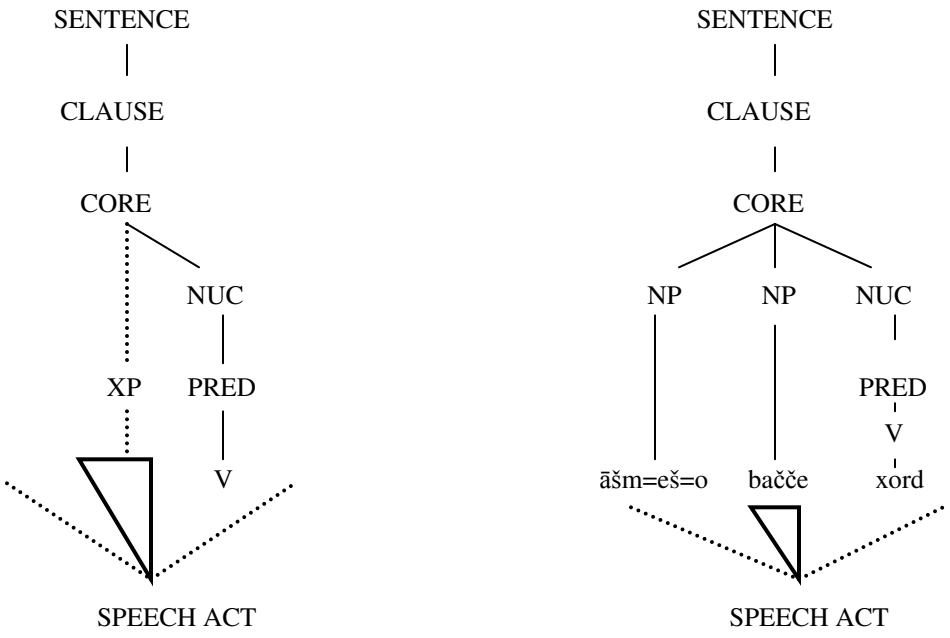


Figure 3.37 Preverbal narrow focus template in Persian (Roberts 2005a: 34)

In spite of the fact that there are several focus positions in Persian such as precore slot, in which direct and indirect objects are placed, preverbal focus position, in which the focal subject is placed, and in-situ positions, in which all constituent can be placed, there is also another focus position which Roberts (2005a: 36) refers to as 'leftward focus position' [LFP]. The signification of this focus position is to place the focused direct object one constituent place to the left of its unmarked position. The syntactic template for this is diagrammed in figure 3.38. As can be seen in (102a), the unmarked position of the definite direct object is immediately before the indirect object, whereas in (102b), the direct object has been moved into the position before the adverbial adjunct *aqlab* to motivate a contrastive focus interpretation.

(102) a. kimiyā aqlab in ketāb=e dāstān=o barā bačče-hā mi-xun-e.
Kimiya often this book=EZ story=OM for child-PL IMPF-read.PRES-3SG
'Kimiya often reads this storybook for children.'

b. kimiyā **in ketāb=e dāstān=o** aqlab o barā bačče-hā mi-xun-e.

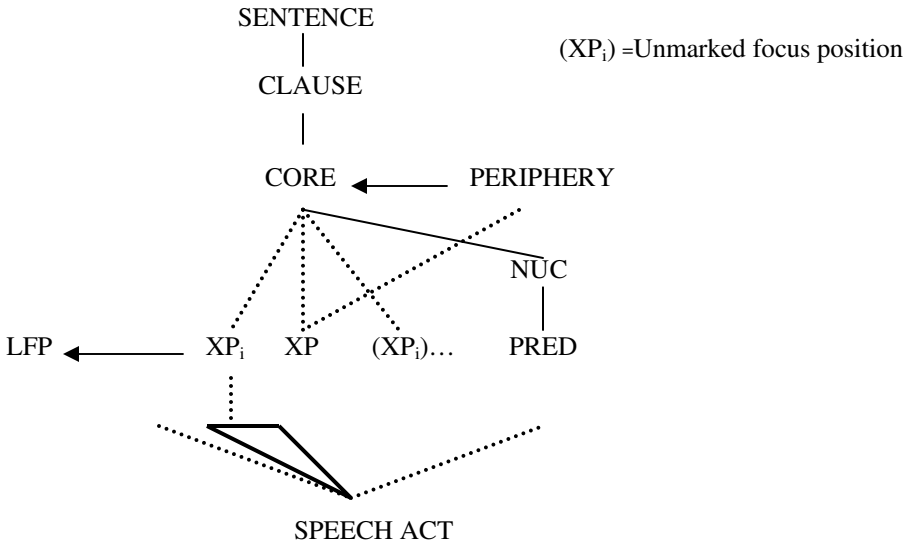


Figure 3.38 Leftward focus position template in Persian (Roberts 2005a: 37)

3.8.3. RRG treatment of postposition *rā* in Persian discourse (Roberts 2005b)

Roberts (2005b) examines the behavior of *rā* in Persian sentences by means of the information structure theory adopted in RRG. Scrutinizing of 3000 Persian clauses prompts Roberts to conclude that *rā* is an identifiability marker which sides with findings of Shokohi and Kipka (2003). He indicates that when a direct object has a specific referent, it must be marked by *rā*. He also contends that it is incumbent to clear up that topicalization with respect to *rā* marking in Persian needs to be accounted for both syntactically and pragmatically, that is, the syntactic process of placing an item in clause initial or left-detached position and the pragmatic process of signaling a marked topic. He explicitly asserts that some marked focussed elements might be the result of pragmatic topicalization. Roberts disputes the analysis that all the active or accessible direct objects in his text database having specific referents are *rā*-marked. He also finds some cases of new referents marked by *rā* because of the fact that they belong to a frame of referents already established in the mind of the addressee or they have an established pronominal reference (2005b: 20). For example, in clause 4 of (103), *mazraʔe (farm)* is marked by *rā* as its mental representation has already been activated in clause 1 and 2. *mahsul (crop)* is also *rā*-marked due to having frame reference to a previously established discourse referent , i.e. *mazraʔe*. Interestingly, *mazraʔe* in clause 4 does function as a part of focus and *heyvān (animal)* bearing the role of 'discourse topic' not 'sentential topic' has been deleted. Thus, the reason for *rā*-marking of *mazraʔe* is explained by its identifiability not its topicality.

(103) Clause 1: in piremard ye mazraʔe dāšt.
this old man a farm have.PAST.3SG
Clause 2: tu=ye mazraʔe, gandom, berenj yā čiz-hā=(y)e digar mi-kāšt.
In=EZ farm wheat rice or thing-PL=EZ other IMPF-sow.PAST.3SG
'On the farm, he used to sow wheat, rice or other things.'
Clause 3-6: vali har šab heyvāni mi-āmad,
But every night animal-IND IMPF-come.PAST.3SG
tamām=e mazraʔ=rā xarāb mi-kard,
whole=EZ farm=OM destroy IMPF-do.PAST.3SG,

mahsul=rā mi-xor-d,
crop=OM IMPF-eat-PAST.3 SG,
va mi-raft.
and IMPF-go.PAST.3SG
'But every night an animal would come, wreck the whole farm, eat the crop and go.'

(104) Topic: *heyvān*

Presupposition: '*heyvān* is available as a topic for comment x'

Assertion: '*x*=

Focus: 'tamām=e mazraʔ=rā xarāb mi-kard'

Focus domain: verb plus remaining pre-verbal core constituents

Since the primary function of *rā*-marking is to indicate referential identifiability of direct objects, Roberts (2005b: 38) treats it a type of case marking in Persian expressed by the rule in (105). He also includes the verb agreement rule, given in (106).

(105) *case marking rule for Persian*

a. The highest ranking core macrorole takes nominative case and zero marked.

b. The other core macrorole argument takes accusative case and is marked by *rā* either when the speaker wishes to indicate to the addressee that the referent is identifiable or if the NP is specific, where specific means to select a delimited referent from a range of reference.

(106) *Finite verb agreement in Persian*

The finite verb agrees with the highest-ranking macrorole argument.

In regard to the Persian word order in case of definite direct object along with the consideration of leftward focus position (see figure 3.38), the direct object needs to occur immediately before the indirect object being marked by *rā.* This can be illustrated by the figure 3.39.

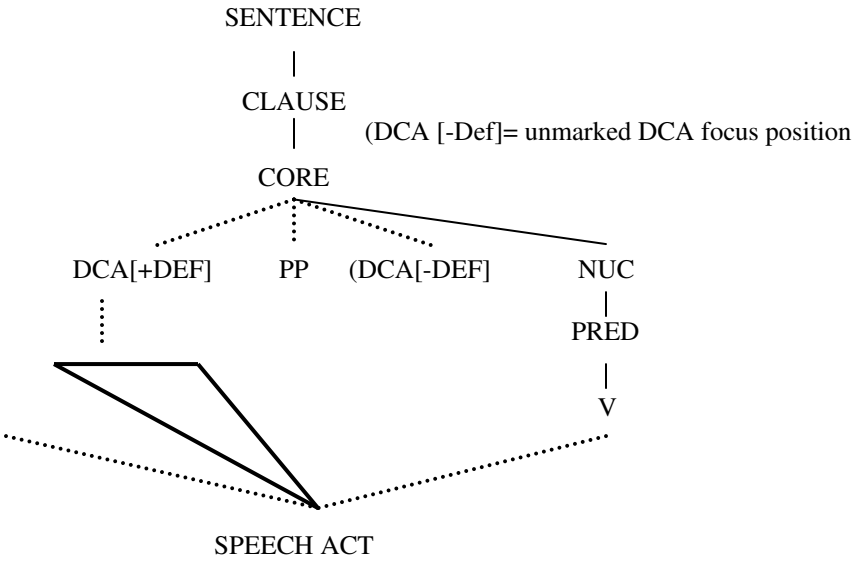


Figure 3.39 Leftward DCA [+Def] focus template (obligatory)(Roberts 2005b:38)

Dabir Moghaddam (2005b: 127) argues that an NP can be left-dislocated from any position in the clause other than subject position which implies that if a possessor NP functioning as subject, i.e. [+PSA], it is not marked by *rā* when it is left-dislocated. Conversely, if a possessor NP is a non-subject, i.e. [-PSA], it is accompanied by *rā.* Roberts proposes a distinct syntactic template for each featured by [± PSA]. The templates are given in figures 3.40 and 3.41.

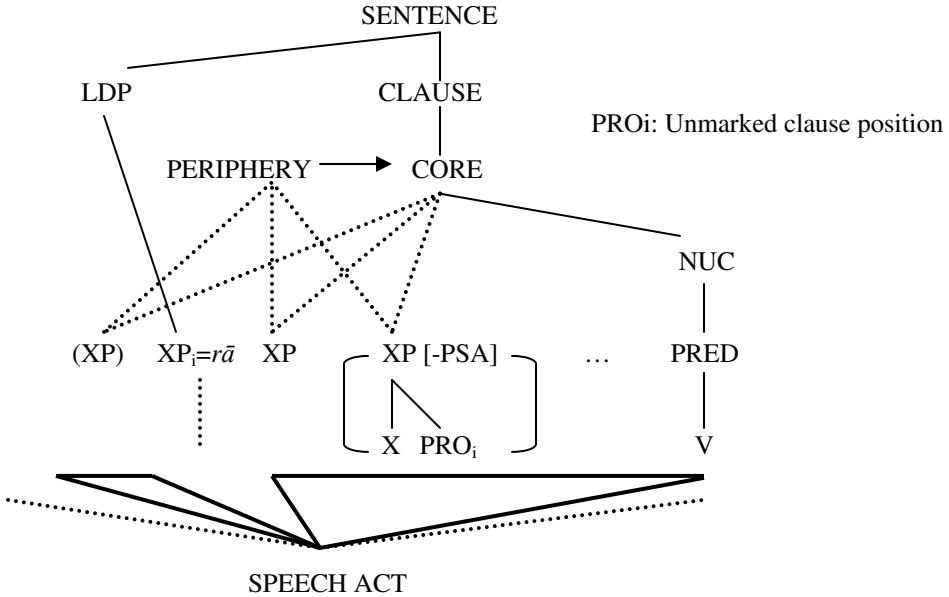


Figure 3.40 possessor [-PSA] topical template with obligatory rā marking (Roberts2005b: 47)

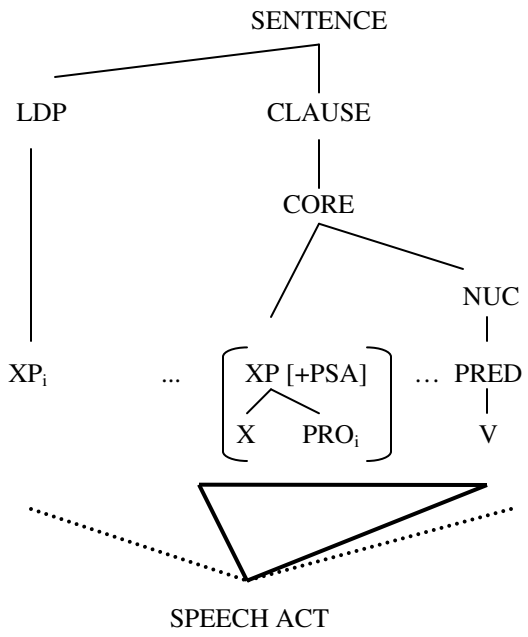


Figure 3.41. Possessor [+PSA] topical template without rā marking (Roberts 2005b: 48)

3.9. Summary

This chapter intended to draw up an overall scheme of RRG theory. To begin with, the theoretical assumptions and the basic principles adopted in RRG, as a communication-cognition theory of grammar, were introduced. It was mentioned that RRG obtains the explanatory adequacy to illuminate the syntactic-semantic-pragmatic processes even in verb final languages such as Lakhota, Persian, etc. The cognitive dimension or the psycholinguistic adequacy grasped by linking algorithm was considered to be an exclusive privilege in the theory. The next step was to schematize the layered structure of the clause depending on the semantic argument-predicate structure. Semantic representations and logical structure, represented on the basis of Actionsart classification of predicates, were the central keys to the RRG treatment of the grammatical constructions. Semantic macroroles and thematic relations were disputed perfectly. Information structure, as a module of RRG grammar, helped describe and explain the pragmatic phenomena in the clause and their interaction with the syntax and semantics of the clause that is meant to be a language-specific motivation in RRG. Linking algorithm, which mirrors the productive-to-comprehensive and the reverse procedure, was detailed. A new approach to the analysis of grammatical relations and proposing the innovative

notion of privileged syntactic argument [PSA], defined as the neutralization of the semantic roles because of syntactic purposes in construction-specific configurations, differentiated RRG from the other approaches. In the end, an RRG treatment of the morphosyntax of Persian simple sentences was presented. According to Rezai (2003), the claim that RRG was proven to be a well-qualified paradigm, which is able to clarify the clause-internal or clause-external aspects of the Persian syntax, was attested. Since Persian relative free word order prepares the grounds for the various syntactic-pragmatic interactions, an attempt was made to scratch the surface of some pragmatically-motivated aspects of Persian discourse within the RRG framework such as scrambling and *rā* marking in order to show that RRG is all armed with sophisticated means to explore the Persian discourse-syntax complexities. The final chapter will be devoted to the RRG analysis of Persian cleft sentences to assess RRG's capability in the characterization of complex constructions in Persian.

CHAPTER

4

Role and Reference Grammar Analysis of Persian Cleft Constructions

Thus far, I have presented an introduction of cleft constructions along with their syntactic, semantic and pragmatic-informational features in chapter 2. In chapter 3, I have proceeded with the RRG discernment, dealing coincidentally with the distinct components within the theory including syntactic, semantic and informational domains. In chapter 4, I will endeavour to initiate an in-depth discussion on the nature of Persian clefts as well as the incongruities emerging from the curious, though interesting, essence of them vis-à-vis the English *it*-clefts. In this chapter, I commence with a preface toward the constitutive parts of the Persian clefts in section 4.1. Then, I will sketch out the syntactic representations using the RRG constituent and operator projection in section 4.2. My concern in section 4.3 will be the semantic representation of Persian clefts contributed essentially by the manifestation of logical structure. Section 4.4 is devoted to the focus structure projection of Persian clefts following the works of Lambrecht (1994, 2001). Section 4.5 and 4.6 deal with the grammatical relations in Persian clefts and the syntax-information interface in some of cleft-like sentences. Finally, section 4.7 seeks to illustrate the syntactic-semantic-pragmatic interaction found in Persian cleft structures by means of the linking algorithm as the turning point of such linguistic interface. It is important to know that my RRG treatment of the Persian clefts is in sympathy with Pavey's (2004, 2008) RRG approach to the analysis of English *it*-clefts. As already noted, a comprehensive analysis of cleft construction requires to examine both the elements within the matrix clause and its bearing to the relative-like cleft clause due to the fact that the syntactic constituents of clefts constructions do not mirror their semantic and pragmatic properties straightforwardly. Here I will dispute that RRG can mirror the

linguistic interface of Persian clefts as Pavey (2004) has indicated the RRG adequacy in terms of the English *it*-clefts.

4.1. An introduction to Persian clefts and pseudoclefts

To date, few studies have been undertaken to explore the nature of Persian cleft and pseudo-cleft constructions. Following the works of Mahootian (1996), Gholam Alizade (1998), Ahmad khani (2001), Karimi (2005), and Khormai and Shahbaz (2010), Persian exhibits three patterns of cleft and pseudo-cleft constructions viz. *it*-cleft sentences, basic *Wh*-cleft sentences and reverse *Wh*-cleft sentences. Clefting in Persian involves moving the focused element from its unmarked position to the start of the sentence followed by a copula (*bud-an* 'to be [PAST]') or (*hast-an* 'to be [PRES]') and a *ke* 'that' relative clause. An example of this is given in (1).

(1) in farhād bud ke širin=rā dust dāšt.
this Farhad be.PAST.3SG that Shirin=OM love have.PAST.3SG
'It was Farhad who loved Shirin.'

It is possible to cleft the direct core arguments (DCAs) and oblique core arguments (OCAs) as well as peripheral adjuncts in Persian. Now consider the examples in (2), (3) and (4) which allow for the possibility for an indirect object, a prepositional adverbial and also a bare NP adverbial to occur in the clefted constituent slot in cleft constructions.

(2) be rahju bud ke man ketāb=o dād-am.
to Rahju be.PAST.3SG that PN.1SG book=OM give.PAST-1SG
'It was to Rahju that I gave the book.'

(3) tu xiyābun bud ke man did-am=eš.
in street be.PAST.3SG that PN.1SG see.PAST-1SG=PC SG
'It was on the street that I saw her.'

(karimi 2005: 92)

(4) diruz bud ke mehmun-ā res-id-an.
Yesterday be.PAST.3SG that guest-PL arrive-PAST-3PL
'It was yesterday that the guests arrived.'

A complex NP can also appear in the focus position. Consider the following example.

(5) [in ke āraš rāz=am=o be hame goft]$_{NP}$ bud
this that Arash secret=PC.1SG=OM to all say.PAST.3SG be.PAST.3SG
ke man=o āšoft-e kard.
that PN.1SG=OM disturb-PSPT do.PAST.3SG
It was that Arash disclosed my secret to all that disturbed me.'

I can represent the structure of the Persian cleft sentences as follow. I will discuss over the nature of *in* subsequently. As we can see in the examples above, some of the cleft sentences have been accompanied by *in* and some have not.

(6) (*in)* + clefted constituent + copula (*hast-an; bud-an*) + *ke*-clause

Mahootian (1996: 118) defines pseudoclefting in terms of movement of the non-focused elements from their non-canonical positions and precedes them with phrases like *kasi ke* 'the one who', *čizi ke* 'the thing which', *jāi ke* 'the place where', *hengāmi ke* 'the time when', etc.

(7) kasi ke asb dus dār-e minā-st.
someone that horse like have.PRES-3SG Mina-be.PRES.3SG
'The one who likes horses is Mina.' (Mahootian 1996: 118)

(8) čizi ke rāmin diruz bā sang šekast šiše bud.
thing that Ramin yesterday with stone break.PASR.3SG glass be.PAST.3SG
'The thing that Ramin broke with a stone was a pane of glass.'
(Gholam Alizade 1998: 225)

The example in (9) is a reverse pseudocleft sentence, taken originally from Khormai and Shahbaz (2009: 54).

(9) in ketab čizi-st ke moʔarref=e nazariyy=e meʔyār mi-bāš-ad.
this book thing=be.PRES.3SG that introducer=EZ theory=EZ standard IPFV-be.PRES-3SG
'This book is what introduces Standard Theory.'

The structure of basic and reverse pseudoclefts can be formulated by (10) and (11) respectively.

(10)[14] { *Kas-i* 'the one' / *čiz-i* 'the thing' / *jā-I* 'the place' / *zamān-i* 'the time' / *dalil-i* 'the reason' } + *ke*-clause + clefted constituent + copula

(11) Clefted constituent + { *Kas-i* 'the one' / *čiz-i* 'the thing' / *jā-i* 'the place' / *zamān-i* 'the time' / *dalil-i* 'the reason' } + copula + *ke*-clause

4.2. Syntactic Structure of Persian clefts

In this section, I attempt to take up the nexus-juncture relation in the first step to explore the layered structure of the clause in Persian cleft sentences, as a complex grammatical construction. Working through the analysis proposed by Pavey (2004), the nexus-juncture relation in cleft constructions has to do with an ad-core subordination, which is largely motivated by adjoining a subordinate cleft clause to a matrix core through the complementizer, which we refer to as clause linkage maker in RRG terminology. Naturally, the linkage type in *it*-clefts is an example of asymmetrical

[14] . Gholam Alizade states that the relative clause in Persian pseudoclefts is restrictive and the morpheme *–i* is a restrictive marker (1998: 226). He also draws a distinction between *–i* as indefinite marker and restrictive marker because it is possible to replace the restrictive marker with the demonstrative *ān* 'that'. For example, instead of *ketāb-i ke* 'the book which', we can say *ān ketab ke* 'that book which'.

linkage, since the linked unit, the embedded clause, is contained within a sub-clausal unit, namely the matrix core. Why the cleft clause is placed in the periphery of the matrix core can be explained broadly by the two main reasons; one would be the fact that the cleft clause is a pragmatic presupposition by which the speaker signals the hearer to take for granted the proposition contained in the cleft clause. Sometimes it is even possible to eliminate the cleft clause because the information containing in it has been grounded in the prior discourse; this leads to the appearance of truncated clefts, as discussed in section 2.1 (see the example in (12)). Secondly, the coindexation between the variable in the cleft clause and the value in the matrix clause will stimulate a syntactic dependency[15] leading to the placement of the cleft clause in the periphery, as noted by Pavey (2004: 209). The layered structure of the clause for Persian cleft in (1) is given in figure 4.1. In this figure, I deliberately ignore going through the *in* RRG projection and look into it later.

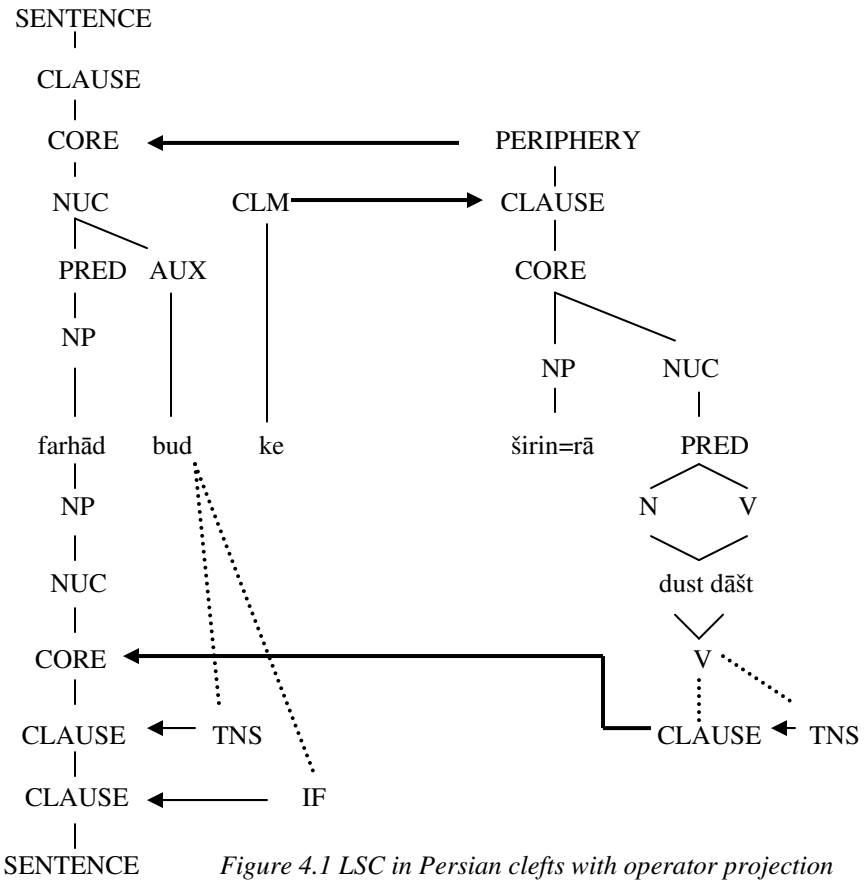


Figure 4.1 LSC in Persian clefts with operator projection

[15] . Abbott (2000) uses the tem 'grammatical presupposition' to refer specifically to the grammatical constructions reflecting the fact that what is presupposed vs. what is asserted depends in part on the syntactic structure of the sentence.

(12) Q: ki bud šiša=ro šekast?[16]

who be.PAST.3SG glass=OM break.PAST.3SG

'Who broke the glass?'

A: rāmin bud.

Ramin be.PAST.3SG

'It was Ramin.'

As diagrammed in figure 4.1, the clefted constituent is placed under the PRED node tracking the proposal in section 2.4.3.2, which offers that the clefts need to be treated as a type of specificational construction in which the clefted constituent functions as a pragmatic predicate. This is because of the predicative function of the clefted constituent that it is projected in the nucleus of the main pragmatic predicate (Pavey 2004: 207). It was also pointed out that Lambrecht (1994: 231; 2001: 471) interprets the presence of the cleft pronoun (optional in null-subject languages like Persian and obligatory in non-prodrop languages like English) and the copula as if they did not exist in the sentence; hence, they do not make significant contribution to the semantic appraisal of the sentence. Notwithstanding, the empty syntactic structure of an *it*-cleft viz. the presence of the copula in the first place along with the overt or covert pronominal subject entails that this sequence should be accounted for as a kind of focus marker affecting the information structure of the sentence alone, that is, a two-level analysis, whereby the clefted constituent receives its pragmatic role from the matrix predicator and its semantic role from the embedded predicator. Consequently, a thoroughly constructional account for the analysis of *it*-clefts requires that the focus relation between the clefted constituent and the cleft clause be captured by the conceptual distinction between the expressions 'pragmatic predicate' and 'pragmatic subject' on one hand, and 'semantic predicate' and 'semantic subject', on the other hand (Lambrecht 1994: 231). I can indicate the cited contrast by the examples in (13), where both signal a narrow focus structure, represented by primary stress on the initial NP in (a) and a syntactically-arranged device, namely clefting. The focus structure representation of the two sentences is in (14).

[16] . The clause linkage marker can be deleted in informal register of Persian.

(13) a. **māšin=am** xarāb šod.

Car=Pc.1SG broken-down become.PAST.3SG

'**My car** broke down.'

b. in **māšin=am** bud ke xarāb šod.

this car=PC.1SG be.PAST.3SG that broken-down become.PAST.3SG

'It was my **car** that broke down.'

(14) Presupposition: "Speaker's x broke down"

Assertion: "x= car"

Focus: "car"

Focus domain: NP

Pragmatic predicate: (copula) car

In (13a), the semantic predicate is the syntactic predicate phrase (or verb phrase) *xarāb šod* 'broke down' and it simultaneously codes the pragmatic subject *x ke xarāb šod* 'the x that broke down', whereas *māšinam* 'my car' is the semantic subject and the pragmatic predicate. In other words, the representation of information structure and syntactic structure in (13) can be displayed as in (15).

(15) a. x ke xarāb šod **māšinam** bud.

↓ ↓

Pragmatic subject Pragmatic predicate

b. **māšin=am** xarāb šod.

↓ ↓

Semantic subject Semantic predicate

In (13b), the clefted constituent *māšinam* is the pragmatic predicate which is syntactically coded as a syntactic predicate phrase, i.e. the left-hand complement of the copula, while the semantic predicate is syntactically expressed by a relative clause. The pragmatically structuring of (13b) is identical with that of (13a) on the grounds that both sentences are

representative of a narrow focus structure; one is represented prosodically and one is represented via a grammatical strategy of clefting. 'copula' in the focus structure in (14) is an indication that the open proposition "x *xarāb šod* " 'x broke down' must be realized by clefting the undetermined value and relativizing the value, which is reserved for the coding of the pragmatic presupposition. This claim is supported by Pavey (2004: 174). To sum up, Lambrecht (1994: 232) states that a narrow focus construction is a non-isomorphic mapping relation between syntactic and semantic categories on one hand and syntactic and information structure categories on the other, and cleft constructions can be viewed as "grammatical strategies for overcoming disparities between semantic structure and information structure". This proves that cleft constructions are 'sui generis' (Huddleston 1984), 'awkward' (Sornicola 1988) 'value-for-variable specifying' (Declerck 1988; Davidse 2000) sentences the complexities of which cannot be grasped by concrete notions.[17]

Persian prepositional phrases akin to noun phrases can be clefted and fill the PRED node slot functioning as pragmatic predicate. The difference with respect to the clefted PPs lies in the nature of PPs. As already discussed in section 3.3.4.1, the logical structure of adjunct prepositions and argument-adjunct prepositions illustrates a predicative layered structure, while the argument-marking prepositions do not have a predicative layered structure. It is important to note that despite that the argument-marking prepositions are not by nature predicative from a semantic perspective, they are pragmatically predicative, because they are projected beneath the NUC node anchoring a pragmatic predicate node. The examples of clefted argument-marking and adjunct prepositional phrases have been presented in (2) and (3). An example of an argument-adjunct prepositional phrase is given in (16).

(16) ruy=e miz bud ke ketāb=o gozāšt-am.
on=EZ desk be.PAST.3SG that book=OM put.PAST-1SG
'It was on the desk that I put the book.'

[17] . Cleft constructions reflect an aspect of speaker's pragmatic competence in order to mark subjects as non-topics by placing them in postcopular position, e.g. English, or in precopular position, e.g. Persian so that they are departed from syntactic subject position (not yet in Persian) (Erteschik-Shir 2007: 121; Gundel 2008: 73)

The layered structure of the clause for the three types of clefted prepositional phrases is given in figures 4.2, 4.3, and 4.4.

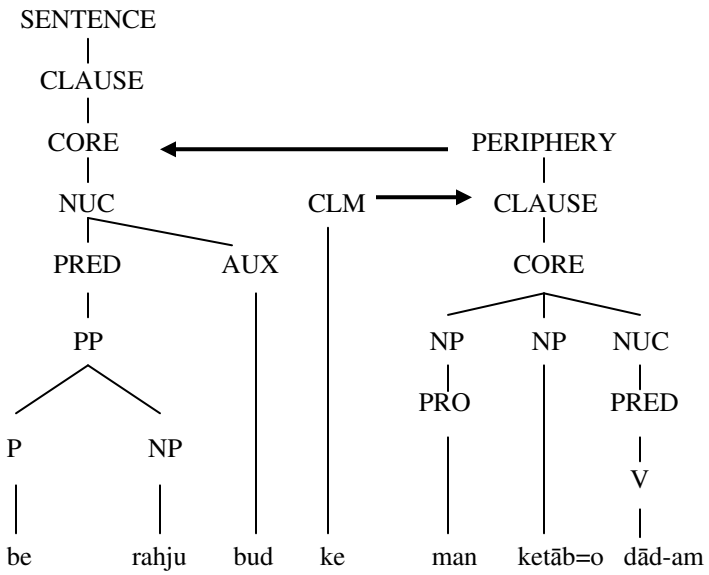


Figure 4.2 LSC of Persian clefted argument-marking prepositional phrases, as in (2)

In figure 4.2, the clefted prepositional phrase is the shared oblique core argument of the relative clause positioned in the focus slot. Most crucially, it does not represent a predicative layered structure itself; however, it functions predicatively in the level of information structure.

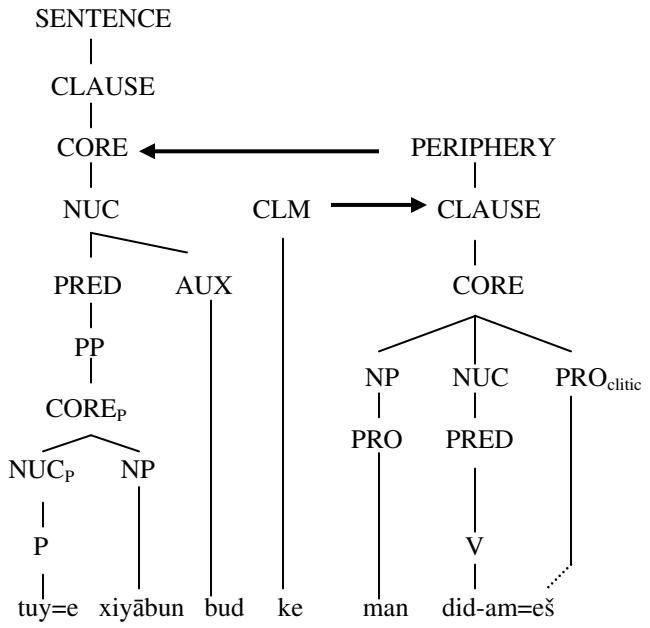


Figure 4.3 LSC of Persian clefted adjunct prepositional phrases, as in (3)

In figure 4.3, the clefted constituent is an adjunct prepositional phrase which functions both semantically and pragmatically as predicative element.

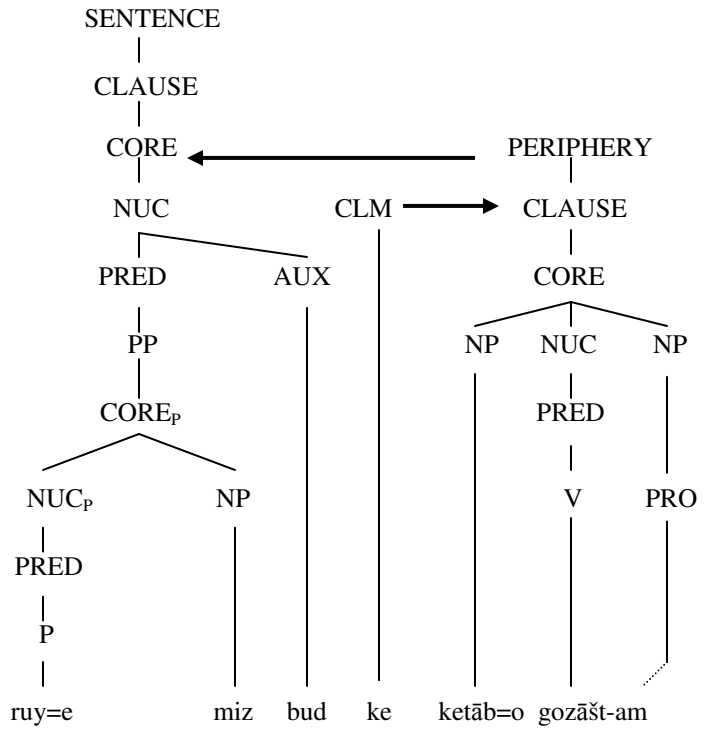


Figure 4.4 LSC of Persian clefted argument-adjunct prepositional phrase, as in (16)

Figure 4.4 illustrates an argument-adjunct prepositional phrase that is placed in the focus position having a predicative function in the information structure and semantic structure mapping.

The interesting point about Persian cleft constructions is the fact that when the clefted constituent is a prepositional phrase (19 and 20) or an adverbial (21), the sentence is grammatically improper if *in* is included; but in case of a noun phrase (17 and 18) in the clefted constituent position, the sentence is definitely grammatical when *in* is present. The data given below confirm this claim. Furthermore, the presence of *in* 'this' is optional when NPs are clefted.

(17) (in) šomā-hā bud-in ke mamlekat=o be in ruz andāxt-in.
(this) PN.2PL-PL be.PAST-2PL that country=OM to this day brought.PAST-2PL
'It was you who brought the country to this state.'

(18) (in) kimiyā bud ke tunest bā un be-sāz-e.
(this) Kimiya be.PAST.3SG that can.PAST.3SG with PN.3SG SUBJ-put up.PRES-3SG
'It was Kimiya who was able to put up with him.'

(19) (*in) be rahju bud ke man ketāb=o dād-am.
(this) to Rahju be.PAST.3SG that PN.1SG book=OM give.PAST-1SG
'It was to Rahju that I gave the book.'

(20) (*in) tu xiyābun bud ke man did-am=eš.
(this) in street be.PAST.3SG that PN.1SG see.PAST-1SG=PC SG
'It was in the street that I saw her.'

(21) (*in) ruz=e šambe bud ke man un=o did-am.
(this) day=EZ Saturday be.PAST.3SG that PN.1SG PN.3SG=OM see.PAST-1SG
'It was Saturday when I saw him.'

(karimi 2005: 92)

Karimi (2005: 92) believes that Persian as a richly agreeing null-subject language lacks overt expletive.[18] Comparing the data in (17)-(21), she analyzes that the optional presence of '*in*' in (17) and (18) and the impossibility of its presence in (19)-(21) advocate the view that '*in*' needs to be treated as a demonstrative and not a real expletive. She also maintains that the absence of the impersonal 'there' as in existential constructions is another consideration that Persian does not have an overt expletive. I agree in part with Karimi's evidence that '*in*' can only be used in cleft constructions when the clefted constituent is an NP, and similarly her claim that the inclusive occurrence of '*in*' with

[18] . Karimi (2005: 118, fn. 40) cites that Darzi (1996: 93-4) has considered that Persian exhibits raising constructions in which the subject position of the matrix clause can be filled with the demonstrative '*in*' that he considers to be an expletive. In presence of '*in*', no embedded element can move into matrix clause.

(i) (in) lāzem ast [CP ke [ali ketāb=rā be u be-dah-ad]]
(this) necessary be.PRES.3SG that Ali book=OM to PN.3SG SUBJ-give.PRES-3SG
'It is necessary that Ali gives the book to him.'

(ii) (*in) ali (*in) lāzem ast [CP ke [t ketāb=rā be u be-dah-ad]]

NPs would necessitate its deictic anaphoricity. However, this view would be problematic in terms of the analysis I will propose subsequently.

Time is ripe to determine the true nature of '*in*' in Persian clefts regarding an RRG account. I raise the same question posed by Karmi (2005: 92): "Can *in* in (17) and (18) be considered a demonstrative rather than an expletive?" To answer this, I would like to refer back to the distinction made in RRG with respect to head- or dependent-marking languages. It was pointed out that Persian is a pro-drop language that the agreement between verb and its subject both in number and person is coded by bound morphemes, which are marked on the verb (chapter 3, fn. 1). Correspondingly, Van Valin and LaPolla (1997: 331) indicate that in pro-drop dependent-marking languages such as Italian, Spanish, Icelandic, Croatian, etc, the overt independent NPs count as the core arguments, with the bound morphemes merely being agreement markers. In case of independent NPs absence, it is the bound morphemes that function as core arguments. This is the situation in Persian that bound morphemes are considered merely agreement marker when NP subjects are directly available in the sentence. To illustrate this fact, I represent the layered structure of the clause in the examples in (22).

(22) a. ānhā šiše=rā šekast-and. b. šiše=rā šekast-and.
they glass=OM break.PAST-3pl
'They broke the glass.'

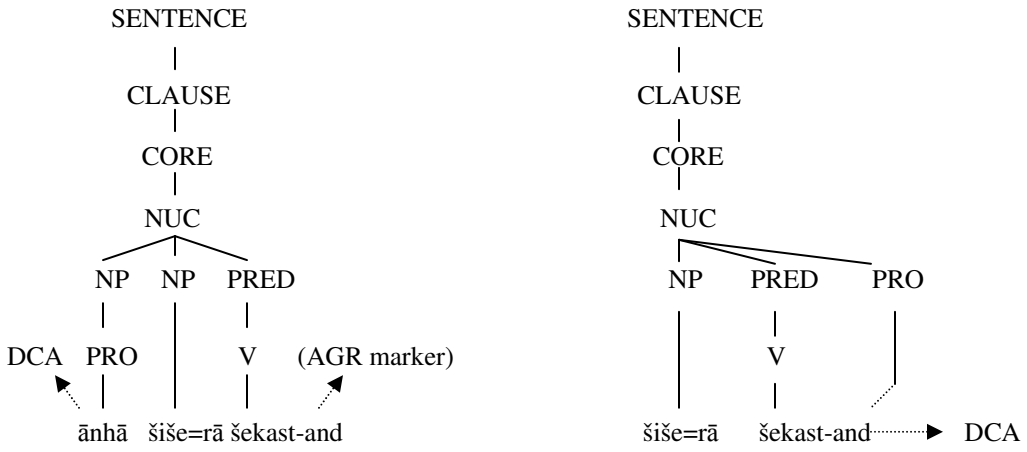


Figure 4.5 Overt NP and bound morpheme as DCA in Persian

In spite of the straightforward pattern of subject agreement in core transitive and intransitive clauses, as shown in (22), Persian NP-clefted sentences exhibit agreement inconsistency such that the form of the matrix core verb (copula) does not co-vary with the phi-features of the so-called demonstrative; it co-varies with the phi-features of the clefted NP vice versa, although it must be the case that agreement correlates with the nominative case assignment in null-subject languages. Moreover, in case of PP- or adverbial-clefted sentences, the so-called demonstrative cannot appear in the clause-initial position, as shown in (19)-(21) and the verb agreement in the matrix core of the cleft sentence appears to be the default value of third singular. This inconsistent agreement pattern raises doubt on the axiom that first NPs in the Persian clauses decide the verb agreement. Clefts provide evidence not to rule out the contingency that Persian deviates from the generally accepted pattern of the verb agreement with the first NP in the clause. Since the copula agrees with the phi-features of the clefted NPs in Persian, not with that of the optional '*in*', '*in*' cannot be considered as direct core argument of matrix predicator. The examples given below display explicitly the copula insensitivity to agree with the first NP, as I call 'so-called demonstrative', although with the second NP (the clefted constituent).

(23) a. (in) man-am ke āšeq=e zabānšenāsi-yam.
(this) PN.1SG-be.PRES.1SG that lover=EZ linguistics-be.PRES-1SG
'It is me who loves linguistics.'

b. (in) to-yi ke am ke āšeq=e zabānšenāsi hast-i.
(this) PN.2SG-be.PRES.2SG that lover=EZ linguistics be.PRES-2SG
'It is you who loves linguistics.'

c. (in) un-e ke āšeq=e zabānšenāsi-ye.
(this) PN.3SG-be.PRES.3SG that lover=EZ linguistics-be.PRRS.3SG
'It is him who loves linguistics.'

d. (in) mā-yim ke āšeq=e zabānšenāsi hast-im.
(this) PN.1PL-be.PRES.1PL that lover=EZ linguistics be.PRES-1PL
'It is us who love linguistics.'

e. (in) šomā-yin ke āšeq=e zabānšenāsi hast-id.
(this) PN.2PL-be.PRES.2PL that lover=EZ linguistics be.PRES-2PL
'It is you who love linfuistics.'

f. (in) un-an ke āšeq=e zabānšenāsi-yan.
(this) PN.3PL-be.PRES.3PL that lover=EZ linguistics-be.PRRS.3PL
'It is them who love linguistics.'[19]

Given that the privileged controller for agreement in the matrix clause is the clefted constituent, one would ask what is the status of '*in*' in Persian clefts. As discussed earlier, Lambrecht's constructional approach analyzes the empty syntactic structure of the matrix clause, namely the succession of the copula and its overt or covert pronominal subject, to be a kind of 'focus marker' for the argument of another predicator (2001: 471). I believe that focus-assigning function of the matrix clause holds in Persian with such a nuisance that the optional cleft pronoun or the same so-called demonstrative is not a pronominal subject because copula fails to agree with it. Syntax cannot apparently provide an answer to our question. This is where information structure succeeds in accounting for the status of '*in*' which appears to be an overt expletive that plays a supportive, emphatic role when it is present in the matrix clause. By supportive, I mean that copula is the main instigator of the focus-marking function in cleft constructions, as E.Kiss (1998) displays that copula has a [+focus] feature in the SPEC of AUX which triggers the focused-to-be element to possess the spec slot in the AUX node; the arbitrary presence of the expletive intensifies the focus-marking function of the copula. It is the case that Persian as opposed to non-prodrop languages like English does not require a dummy filler to be in the subject position so that the sentence is grammatical. The placement of the overt expletive '*in*' complies with the pragmatic competence of the Persian speakers to maximize the focalizing task of Persian cleft constructions. According to the issue raised above, I represent the overt expletive in the periphery of the clefted NP to highlight these facts:

1. Overt expletive in Persian clefts is not a DCA due to the verb agreement failure 2. The peripheral status of the overt expletive signals its arbitrariness as well as its contribution

to double the focus marking function of clefts [20]&[21] . The syntactic representation of the example in (24) is given in figure 4.6.

(24) in man bud-am ke raft-am taraf=e xāhar=am.
this PN.1SG be.PAST-1SG that walk.PAST-1SG towards=EZ sister=PC.1SG
'It was me who walked towards my sister.'

---

[20] . The emphatic contribution of '*in*' in Persian clefts is also confirmed by its combinability with *ham* and *če* as **emphatic** prefixes to form what Phillott (1919: 87) calls 'emphatic demonstrative pronouns', i.e. *ham-in* and *čon-in* .

(i) ham-in ketāb=rā xarid.
same-this book=OM buy.PAST.3SG
'He bought the same book.'

(ii) čon-in asb-hā=ye qašangi tā be hālā did-e-id.
Such-this horse-PL=EZ beautiful till to now see-PSPT-be.PRES-2PL
'Have you ever seen such beautiful horses?'

(Mace 2003: 59)

The emphatic function of *ham* can be observed by the stress falling on it (Mace, Ibid.), and also on closer inspection, we realize that there is no indication of deictic expression in the English gloss of *hamin* 'the same' and *čonin* 'such'. Lazard (1957: 145) and Lambton (1966: 32) mention that Persian demonstratives, *in* 'this' and *ān* 'that' can be 'strengthened' by *ham.* This emphatic function has also been denoted by Persian grammarians such as Shafai (1984: 611); Anvari and Ahmadi Givi (1989: 263); Kalbasi (1992: 97); Nobahar (1993:205); Meshkatoddini (2005: 104).

[8.] It is interesting to know that Persian can exhibit the possibility that a proper noun is preceded by *in*. In this situation, one would have to consider the demonstrative as emphatic element which appears to strengthen the emotional load of the sentence, not to help the addressee identify the referent of the NP, because the proper nouns are inherently referential, hence no need to make it definite, unless the speaker intends to affect the addressee's emotion. Consider the following examples by which I attempt to convey what I mean by emotional load.

(i) A: be farhād goft-am age mašin=eš=o lāzem na-dār-e, be=het qarz=eš be-d-e,
to Farhad say.PAST-1SG if car=PC.3SG=OM need NEG-have.PRES-3SG, to=PC.2SG lend=PC.3SG SUBJ-give.PRES-3SG
vali alaki goft ke lāzem=eš dār-e.
but dishonestly say.PAST.3SG that need=PC.3SG have.PRES=3SG
'I told Farhad to lend you his car if he didn't need it, but he told me dishonestly that he did.'

B: **in** farhād ajab ādam=e mozaxrafi-ye.
this Farhad what guy=EZ nasty-be.PRES.3SG
'What a nasty guy Farhad is.'

I would like to set up another context in which little Farhad and Neda are quarrelling and Neda asks her father to stop Farhad teasing her.

(ii) Neda: bābā!!! be **in** farhād ye čizi be-gu, man=o azyat mi-kon-e.
daddy to this farhad one thing IMP-tell.ø, PN.1SG bother IMPF-do.PRES-3SG
'Daddy!!! Plz tell Fahad not to tease me.'

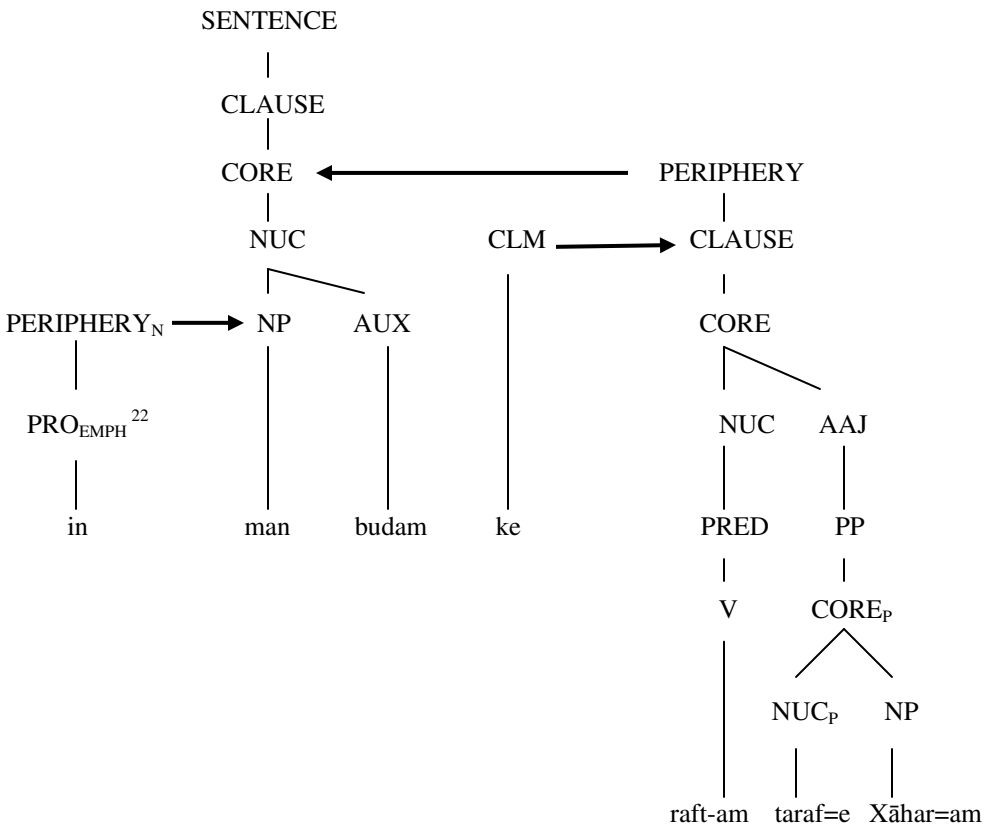


Figure 4.6 RRG projection of the Persian cleft Pronoun

Here, I formulate the structural properties of Persian clefts following the argument provoked in the preceding lines. Then, I will display how these distinctive properties are stored in the syntactic template[23].

(25) (*in* **EMPH**) + [NP-clefted constituent as pragmatic predicate] copula + CLM + Ad-core SUB.CL.

agreement with ϕ-features (person & number)[24]

[22] . Bejar and Kahnemuyipour (2008) provide a formal account for the uncharacteristic agreement of copular clauses in Persian which contrasts markedly with the straightforward subject agreement in Persian non-copular clauses. They suggest that while the second NP in *in man-am* 'this is me',(i.e. the clefted constituent in clefts) bears an accusative case in English, the second NP in Persian copular clauses bears a nominative case given that the specific NPs bearing accusative case need to be *rā*-marked.

[23] . In the syntactic representation of RRG, various patterns are stored as syntactic templates in a syntactic inventory.

[24] . In Persian, plural inanimate subjects may appear with 3rd /default morphology with no number agreement (Sedighi 2006: 38). Consider the following examples, taken from Sedighi (Ibid).

(i) in šaye?e-ha mardom=rā be xænde andāxt or (-an)
this rumor-**PL** people=OM to laughter drop.PAST.**3SG** or **(-3PL)**
'These rumors made people laugh.' →

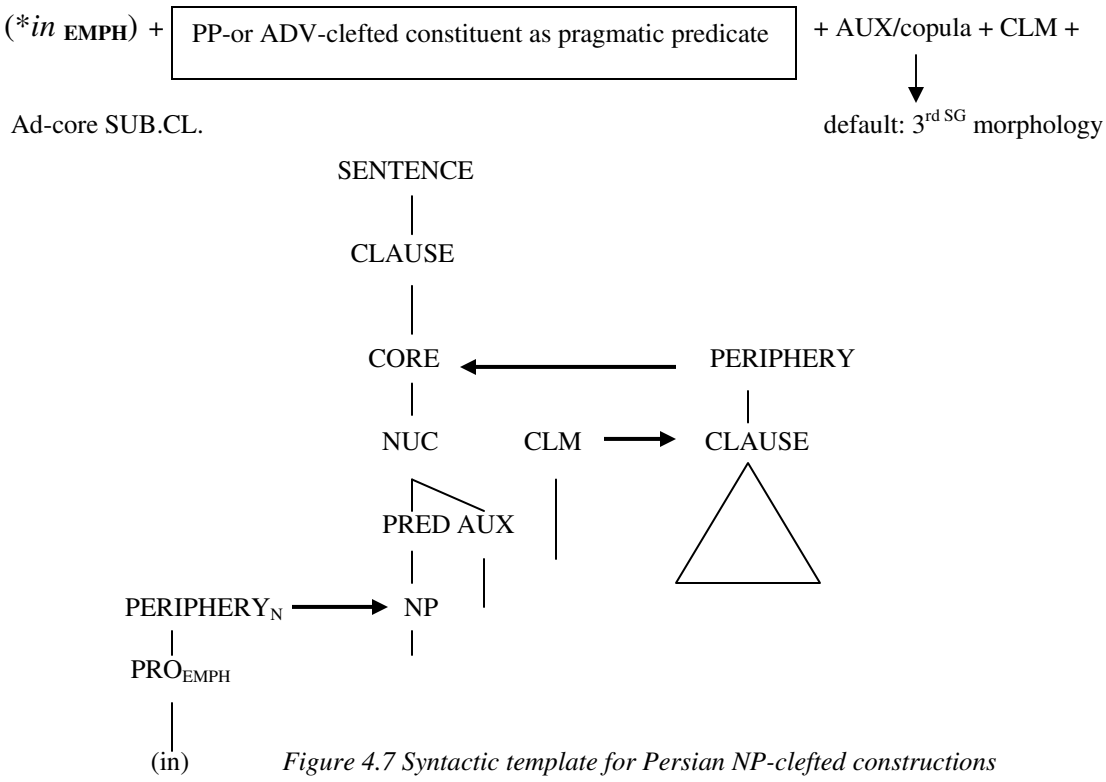


Figure 4.7 Syntactic template for Persian NP-clefted constructions

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In RRG formulation of Persian clefts, the [± animacy] feature must be attended because it leads us to an argument against that the clefted constituent is not in the subject position. Look at the examples below.

(ii) a. [in tāktik-hā]$_{DP}$ bud ke irān=rā be jām=e jahāni bord.
this tactics-**PL** be.PAST.**3SG** that Iran=OM to cup=Ez world take.PAST.**3SG**
'It was these tactics that took Iran to the World Cup.'
b. [in tāktik-hā]$_{DP}$ bud-and ke irān=rā be jām=e jahāni bord-and.
this tactics-**PL** be.PAST-**3PL** that Iran=OM to cup=Ez world take-PAST-**3PL**

A closer look at (ii) reveals that in (a) the clefted constituent is an inanimate DP with which neither matrix clause nor relative clause verb agrees; however, both appear in default morphology agreement, namely third person. The reason behind considering the clefted constituent as DP is the fact that '*in*' in (a) and (b) is a demonstrative. Further, prosody can help us identify that the DP is an integrated tonic group with primary stress falling on the NP, i.e. *tāktik-hā.* Now consider the pair in (iii).

(iii) a. in**'** [tāktik-hā]$_{NP}$ bud-and ke irān=rā be jām=e jahāni bord-and.
this tactics-**PL** be.PAST-**3PL** that Iran=OM to cup=Ez world take-PAST-**3PL**
'It was tactics that took Iran to the World Cup.'
b.*in**'** [tāktik-hā]$_{NP}$ bud ke irān=rā be jām=e jahāni bord.
this tactics-**PL** be.PAST.**3SG** that Iran=OM to cup=EZ world take.PAST.**3SG**

Above, I have illustrated the emphatic '*in*' being separated form the clefted constituent by a pause (**'**), which means prosodically that both '*in*' and the clefted constituents carry the primary stress. In other words, '*in*' in (iia) and (b) is a part of the clefted constituent and functions as deixis, whereas 'in' in (iiia) and (b) is separated from the clefted constituent by a pause and functions as emphatic marker. Moreover, the agreement failure with '*in*' in (iiib) and agreement success with the clefted constituent can be established proof that the second NP is in the subject position of the matrix clause along with the fact that the emphatic function of '*in*' must be distinguished from its deictic function, which is illuminated by syntactic, prosodic and informational considerations. The RRG projection of the clefted constituent in (iia) is given below.

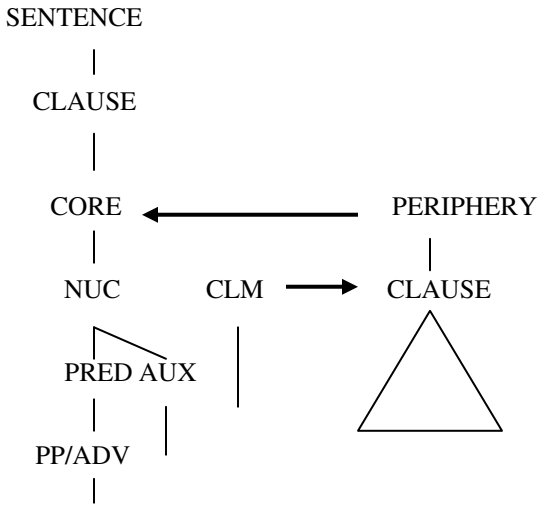
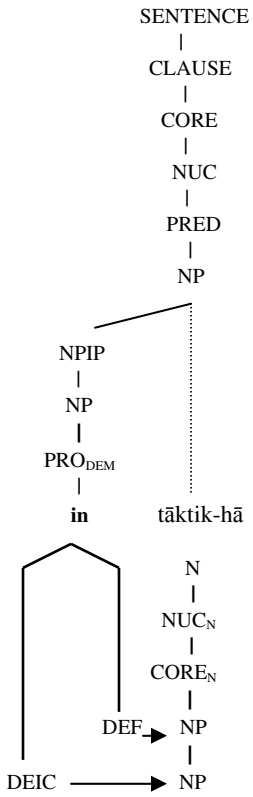


Figure 4.8 Syntactic template for Persian PP- or ADV-clefted constructions

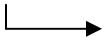
4.3. Semantic Structure of Persian clefts

Along the lines proposed by Pavey (2004) in section 2.4.3.4. I employ an identical approach to the semantic representation of Persian clefts.



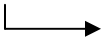
Pavey (2008) claims the function of noun phrases to alter from reference to predication. NPs which are non-specific and non-referential function as semantic predicate, whereas NPs which are specific and referential are referring expressions which probably function as pragmatic predicate in specificational sentences. Nominal semantic predicates are found in identificational sentences which provide descriptions, as in (26), while nominal pragmatic predicates are found in specificational sentences such as clefts and pseudoclefts, which serve to provide the hearer with the full identity of the particular entity the speaker has in his mind, as in (27).

(26) Monica is a chef.



Semantic predicate with descriptive function

(27) George is the winner.



Pragmatic predicate with specificational function

She argues convincingly that it is in the communicative exchange that participants are able to cope with the cognitive and grammatical coding of the discourse referents. The communication procedure in uttering a specificational sentence operates in a way that the hearer is not able to identify fully a particular referent, although recognizing or guessing somehow; hence, the speaker assists the hearer to make a full identification of the underspecified referent. To settle such underspecification, it is urgent for the variable to be specific, non-referential and for the value to predicate something of the variable; the reason Lambrecht exploits the pragmatic predicate term. As Pavey (2008) discusses, *the bank robber* in the communicative exchange in (28) can be described as identifiable, specific and non-referential in (a); thus, the speaker B starts with the same theme to enable the hearer to come up with intended referent. The classification of the two NPs can be displayed in table 4.1.

(28) a. Who is the bank robber?

b. The bank robber is John Thomas.

NP	Grammatical coding	Pragmatic interpretation	Function
The bank robber	Definite	Specific non-referential	Pragmatic predicate
John Thomas	Definite	Specific referential	Referring expression

Table 4.1 Classification of NPs in (28), based on Pavey (2008)

As mentioned in chapter 2, the cleft sentences are considered as a type of copular specificational constructions that provide a value for a variable. So, the specificational function of *it*-clefts must be reflected in their logical structure. Following Van Valin (2005: 48), the logical structure of different types of copular sentences is represented as in (29).[25]

(29) a. Pat is small: **be´** (Pat, [**small´**]) Attributive
b. Kim is a lawyer: **be´** (Kim, [**a lawyer´**]) Identificational
c. George is the winner: **be´** (George, [**the winner´**]) Specificational
d. Kim's sister is Sandy's lawyer: **equate´** (Kim's sister, Sandy's lawyer) Equational

Pavey (2004) indicates the specifying function by exploitation of **be´** as the main predicate in the semantic structure of *it*-cleft constructions. This is the predicate used in the logical structure of the specificational sentences, as shown in (29c). It turns out that the specificational predicate is different from the English auxiliary *be* as it comes to mark specificational on a par with attributive and identificational predication. *Be* as auxiliary is not part of the predication in copular sentences. The inequality between simple specificational sentences like (29c) and specificational cleft sentences can be captured by the value and variable being NPs in the former which contrasts with that the variable discourse referent is not expressed syntactically as a noun phrase, although a relative-like clause in the clefts. **be´** predicate contains two arguments represented as x and y. x equals the semantic content of the cleft clause (variable) and y corresponds to the clefted constituent (value). Since specification is the most remarkable property of *it*-clefts, we should make adequate provision to envisage it in syntactic, semantic and information

[25] . Van Valin (2005: 48) distinguishes between attributive and identificational sentences by the predicate being an adjective in the former and a nominal in the latter.

structure representation of the sentences. The copula as well emphatic cleft pronoun in Persian clefts is the syntactic device in doing so. As for the semantic participation in accomplishing such a cooperative task, the internal logical structure of the cleft clause has an unfilled argument that is coindexed with the second argument of specificational **be´**, i.e. x, representing the value. I would prefer to reiterate the logical structure of English *it*-clefts, illustrated in 2.4.3.4, for the sake of clarity and simplicity.

(30) a. Its' Martha that eats octopus.

be´ ([**do´** (x_i, [**eat´** (x_i, octopus)])], $Martha_i$)

b. It's Martha who eats octopus.

be´ ([**do´** (who_i, [**eat´** (who_i, octopus)])], $Martha_i$)

(Pavey 2004: 215)

In the same manner, I can illustrate the logical structure for Persian clefts in (1), repeated below as (31).

(31) a. in farhād bud ke širin=rā dust dāšt.

this Farhad be.PAST.3SG that Shirin=OM love have.PAST.3SG

'It was Farhad who loved Shirin.'

b. **be´** ([**love** ´ (x_i, shirin)], $Farhad_i$)

The speaker in (31) wants to convey that what concerns him is not that *Shirin* is loved by a person, oppositely that the lover is *Farhad.*

The point I would like to draw your attention to is that the emphatic *in* has not been represented in the logical structure in (31); it implies that this emphatic element in the Persian clefts makes no syntactic or semantic contribution to their analysis; hence an expletive, only it cooperates with the copula to affect the information structure of the sentence and strengthen the focus marking nature of Persian clefts.

As noted above, predicative and non-predicative PPs can be clefted and placed in the focus position of Persian clefts. I have mentioned that argument-adjunct and adjunct prepositions are predicative by nature; thus, this semantic property must be mirrored in the logical structure of the predicative PP-clefted sentences. To this end, Pavey deploys the abstract logical structures, which were adopted in RRG theory by Van Valin and Lapolla (1997: 335) for representing the English wh-words in the precore slot. The history of abstract logical structures dates back in Jurafsky (1992). **be-LOC´** and **be-TEMP´** are abstract logical structures in (32b´) and (33b´).

(32) a. qazal māni=ro tu madrese did.
Ghazal Mani=OM in school see.PAST.3SG
'Ghazal saw Mani in the school.'
a´. [**be-at´** (madrese, [**see´** (Ghazal, Mani)])]

b. qazal māni=ro kojā did?
Ghazal Mani=OM where see.PAST.3SG
'Where did Ghazal see Mani?'
b´. [**be-LOC´** (kojā, [**see´** (Ghazal, Mani)])]

(33) a. qazal māni=ro baʔd=e madrese did.
Ghazal Mani=OM after=EZ school see.PAST.3SG
'Ghazal saw Mani after the school.'
a´. [**be-after´** (school, [**see´** (Ghazal, Mani)])]

b. qazal māni=ro kei did?
Ghazal Mani=OM when see.PAST.3SG
'When did Ghazal see Mani?'
b´. [**be-TEMP´** (key, [**see´** (Ghazal, Mani)])]

If the clefted constituent is an argument-marking preposition with its NP complement, the NP is coindexed with an unvalued argument in the complex logical structure. This is

shown in (34b). Pavey (2004: 221) maintains that in the semantic representation, clefted argument-marking prepositional phrases are treated the same as clefted noun phrases and not represented in the logical structure of the sentence.

(34) a. be rahju bud ke man ketāb=o dād-am.
to Rahju be.PAST.3SG that PN.1SG book=OM give.PAST-1SG
'It was to Rahju that I gave the book.'
b. **be´** ([**do´** (1SG, Ø) CAUSE BECOME **have´** (x_i, ketāb)], $Raju_i$)

In case the clefted constituent is an argument-adjunct prepositional phrase, the abstract logical structure **be-LOC´** is used, following Pavey (2004: 222).

(35) a. ruy=e miz bud ke ketāb=o gozāšt-am.
on=EZ desk be.PAST.3SG that book=OM put.PAST-1SG
'It was on the desk that I put the book.'
b. **be´** ([[**do´** (1SG, Ø) CAUSE BECOME **be-LOC´** (x_i, $ketāb_j$)]], [**be-on´** (miz, y_j)$_i$)

As can be seen, the variable in the specificational logical structure contains an abstract logical structure the first argument of which x, representing the unvalued argument of the predicative preposition, is coindexed through 'i' with the value as the second argument of specificational predicate **be´**. (y) in the value element of **be´** stands for the second argument of the locative predicate, coindexed with it by 'j'. This semantic representation covers up the specificational function of the Persian cleft constructions via **be´** insertion, represented by coindexation in the logical structure.

When an adjunct prepositional phrase is clefted, Pavey (2004: 225) recommends to use locative or temporal abstract logical structures, i.e. **be-LOC´** and **be-TEMP´**.

(36) a. tu xiyābun bud ke man did-am=eš.
in street be.PAST.3SG that PN.1SG see.PAST-1SG=PC SG
'It was on the street that I saw her.'

b. **be´** ([**be-LOC´** (x_i, [**see´** (1SG, 3SG)] $_j$)], [**be-in´** (xiyabun, y_j] $_i$)

According to the logical structure of the adjunct prepositional phrases as clefted constituent, there is no missing argument in the logical structure of the cleft clause, but since clefts are specificational, it is necessary to identify a value for a variable in the logical structure of prepositional phrase.

Temporal adjunct can also function as focus phrase in Persian clefts, as already noted. To represent the logical structure of adverbial-clefted constructions, the **be-TEMP´** is used again.

(37) a. diruz bud ke farhād mahdi=ro be pārk bord.
yesterday be.PAST.3SG that Farhad Mahdi=OM to park take.PAST.3SG
'It was yesterday that Farhad took Mahdi to the park.'

b. **be´** ([**be-TEMP´** (x_i, [[**do´** (Farhad, Ø)] CAUSE [BECOME **be-in´** (park, $Mahd_i$)]] $_j$)], [**yesterday´** (y_j)] $_i$)

4.4. Focus Structure of Persian Clefts

It has been repeatedly mentioned that the functional motivation[26] for the use of *it*-cleft constructions is upheld by the principle that cleft constructions are optimally syntactic construal of marking a non-focal argument as focal, or a focal predicate as non-focal, or both (see section 2.4.3.2). Having taken a constructional approach to the analysis of Persian clefts so far, I follow up the taxonomy of focus structure, proposed by Lambrecht (1994) and adopted in RRG, with respect to the Persian clefts. Persian clefts are functionally narrow focus constructions in which the clefted constituent rests in the precopular actual focus domain in order to enable the addressee to interpret exhaustively the value element as specific referent holding a focus relation to a pragmatically presupposed proposition in the cleft clause. Keep in mind that Persian clefts are semantically specificational constructions that provide a value for an underspecified

[26] . Lambrecht (2001: 488) expresses the formal motivation of the use of *it*-clefts as correlation with the degree of positional freedom of prosodic accents and syntactic constituents in languages.

element in the variable. Noteworthy is that focus of proposition is acknowledged not as a referential property of a denotatum in the discourse model; rather, as a relation established between the denotatum and the proposition. This means that a focal denotatum may in principle have the same referent as a topical denotatum but what makes it focal is its new relation to the presupposition. In other words, a denotatum can be referentially given but relationally new. More strictly speaking, a cleft sentence is from a constructional viewpoint a disambiguative, discourse-pragmatic strategy on the side of the speaker to instruct the hearer to establish a pragmatic relation between a denotatum and a proposition. RRG provides the Persian speakers with two syntactic templates including the focus structure projection, given in figure 4.9.

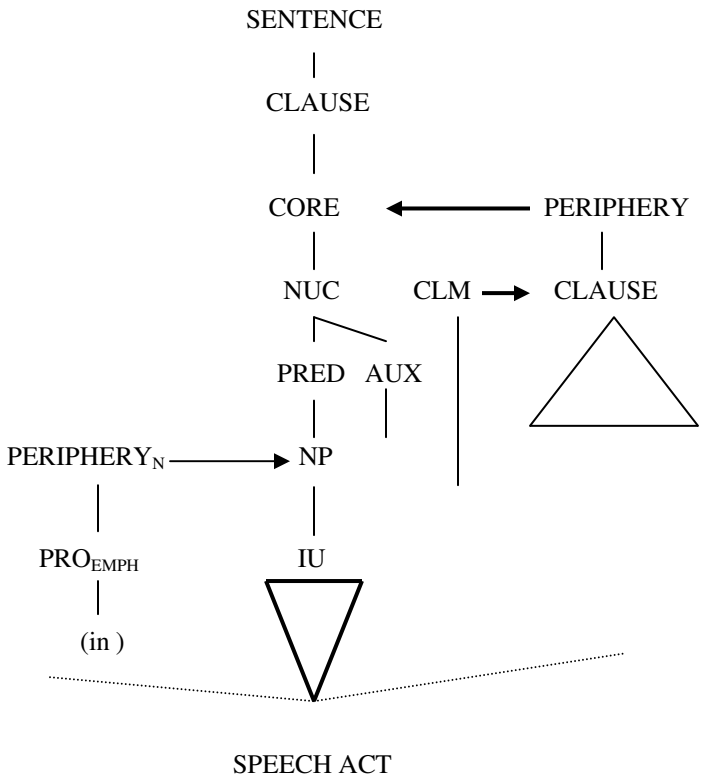


Figure 4.9 Persian NP-clefted syntactic template with focus structure projection

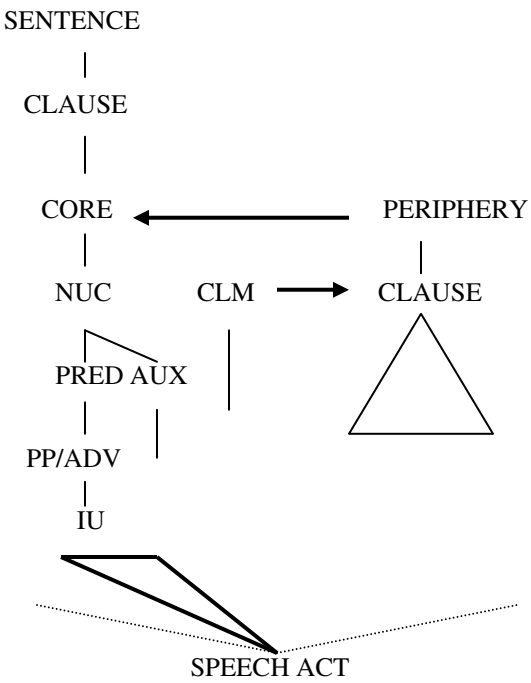


Figure 4.10 Persian PP- or ADV-clefted syntactic template with focus structure projection

The cleft clause is not placed in the focus domain because it is pragmatically and grammatically presupposed. As reflection of this, the units in the cleft clause cannot be interrogated, as shown in (38).

(38) Q: mahdi bud ke farhād diruz bord=eš pārk?
Mahdi be.PAST.3SG that Farhad yesterday take.PAST.3SG=PC.3SG
'Was it Madi that Farhad took to the park?'
A: na, māni (bud)/* na, sinamā/ * na, dišab [ke farhād diruz bord=eš park].
no Mani (be) no cinema no last night
'No, it was Mani.'

The syntactic structure and focus structure of (39) are given in figure 4.11.

(39) in māni bud ke farhād diruz bord=eš (be) park.
this Mani be.PAST.3SG that Farhad yesterday take.PAST.3SG=PC.3SG (to) park
'It was Mani that Farhad took to the park.'

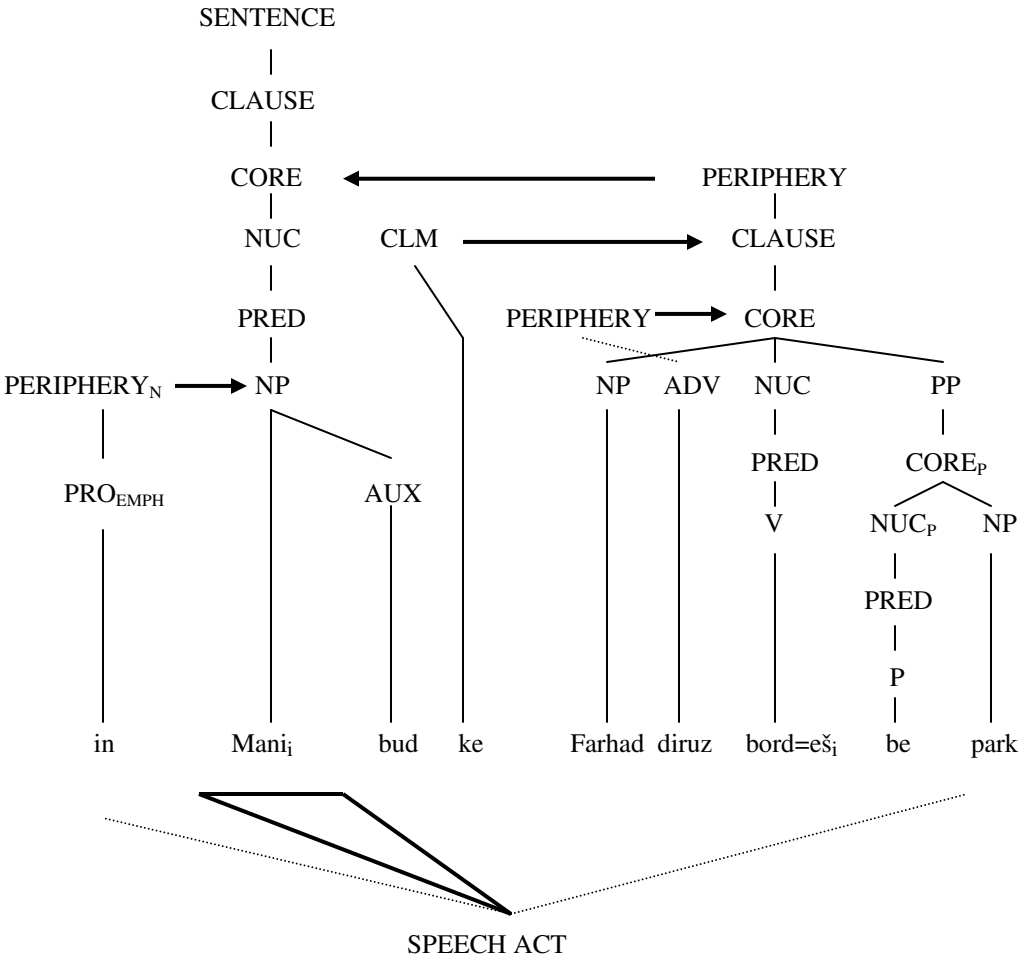


Figure 4.11 Syntactic and focus structure projection in (39)

The syntactic templates in figures 4.9 and 4.10 overlap with the corpus-driven analysis of Khormai and Shahbaz (2010) suggesting that both the stressed focus and informative-presupposition[27] clefts in Persian are one single category, regardless of the informational status of the clefted constituent and the cleft clause.[28]

[27] . Prince (1978) identifies the distinction between Stressed focus [SF] *it*-clefts and informative-presupposition [IP] *it*-clefts. SF *it*-clefts are the cases in which the clefted constituent carries new, often contrastive, information; while the cleft clause represents known or old information. This type of *it*-clefts is marked prosodically by the nucleus falling on the clefted constituent. IP *it*-clefts are those with marked information structure, such that the cleft clause conveys information which is new in the discourse and possibly unknown to the hearer. The primary stress generally falls inside the cleft clause in these sentences. The hearer is in fact expected to evaluate the informativeness of the cleft clause as 'known fact'.

[28] . Khormai and Shahbaz (2010) offer reasons to prove that the two-fold distinction of *it*-clefts appears to be wanting. Firstly, they claim that the focus marking function of the two *it*-cleft types is proof in support of their non-distinctiveness. Secondly, both types bear resemblance with respect to the grammatical presupposition contained in the cleft clause which is the evocation of its embeddedness. Further, state aspect (Delin and Oberlander 1992, 1995) is another shared syntactic property in both cleft types. Finally, emphasis, contrastiveness and exhaustiveness are semantic properties which are found in both of them. (for further explanation, see Shahbaz (2008))

Let's have a look at the information distribution in the example in (40), taken from *Bufe kur* 'the blind owl'.

(40) tanhā marg ast ke doruq ne-mi-gu-(y)ad! hozur=e
only death be.PRES.3SG that lie NEG-IMPF-tell.PRES-3SG presence=EZ
marg hame=(y)e mouhumāt=rā nist-o nābud mi-kon-ad.
death all=EZ hallucinations=OM destroy-CONJ ruin IMPF-do.PRES-3SG
mā bačče=(y)e marg hast-im va **marg ast ke mā=rā**
PN.1PL child=EZ death be.PRES-1PL and death be.PRES.3SG that PN.1PL=OM
az faribkāri-hā=(y)e zendegi nejāt mi-dah-ad.
from deceit-PL=EZ life save IMPF-give.PRES-3SG
'It is only death that does not lie. Death existence annihilates all hallucinations. We are the children of death and it is death that rescues us from the deceits of life.' P.69

I would like to turn to the relational and referential givenness/newness and relational givenness/newness distinction (Gundel 2004, 2008) where the former is defined in terms of a semantic/conceptual partition of a sentence into two complementary parts, x and y; x is what the sentence is about and y is what is predicated about x, and the latter is defined in terms of the relation between a linguistic expression and a corresponding entity in the discourse model that is based on the referential givenness hierarchy (Gundel et al 1993). In (40), the cognitive status of the clefted constituent *marg* is referentially presupposed/ given because it is 'in-focus' of the preceding discourse model. Likewise, the cleft clause material is referentially presupposed because it at least entails 'uniquely identifiable'[29] in the proposition 'x mā=rā az faribkārihā=(y)e zendegi nejāt midahad'. Interestingly, being directly evoked in the discourse, the clefted constituent bears a focus relation to the propositional content of the cleft clause (as it is projected in the PRED node of the syntactic template in figure 4.9) on the grounds that it establishes a 'new' relation to an

[29]. Material coded in the cleft clause is always referentially given in the sense that it is at least uniquely identifiable (Gundel 2008: 72). The reason is that the cleft pronoun and the cleft clause form a discontinuous definite referring expression, following Hedberg (2000). Moreover, the propositional content of the cleft clause is already taken for granted by being grammatically embedded in a subordinate clause.

indirectly-evoked mistaken belief that death could be the endpoint of life. The author would be inclined to convey to his addressee (probably afraid of death) that death is not the end, rather a rebirth by the stating *mā bačče=ye marg hast-im* 'we are the children of death'. Accordingly, *marg* is considered relationally new. To elaborate on the relational status of the relative clause [RC] proposition, I employ the notions of Knowledge-presupposition [k-presupposition] and Topicality-presupposition [T-presupposed] in Lambrecht (2001)[30]. The RC-proposition in the cleft clause is known to the hearer as it is a part of pragmatic presupposition, i.e. K-presupposed (the hearer is ready to take for granted at utterance time that death will rescue us from life deceits)); yet it is not of hearer's current interest; hence not T-presupposed (the topicality of the RC-proposition is not sufficiently salient to be 'ratified'/ pragmatically accommodated, that is , the hearer is not expected to be given information about death's capability to rescue humans). This leads us to consider the RC-proposition of (40) as relationally new. To summarize, the cleft sentence above is a sample of informative-presupposition (all-comment in Hedberg and Fadden's (2007) terminology), evidenced by the primary stress falling on an element inside the cleft clause, namely *nejāt*. Khormai and Shahbaz argue that in case of informative-presupposition clefts, the hearer is cognitively invited to evaluate the proposition in the cleft clause as given. This is what Lambrecht (1994) calls 'pragmatic accommodation', a discourse strategy that enables the interlocutors to push forward the discourse model.

Clefted constituent	Cleft clause
marg	X ke mārā az faribkārihāye zendegi nejāt midahad
Referentially given	Referentially given
Relationally new	Relationally new

Table 4.2 Referential and relational givenness-newness in (40)

[30] . Lambrecht (2001) distinguishes three kinds of presupposition. K-presupposition is identical with pragmatic presupposition, presented in section 3.4.1. Consciousness-presupposition [C-presupposition] occurs if the speaker assumes that the mental representation of an entity or a proposition has been activated in the interlocutors' short-term memory (P. 475). An entity or a proposition is T-presupposed if the hearer considers it to be a center of his current interest, i.e. the hearer is predisposed to hear some information about that entity or proposition (P. 476). It is important to know that T-presuppositions entail C-presuppositions, that is, for an entity to be T-presupposed, it must be C-presupposed, i.e. it must be activated in the hearer's consciousness. The notions of K-presupposed and C-presupposed are equivalents of 'hearer-old' and 'discourse old' in the taxonomy of Prince (1992).

Now consider the informational pattern in (41), excerpted from *ruzegār-e separi šode-ye mardom-e sālxorde* 'the bygone era of the senile people' .

(41) har do tā=šān barādar-hā=(y)am bud-and, ham abdus=rā
each two CL=PC.3PL brother-PL=PC.1SG be.PAST-3PL also Abdus=OM
dust dāšt-am va ham yadegār=rā ke bad az ān nāxuši ham
love have.PAST-1SG and also Yadegar=OM that after from that sickness also
nākār shod ke shod. bad az marg=e
inefficient become.PAST.3SG that become.PAST.3SG after from death=EZ
pedar=am, **in barādar-hā=(y)am bud-and ke man=rā**
father=PC.1SG this bother-PL=PC.1SG be.PAST-3PL that PN.1SG=OM
be yād=e u mi-andāxt-and. (p.31)
to memory=ez PN.3SG IMPF-cast.PAST-3PL
'Both of them were my brothers; I loved both Abdus and Yadegar, who became inefficient after that sickness. After my father's death, it was my brothers who reminded me of his memory.'

The cognitive status of the cleft clause is always referentially given. The cognitive status of the clefted constituent is referentially given too, as there are direct mentions of it in the previous sentences. The cleft clause material is relationally given because it is inferable from the expression *bad az marg=e pedar-am* 'after my father's death' that when a person passes away (specially a family member), his relative think of him after his death. Therefore, the proposition 'x ke man=rā be yād=e u mi-andāxt-and' is relationally given. In other words, the RC-proposition topicality is construed as pragmatically ratified/ accommodated. Arguably, the clefted constituent still holds a focus relation to the presupposed RC-proposition, hence relationally new. This type of sentence is the prototypical case of clefting (stressed focus *it*-clefts), for the cleft clause is both referentially and relationally given and the clefted constituent is relationally new. The primary stress falls on the clefted constituent.

Clefted constituent	Cleft clause
barādar-hā=yam	x ke man=rā be yād=e u mi-andāxt-and
Referentially given	Referentially given
Relationally new	Relationally given

Table 4.3 Referential and relational givenness-newness in (41)

Last but no the least, it is evident that RRG can explicitly formalize the expression of information structure with the help of actual focus domain, that is, the clefted constituent, no matter its referential coding, bears a new/focus relation to the RC-proposition, regardless of the mental or relational representation of the cleft clause.

4.5. Information structure-syntax interface of cleft-like sentences in Persian

Persian discourse is imbued with a large amount of sentences that seemingly share structural and functional properties with cleft sentences. Extrapositional sentences are the hallmark of such affinity. This section argues that these two types of information packaging devices in Persian discourse can indeed be differentiated by the interaction of constituent projection and focus structure projection in the RRG theory.

Both extraposition and clefting are thematically marked grammatical constructions with which the natural language users are provided the possibility to depart from the unmarked expression of sentences, e.g. clefting in Persian represents a markedly structuring of a non-focal argument as focal by placing it in the precopular position of a matrix clause. On the other hand, extraposition is moving a clause out of the subject domain and placing it sentence-finally. The structural similarity of these two can be represented in the following way, proposed by Calude (2008).

(42) a. Persian cleft sentence: (in) + clefted constituent + copula + cleft clause

b. Persian extraposed sentence: (in) + remainder predicate + copula + extraposed clause

Here I present an example of extraposition in Persian, taken from *čerāqhā rā man xāmuš mikonam* 'the lights, I'll turn off'.

(43) in mohem nabud ke ninā šelaxte ast va be qoul=e
this important NEG-be.PAST.3SG that Nina untidy be.PRES.3SG and to word=EZ
madar tu=(y)e xāne=aš šotor bā bār=aš gom
mother in=EZ house=PC.3SG camel with burden=PC.3SG lost
mi-sha-(v)ad. **in mohem bud ke ninā va gārnik bā**
IMPF-beome.PRES-3SG this important be.PAST.3SG that Nina and Garnik with
ham xub va xoš bud-and. (P. 22)
together good and happy be.PAST-3PL
'It was not important that Nina is untidy and as her mother says, a camel with its burden is lost in her house. [31] It was important that Nina and Garnik are happy and prosperous together.'

The ambiguity between clefting and extraposition can be solved by in the first place the information structure which is the reflection of their discourse functions. As already mentioned, clefts are focus marking devices, highlightening or contrasting bits of information, that is, they are attention markers (Miller and Weinert 1998: 301). Extraposition, on the other hand, is associated with avoidance of having complex subjects at the beginning of the sentence serving the two principles of end-focus and end-weight (Quirk et al. 1985: 863 cited in Calude 2008: 9). Extraposition in principle patterns with the Given-Before-New principle (Gundel 1985; 1988; see section 2.2.1) and also with the Communicative Dynamism (see section 1.4.3). In (43), the hearer's mind has been previously impregnated with the presupposition that something is important and the speaker, because of the syntactic heaviness and a high degree of informativeness current in the new element, finds it expedient to lighten the load of the element by 'demoting' it from the subject position to the end of the sentence. To follow up the above-mentioned

[31] . A camel with its burden being lost in one's house is an idiomatic expression in Persian used to refer to a person who is messy.

comment, I represent how the information is organized in (43) by using the syntactic and focus structure representations in RRG.

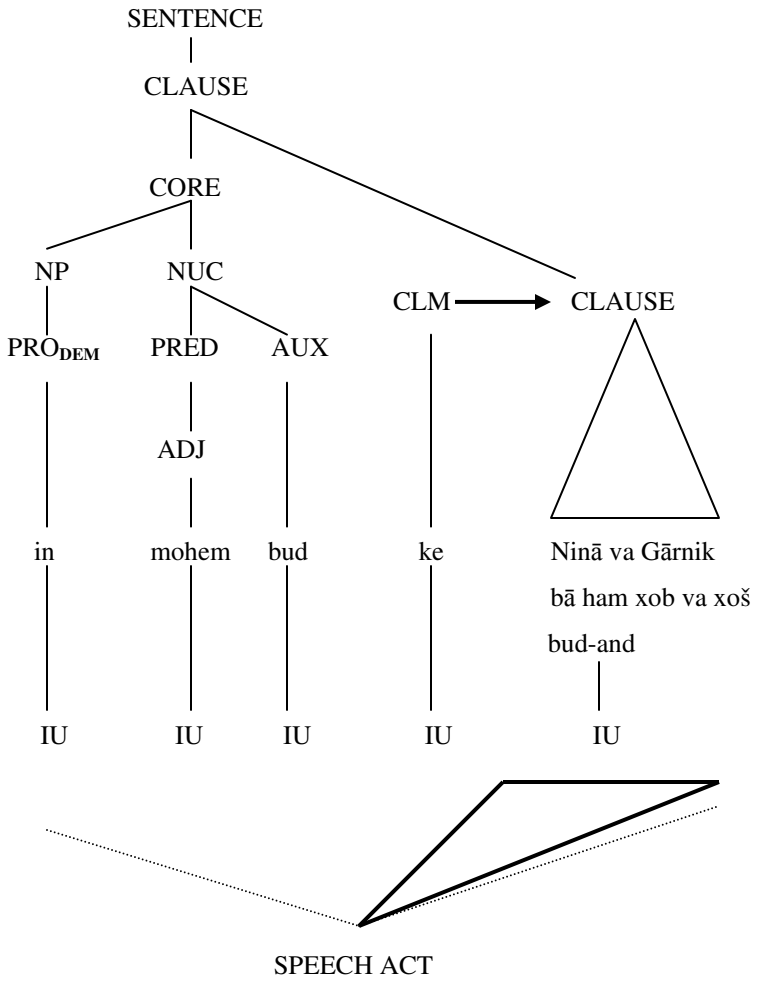


Figure 4.12 Syntactic representation of Persian extraposed sentences along with the focus structure projection

The nexus-juncture relation in extraposition is daughter clausal subordination because the extraposed clause is both informationally and structurally dependent on the matrix clause, whereas this relation in clefts is of ad-core subordination alongside the cleft clause is placed in the periphery of the matrix clause. It was pointed out in section 3.6.6 that the focus domain in complex sentences can extend over the subordinate clause if and only if the subordinate clause is the direct daughter of the clause node which is modified immediately by the IF operator. Figure 4.12 shows that the subordinate clause meets the

condition and consequently, the focus domain encompasses the extraposed clause. More specifically, the actual focus domain falls upon it because it contains new information. This can be illustrated by the question-answer context in (44).

(44) Q: či mohem bud?
what important be.PAST.3SG
'What was important?'
A: in ke ninā va gārnik bā ham xub va xoš bud-and.
this that Nina and Garnik with together good and happy be.PAST-3PL
'That Nina and Garnik was happy and prosperous together.'

Extraposition keeps track of the Persian speakers' communicative competence in the placement of the heavy complex NP to the end part of the sentence because processing a sentence starting off with a complex NP of strong informativeness would be high-cost for them communicatively. This discourse strategy of Persian speaker can be stored in a syntactic template in which the extraposed clause lies in the actual focus domain.

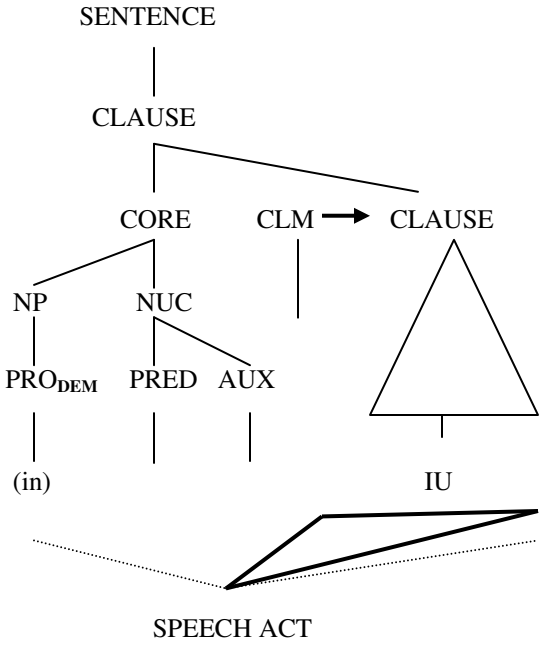


Figure 4.13 Syntactic template for Persian extraposed sentences along with the focus structure projection

It is worth considering that '*in*' has been treated as demonstrative in the syntactic template of extraposition in figure 4.13, while '*in*' in clefting as emphatic in the syntactic template of clefting in figure 4.7. The point here is that the demonstrative in extraposed constructions functions as core argument, due to its agreement with the copula, but the emphatic element in the cleft constructions functions as a nominal adjunct in the NP periphery because of its agreement failure with the copula. The optional presence of demonstrative in extraposition is justified with the pro-drop parameter of Persian as a null subject language, while the optional presence of '*in*' in the cleft sentences needs to be justified by the Persian speakers' communicative competence to intensify the focus marking function of clefts. In other words, Persian syntax on one hand, prepares the grounds for the deictic '*in*' in the extraposition to be interpreted anaphorically (i.e. the subject position of the demonstrative) and Persian discourse stylistics takes the responsibility to interpret '*in*' in the clefting emphatically when it comes to the incapability of syntactic features (i.e. agreement failure of the emphatic).

The treatment of '*in*' as demonstrative is confirmed by Karimi (2005: 92), Soheili-Isfahani (1974), and Dabir Moghaddam (1982) [the last two citations are referenced in Karimi (ibid)]. They suggest that subordinate extraposed clauses are indeed headed by an NP viz. the demonstrative *in*, as in (45).

(45) a. (in) vāzeh-e [$_{CP}$ke kimiyā doxtar=e xubi-(y)e]. (Extraposition)
(this) clear-be.PRES.3SG that Kimiya girl=EZ good-be.PRES.3SG
'It is clear that Kimiya is a good girl.'

b. [$_{DP}$in [$_{CP}$ke kimiyā doxtar=e xubi-(y)e]] vāzeh-e. (Non-extraposition)
b′. *[$_{CP}$ke kimiyā doxtar=e xubi-(y)e] vāzeh-e

The obligatory presence of '*in*' in (45b) and the possibility that the demonstrative in Persian can replace the whole DP, as illustrated in (46), give evidence that *in* is an anaphoric expression in the subject position.

(46) in vāzeh-e.

this clear-be.PRES.3SG

'It is clear.'

From an RRG perspective, the sentence in (45a) is an example of daughter clausal subordination as it has been indicated in figure 4.13. The sentence in (45b), on the other hand, represents an example of ad-core NP subordination (Van Valin and Lapolla 1997:509) where the demonstrative is placed in the NUC_N and the relative clause is adjoined to the $CORE_N$. The layered structure of the clause in (45) is given in figures 4.14 and 4.15.

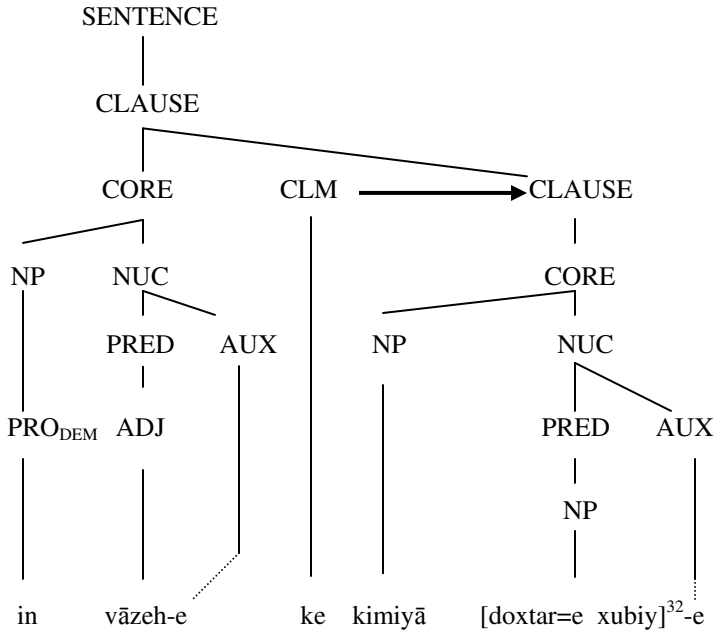


Figure 4.14 Daughter clausal subordination in extraposed sentences in Persian

Van Valin and Lapolla (1997: 527) assert that since the expletive pronoun contributes to the semantic interpretation of the sentence in the way that it refers to a *that*-clause outside the core, it must be part of semantic representation. This is the case with the Persian extraposed construction where '*in*' refers to the subordinate *ke*-clause; thus participates in the semantic representation, whereas in Persian cleft construction, '*in*' is not part of

[32] . I did not get into the layered structure of the NP *doxtar=e xub* 'a good girl' and considered it as a complex NP predicated of *kimiya* in the semantic representation,

semantic representation because of its very syntactically as well as semantically dummy nature, as discussed in section 4.3. Further, the demonstrative indicates the function of the *ke*-clause as actor or undergoer. Logical structures of (45a) and (b) are given in (47) and (48) respectively.

(47) **be´** ([3SG DEM$_i$, [**be´** (Kimiya, [**good girl´**])]$_i$], [**clear´**])

Undergoer undergoer

for the first **be´** for the second **be´**

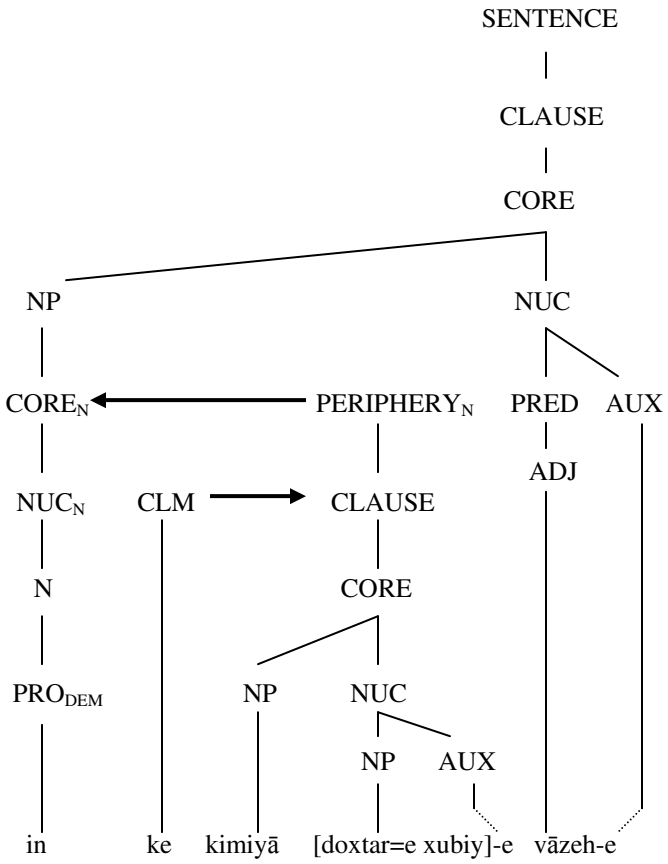


Figure 4.15 Ad-core NP subordination in Persian

(48) **be´** ([**be´** (3SG DEM, [**be´** (Kimiya, [**good girl´**])])], [**clear´**])

The interesting point about the logical structure in (48) is that the predicate **be´** has been used for three times. The first and third predicates represent the logical structure belonging to attributive sentences (see 29) and the second predicate represents the logical structure for a complex NP. In RRG, it is common to underline the nominal nucleus to differentiate it from attributive sentences. This difference is shown in (49).

(49) a. gol zibā ast.
flower beautiful be.PRES.3SG
'Flower is beautiful.'
a´ **be´** (gol, [**beautiful´**])
b. gol=e zibā
flower=EZ beautiful
'the beautiful flower'
b´. **be´** (gol, [**beautiful´**])

Since ad-core NP subordination differs from the daughter clausal subordination regarding the sentences in (45), I assign a particular syntactic template to it in figure 4.16[20].

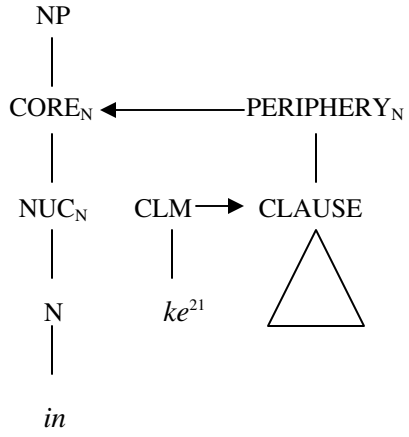
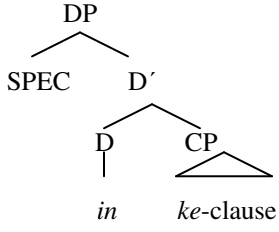


Figure 4.16 Syntactic template for ad-core NP subordination in Persian

20. The RRG projection of Persian ad-core NP subordination patterns with the minimalist approach to the analysis of the complex NPs headed by *in* as determiner.



To provide further proof in support of '*in*' differentiation in the Persian cleft and extraposed constructions, I employ a transformational test, partly similar to the one proposed by Calude (2008), according to which the process of reinstating the extraposed clauses to its original position will result in grammaticality, while doing the same to the cleft clause will bring about ungrammaticality. Consider the reinstatement process in (45a), repeated below as (50), and in (1), repeated as (51).

(50) Reinstatement test:

↓

in vāzeh-e ke kimiyā doxtar=e xubi-(y)e.

↓

in ke kimiyā doxtar=e xubi-(y)e vāzeh-e. = grammatical result ⟹ Extraposition

(51) Reinstatement test:

↓

in farhād bud ke širin=rā dust dāšt.

↓

?? in ke širin=rā dust dāšt farhād bud. = ungrammatical result ⟹ Clefting

One would claim that the result of the reinstatement test on (51) is acceptable, but a far closer look reveals that its oddity will be removed if we take the sentence in (52) into consideration. In other words, the grammatical form is a pseudocleft sentence.

(52) un ke širin=rā dust dāšt farhād bud.
that that Shirin=OM love have.PAST.3SG Farhad be.PAST.3SG
'The one who loved Shirin was Farhad.'

---

21. Aghai (2006: 37) believes that ke in Persian is of two kinds: property-denoting and proposition-denoting. The property-denoting *ke*-clauses are those in which *ke* functions as relative pronoun and the clause modifies the NP occurring before *ke*. In proposition denoting *ke*-clauses, *ke* functions as complementizer followed by a subordinate clause containing a proposition e.g. the clauses which follow the perception verbs like *fekr kardan* 'to think' and *hads zadan* 'to guess', etc.. It appears that RRG treats equally both as clause linkage marker. This claim sympathizes with Karimi(2001: 72) that rejects relative pronouns to exist in Persian, claiming that the complement clauses are formed by *ke* as relative complementizer. Meanwhile, Aghai (Ibid) considers '*in*' in the extraposed constructions to be a dummy DP, following Bayer (1997), that is coindexed with the CP in postverbal position.

(i) pesar-e [$_{DPi}$ in]=o mi-dun-e [$_{CPi}$ ke bābā=š bikār-e].
boy-DEF this=OM IMPF-know.PRES-3SG that father=PC.3SG unemployed-be.PRES.3SG
'The boy knows that his father is unemployed.'

Aside from the extrapositional sentences, other sentences can be found bearing structural similarity to the cleft sentences. Again this is information structure that can help us distinguish between them, although syntactic features sometimes prove helpful. Consider the examples in (53) and (54).

(53) a. vasat=e rāhrou bud-**Ø** ke nedā zang zad.
middle=EZ doorway be.PAST-**3SG** that Neda ring hit.PAST.3SG
'It was in the middle of the doorway that Neda Rang.'

(54) vasat=e rāhrou bud-**am** ke nedā zang zad
Middle=EZ doorway be.PAST-**1SG** that Neda rang.
'When I was in the middle of the doorway, Neda Rang'

The only criterion which enables us to distinguish between the two sentences is the bound morpheme marked on the copula. In (53), the agreement marker is a 3rd person zero morpheme, indicated here for the clarity sake, while it is overt 1st person morpheme. According to the formulization of cleft constructions in (25), the 3rd person agreement morphology signals that a PP or an ADV has been clefted. As for (54), I consider it to be a kind of fronted adverbial construction, representing a sentential subordination which involves sentences or clauses occurring in the right- or left-detached position (Van Valin 2005: 192). The relation between of the adverbial subordinate clause to the core it modifies is the same as that of a peripheral PP modifying a core. Therefore, since a fronted peripheral PP occurs in the LDP, a fronted adverbial clause can appear, by comparison, in the same position. Van Valin and Lapolla (1997: 228) argue that the elements in the LDP are always topical; hence outside of the actual focus domain. Regarding all this, I represent the syntactic and focus structure of (53) and (54) in figures 4.17 and 4.18. The semantic representations will be also given in (55) and (56) in sequence.

(55) **be´** ([**be-LOC´** (x_i, [**do´** (Neda, [**ring´** (Neda)])] $_j$)], [**be-in middle of´** (rāhrou, y_j)]$_i$)

(56) **be-in middle of´** ([rāhrou, 1SG)], [**do´** (Neda, [**ring´** (Neda)])])

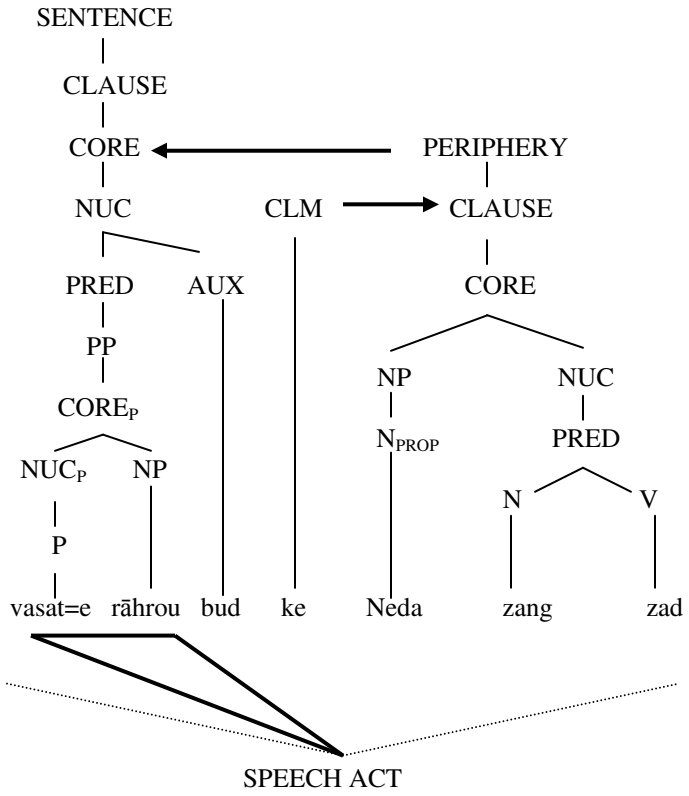


Figure 4.17 information structure- Syntax interface in (53)

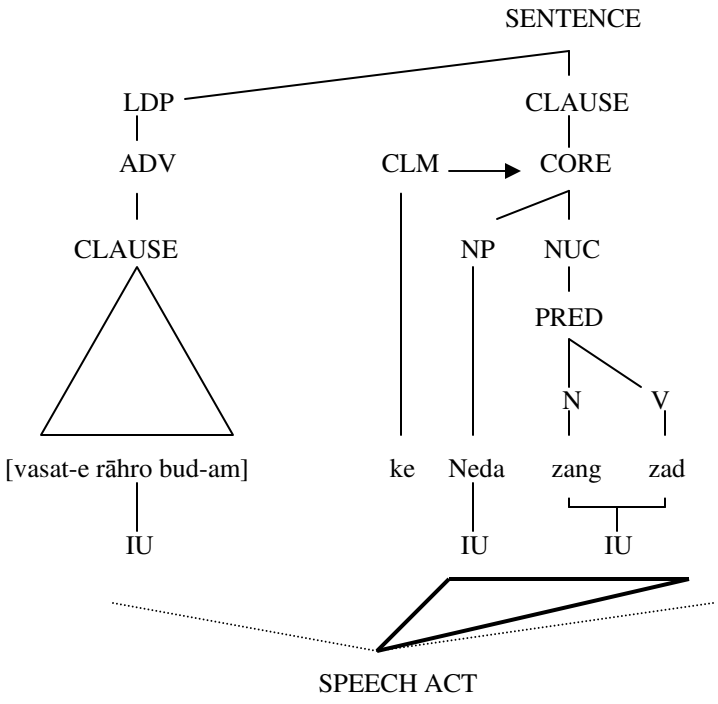


Figure 4.18 Information structure-syntax interface in (54)

The potential focus domain in figure 4.18 does not extends over the fronted adverbial clause because it is not the direct daughter of the clause immediately dominated by IF operator (see (61), chapter 3). The actual focus domain falls on the whole clause, that is, any item in it can be actually brought into focus. Crucially, *ke* appears to be able to emphasize any NP or the entire clause in Persian as an emphatic (Windfuhr 1979: 71).

4.6. Grammatical relations in Persian clefts

As mentioned in section 3.5, RRG takes a somewhat different view of grammatical relations, which are defined in terms of the neutralization of semantic macroroles for syntactic reasons in specific constructions. To begin with, I get into the determination of the PSA in sentences in which NPs are clefted. Since clefts consist of two clauses, it seems that each has its own PSA. In Persian cleft constructions, there is neutralization with respect to the omitted argument in the subordinate cleft clause, i.e. both actor and undergoer can be regarded as PSA, for either can function as clefted constituent. This means the PSA in the cleft constructions is a syntactic pivot. Given that *in* cannot occur when the clefted constituent is not an NP, and it is optional with clefted NPs, it would be best to take the form without *in* as basic.

(57) a. farzād$_i$ bud ke [$_i$____] xaste šod. (Undergoer of an intransitive verb)
Farzad be.PAST.3SG that tired become.PAST.3SG
'It was Farzad who became tired.'

b. mehrdād$_i$ bud ke [$_i$____] dar raft. (Actor of an intransitive verb)
Mehrdad be.PAST.3SG that PREV go.PAST.3SG
'It was Mehrdad who ran away.'

c. farhād$_i$ bud ke [$_i$____]sar=eš=o šekast. (Actor of a transitive verb)
Farhad be.PAST.3SG that head=PC.3SG=OM break.PAST.3SG
'It was Farhad who broke his head.'

d. nedā$_i$ bud ke bačče-hā [$_i$____] mi-zad-an=eš
(Undergoer of a transitive verb)
Neda be.PAST.3SG that kid-PL IMPF-hit.PAST-3PL=PC.3SG
'It was Neda that the kids hit.'

The clefted constituents, however, is a double controller because it controls both the core-internal phenomenon viz. verb agreement in the matrix clause, and it controls the interpretation of the missing argument in the linked core. As for the PSA when the clefted constituent is a prepositional phrase or an adverbial, I claim that there is no PSA in the matrix clause because PSAs must be core-level phenomena, and also because the agreement is not marked on the copula (unless the clefted constituent is an argument adjunct prepositional phrase). The cleft clause yet has a PSA which controls the verb agreement in it. I discussed that '*in*' in NP-clefted constructions performs emphatically as the copula fails to agree with it; thus I can lay down the following rules with respect to case assignment in Persian cleft constructions.

(58) Case marking rules for Persian NP-clefted constituent constructions:

PSA: double syntactic controller in the matrix core and syntactic pivot (the missing argument)

a. Matrix core

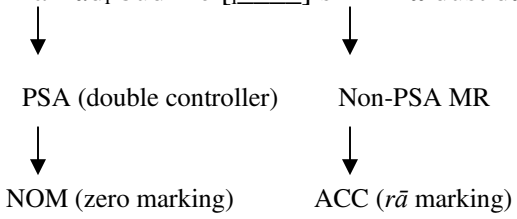
Assign nominative case to the PSA, which is zero marked (even if the emphatic *in* is present).

b. Linked core

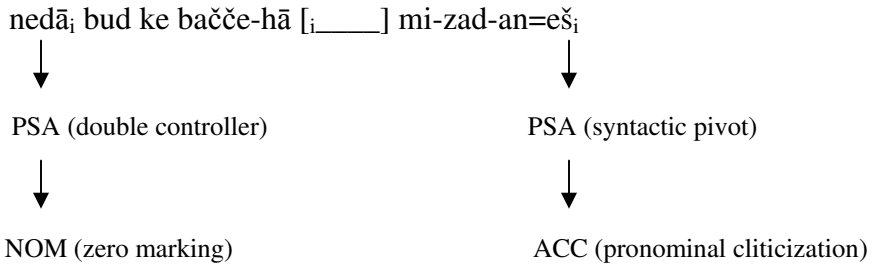
1. Assign accusative case (=*rā*) to the non-PSA macrorole in the linked core when it is not identical with the PSA in the matrix core, or
2. assign accusative case (pronominal cliticization) to the PSA in the linked core (syntactic pivot) when it is identical with the PSA in the matrix core (a pronominal clitic appears on the subordinate predicator, coindexed with the PSA in the matrix core).

(59) Application of the rule in (a) and (b1) to (1):

in farhād$_i$ bud ke [$_i$____] širin=**rā** dust dāšt.



(60) Application of the rule in (a) and (b2) to (57d)



Interestingly, the PSA in the matrix core turns out to be a 'triple controller': it controls the verb agreement in the matrix core, it controls the syntactic pivot in the linked core, and finally it controls the cross-reference with the pronominal clitic on the linked verbal core.

4.7. Linking algorithm in Persian clefts

In this section, I will capture the relation between the syntactic and semantic representations in Persian clefts through the bi-lateral linking algorithm in RRG. The efficiency of linking algorithm has been displayed in Persian simple sentences in Rezai (2003). Now I will test its workability in regard to the Persian complex cleft sentences to see whether the same linking accounts for the linguistic phenomena in cleft sentences or some modifications should be involved.

4.7.1. Semantics to syntax

At this stage, I will start with the semantics-to-syntax linking in the example (1), repeated below in (61).

(61) in farhād bud ke širin=rā dust dāšt.

The speaker would utter (61) to make the intention clear that the person who loves *Shirin* is *Farhad*, with respect to the specificational function of cleft constructions. As the first step in the semantics-to-syntax linking (ch.3, 74-1), the logical structure of a specificational sentence must be retrieved from the lexicon, that is **be**´(x, y). X stands for

the cleft clause and y for the clefted constituent. As mentioned before, there is a lexically unfilled argument in the logical structure of the cleft clause which is specified by coindexation with the second argument of the specificational predicate. It is also necessary to determine the cognitive status of the arguments along with illocutionary force and the verb tense of the sentences because they are entangled with the communicative intent of the speaker (Van Valin 2005: 137). The output of this stage is shown in (62).

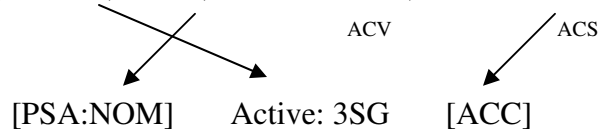
(62) <DEF<PAST<**be´** ([**love´** (x_i, Shirin)], $Farhad_i$)>>>
IF *TNS* ACT ACS

The second step (see Ch.3, 74-2) involves identifying the actor and undergoer of the predicates in the logical structure; macroroles for **be´** and **love´**. Since the former is a state predicate, it has only an undergoer argument. Nonetheless, Pavey (2004: 248) argues that we cannot assign any macrorole to the first argument of **be´** as it is a clause, so it cannot code a thematic relation. As for the second argument, it cannot take macrorole assignment because of its predicative function, i.e. pragmatic predicate. However, it seems that we should determine the macroroles in the embedded logical structure. According to actor-undergoer hierarchy (figure 3.14), the unvalued x is actor with the *shirin* as the undergoer. The referent of x is established through coindexation with the second argument of **be´**. The output is given in (63).

(63) …**be´** ([**love´** (x_i, UND: Shirin)], ACT: $Farhad_i$)
ACV ACS

Next step (see Ch. 3, 74-3) is associated with the PSA selection, case marking rule, and agreement. Given that Persian is a nominative-accusative language, the PSA is the actor in active voice. The other macrorole takes the accusative case, hence *rā* marked. (64) represents the output of the third step.

(64) …**be´** ([**love´** (x_i, UND: Shirin)], ACT: $Farhad_i$)



The forth step concerns the retrieval of the syntactic template of the Persian cleft constructions from the syntactic inventory. The syntactic template assignment must meet the principles in syntactic template selection, repeated below in (65).

(65) a. *Syntactic template selection principle (Van Valin 2005: 130):*

The number of syntactic slots for arguments and argument-adjuncts within the core is equal to the number of distinct specified argument positions in the semantic representation of the core

b. *Language-specific qualifications of the principles in (a):*

1. All cores in the language have a minimum syntactic valence of 1.
2. Argument-modulation voice constructions [e.g. passive construction] reduce the number of core slots by 1.
3. The occurrence of a syntactic argument in the pre/postcore slot reduces the number of core slots by 1 (may override (1) above).

Persian is a null-subject language, so it need not follow the qualifications in (b1). The syntactic template for NP-clefted constituent has been shown in figure 4.7, which does not flout the principle in (65a) if we consider a universal qualification, proposed by Pavey (2004: 250), given in (66). The emphatic *in* does not enter into the semantic representation of the sentence, so it must not occupy a core slot in the syntactic representation. To this end, it stands out of the matrix core.

(66) The occurrence of a core in an externally-headed relative clause construction in which the head noun *or* clefted constituent is a semantic argument of the predicate in the core reduces the number of core slots by 1.

Finally, all that remains is to link the semantic arguments in the logical structure to the syntactic slots in the syntactic representation. Notably, there must be no unlinked argument so that the completeness constraint is seen. The constraint is repeated below.

(67) *Completeness constraint (Van Valin 2005: 129):*

All of the arguments explicitly specified in the semantic representation of a sentence must be realized syntactically in the sentence, and all of the referring expressions in the syntactic representation of a sentence must be linked to an argument position in a logical structure in the semantic representation of the sentence.

The outputs of the forth and final steps are given in figures 4.19 and 4.20.

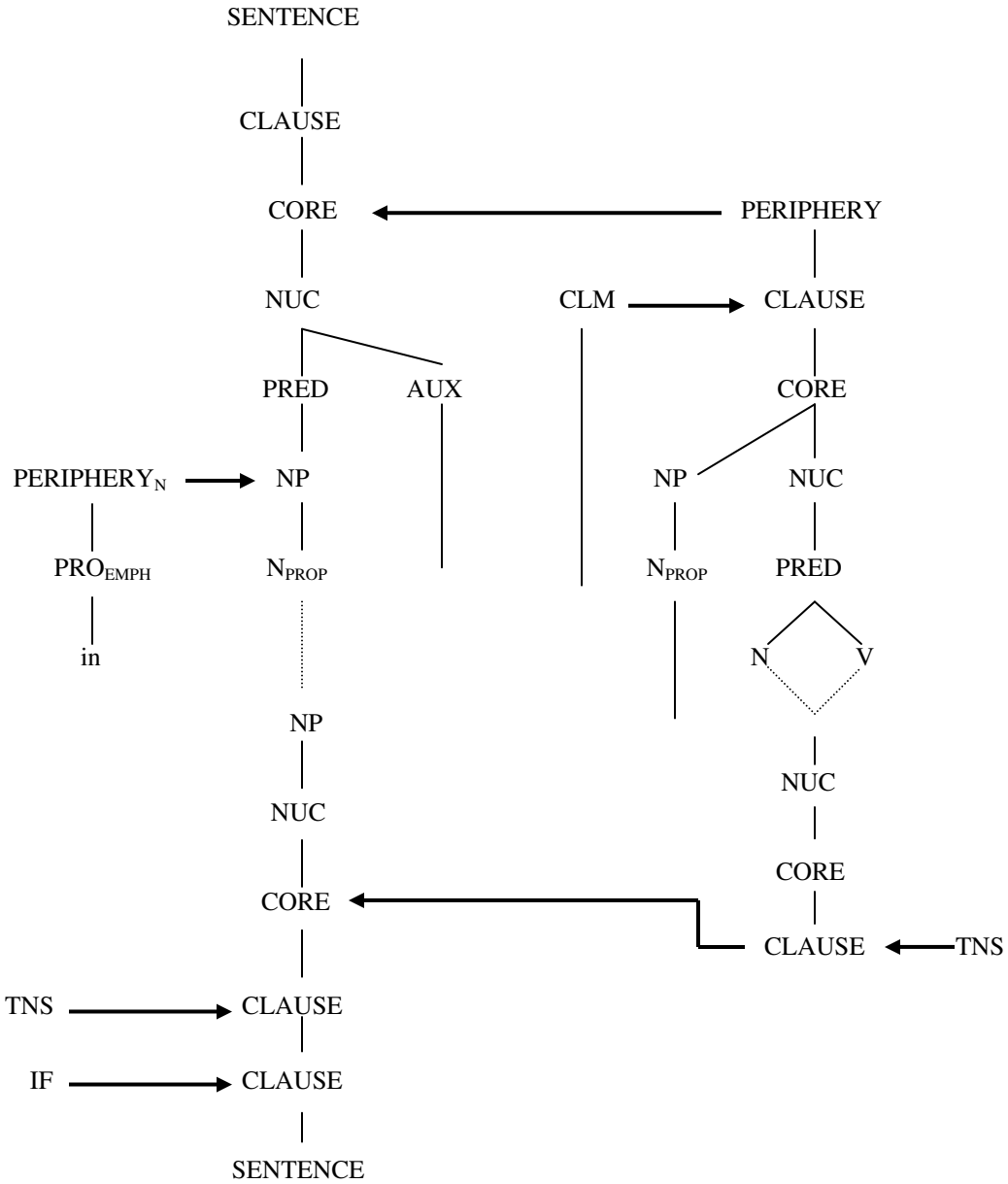


Figure 4.19 Output of t step 4 of the semantics-to-syntax linking in (61)

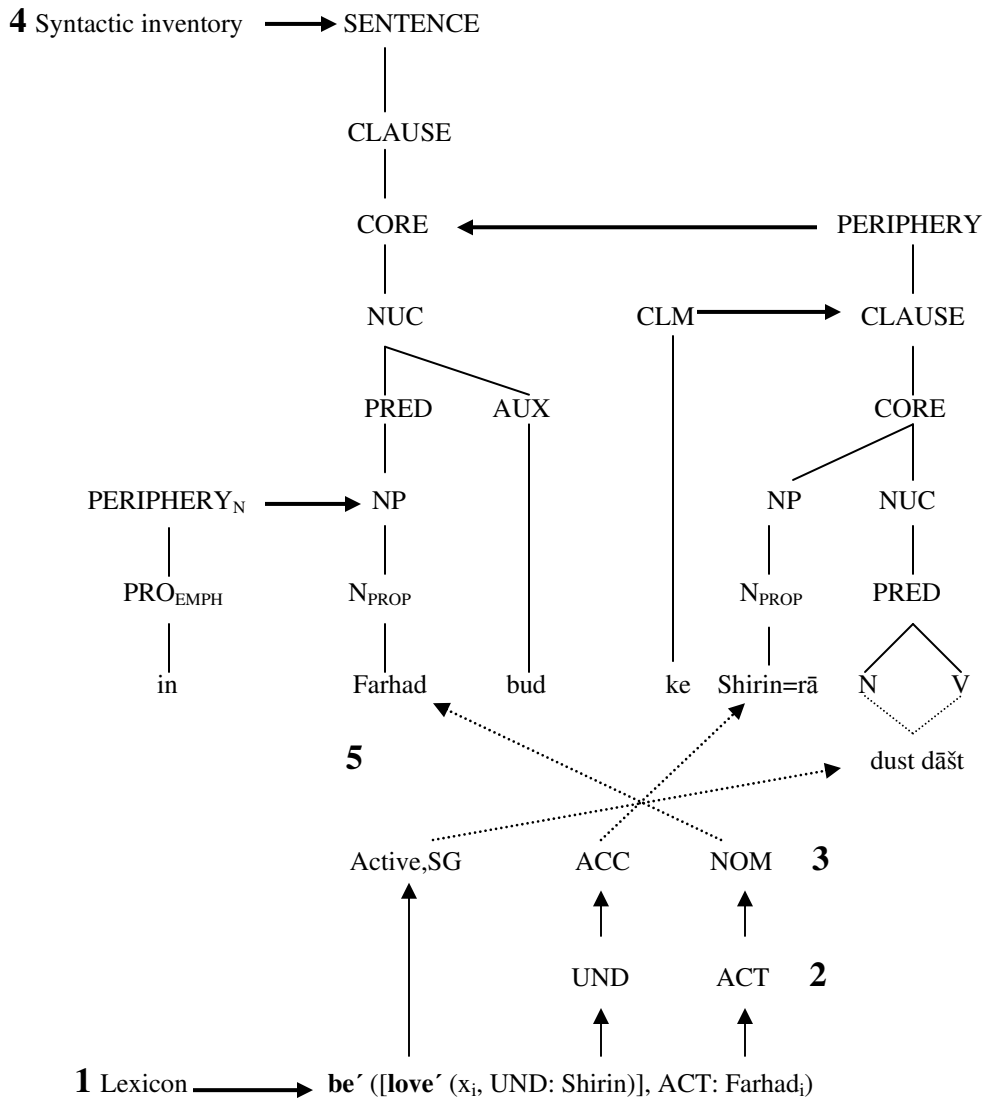


Figure 4.20 The semantics-to-syntax linking in (61)

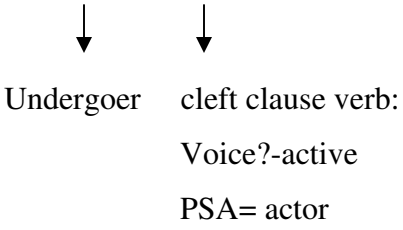
It was pointed out that clefts are bi-partition sentences with a single semantic predicate. So, the second argument of **be´** is the first argument of **love´**, but since there is no extra syntactic slot in the syntactic representation of the cleft clause, it should be linked to the precopular slot as pragmatic predicate.

4.7.2. Syntax-to-semantics linking

Now I will get into the syntax-to-semantics linking in (65). Firstly, I determine the macrorole in the sentence (see ch. 3, 75-1). The copular verb in the matrix clause is not predicative, and since the element in the nucleus has no semantic arguments, there are no

macroroles to assign for this clause (Pavey 2004: 258). The verb in the cleft clause is active, so the actor is the PSA, because Persian is a nominative-accusative language. The actor is not included in the cleft clause and only the undergoer can be specified. The output of the first step is followed in (68).

(68) in farhād bud ke širin=rā dust dāšt.

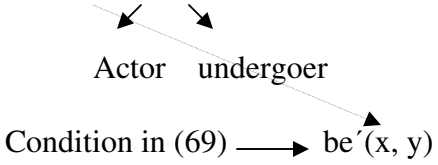


The second step involves retrieving from the lexicon the logical structure of the cleft clause verb with the macroroles assigned in it. At this time, it is necessary urgent to consider a condition, proposed by Pavey (2004: 257).

(69) Retrieve from the lexicon a specificational LS and substitute the LS of the verb in the cleft clause for the 'x' argument.

Output of the second step as well as the condition in (69) is summarized in (70).

(70) love´ (w , z)



At the third step, all the arguments in the step 1 are linked to the arguments in step 2 until all core arguments are linked. Pavey (2004: 257) considers another condition governing the linking procedure in the cleft sentences, which is given in (71).

(71) Coindex the 'y' argument in the specificational LS with the constituent in the cleft clause LS linked to the clefted constituent.

Following the step 3 *Shirin* is linked to the z argument in the logical structure of **love´**; then, y standing for the clefted constituent is coindexed with the first argument of **love´**, i.e. w to meet the condition in (71). As we know, all the syntactic core argument need to be linked to the semantic argument to keep in line with the completeness constraint in (67). In so doing, *Farhad* is linked to w in the logical structure of embedded predicate. The linking can be shown in figure 4.21.

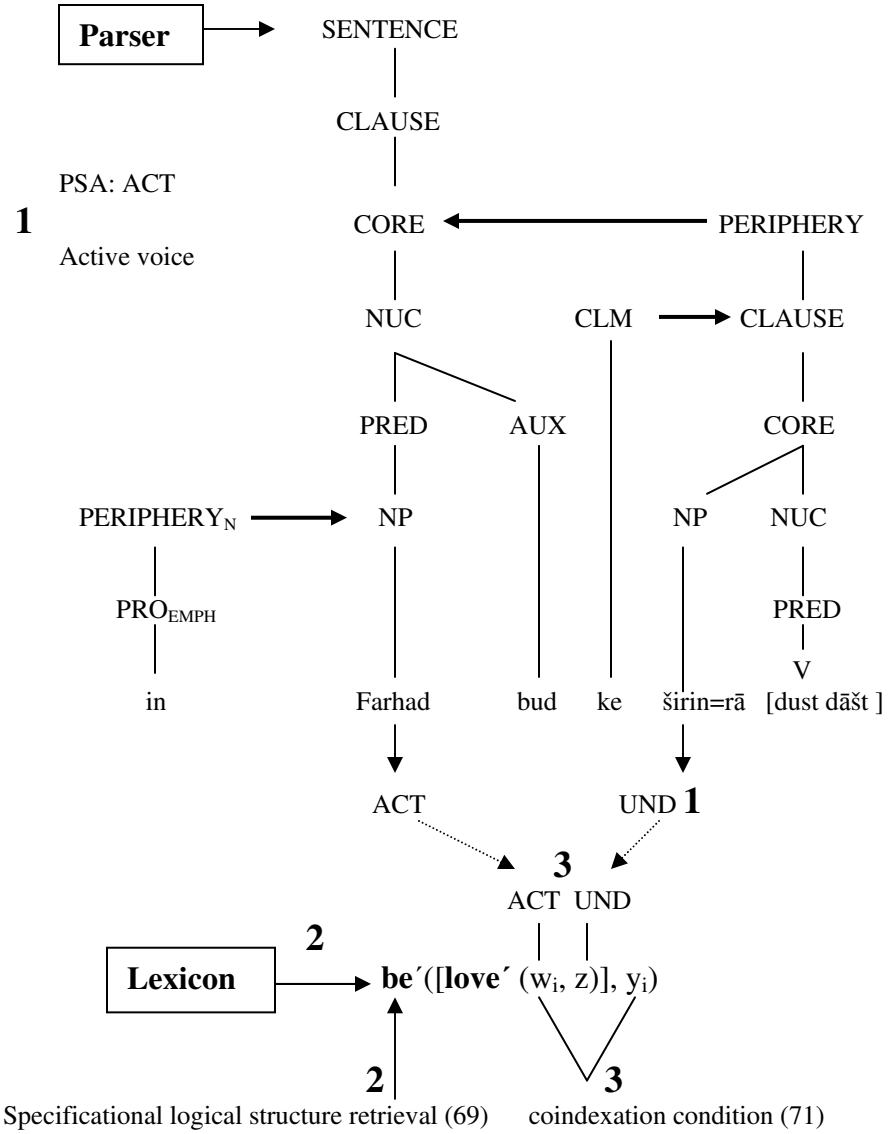


Figure 4.21 The syntax-to-semantics linking in (61)

In the end, I find it necessary to represent the constructional templates for Persian cleft constructions, in case the clefted constituent is an NP, a PP, or an ADV.

Construction: Persian cleft construction with an NP as the clefted constituent
Syntax: Juncture: core Nexus: subordination Construction type: Specificational Unit template(s): Optional emphatic '*in*', pragmatic predicate, copula, cleft clause, qualified by the principle in (66) PSA: double controller in the matrix core and syntactic pivot in the linked core Linking: the conditions in (69) and (71) need to be met in syntax-to-semantics linking
Morphology: *Ke*: optional in informal register Copula: agrees with the clefted constituent both in number and person *in*: a discourse strategy highlighting the focus marking function of the construction
Semantics: Specifying a value for a variable with respect to the logical structure **be´** ([**pred´** (…x $_i$…,)], y $_i$); y is the pragmatic predicate coindexed with the unspecified value in the variable
Pragmatics: Illocutionary force: unspecified Focus structure: narrow focus on the clefted constituent (NUC of matrix core) or element(s) within it

Table 4.4 Constructional template for Persian NP-clefted constituent construction

Construction: Persian cleft construction with a PP or an ADV as the clefted constituent
Syntax: Juncture: core Nexus: subordination Construction type: Specificational Unit template(s): pragmatic predicate, copula, cleft clause, qualified by the principle in (66) PSA: syntactic controller in the linked core Linking: the conditions in (69) and (71) need to be met in syntax-to-semantics linking
Morphology: *Ke*: optional in informal register Copula: default 3rd singular morphology
Semantics: Specifying a value for a variable with respect to the logical structure **be´** ([**pred´** (…x $_i$…,)], y $_i$); y is the pragmatic predicate coindexed with the unspecified value in the variable
Pragmatics: Illocutionary force: unspecified Focus structure: narrow focus on the clefted constituent (NUC of matrix core) or element(s) within it

Table 4.5 Constructional template for Persian PP- or ADV-clefted constituent construction

4.8. Summary

Chapter 4 was concerned with the analysis of Persian cleft constructions. It was discussed that RRG can clear up unambiguously the complexity of Persian clefts as an asymmetrical grammatical construction the semantic and syntactic properties of which are not compositionally iconic. Firstly, I went through the syntactic structure of Persian clefts and illustrated that the copula as well as the cleft pronoun are in fact syntactic devices that bring into focus a semantic argument of the cleft clause. '*in*' in the structure of clefts is an emphatic marker which does not modify the syntactic structure of the sentence because of the disagreement with the copula, but it contributes to the informational account of the construction. Therefore, I ended up with the appreciation

that emphatic and anaphoric '*in*' in Persian discourse should be distinguished, as Dabir Moghddam (1990, 1992) speaks of the necessity to differentiate between the syntactic behaviour of the postposition *rā* as the marker of definite direct objects and its discourse function as the marker of secondary topicalization. I also mentioned that the clefted constituent can be NPs, PPs, and ADVs, although the emphatic marker is omitted if the clefted constituent is a PP or an ADV and the agreement default morphology appears to be 3rd singular. The logical structure of Persian clefts represented explicitly the specificational function in the semantic structure through the coindexation of the second argument of the specificational predicate with an element in the logical structure of the embedded predicate. Despite that the clefted constituent is a semantic argument, interpreted referentially in the logical structure of the cleft clause, it has a predicative function playing as pragmatic predicate in the information structure of the cleft sentence. This absolutely stems from the non-isomorphic nature of the cleft constructions. Persian clefts align with the communicative competence of the speakers in the marked expression of the propositions that otherwise can be understood as the unmarked subject-predicate ordering; consequently, the clefted constituent bears a narrow focus relation to the proposition contained in the cleft clause.

4.9. Concluding remarks

This RRG-centric thesis was written up in order to bridge the gap with respect to the structural-functional analysis of Persian grammatical constructions. Cleft construction was deliberately selected to show that the exploration of syntactic, semantic, and pragmatic aspects of the construction requires linguistic approaches that take a non-derivational treatment toward the analysis of cleft sentences. Derivational approaches to cleft construction such as the expletive or extrapositional analyses of generativist scholars claim that cleft constructions are derived from their pseudocleft or non-cleft counterparts. These approaches most likely put a blind eye on the relations between the clefted constituent and the cleft clause, or that between the internal constituents of the matrix clause. As for the RRG, it adopts a holistic view of all the syntactic, semantic, pragmatic-informational as well as cognitive features within a grammatical construction. Clefts are emblem of such linguistic interface that needs to be accounted for by theories that pick up

an interest in interactional linguistics. The universal, semantic motivation of RRG such as the argument-predicate logical structure and the language-specific pragmatic motivations such as the existence of clause-external positions, i.e. PrCS, PoCS, LDP, and RDP along with the universal syntactic aspects of the clause empower RRG to declare its efficiency in regard to the so-called long-lasting unresolved facets of Persian discourse grammar. It is also equipped with linking algorithm that mirrors in an ingrained way such linguistic interface in the production and comprehension of speech process.

It seems proper to consider the research questions once again:

3. To what extent can the RRG framework describe and explain the syntactic, semantic and pragmatic properties of Persian cleft constructions?
4. How can we formalize and elaborate the discourse function of Persian cleft constructions in terms of information structure as independent module of grammar in RRG?

It was made clear in the entire thesis that clefts are bi-partition sentences and the query how to account for their non-compositionality of their semantic and syntactic properties roots in the interaction of the syntax, semantics, and pragmatics. The presented analysis in chapter 4 underlines that RRG is a 'well-qualified' theory of language that is sophisticated enough to cope with the perplexities in Persian clefts. It was also postulated that the elaboration on the discourse function of Persian clefts is grasped by the notion of pragmatic predicate in the way that the optional presence of the emphatic marker *in* and the copula affect only the information structure of the sentence, which is justified by the communicative competence of Persian speakers. Furthermore, the clefted constituent can trigger the agreement on the copula not the initially-occurring cleft pronoun. So, this initial occurrence can be a discourse strategy on the speaker's side to intensify the focus marking function of clefts. That is why it is projected as PRO_{EMPH} in the periphery of the clefted NP. Its peripheral position indicates it arbitrariness in the discourse. Apparently, the crosslinguistic studies of grammatical constructions within RRG framework put an end to Sornicala's obsession where she writes, "the interplay of these levels of analysis [i.e. syntax, semantics, and pragmatics] still remains one of the most puzzling in

linguistic research" (1988: 378). To this end, I would prefer to represent the interplay of the afore-mentioned domains in figure 4.22.

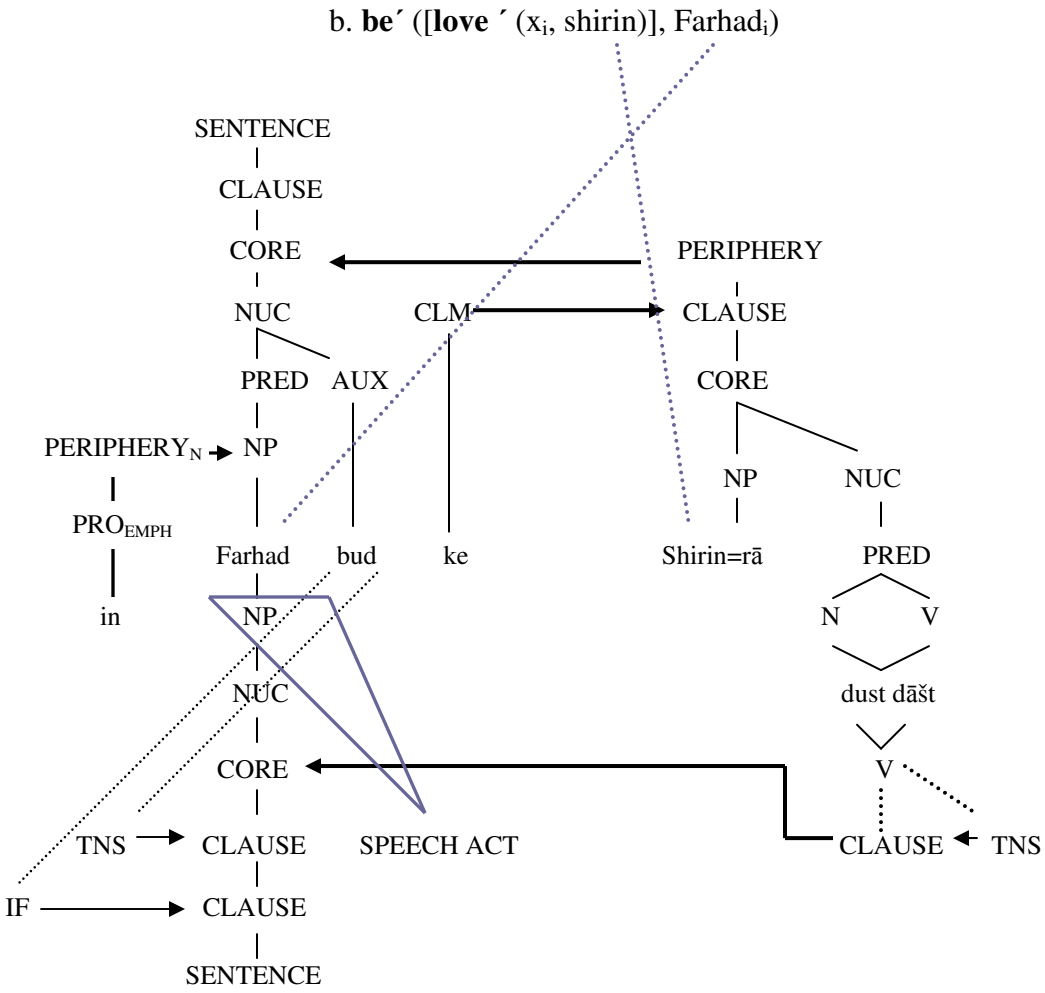


Figure 4.22 Syntax-semantics-pragmatics interface in Persian clefts

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