Reference, Deixis and Focus in Hittite. The demonstratives ka- "this", apa- "that" and asi "yon"
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Citation for published version (APA):
Goedegebuure, P. M. (2003). Reference, Deixis and Focus in Hittite. The demonstratives ka- "this", apa- "that" and asi "yon"

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2. Deixis, Discourse and Reference

2.1. Introduction

This chapter provides the necessary theoretical background for the description of Hittite referring expressions\(^4\). In recent theoretical literature on reference two different models are employed to explain the use of referring expressions in natural language. In outline they can be described as the *geographical*\(^5\) (2.2.1) and the *cognitive* approach (2.2.2)\(^6\). In this chapter I will present both approaches. As we will see, both ways of viewing the use of referring expressions can easily be combined, without the need to reject the one or the other (2.3.). In addition I will present the theory of information structure of the sentence as advocated and further developed by Lambrech 1994 (2.2.3.) and discuss it together with the other approaches in 2.3. This theory, which concentrates on certain pragmatic functions at sentence level, is of great use for a more complete description of the Hittite pronominal system. The resulting modular theory as outlined in this chapter will be applied to the Hittite pronominal and demonstrative system in chapter 3. The information on the expressions contained in chapter 3 is collected from the chapters on the individual pronomes and demonstratives in part II *Deixis*, the chapters 4 (The Distal Demonstrative *asi*), 5 (The Medial Demonstrative *apa*-), 6 (The Proximal Demonstrative *ka*-), and part III *Focus*, chapters 7, 8 and 9 (On *apa*- as Emphatic Pronoun).

Before continuing with the description of the approaches on reference, I here present a global introduction to the subject based on the traditional account of deixis as discussed by Levinson 1983: 61ff.

Prototypically, a linguistic expression which refers to the context of the utterance, the speech-setting, is called *deictic*. According to Lyons 1977: 637 deixis consists in ‘the location and identification of persons, objects, events, processes and activities being talked about, or referred to, in relation to the spatio-temporal context created by the act of utterance and the participation in it, typically, of a speaker and at least one addressee’. Take the following part of a conversation:

\[2.1\] There you are! I have been waiting here for an hour.

The context of the utterance is necessary in order to establish the intended referents. We cannot correctly interpret this utterance if we do not know who the Addressee and the Speaker are. Furthermore, *here* and *for an hour* only have meaning if we know where and at

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\(^4\) For an overview of studies on reference in discourse from different kinds of angles and frameworks see Yan Huang 2000.

\(^5\) Term coined by Ariel 1990: 5.

\(^6\) Yan Huang 2000 discusses several models dealing with discourse anaphora: the topic continuity or distance-inference model (o.c. 303-309), the hierarchy model (o.c. 309-314) and the cognitive model (o.c. 314-318).

Before presenting his own pragmatic model (o.c. 318-329) he concludes that underlying all these models are some cognitive or pragmatic principles (o.c. 308, 314). I therefore only distinguish between the geographical and cognitive approaches.
what time the utterance took place. Familiarity with the Speaker, Addressee, Time and Place, that is, the context of the utterance, is necessary for recovering the referents. Anaphorically used expressions on the other hand, refer to entities or referents which have been mentioned or are going to be mentioned in the utterance or text itself. Knowledge of the speech situation is not necessary in order to find the entity to which the expression refers:

2.2 Unprepared for the speed and ferocity of the Hittite advance, Tusratta could offer no resistance. He had no option but to flee the capital, with whatever troops he could muster, before it fell to the Hittites (Bryce 1998: 175)

The pronouns he and it both refer to entities which have been referred to before in this piece of narration. The masculine pronoun he points at the person named Tusratta, and the neuter pronoun it to the referent of the definite Noun Phrase the capital. The latter expression is also anaphoric, and refers to the city Wassuganni, mentioned in the clause preceding this passage.

Example 2.1 shows already three types of deixis. Personal deixis, seen in the expressions you and I, deals with the encoding of the roles of the participants in the speech event. In Hittite the role of the Speaker is grammaticalized in the pronoun uk / ammuk ‘I’ and in the verbal ending if the Speaker is the subject of a clause, the role of the Addressee in zik / tuk ‘you’, and apas and asi ‘he, she, it’ are used for persons who are neither speaker nor addressee. When we are dealing with spatial locations relative to the speech participants, it is called Place deixis. English this and that, and here and there are grammaticalizations of proximal location (near the speaker) and distal location (not near speaker). Some Hittite equivalences are the deictic adverbs ka ‘here’, apiya ‘there’, and kas ‘this one (nom.)’ as the proximal demonstrative, apas ‘that one (nom.)’ as a non-proximal demonstrative7. Time deixis is concerned with the location of entities or events in time relative to the time at which the utterance is expressed. Languages may grammaticalize this relative location in time by means of deictic adverbs of time, like English now, then, Hittite kinun(a) ‘now’, apiya ‘then’, or tense. Two further types of deixis are Discourse Deixis and Social Deixis. Expressions belonging to the field of Discourse Deixis refer to parts of the discourse itself: English this in Listen to this: … and Hittite kissan ‘in this (as will be described) manner’ and enissan ‘in that (as just described) manner’ are discourse deictic expressions. Levinson also includes such discourse notions as topic/comment, main storyline etc. (Levinson 1983: 77n, 88-9). The final type of deixis, Social deixis, has to do with the encoding of social distinctions between Speaker and Addressee. In Hittite official correspondence we often encounter the use of family terms to address persons who are not (necessarily) family members. Persons of equal rank call each other ŠES-YA ‘my brother’, and someone who occupies a relatively higher position in society is addressed with ABI-YA ‘my father’ or AMA-YA ‘my mother’.

In the following discussion I will concentrate on Anaphora, Place Deixis, Discourse Deixis and Personal Deixis, but the latter only in so far as it concerns third person reference.

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7 The use of apa- as a demonstrative will be discussed in chapters 3 and 6, and as an emphatic pronoun in chapters 3 and 7-9.
2.2. Discourse, Reference and Information Structure

In this section the two main approaches to reference in discourse are introduced, together with a theory on Topic and Focus on sentence level. A more detailed description of a combination of the three approaches will be presented in 2.3.

A major problem in the study of reference is the fact that especially the anaphoric demonstratives are rather neglected. This is quite problematic if one needs a framework describing the use of demonstratives. In most reference works and descriptive grammars the discussion is restricted to the deictic use of demonstratives and to the observation that demonstratives can also be used anaphorically (Himmelmann 1997: 2). In the same vein studies that focus on reference in discourse have noted the same without explaining how these demonstratives are posited in relation to the other referential expressions, although DiesSEL 1999: 96 lists several studies which shed some light on this problem. However, most of these studies focus on a sub-set of referring expressions (Linde 19798; Ehlich 19829; Givón 198310; Lichtenberk 199611). As a result, the theoretical part on anaphoric demonstratives (sections 2.3.3.4. and 2.3.4.) remains somewhat eclectic and should only be considered a preliminary outline. Another problem is that it is virtually impossible to find literature on the differences and similarities between the different anaphoric demonstratives themselves. Exceptions are Sidner 1983, Gundel et al. 1993, Himmelmann 1996 and DiesSEL 1999. But even these works cannot provide a background for the use of the Hittite demonstratives. In the conclusion, 2.4., I present my own view on demonstratives and pronouns, but this too must be considered highly theoretical and needs to be tested typologically.

2.2.1. The ‘geographical’ approach

As the name already indicates, the geographical approach, which is also the traditional approach followed by for example Lyons (1977, Ch. 15) and Levinson (1983, Ch. 2), Himmelmann 1996, DiesSEL 1999 and others, derives its classification of referring expressions from the location of the ‘target’ (referent) of the referring expression. In the case of deixis, the referent is located outside the text in the physical environment, whereas an anaphor is related to an accompanying antecedent in the preceding text. Both types of location were described by Bühler (1934) as Zeigfeld and Symbolfeld respectively.

Besides the Zeigfeld, i.e., the speech situation (Bühler’s deixis ad oculos) and the Symbolfeld, i.e., the discourse or the text, other deictic spaces have been identified. Lingering between deixis for the Zeigfeld and anaphora for the Symbolfeld is discourse deixis. This time the referent is not an entity, as with deixis and anaphora, but a segment of the discourse itself. More types of deixis are discussed in Cornish 1999: 21.

8 Linde discusses the use of it and that in apartment descriptions. Her main conclusion is that it refers within a discourse node whereas that refers across a discourse node to the same type of entity.
9 Ehlich introduces the terms deictic procedure and anaphoric procedure, which we will encounter later again. Within this framework he mainly discusses the Hebrew demonstrative ze ‘this’.
10 Most contributors to Givón 1983 exclude the demonstratives from referring expressions, I assume because their corpora generally did not contain that many demonstratives. The general framework set up by Givón 1983: 5ff. does discuss the demonstrative pronouns and determiners among the topic (dis)continuity markers.
11 Lichtenberk discusses what he calls immediate anaphora after first mention in To’aba’ita narrative discourse. When a discourse participant will become thematically prominent, To’aba’ita uses a lexical NP (which includes the ‘proximal’ demonstrative ‘eri’), otherwise dependent pronouns are used.
Although the geographical approach concentrates on the different contexts in which referential expressions occur, attention is also paid to the mental effort needed when accessing some referent (Lyons 1979: 94). Especially the demonstratives are capable of placing a referent in the center of attention besides simply pointing to an element in the physical surroundings (Diesel 1999: 94, 96).

2.2.2. The ‘cognitive’ approach

2.2.2.1. Introduction

Another approach to deixis and anaphora has been developed during the past 20 years. The central theme of studies like Apollonius Dyskolus12, Ehlich 1979, 1982, Bosch 1983, Ariel 1990, 199613, Gundel et al. 1993, Lambrecht 1994, Van Hoek 1997, Cornish 1999, Givon 1983, 2001 consists of emphasis on the cognitive motivation underlying the use of referring expressions. There is no clearcut difference between the use of expressions referring to the outside world or the textual world, although these different worlds are of course acknowledged. Just as the geographical approach includes the cognitive notion of ‘bringing something into the focus of attention’, the cognitive approach includes references to the different Zeigfelder. However, the explanation of the use of deictic and anaphoric expressions lies in the ways Speaker and Addressee communicate: ‘The object of both deixis and

12 Bosch 1983: 4-9 provides an account of Apollonius’ views on deixis and anaphora.
13 Ariel 1990, 1996 states that various referring expressions mark different degrees of accessibility in memory (1996: 15). The form of a referring expression guides the Addressee in searching his or her memory for an earlier expression (antecedent) which bears the memory status in accordance with the status indicated by the referring expression: the form of the anaphor signals the degree of cognitive accessibility and thus leads the Addressee to the correct antecedent among the set of referents in his memory. Based on these assumptions, which I do not want to contest, Ariel has set up a scale. The high accessibility markers are arranged as follows (with higher accessibility to the left): zero < reflexive < agreement marker < cliticized pronouns < unstressed pronouns < stressed pronouns < stressed pronouns + gesture. They are followed by the intermediate accessibility markers: proximal demonstrative (+ NP) < distal demonstrative (+ NP) < proximal demonstrative (+ NP) < modifier. And finally the low accessibility markers: distal demonstrative (+ NP) + modifier < first name < last name < short definite description < long definite description < full name < full name + modifier. The material discussed in this study fall mainly in the intermediate group (ka-(+ N), apa- (+ N), asi(+ N)). The emphatic pronoun apa- is a high accessibility marker, whereas asi (+ N) + modifier is a low accessibility marker. Although I mainly agree with this categorization of the Hitite pronouns and demonstratives, my material does not support the cline inside each category. The demonstrative ka- is not more accessible than apa-, which in turn is not more accessible than asi. Furthermore, the emphatic pronoun apa- refers generally to a referent which is as accessible as zero or the enclitic pronoun when it indicates Argument Focus. Among the arguments one could provide against this part of her theory is the following. Ariel 1990: 53 correctly states that in English ‘that requires identifiability by both speaker and addressee, whereas this sometimes refers to objects accessible only to the speaker.’ However, I should think that this would imply that this is a lower accessibility marker than that, because the speaker assumes that the addressee does not yet know what the discourse topic is going to be.

Ariel however claims that, since the Speaker is ‘ego-centric’, a topic is more accessible to her than to the addressee, so that this as higher accessibility marker is used. However, cognitive models all focus on the assumptions which the Speaker holds of the Addressee’s awareness about some subject. Speaker should therefore adapt her language to her estimation of Addressee’s state of mind. I do not understand Ariel’s move to centerering on the Speaker instead of on the Addressee. In this respect I prefer the analysis of Gundel et al. who have created a category for this type of this with a lower cognitive status than the other demonstratives (see table 2.2). Furthermore, they group this, that and this N together under the heading ‘activated’, which is more in accordance with my material.
anaphora is to ensure that the speech participants are ‘on the same wavelength’ with respect to their center of attention at any one point in the discourse’ (Cornish 1999: 25ff.). An extensive treatment of anaphora and deixis within the cognitive framework is presented by Cornish 1999, whom I will follow when discussing the cognitive approach in the remainder of this chapter.

2.2.2.2. Memory and cognitive procedures

From a cognitive viewpoint the manner in which discourse entities are referred to depends on the part of the memory in which their mental representations are located. Cornish 1999 Chapter 6 sketches the following tripartite structure (o.c. 207ff.). First, long-term memory: this part of memory contains among other things lexical meaning and encyclopaedic knowledge, i.e., knowledge of the world. Second and third, a working memory divided into two parts, the implicit focus space and the explicit focus space. The latter focus space is also called the ‘cache’. The cache is a highly active, ‘spotlighted’ region which contains at least the proposition which is being expressed or processed and the preceding proposition. Every information contained in the cache is salient, although there are different levels of cognitive activation within the salient information. Besides the spotlighted region the implicit focus space contains less active, supportive background information, such as the partial discourse model constructed by Speaker and Addressee. The limitations of working memory not only cause differences in cognitive activation but also have to do with the episodic structure of discourse.

The propositions of a discourse episode or paragraph are kept in working memory (Van Dijk 1982: 191). Within an episode reference is often done by pronouns, whereas NPs and names are generally used at episode boundaries (or discourse nodes). (Van Dijk & Kintsch 1983, Fox 1987, Ariel 1990, Van Hoek 1997, among others).

Elements in the three memory compartments and also elements from the extra-linguistic context have to be accessed somehow. According to Cornish (see already Ehlich 1982) the deictic procedure draws an element into the immediate attention of the Addressee, either from long-term memory or from the surroundings, and gives it a place in the discourse, whereas the anaphoric procedure instructs the Addressee to maintain the focus of attention on the mental representation of some referent, thus ensuring the retrieval of salient, already recorded information located in the cache. The next example illustrates both procedures:

2.3 [It is dusk, and John and Mary are returning from a shopping trip. As John is parking the car, Mary exclaims:]
   Good God! Look at that incredibly bright light [Mary gestures towards a point in the evening sky]! What on earth do you think it could be? (Cornish’ ex. 2.6a, p. 27)

The expression that incredibly bright light serves to draw John’s attention towards some object in the sky. The next reference is done by the unaccented pronoun it, indicating that the referent of it is already in the center of attention of the Addressee.

The difference between the geographical approach and the cognitive approach cannot be explained by means of ex. 2.3: That incredibly bright light is a typical example of the deictic properties of demonstratives -reference to the extra-linguistic world- whereas it is referring anaphorically, to the text-internal world. This one-to-one mapping of deixis and the deictic procedure and anaphora and the anaphoric procedure is invalidated however by the next example:
2.4 [A and B turn a corner on the pavement, and suddenly find themselves face to face with a rather large dog]  
A to B: Do you think it's friendly? (Cornish' ex. 4.1, p. 112)

The unaccented pronoun *it* refers to an entity in the text-external world, without the mediation of an antecedent in the form of a lexical noun phrase. The situation in ex. 2.4 is such that the dog cannot fail to be in the center of attention of A and B. Being in the center of attention, any further reference to the dog has to be done by the anaphoric procedure, in this case in the form of it.

The opposite of Deixis and the anaphoric procedure is Anaphora and the deictic procedure, illustrated by an example from English (Moyer 1969: 104):

2.5 Specifically this included being bathed, dressed in clean garments, and having the nails and body hair removed. (Followed by 6 sentences about the bathing, then a new paragraph consisting of 3 sentences on the extent of washing. The next paragraph starts with:)  
The clean garments are not specified in any way. ...

To access and reactivate the clean garments after 9 sentences and two paragraph breaks dealing with the ritual bathing the definite noun phrase ‘the clean garments’ is used.

The referring expressions from the preceding examples can roughly be tabulated as follows:

<table>
<thead>
<tr>
<th>Geographic approach</th>
<th>Cognitive approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deixis</td>
<td>Deictic procedure</td>
</tr>
<tr>
<td>Anaphora</td>
<td>Anaphoric procedure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Deictic procedure</th>
<th>Anaphoric procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>this/that NP</td>
<td>it</td>
</tr>
<tr>
<td>the NP</td>
<td>it</td>
</tr>
</tbody>
</table>

Table 2.1: geographical-cognitive matrix

It might be concluded from table 2.1 that the cognitive approach should prevail over the geographical one, but as we will see in the following discussion (and in 2.3.) the division of labor of these referring expressions is not as clear-cut as it may seem here. On the level of Anaphora one could also conclude that the anaphoric procedure is used within a discourse unit or episode, while the deictic procedure is used at the beginning of a new episode. However, also this match does not cover the phenomena described in this chapter. It has been noted that salient entities, requiring the anaphoric procedure, are sometimes still referred to by means of NPs (more on this in 2.3.3.4.).

In order to avoid confusion with the traditional meanings of deixis and anaphora, I will use a different terminology: The *deictic procedure* is required when some element needs to be brought in the center of attention, so I will call this procedure the *centering procedure*. The *anaphoric procedure* is required when something needs to be continued in the center of attention. I will call this procedure the *continuity procedure*.

2.2.2.3. The cognitive status of referring expressions
Within the framework presented by Cornish, referring expressions are not inherently centering or continuing. Instead, they are used as centering or continuing (o.c. 23). However, referring expressions still have some inherent, 'basic' meaning, be it almost empty for enclitic pronouns or rather full for demonstrative descriptions. The intrinsic referential-semantic character of referring expressions is described by Gundel et al. 1993 and Cornish 1999: 52ff. The following Givenness Hierarchy contains the six cognitive statuses that are relevant to the form of English referring expressions (Gundel et al. o.c. 275)\(^\text{14}\):

<table>
<thead>
<tr>
<th>in focus</th>
<th>activated</th>
<th>familiar</th>
<th>uniquely identifiable</th>
<th>referential</th>
<th>type identifiable</th>
</tr>
</thead>
<tbody>
<tr>
<td>(it)</td>
<td>that</td>
<td>that N</td>
<td>the N</td>
<td>indef this N</td>
<td>a N</td>
</tr>
<tr>
<td>this</td>
<td>this N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>stressed pronouns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2.2: The Givenness Hierarchy (Gundel et al. 1993: 275)

Every status entails all lower statuses: the expression that N bearing the status ‘familiar’ is also ‘uniquely identifiable’, ‘referential’ and ‘type identifiable’. Furthermore, for example that N may be used higher (that is, to the left) in the hierarchy, because all positions to the left of ‘familiar’ necessarily contain the feature ‘familiar’. It may not be used lower in the hierarchy because that N indicates at least familiarity. Basically, most expressions seem to stick to their category (o.c. 290-294).

Gundel et al.’s examples illustrating the hierarchy are variants of I couldn’t sleep last night. A dog (next door) kept me awake\(^\text{15}\), ‘a dog’ (or the/that/this dog etc.), in which ‘x (dog)’ is the first reference to an extra-linguistic entity. Although their discussion is exemplified by means of deictic expressions, they do not differentiate between extra-linguistic and intra-linguistic use of referring expressions. Gundel et al. indeed emphasize the necessity to distinguish between cognitive status of an entity and the context through which that status is acquired (by being linguistically introduced, derived from general or encyclopaedic knowledge, or prominence in the physical surroundings, o.c. 275), but by focusing on the cognitive status they are not in a position to describe the difference between this, that and this N or the emphatic pronouns in the category ‘activated’. Their approach posed problems for me because the material described in this study includes the zero, enclitic, emphatic and demonstrative pronouns and determiners. Therefore I will not take the cognitive states as a leading principle, but will treat them when appropriate.

Cornish provides a different classification of the referential expressions. As said above the centering (or deictic) procedure brings elements into the cache that have a low degree of familiarity or are not (or no longer) cognitively salient in the discourse (o.c. 206). The continuity (or anaphoric) procedure maintains the center of attention. No particular effort is required to retrieve these referents since they are already salient. Within the cache different levels of saliency may be discerned: globally we have high and mid-level saliency. This means that the continuity procedure is used to promote an entity from mid to high level, or to maintain it on high level, whereas the centering procedure is required when promoting something from low to high level. The distribution of the different referring expressions in English over the procedures and levels according to Cornish (o.c. 52ff., 206, 227) can be tabulated as follows, although we have to keep in mind that the table below presents the

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\(^{14}\) Gundel et al. claim that the Hierarchy is universal (o.c. 283ff.).

\(^{15}\) ‘A dog’ is every time replaced by one of the other expressions like ‘this/the/that dog’ etc.
preferred use of these expressions. They may also be used in the other procedure, indicated by +:

<table>
<thead>
<tr>
<th>Centering procedure</th>
<th>Continuity procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>low (\rightarrow) high saliency</td>
<td>mid (\rightarrow) high saliency</td>
</tr>
<tr>
<td>Definite descriptions</td>
<td>$+$</td>
</tr>
<tr>
<td>Accented 3rd person pronouns</td>
<td>$+$</td>
</tr>
<tr>
<td>Demonstrative pronouns</td>
<td>$+$</td>
</tr>
<tr>
<td>Demonstrative descriptions</td>
<td>$-$</td>
</tr>
<tr>
<td>implicit focus</td>
<td>implicit focus</td>
</tr>
<tr>
<td>long term memory</td>
<td>long term memory</td>
</tr>
<tr>
<td>physical environment</td>
<td>physical environment</td>
</tr>
<tr>
<td>cache</td>
<td>cache</td>
</tr>
</tbody>
</table>

Table 2.3: Distribution of referential expression as derived from Cornish 1999.

Both in Cornish' and Gundel et al.'s framework problems occur with the demonstratives: within their theories they seem either not to be distinguished from each other or to occur in more contexts than can be accounted for. In both theories the accented pronouns occur in the same slot as the demonstratives without explaining how that is possible. There has to be a difference. I believe that the difference can be explained by 1) combining the geographical and cognitive approaches and 2) by combining both these approaches with the Information structure of the sentence. The Information structure of sentences will be presented in the next section. Discourse episodic structure is seemingly only related to Anaphora and will be discussed in 2.3.3. (although in 2.4. I will propose to extend discourse structure also to non-linguistic information).

2.2.3. Topic and Focus on sentence level

2.2.3.1. Introduction

Information structure deals with the differences between the following clauses (small caps indicate main stress):

2.6 a. John was eating an APPLE
    b. John was EATING an apple
    c. John WAS eating an apple
    d. JOHN was eating an apple

The different stress patterns imply something like the following:

2.7 a. John was eating an APPLE (not a PEAR)\(^{16}\)
    b. John was EATING an apple (not LOOKING AT an apple)
    c. John WAS eating an apple (not IS)

\(^{16}\)This sentence might also simply be a statement about John, without any contrast with some other fruit. 22
d. JOHN was eating an apple (not MARY)

Much work has been done on information structure since the 1920s (for references see Van Valin & LaPolla 1997: 199), but in this study I will mainly refer to Lambrecht 1994 for the overall picture and to Dik 1997a for several important details. The key concepts in information structure are the pragmatic functions Topic, Focus and some related notions as presupposition and comment. How these notions relate to the cognitive states and procedures described in 2.2.2. will be discussed in the appropriate subsections of 2.3. For the moment I refer to Lambrecht's notion (o.c. 160ff.) that the cognitive state of the mental representation of a referent is only a precondition of the pragmatic relations Topic and Focus. One cannot predict on the basis of these states alone what referential expression will be chosen. However, Lambrecht describes the pragmatic difference between accented and unaccented constituents, without reference to demonstratives.

2.2.3.2. The notions Topic and Focus

Lambrecht's understanding of Topic is summarized as follows:

2.8 "A referent is interpreted as the topic of a proposition if IN A GIVEN DISCOURSE the proposition is construed as being ABOUT this referent, i.e. as expressing information which is RELEVANT TO and which increases the addressee's KNOWLEDGE of this referent. ... Topic is a PRAGMATICALLY CONSTRUED SENTENCE RELATION" (1994: 127).

Only referring expressions can be topics. Referents of discourse topics must be discourse referents. *It* in "it is raining" and *there* in "there's nobody in the room" are not referential expressions and therefore not Topics. This also applies to the indefinite pronouns and other quantified expressions like *nobody, everybody, many people* etc. (o.c. 156).

The Focus of a sentence is described as follows:

2.9 "The focus of a proposition is that element of a pragmatically structured proposition which makes the utterance of the sentence expressing the proposition into a piece of information. It is the balance remaining when one subtracts the presupposed component from a given assertion. [...] Like the topic, the focus is an element which stands in a pragmatically construed relation to a proposition. But while the pragmatic relation between a topic and a proposition is assumed to be predictable or recoverable, the relation between the focus element and the proposition is assumed to be unpredictable or non-recoverable for the addressee at the time of the utterance" (o.c. 217-8). As a result "a constituent in focus can by definition not be omitted without depriving the utterance of some or all of its information value." (o.c. 224).

Lambrecht distinguishes three basic types of clauses with a certain information structure:

2.10 a. Topic-Comment or Predicate-Focus structures
b. Identificational or Argument-Focus structures
c. Event-reporting or Sentence-Focus structures

These three types are illustrated by means of the following examples. The questions preceding them suggest a discourse situation in which the clauses can occur (o.c. 223).
2.11 **Predicate-Focus structure**

What happened to your car?

a. My car/it broke DOWN
b. (La mia macchina) si è ROTTA
c. (Ma voiture) elle est en PANNE
d. (Kuruma wa) KOSHOO-shi-ta

2.12 **Argument-Focus structure**

I heard your motorcycle broke down?

a. My CAR broke down
b. Si è rott a la mia MACCHINA./E la mia MACCHINA che si è rott a
c. C’est ma VOITURE qui est en panne.
d. KURUMA ga koshoo-shi-ta

2.13 **Sentence-Focus structure**

What happened?

a. My CAR broke down
b. Mi si è rott a (ROTTA) la MACCHINA
c. J’ai ma VOITURE qui est en PANNE.
d. KURUMA ga KOSHOO-shi-ta

These three types of Focus structure and their expression in the different languages are discussed in the next three sections (2.2.3.2.1, 2 and 3).

2.2.3.2.1. **Predicate-Focus**

The proposition provides relevant information about the car, which is a standing current interest given the question (or preceding context). ‘My car/it’ in ex. 2.11 is the Topic of the clause and the comment on this Topic is the rest of the clause, the predicate. The comment contains the assertion ‘broke down’ which is the unrecoverable part of the message and therefore the Focus.

Predicate-Focus structures are minimally characterized by a focus accent on some element of the predicate. However, Predicate-Focus structures are unmarked for information structure, meaning that this structure is also compatible with other pragmatic construals (Lambrecht 1994: 226-228).

The Topic may be expressed by means of an unaccented pronoun or zero, an accented pronoun or a lexical noun phrase. When the Topic was already the center of the attention of the preceding discourse, the preferred topic expression is an unaccented pronominal, inflectional or zero (depending on the language). Lambrecht calls this type of Topic an *Established Topic* (see also Dik’s *Given Topic* (1997a: 318f.)):  

2.14 But this was not the end of the matter. Brooding further over his wife’s offence, Ammistamru refused to accept that justice had been done. He demanded that the princess be extradited to Ugarit, for punishment, ... (Bryce 1998: 346)

---

17 See also ex. 2.7.a. without the contrastive reading.
18 See also ex. 2.7.a. and d.
19 To make things more complicated: Lambrecht also includes possessive and demonstrative pronouns in this category.
**He** refers back to Ammistamru, who is highly salient and in the center of attention at the moment of expressing *he*. In the clause containing the expression *he* itself, Ammistamru is also the Topic because the clause is about Ammistamru.

In the following example the lexical noun phrases ‘the napkin feeder’ and ‘the straw feeder’ are inferred from the preceding discourse and not the center of attention:

2.15 Sunday I was taking paper and pasting it together and finding a method of how to drop spoons, a fork, a napkin, and a straw into one package. **The napkin feeder** I got. **The straw feeder** we made already. That leaves us the spoon and the fork. (Lambrecht’s ex. 4.32, p. 160)

Although the feeders, inferred from the context, have low accessibility under Ariel’s analysis and are uniquely identifiable under Gundel’s analysis, they are a Topic of the two sentences containing them. But not being expected in this role, they are Unestablished or Unexpected Topics (see also Dik’s Sub-Topic (1997a: 323f.)).

Sometimes however, while everything seems to favor an unaccented pronoun, a semantically heavier expression is used, as in:

2.16 a. What is she going to DO?  
b. **SHE**’s going to do the **COOKING** (adapted from Lambrecht o.c. 328, ex. 5.86’).

The referent of *she* is ‘in focus’, and actually the established Topic, so we expect an unaccented pronoun. This Topic is accented, not because there is a topic shift but because the speaker wants to imply that there are other possible Topic referents although the questioner did not ask for that information. The message thus conveyed is that the relationship between the elements in the clause is not expected, with the result that the Topic has to be considered as Unestablished.

A special category of accented Topic are the Contrastive Topics (Lambrecht 1994: 291ff., his ex. 3.20b.)

2.17 I saw Mary and John yesterday. SHE says HELLO, but HE’s still ANGRY at you.

This time the referents are already in the center of attention but are contrasted with each other.

2.2.3.2.2. Argument-Focus

When the Focus rests on an argument of the predicate, in the examples the subject, the proposition ‘something broke down’ in ex. 2.12 is pragmatically presupposed. Only the ‘something’ has to be filled in. That is, the missing part has to be identified, which is why this type of structure is also called an identificational sentence (ex. 2.10.b.). In each language the non-topic status is marked by prosodic prominence, the presupposition is marked via absence of prominence on the verb phrase. Besides prosodic prominence, Italian and French use cleft-sentences, and Japanese *ga*-marking of the subject (Lambrecht 1994: 228ff.).

---

20 *‘I’ is also a Topic. The predicate ‘got’ says something about the relation that holds between the two Topics. The difference between the two Topics is that ‘I’ is expected as such, but not the feeder. The feeder is therefore referred to by means of a definite NP in Initial position.

21 For Dik 1997a: 326, 332 this is Parallel Focus.
In 2.12 a wrong piece of information was corrected. This correction however is not a necessary feature of Argument Focus. Ex. 2.12 could as well have been the answer to ‘What broke down?’ The latter type of Focus is called New or Compleitive (Dik 1997a: 332) whereas the correcting Focus is one the five counter-presuppositional Focus types distinguished by Dik i.e., Rejecting, Replacing, Expanding, Restricting and Selecting Focus.

The type of Argument-Focus in 2.12 is called Replacing Focus (Dik 1997a: 332). The following example is adapted from Dik o.c. 333 (ex. 48):

2.18 S assumes that A might think: John bought apples.
S corrects: He didn’t buy APPLES, he bought BANANAS.

In Expanding Focus the incomplete information is replaced by the correct information. The following example of this type of Focus is adapted from Dik o.c. 334 (his ex. 49):

2.19 S assumes that A might think: John bought apples.
S corrects: He did not only buy APPLES, he also bought BANANAS.

In case of Restricting Focus the speaker assumes that the addressee might have some correct information, but also thinks that something else is true. This last part of information needs correction (i.e.). Restricting Focus replaces that part of the information by the correct information. The following example is adapted from Dik i.e. (ex. 50):

2.20 S assumes that A might think: John bought apples and bananas.
S corrects: He only bought APPLES.

The last type, Selecting Focus, occurs when the speaker assumes that the addressee believes that one of two pieces of information is correct, but does not know which one. The following example is adapted from Dik i.e. (ex. 51):

2.21 A asks: Would you like coffee or tea.
S: COFFEE, please.

All these types of Focus can also apply to other elements than nouns, as exemplified in 2.7. b and c. I will not discuss them further.

2.2.3.2.3. Sentence-Focus

A Sentence Focus clause informs the addressee of some event: it is event-reporting (ex. 2.13). Sentences like this are contextually relatively independent and could be uttered “out of the blue”. Most important is that the proposition is not construed as a statement about the referent of the Subject phrase, in contrast with Topic-Comment/Predicate Focus structures.

The non-topical status of the Subject phrase is not unambiguously marked with a prosodic peak in English. Although the Subject phrase carries an accent, it still could be a topic (for example, contrastive topics). In other languages the non-topical status of the subject in event reporting sentences is consistently marked, in Japanese for example by means of the particle ga (see ex. 2.13.d.).

2.3. A Combinatory Approach to Referential Expressions
The main goal of this chapter is to provide a framework based on the approaches presented above that might describe the use of referential expressions. I will try to reconcile their results and hope thereby also to circumvent the problems resulting from each individual approach.

In the description of the use of referential expressions the different approaches focus on separate parameters. The geographical approach bases its classification mainly on the different types of context in which the entity or event is located, but takes also the type of entity into account. Reference to an object in the physical surroundings is called deixis, exophora or situational use, while reference to an event or proposition in the preceding discourse is called discourse deixis. Reference to entities in the ongoing discourse is called anaphora (both backward and forward referring). A special type of reference restricted to the demonstratives is recognitional reference (see 2.3.1.2).

Approaches as advocated by Cornish (1999), Gundel et al. (1993), Ariel (1990, 1996), Givón (2001) concentrate on the effort an addressee has to make in order to retrieve the correct antecedent or referent. This retrieval can be achieved by exploiting the inherent semantic-pragmatic load of the referring expressions, and not so much by exploiting the different context types. In a simplification of Cornish' view the retrieval is either easy or difficult, and the procedures matching these efforts are the continuity (or anaphoric) procedure or the centering (or deictic) procedure.

Both parameters, the geographical and the cognitive, function on discourse level. In my view, at least a third exponent on sentence level has to be added in order to describe and explain the use of referring expressions: the Topic - Focus distribution as described by Lambrecht 1994, Dik 1997a, Erteschik-Shir 1997 etc. Although Established Topics are necessarily ‘in focus’, entities ‘in focus’ are not necessarily Established Topics. They may be an Unestablished Topic, or a Focus entity. As a result, different expressions can be used for entities that are ‘in focus’, such as unaccented pronouns, accented pronouns, demonstratives, names or definite NPs.

The final parameter, the episodic structure of discourse, gains importance when dealing with Anaphora and will be dealt with in the section on Anaphora (2.3.3.).

Combining the first three parameters results in the following table:

<table>
<thead>
<tr>
<th>geographical parameter</th>
<th>cognitive parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>continuity procedure</td>
</tr>
<tr>
<td></td>
<td>Topic</td>
</tr>
<tr>
<td>Deictic</td>
<td></td>
</tr>
<tr>
<td>Recognitional</td>
<td></td>
</tr>
<tr>
<td>Anaphoric</td>
<td></td>
</tr>
<tr>
<td>Discourse deictic</td>
<td></td>
</tr>
</tbody>
</table>

Table 2.4: Geographical-Cognitive-Information structure matrix

Some slots will not be filled given the incompatibility of some parameters. For example, demonstratives in recognitional use serve to *introduce* an entity that is familiar to the addressee (see 2.3.1.2). The slots belonging to the continuity procedure are therefore not filled in.

In the next sections I will discuss the 16 slots and fill them in accordingly. This table is only intended as an attempt to elucidate the distribution of the referring expressions. In section 2.4. (Summary and conclusions) it will become clear whether these features describe the use of these referential expressions or whether other features are more important.

2.3.1. Deixis and the centering procedure
In this section the following slots of Table 2.4. will be discussed:

<table>
<thead>
<tr>
<th>geographical parameter</th>
<th>continuity procedure</th>
<th>centering procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deictic</td>
<td>Topic</td>
<td>Focus</td>
</tr>
<tr>
<td>Recognitional</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.3.1.1. Situational Reference

When a Speaker wants to draw the attention of the Addressee to an object in the surrounding area which was hitherto not in the center of attention, he should restrict himself to a limited set of signs specialized in ‘pointing’. This pointing, or Situational reference, can be achieved by a gesture (such as the pointing finger, a nod of the head), prosody (high level of pitch and accent in spoken medium), or certain linguistic referring expressions (demonstrative pronouns, adverbs or particles, demonstrative descriptions, but also the accented pronouns) (see Levinson 1983: 65ff, Diessel 1999: 2, 93ff.). Of these pointers only the deictic demonstratives indicate a distance contrast. Fillmore 1982 states that there are two types of distance contrast: a two-way contrast, like in English this, here for ‘relatively close to the Speaker’ and that, there for ‘relatively remote from speaker’, and a three-way contrast, with Proximal, Medial and Distal demonstratives (measured in distance from Speaker), as in Latin, Greek, Japanese, Turkish, etc. Other, sometimes additional contrasts are according to Fillmore (o.c. 49) based on non-distance criteria, such as Pivot contrast (taking Speaker or Addressee as the Pivot), or visibility. The three-way system can be presented as follows:

- **Distal Demonstrative** (Fillmore 1982: 50-1): Prototypically the distal demonstrative alternates between two features, (a) it points to an entity at a great distance from both Speaker and Addressee’s visual field or (b) to an entity being outside the Speaker’s and Addressee’s visual field. In some languages both conditions need to be satisfied for the demonstrative in order to be classified as distal, in other languages only one of them is criterial.

- **Medial Demonstrative** (Fillmore 1982: 49): Prototypically a medial demonstrative alternates between two features, (a) it points to an entity at a relatively small distance from Speaker (Speaker Pivot) or (b) to an entity being near the Addressee (Hearer Pivot). In some languages both conditions need to be satisfied for the demonstrative in order to be classified as medial, in other languages only one of them is criterial. When only (b) is satified, the language has a person-based demonstrative system, when only (a) is satified, it has a distance-based system.

- **Proximal Demonstrative**: A proximal demonstrative is characterized as indicating the closest distance to the Speaker.

The origin against which everything is measured, distance but also time and social rank for example, is called the Deictic Center. One can distinguish two types of pointing at an entity present in the speech-situation. The first type, gestural deixis, requires the monitoring of the situation because the situation provides the Addressee with the only clues from which to derive the correct interpretation of what the Speaker means:
2.22 This finger hurts (Levinson 1983: 66, ex. 31a)

2.23 [It is dusk, and John and Mary are returning from a shopping trip. As John is parking the car, Mary exclaims:]

Good God! Look at that incredibly bright light [Mary gestures towards a point in the evening sky]! What on earth do you think it could be? (Cornish 1998: 27, ex. 2.6a, and my example 2.3)

Less restricted than gestural deictis is symbolic deictis. With only general knowledge of the 'here and now', an Addressee is very well capable of interpreting an expression like

2.24 This city stinks (Levinson 1983: 66, ex. 31b)

However, locating an object\(^{22}\) in the physical world is not the only function of the 'pointers'. As Diesell (1999: 94) explains, the pointing expressions can also be used to refer to entities that are not visible or present in the immediate surroundings, as in Levinson's example (1983: 66, ex. 34b):

2.25 Hello, is Harry there? (on the telephone)

where the possible location of Harry is not visible or in the presence of the Speaker. Still more abstract is Deixis am Phantasma. This type of deictis is mainly found in narratives and descriptions. The Deictic Center is transferred from the Speaker to a character in the story or description. In that case demonstratives like 'here' and 'there', 'this' and 'that' may be used in order to relate a position as described in the discourse to the Deictic Center as given in the discourse:

2.26 And he's heading . . you see a scene where he's . . coming on his bicycle this way,

(Himmelmann 1996: 222)

This way has not to be interpreted in relation to the Speaker but in relation to the person on the bike.

A special type of Deixis am Phantasma is, according to Himmelmann (1996: 222), new-this (Gundel et al.'s 'referential' category). The English proximal demonstrative may be used in colloquial speech to both introduce and firmly establish a referent in the universe of discourse at the same time. The latter feature leads Himmelmann to the inclusion of new-this in Situational Use, because in Situational Use the demonstrative both introduces a referent and establishes it as a possible discourse topic:\(^{23}\)

\(^{22}\) Not only objects but also events in the physical surroundings may be referred to by demonstratives. Take 'Did you see that?' The speaker refers to some event in the situation, so this use should be called deictic and not discourse deictic (see 2.3.5. and 2.3.6. for discourse deixis). It is even possible to refer to propositions by means of deictics, as in 'Can you believe that', after accidentily picking up some conversation from your neighbouring table.

\(^{23}\) Wald 1983: 93ff. on the other hand denies any ties with the situationally used 'this', and equates it to introductory NPs with an indefinite article although on p. 95 he says that new-this: 'reflects the continuity of its character as a demonstrative'. Gundel et al. 1993: 275-6, although referring to new-this + NP as 'indefinite this NP', do not equate it with indefinite NPs. The main difference with the latter is the likelihood of continuance in further discourse of the referent thus introduced (p. 277 n. 3). They derive indefinite this from the cataphorically used proximal demonstrative. But while assuming a close connection, they explicitly distinguish
2.27 Because there's this guy Louie Gelman, he went to a BIG specialist, and the guy ... analyzed it WRONG (Cornish 1999: 26, ex. 2.5)

If one treats a demonstrative expression referring to an entity that is not present at the moment the speech-act takes place as Situational, one should also look at another specific use of the demonstratives, the so-called Recognitional use as defined by Himmelmann 1996: 230ff. and Diessel 1999: 105ff. (see 2.3.1.2. for discussion).

Whether or not the Recognitional demonstrative is connected with Situational use, I will discuss the Recognitional demonstratives separately from the Situational Use in the Hittite section for, as we will see, recognitional demonstratives are often accompanied by some typical linguistic phenomena which are absent from Situationally used demonstratives.

Another important category in which deixis may be found is Reported Speech cited in narration (Himmelmann 1996: 221-2, see 3.1.2. with Hittite examples). Finally, a rather specific type is Self-reference to a linguistic unit or act (o.c. 221, also see 3.1.4.). Himmelmann's ex. on p. 221 comes from the Pear Stories (Chafe 1980):

2.28 XII.16. it's very funny to make this [.35]
XII.17. telling.

where this telling refers to the speech-act itself.

Returning to the categorization of Fillmore 1982, demonstratives either express distance or speech participant contrasts, or both. English is usually considered a distance based system, but there are indications that this is not completely true. Lyons 1999: 18 gives some examples that show speech participant orientation:

2.29 Show me that (?this) letter you have in your pocket (Lyons' ex. 61).

2.30 Tell her to bring that (?this) drill she has (Lyons' ex. 62).

Lyons states that this is certainly possible, but that 'it would imply that the letter or drill is in some way associated with the speaker' (l.c.).

Another type of orientation on the speech participants is the emotional use of demonstratives, also called Empathetic Deixis. Levinson 1983: 81 recalls that English that may shift to this to show empathy, and that this may shift to that to show emotional distance. See Chen 1990: 148-151 for a discussion of distancing-that, sympathy-that and camaraderie-that and -this. Besides these few references the empathetic use of demonstratives has not received much attention. Rauh 1983: 40-41 considers the transference of deictic contrasts to

two different forms of 'this', a demonstrative and an indefinite this (p. 275 n. 1). It seems that they distinguish between a proximal demonstrative and a cataphoric demonstrative, and that these demonstratives do not have the same cognitive status. Cornish 1999: 27 connects 'presentational' this (or new-this) with the proximal-demonstrative this, and compares its function to 'cataphoric' this. In my view new-this + N and the cataphoric demonstrative pronoun this have the same function: 1) they both announce a new entity. New-this introduces a first order entity on stage, whereas pronominal this introduces a higher order entity on stage, and 2) in both cases the clause containing the demonstrative provides a kind of link, a stepping stone, for what follows. Thus, the only difference between new-this and discourse deictic this is their entity order. For the same reason I would like to give up the category of Discourse Deixis and let it collapse with Anaphora. I assume that the only difference between the two is entity order. However, the typological works on which I build the discussion of the Hittite demonstratives in Chapters 4, 5 and 6 consider this category as one of the four basic uses of demonstratives. I therefore also include Discourse deixis as a separate category.
the emotional level even problematic given the fact that for example *that* may be used both negatively and positively.

### 2.3.1.2. Recognitional Reference

A specific case of reference to an entity somewhere in the outside world in combination with the centering procedure is the introduction of a referent which is discourse new (unactivated) but hearer old (pragmatically presupposed) (Diessel 1999: 106). In English the distal demonstrative adnominal *that* can serve to introduce a new referent, but then always carries the assumption of prior potential familiarity, either because of co-presence of the referent in the context or because of prior experience (Cornish 1999: 27). The notion of prior experience is crucial here. Potential familiarity caused by *co-presence* in the context belongs to the Situational Use as defined in the geographical approach, whereas *prior experience* excludes the presence of a referent in the utterance context. As mentioned earlier, Cornish gives priority to the cognitive approach, but in doing so is unable to distinguish between these two types of adnominal *that*. That this distinction is relevant is shown at least by Himmelmann 1996 and Diessel 1999. A typical example is

2.3.1. I couldn't sleep last night. *That* dog (next door) kept me awake. (Gundel et al. 1993: 278.)

The speaker uses a distal demonstrative adnominal for first mention of the dog, not in order to point at the dog, not being present, but to activate the knowledge about a certain dog in the mind of the hearer (speaker and hearer might have discussed the subject in the past).

Typological research, conducted by Himmelmann and Diessel, the latter using data from 85 languages, shows that introducing referents which are familiar to speaker and addressee but also discourse new, is done solely by means of demonstrative descriptions (*demonstrative + Noun(phrase))*). The example above shows the situation in English, where only the non-proximal demonstrative *that* is allowed. The following German example with the demonstrative *dies-* is taken from Himmelmann 1996: 231:

2.3.2 01 X: *was isn* eigentlich mit diesem: *Haustelephon* was mir immer khabit ham;  
I'm wondering what happened to *that internal phone we used to have*.

02 N: *des haut nimmer hin,*  
it doesn't work anymore

This specialized use of the demonstratives, called *Recognitional*, has been described systematically for the first time by Himmelmann 1996: 230ff. (with note 25 for the term *Recognitional*), followed by Diessel 1999: 105ff. The following is mainly based on their account. Himmelmann (1996: 240) thus presents

2.3.3 'the recognitional use, which involves reference to entities assumed by the speaker to be established in the universe of discourse and serves to signal the hearer that the speaker is referring to specific, but presumably shared, knowledge. It invites the hearer to signal the need for further clarification regarding the intended referent or to acknowledge that he or she, in fact, knows what the speaker is talking about.'

The invitation to the hearer to acknowledge the presented information or to ask for clarification is of course not applicable to the written Hittite corpus. There are however
safeguards preventing a possible failure in identification by the hearer. One of the features often involved in a recognitional mention is the inclusion of a relative clause or other likewise elaborate modifiers. This usually presents the addressee with enough information to be able to correctly identify the referent intended by the speaker.

A second feature mentioned in 2.33, specific, shared knowledge, is another typical aspect of the recognitional use of demonstratives. The definite article also requires prior familiarity, but on a more general level. The referent expressed by means of a definite article plus noun, such as the queen, the moon, usually belongs to the general, shared knowledge of a speech community. A speaker might need to describe a certain telephone as (you know,) that telephone of yours that doesn't work, but he is 'over identifying' when saying (you know,) that moon that stands in the sky.

Recognitional use of the demonstrative usually involves first mention. Himmelmann (1996: 236ff.) however also subsumes some later mentions under recognitional use rather than under tracking (or anaphoric) use. In that case the demonstrative serves to remind the hearer of a preceding participant or episode rather than to keep track of it. This method is used by the Speaker when s/he doubts whether the Addressee can recover the correct referent, especially when that referent appeared in the discourse several units (pause units, paragraphs) earlier.24

In 2.3.1.1. I mentioned that, if new-this is considered a special case of Situational Use, Recognitional use (Hearer old, Discourse new) might also be connected with Situational Use. Indeed, both Wald (1983: 113-4) and Chen (1990: 142-3) compare new-this with old-that, the difference being that new-this introduces non-presupposed information whereas old-that retrieves presumably shared information. Another reason to view the Recognitional demonstrative as a special type of Situational Use, is the existence of so-called invisible demonstratives, used for referents out of sight and therefore not really present in the speech situation (Diesel 1999: 42). Invisible demonstratives referring to entities that are not present are for example attested in Lillooet (Salish). The following table lists the Lillooet demonstratives (Van Eijk 1985: 198):

<table>
<thead>
<tr>
<th></th>
<th>visible</th>
<th></th>
<th>invisible</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>‘this’</td>
<td>‘that’</td>
<td>‘this’</td>
<td>‘that’</td>
</tr>
<tr>
<td>singular</td>
<td>cʔa</td>
<td>tiʔ</td>
<td>tʔu</td>
<td>kʔʔa</td>
</tr>
<tr>
<td></td>
<td>‘that’</td>
<td></td>
<td>‘that’</td>
<td></td>
</tr>
<tr>
<td>plural</td>
<td>?itd</td>
<td>?itʔ</td>
<td>?itʔu</td>
<td>kʔʔa</td>
</tr>
<tr>
<td></td>
<td>‘this’</td>
<td>‘that’</td>
<td>‘this’</td>
<td>‘that’</td>
</tr>
<tr>
<td></td>
<td>‘those’</td>
<td></td>
<td>‘those’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘those’</td>
<td></td>
<td>‘those’</td>
<td></td>
</tr>
</tbody>
</table>

Table 2.5: The demonstratives in Lillooet.

In 2.34a the demonstrative kʔʔu? is used to refer to a sound of which the source is invisible but still considered to be present. In 2.34b a visible object is referred to by means of medial tiʔ?. But the same entity can be accompanied by a demonstrative even if the object is not present (2.34c). In such a case the Speaker uses a member from the set of invisible demonstratives, in this case niʔ?, the counterpart of visible tiʔ? (all examples from Van Eijk o.c. 199):

2.34 a. stām=kʔʔu’
What is that? (when hearing a noise)

24 Gundel et al. also identify this type of use for the demonstrative, naming it ‘reminder that’ as ‘a demonstrative determiner that requires familiarity but not activation (...) often facilitates comprehension by serving as a signal to the addressee to search long-term memory for a familiar referent’ (1993: 301-2). See also 2.2.5.2.
b. \( nnil=\tilde{t}i? \ k''u=\text{ctlx}^w \text{el}p \)
that is the house (\( \text{ctlx}^w \)) that burned down (\( \text{el}p \)) (when pointing at the ruins)

c. \( \text{el}p=\text{tu}' \ ni?=k''u=\text{ctlx}^w \)
that house burned down (when talking about the house, while it is completely absent from the situation of speech).

Thus, entities that are not visible but present and entities that are not present at all can be indicated by means of the invisible set. So at least we have an example of a deictic demonstrative referring to something that is not only not visible but also not present.\(^{25}\)

2.3.1.3. Summary and conclusions

Entities that are present in the speech situation but need to be brought under the attention of an Addressee are often referred to by means of demonstratives. The choice for a specific demonstrative depends either on relative distance from the Speaker in a distance-based system or on location near one of the speech participants in a person-based system.

Three types of deixis are distinguished: gestural deixis, symbolic deixis and 'Deixis am Phantasma', mainly found in narratives. These types of deixis can, and regularly are, accompanied by pointing gestures. It is therefore often said that demonstratives are pointers or localizers, although not everyone agrees with this characterization\(^ {26}\). I believe that the demonstrative expression simply links a mental representation to the speech situation, without being capable of further identifying the referent. The identification is performed by the gesture.\(^ {27}\)

Another way of referring to an element in the non-linguistic world belongs to the competence of recognitionally used demonstratives. Their sole purpose is to introduce a referent into the discourse that contains shared, private information. Such a demonstrative NP is often accompanied by a modifier providing more information if the head noun is not informative enough itself. I believe that this modifier is the linguistic pendant of the almost obligatory gesture in the case of deixis: it helps identify the intended referent. Again the demonstrative could be considered a linker. This time however the demonstrative links a mental representation to an entity in the memory of both Speaker and Addressee. In other words, in both non-linguistic uses the demonstrative instructs the Addressee to link a mental representation of some as yet unidentified referent to an entity in some non-linguistic search domain. In case of deixis the search domain is the speech situation, in case of recognitional use the search domain is private, shared long term memory. The latter memory partition by the way is also accessed when an entity mentioned a long time ago has to be retrieved (this is actually Anaphora in the geographical approach). More on that in the appropriate sections. In table form:

<table>
<thead>
<tr>
<th>Demonstrative use</th>
<th>Search domain</th>
<th>more identifying information</th>
</tr>
</thead>
</table>

\(^ {25}\) If Recognitional Use and Situational Use can be partially equated somehow, and if Recognitional Demonstratives can also be Anaphoric (as Himmelman assumes), then the system of the geographical approach partially collapses. Which is one of the reasons why the geographical approach alone will not do.

\(^ {26}\) See for example De Mulder 1996. De Mulder concludes that the French demonstrative determiner is neither a pointer nor a localizer since it does not identify the referent on its own. Instead, the demonstrative determiner simply signals the Addressee to search for the referent in a certain region of the speech situation.

\(^ {27}\) One should try to find the referent of 'look at that man over there' if the Speaker keeps his eyes closed and does not point. It will only work if the man is the only member of his class present.
Turning to Information structure, recognitional demonstratives are always Focus. Given the characteristics - the entity is not present in the speech situation and the reference is a first mention in the discourse - the referents of such demonstratives can never be a Topic in the clause containing them. Entities that are present in the speech situation and also mentioned for the first time are often Focus, either because they are introduced in the focal part of a Predicate Focus clause (see 2.2.3.2.1.), or because they are introduced as the subject in an ‘out-of-the-blue’ sentence, or Sentence Focus clause (see 2.2.3.2.3.).

The question is now: does the combination of Topic and Situational Use & the centering procedure exist? If it does, it should only concern Unestablished Topics, because Established topics are always part of the continuity procedure (see the next section). We have to look for non-salient entities that have not been mentioned before, but which the speaker places in subject position in order to comment on it. Following the definition in ex. 2.8, the comment increases the addressee’s knowledge of the Topic referent. But since the referent was not salient and not mentioned before nor present, the addressee has no knowledge to increase. Furthermore, a Topic in Situational Use & centering procedure would violate the Principle of Separation of Reference and Role (Lambrecht 1994: 184) which says “Do not introduce a referent and talk about it in the same clause” (o.c. 185).

Combining this last remark with the findings in this paragraph and the preceding one, the table is filled in as follows (U-Top = Unestablished Topic):

<table>
<thead>
<tr>
<th>geographical parameter</th>
<th>cognitive parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>continuity procedure</td>
</tr>
<tr>
<td>Deictic</td>
<td>Topic</td>
</tr>
<tr>
<td></td>
<td>U-Topic</td>
</tr>
<tr>
<td>Recognitional</td>
<td>this/that N</td>
</tr>
</tbody>
</table>

The remaining empty slots will be discussed in the next paragraph.

2.3.2. Deixis and the continuity procedure

In this section the following slots of the table will be discussed:

<table>
<thead>
<tr>
<th>geographical parameter</th>
<th>cognitive parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>continuity procedure</td>
</tr>
<tr>
<td>Deictic</td>
<td>Topic</td>
</tr>
<tr>
<td></td>
<td>U-Topic</td>
</tr>
<tr>
<td>Recognitional</td>
<td>this/that N</td>
</tr>
</tbody>
</table>

28 It is possible of course that Speakers actually sometimes use this kind of expression. I believe however that this would require a lot of accommodating by the Addressee (see Lambrecht 1994: 195ff. for pragmatic accommodation).
Introducing an entity linguistically into the discourse does not automatically imply that the entity is not yet in the center of attention. It is very well possible, as Cornish 1999, Chapter 4 argues, that entities are present in the center of attention of a Speaker and Addressee without being introduced in the discourse by linguistic means. A gesture, a nod of the Speaker to some entity often will do to bring that entity in the center of attention of the Addressee. After having done so, both may use unstressed, anaphoric pronouns, the so-called antecedentless anaphors, referring to the entity in the discourse following the gesture. The following example shows that even such an attention drawing non-linguistic act is not necessary if the referent on its own account stands out from the background:

2.35  [A and B turn a corner on the pavement, and suddenly find themselves face to face with a rather large dog]

A to B: Do you think it's friendly? (Cornish 1999: 112, ex. 4.1)

By its sudden appearance the dog is immediately in the center of attention, and reference may therefore be made to it by an anaphoric pronoun (anaphoric as understood in the geographical approach). The speaker maintains or continues the center of attention on the dog as s/he may similarly maintain the focus on a referent which has been mentioned before in the discourse.

This time the pronoun in deictic context (it) stands in a Topic relation with the sentence, the sentence being a comment on the dog. Although the correlation between Continuity and Topic is very strong, it is possible to react on the appearing of the dog as follows with a Focus expression:

2.36  A to B: THAT's29 the dog that bit my leg yesterday (in contrast with other dogs)

The only other requirement that validates this reaction in this context is the assumption the Speaker makes about the state of knowledge of the Addressee. Speaker assumes that Addressee knows that some dog has bitten the Speaker. The lack of accent on dog and the following relative clause indicates the presupposedness of this part of the clause, that is, the fact that some dog has bitten Speaker's leg yesterday. The unpredictable part from the point of view of the Addressee, and thus the Focus, is the fact that it is exactly that dog and no other.

It is even possible to think of Unestablished Topics in connection with the speech situation. As Lambrecht explains, Topics when unexpected have to be accented:

2.37  [(This example is invented). Someone enters a room and notices that the children did something wrong. Another person is asked:]

What did they do? — Well, HE ate the COOKIES, and HE ate the CAKE! (gestures are necessary.)

The answer provides the missing part of information about the children, and the children are therefore the Topic on which the predicates comment (compare with the possible answer with unaccented pronoun 'they ate the COOKIES'). It is however not clear which of the children did what, and this unpredictability is indicated by using accented pronouns. So although the children together are already the most salient referent, thus requiring the continuity procedure, the Addressee still needs to establish a Topic relation due to the two different predicates.

29 In this example accented that is the accented counterpart of it, not simply the demonstrative that. Compare with the following situation: Who ate the cake? — HE did! (with pointing gesture). The gesture is the physical correlate of the centering procedure, causing the person to be salient. The missing Focus argument is now provided by accented he.
The reason that I include expressions as in 2.36 and 2.37 under the heading of Continuity is the fact that the entities in both contexts are already in the center of attention. The centering procedure is therefore not required. On discourse level the center of attention is maintained, on sentence level however other mechanisms are at work that depend on the way the Speaker wants to highlight his/her most important point in an information unit. The most conclusive evidence for the fact that saliency and for example Focus-hood do not exclude each other are of course Focus expressions referring to entities that are clearly salient in the discourse. If I say

2.38 Pat said she was called. (example 3.30 in Lambrecht 1994: 286)

then the referent of she is in Focus, but still salient. I will illustrate below that especially pronouns in Focus refer to entities that are in the center of attention. Also Givón 2001: 230 notes 'that a constituent under contrastive focus is also an anaphorically accessible topic'.

Summarizing, we have seen combinations of Deixis, Centering and Focus (exx. 2.22, 2.23, 2.24, 2.5, 2.27, 2.32, 2.33), Deixis, Continuity and Topic, either established (2.35) or unestablished (2.37), and finally Deixis, Continuity and Focus (2.36).

The unexpected combination is Continuity & Focus. Only Argument Focus (A-Focus) is possible here (see 2.2.3.2.2). Continuity & Topic covers both Established Topic (E-Topic) and Unestablished Topic (U-Topic), whereas Centering & Focus covers Predicate Focus and Sentence Focus:

<table>
<thead>
<tr>
<th>geographical parameter</th>
<th>cognitive parameter</th>
<th>continuity procedure</th>
<th>centering procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deictic</td>
<td>s/he</td>
<td>—</td>
<td>thisthat N</td>
</tr>
<tr>
<td>Recognitional</td>
<td>S/HE</td>
<td>S/HE</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>E-Topic</td>
<td>U-Topic</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>A-Focus</td>
<td>U-Topic</td>
<td>that N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Focus</td>
<td></td>
</tr>
</tbody>
</table>

Table 2.8: The matrix: continuing & Deictic and Recognitonal

2.3.3. Anaphora and the continuity procedure

2.3.3.1. Introduction

Anaphora as defined in the geographical approach is the phenomenon of reference to an earlier mentioned entity. The anaphoric expression links its referent to the referent of a textual antecedent:

2.39 Thus, from the Middle Hittite period on foreign elements played a great role in Anatolian magic. They were brought in by the newcomers from foreign lands, most

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Cornish 1999: 63 & 206 n. 1 takes accented pronouns generally as centering. The examples (4.5 and 4.7) he adduces to illustrate his view indeed refer to entities that are neither anaphorically nor situationally accessible. They are however made salient, triggered, through inference from the discourse context and then contrastively referred to. Cornish refers to Knud Lambrecht who analyzes these examples with accented pronouns as Contrastive Focus expressions (o.c. 123). In my view, his examples do not convincingly prove that accented pronouns are centering.
often by the Hurrians. These elements were creatively transformed and absorbed into the local tradition. (Popko 1995: 108)

The most common anaphoric expressions are the unemphatic third person pronoun (they in the example above), enclitics or zero (see 2.3.3.2.) and the emphatic pronoun (see 2.3.3.3.). However, in most languages also demonstratives (these elements in the example above) can be used to refer to referents of preceding textual antecedents31. Instead of focusing the Addressee on an element of the outside world, demonstratives are somehow needed to keep track of participants in the preceding discourse (Diesell 1999: 96, Himmelmann 1996: 226). The main characteristic of these participants is that they often are not in the current center of attention and need to be made salient again. Thus, the geographical approach is not able to explain the difference between zero, pronouns and demonstratives. This leads us to a combination with the cognitive approach as a possible model which might explain the differences between these anaphoric expressions.

Discourse referents may be subjected to either the continuity or the centering procedure. To recapitulate:

2.40 The ‘continuity procedure’ maintains the current center of attention on a referent, whereas the ‘centering procedure’ introduces a referent into the center of attention.

The third distinguishing feature is whether an expression stands in a Topic or Focus relation to the rest of the clause.

And the other factor which has to be taken into account when describing the anaphoric use of referring expressions is discourse structure. The objective is now also to establish the distribution of referential expressions, either continuing or centering, in relation to the location of their antecedents (i.e., inside the same discourse unit or in different discourse units). I will therefore split up the anaphora row in an in-node and across-node row.

This section discusses the use of unaccented pronouns (2.3.3.2.), accented pronouns (2.3.3.3.) and demonstratives (2.3.3.4.) referring to entities that are salient at the moment the clause containing the pronoun or demonstrative is expressed (Anaphora and the centering procedure, i.e. the demonstratives, are discussed in 2.3.4.). Anaphora and continuity is the most heterogeneous group of all, both in form and function. Cornish 1999 finishes his book with a remark on salient anaphoric definite descriptions and demonstratives: ‘such forms always convey something other than the default ‘continue the representation currently in explicit focus’, even when their intended referent is in fact one of the discourse entities in current focus. But this is to begin another story …’ (o.c., 250). Here discourse structure kicks in:

<table>
<thead>
<tr>
<th>geographical parameter</th>
<th>cognitive parameter</th>
<th>continuity procedure</th>
<th>centering procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anaphora</td>
<td></td>
<td>E-Topic</td>
<td>U-Topic</td>
</tr>
<tr>
<td>in-node</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>across-node</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

2.3.3.2. Unaccented pronouns, clitics and zero as Established Topics

31 And definite descriptions. But since definite descriptions are not formally marked in Hittite, I will not further discuss them.
Unaccented pronouns, clitics, and zero are the only expressions on which everyone agrees. They are specialized in referring to entities that are in the absolute foreground of thought, in the highest focus of attention. For Gundel et al. (1993: 279) being ‘in focus’ means that a referent is at the current center of attention. Elements in focus include at least the topic of the preceding utterance and other still-relevant higher order topics. Cornish (1999: 63) notes on ordinary third person pronouns: ‘their chief discourse function is to signal referential and attentional continuity, thereby marking the stability of a given referent’s existence within a given discourse model’. They are among Ariel’s (1990: 56ff.) highest accessibility markers. Within the Topic-Focus framework, unaccented constituents, and thus pronouns, are used by a Speaker who assumes that the referent is both active in the mind of the Addressee (in the sense of being in the center of attention) and expected by the Addressee to be a Topic (Lambrecht 1994: 324). The unaccented constituent is the Established Topic.  \[32\]

2.41 After some initial delay, Madduwatta, launched an attack on Hapalla. He conquered it, and (she) added it to his own kingdom, ... (Bryce 1998: 146)

After uttering the initial sentence, the story is expected to continue the dealings of Madduwatta with the state Hapalla. Both are now in the center of attention, and a link has been established between the two. The only new element is the type of relation as expressed by the verb that exists between them, so both may be referred to by unaccented pronouns (or zero in the case of Madduwatta). And when used indeed, they trigger the assumption that the referent has to be the most salient entity and an established Topic so that the Addressee looks for a candidate in the preceding clause with the most fitting properties (with preference of Subject over non-Subject, human over non-human/inanimate, head over modifier, and discourse topic over non-discourse topic).

2.3.3.3. Accented pronouns

How do the accented pronouns fit into the system? According to Cornish 1999: 63 accented pronouns are capable of referring to entities that are still easily recoverable by the addressee but not in the highest focus of attention (see table 2.3). Moreover, they refer generally to entities that are not salient. The difficulty with Cornish’ view is that the examples that he adduces are not unambiguously centering (see fn. 30). Cornish’ view seems to coincide with Bosch 1983: 58ff. who classifies all accented referential pronouns as ‘deictic’, as re-orienting the listener’s attention. But Bosch’ definitions of salience and anaphoric and deictic procedures have everything to do with the Topic or Focus of a sentence: ‘... salience, with respect to discourse, is aboutness: Within a discourse, the most salient object at any point is always the object the discourse at that point is about’ (Italics in the original work). And ‘what the discourse is about’ is actually ‘what a sentence is about’: ‘anaphoric pronouns refer to the objects which the sentences (of which the pronouns form a part) are about, provided the objects are semantically suitable with respect to the pronoun form’ (o.c. 58; Italics mine). Thus, anaphoric pronouns are within Lambrecht’s framework Topic pronouns, and deictic pronouns indicate the Unestablished Topic or the Focus.

Besides the possibility that Cornish’ centering accented pronouns actually refer to referents that are already salient, most other instances of accented pronouns which I found in

32 This includes according to Cornish also unaccented demonstratives, but I have no material in English on this subject.
the literature are indeed salient within Cornish' framework. Recalling what saliency means, elements in the explicit focus region of working memory or cache are salient (Cornish 1999: 223). The cache can contain no more than 2 or 3 sentences or 7 propositions (o.c. 222). If we combine this with the findings of Givón 1983 that the referential distance of accented (or independent) pronouns is generally 1-2 clauses to the left, it follows that accented pronouns are generally salient.

2.3.3.1. Accented pronouns as Unestablished Topics

Although I consider all 3rd person pronouns salient, they do not necessarily have the same degree of accessibility. Gundel et al. 1993: 278 classify the stressed pronouns as ‘activated’ and not in ‘the focus of attention’, as less salient (see also Van Hoek 1997: 62) but still in short-term memory (without presenting examples). The high accessibility of stressed pronouns is also discussed by Ariel 1990: 65ff. But as we will see later, accented pronouns can also be used when the referent is in focus. So what is the difference between activated and in focus accented pronouns? The answer is provided by the framework set up by Lambrecht. In this section I will treat the accented pronouns that indicate Unestablished Topics, in the next section those that indicate Contrastive Topics (2.3.3.2.), followed by the Argument Focus pronouns (2.3.3.3.).

Accented pronouns can be used to indicate that another element comes ‘in focus’ (Givón 1983: 30, Ariel 1990: 64ff., Gundel et al 1993: 299 fn. 30, Cornish 1999: 63). This means that the Topic of the preceding clause is replaced by a new Topic. See for example:

2.42 John hit BILL and then HE hit HIM. (Lambrecht 1994: 327, ex. 5.84)

The accented he has to refer to Bill, indicating a Topic-shift. Unaccented he should have referred to John, because an unaccented pronoun triggers the assumption that the referent has to be ‘in focus’ and an established Topic (see 2.3.3.2.). When a salient element in the preceding clause that was not already the Subject-Topic becomes a Topic in the next clause, an accented pronoun can be used (although I wonder whether ‘and then Bill hit John’ would have been more natural). Similarly, John is moved from Established Topic to an unexpected position in the focus domain of the clause, indicated by accented him (for a more elaborate explanation see Lambrecht l.c.). In 2.42 the new Topic also is a new agent-Subject. The next example shows that the Subject does not need to switch:

2.43 John hit BILL and then HE was hit by IRA. (Ariel 1990: 65, ex. 17)

The unaccented pronoun he would have implied that Bill was hit by Ira. This time the role of the comment ‘was hit (by Ira)’ forces the interpretation that Bill was hit given the fact that that was what happened before. This role of the comment is one of the other factors beside Established Topic-hood and cognitive status that guide the addressee at referent resolution. To avoid the expected pragmatic relation between Bill and ‘being hit’, the speaker has to avoid the unaccented pronoun.

One might think that the change in semantic role causes the use of the accented pronoun, but Ariel 1990: 66, who argues that accented pronouns have lower accessibility than unaccented pronouns, suggests something which perfectly fits in the Topic-Focus framework: ‘I suggest that lower accessibility is marked by stress, usually reserved for focus marking, because both have in common the indication that the referent intended is not the one to be

33 Cornish 1999: 69ff. has devoted a chapter to the role of what he calls the indexical segment.
expected'. This is also what Lambrecht has found: 'The function of an accent on constituents with active referents', whether pronominal or nominal, is then to establish the role of a given referent as a topic or a focus argument in a pragmatically structured proposition' (o.c. 323). Thus, in 2.42 and 2.43 the accented pronoun establishes the referent as Topic in relation to that specific comment.

The formulation of Lambrecht does not distinguish between pronominal and nominal expressions. As I stated above, it seems to me that the Unestablished Topics in ex. 2.42 (and 2.43) are more naturally expressed by means of accented names. Also, I believe that accented pronouns have more often 'in focus' referents than generally assumed (see 2.3.3.3.2. and 2.3.3.3.3.). For the moment this has to remain an assumption and should be tested on a corpus of recorded English conversation.

Before we move to the 'in focus' accented pronouns, a word is in order about Topic-shift in other languages than English. Topic-shifts in other languages may not be indicated by accented pronouns, but by demonstrative pronouns, as in French (Cornish 1999: 66, ex. (2.28)):

2.45 L'ouvrière redit naïvement son mensonge à Melle Vatnaz; celle-ci en vint à parler au brave commis. (Flaubert)

The female worker naively repeated her lie to Mlle Vatnaz; the latter (f.sg.) ended up speaking to the good clerk (about it).

Cornish' translation into English shows that the latter is preferred instead of an accented pronoun, which would support my impression that accented pronouns as Unestablished Topics are rather odd. For the use of the French demonstrative determiner ce as a salient demonstrative capable of structuring the discourse, see 2.3.3.4.2.

Interestingly, contrary to French the Latin distal demonstrative pronoun ille is more or less restricted to the environments described in this paragraph, and does not occur in the discourse structuring function of the other demonstratives hic and is (see 2.3.3.4.2.). As is the case with the Hittite medial demonstrative pronoun apa- in anaphoric use, the Latin distal demonstrative pronoun ille seems to be specialized in signalling Unestablished Topics and Argument Focus. An example of an Unestablished Topic and ille is (from Bolkestein & Van de Grift 1994: 289, 294, ex. 5b’ combined with ex. 10a):

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34 Lambrecht's category 'active' (1994: 93ff.) corresponds with high saliency.

35 In order to support this I list the findings of Gundel et al 1993: 291. The Chinese accented ta 'he' did not occur on a total of 240 referring expressions. For English there was only one accented 3rd person pronoun on 655 referring expressions. This pronoun had the status 'activated'. The Russian accented ono 'he' occurred once as 'activated' on a total of 284 referring expressions. The Spanish accented pronoun el was not attested on a total of 331 referring expressions. The cognitive status of Japanese kare 'he' is 'activated' according to Gundel et al. o.c. 284, but in their material kare occurs 4 times on a total of 363 referring expressions, each time 'in focus'. Thus, we have 4 'in focus' and 2 'activated' accented pronouns on 1873 referring expressions. Any conclusion based on 6 out of 1873 is statistically irrelevant. Assigning the cognitive status 'activated' to the accented pronouns seems therefore premature: one would like to examine the examples. In Hittite the referent of the accented pronoun apa- is almost always 'in focus'.

36 As Ariel 1990: 65 notes, 'High Accessibility Markers are the hardest to correlate cross-linguistically'. This means that different languages can use different types of expressions to state the same and vice versa.
2.46  *Erat unus intus Nervius, nomine Vertico, loco natus honesto, qui ... Hic servo ... persuadet ... ut litteras ad Caesarem deferat. Has ille in iaculo illigatas effert* (Caes. Gall. 5.45.3-4)

There was a Nervian in the camp, named Vertico, born to an honourable estate, who ... He (*hic*) persuaded a slave (*servo*) to deliver a despatch to Caesar. The man (*ille*) carried forth the despatch bound on a javelin.

2.3.3.2. Accented pronouns as Contrastive Topics

To recapitulate, the dominant opinion is that the accented pronoun in English is basically not 'in focus'. However, accented pronouns may also be used to refer to elements that are already highly salient. First, accented pronouns may indicate that the most salient referent is in counter-presuppositional Focus (see the next section). Secondly, Contrastive Topics are almost always highly salient. Example 2.17 (2.2.3.2.1.) provided an illustration of salient entities that are referred to by accented pronouns, repeated here as 2.47.b.:

2.47  a. I saw MARY yesterday. *She* says HELLO.

b. I saw MARY and JOHN yesterday. *SHE* says HELLO, but HE's still ANGRY at you.

In both a. and b. Mary is equally salient and accessible (or active in Lambrecht's terms), and in both cases the predicate is about Mary, providing some new information about her. Therefore Mary is the Topic. In the b. part however both Mary and John are introduced. Both may now be topics but with what comment? This unexpectedness is indicated by means of accented pronouns. Both Topics are *Contrastive Topics* (Dik 1997a: 326 classifies the accented elements in this type of construction as Parallel Focus.)

The accented pronouns are not centering because the cognitive effort in retrieving the correct antecedent is minimal, especially when one realizes that *she* may only refer to females, and *he* to males. The use of accented pronominal Contrastive Topics is only possible in English when the referents are male and female. Otherwise one again has to use the names:

2.48  John and Bill came to see me. JOHN was NICE, but BILL was rather BORING (Dik 1997a: 326, ex. 36).

Sometimes however, highly salient referents that are also expected to become the Topic in the next clause are still expressed by means of an accented pronoun although there is no explicit contrast (ex. 2.16 repeated as 2.49):

2.49  a. What is she going to *DO*?

   b. *SHE*’s going to do the COOKING (adapted from Lambrecht (5.86’))

As I described *sub* 2.16, the accented pronoun indicates that the referent is to be considered an Unestablished Topic. I would like to call this kind of Topic an *Implicitly Contrastive Topic* given the implicature that the referent of *she* is ‘selected over some potential alternative candidate in the universe of discourse’ (Lambrecht 1994: 328). Still, the accessibility and ‘in focusness’ of *she* are the same whether *she* is accented or unaccented. The hierarchies of

---

37 There is however another possibility. As I discuss in chapter 7.6, parallel constructions like these with accented salient expressions might have nothing to do with Topic or Focus, but everything with the intonation contour required by coordinate clauses.
Gundel et al. (1993) and Ariel (1990) do not account for such a situation because they concentrate on the cognitive status and identifiability of referents throughout the flow of discourse. Neither can Cornish explain this type of use. He only points at the topic-shifting powers of the accented third person pronoun (1999: 63).

2.3.3.3.3. Accented pronouns as Focus

Lambrecht has shown that Focus and saliency are independent parameters (1994: 257ff., 286). He illustrates this by means of the following examples (his (3.29) and (3.30), o.c. 115)

2.50  A: Has Pat been called yet?
     B: Pat said she was called TWICE.

2.51  A: Who did they call?
     B: Pat said SHE was called

In the first example she referring to Pat is clearly in the center of attention, and also the Established Topic. In the second example the requested information is provided by accented she which is therefore the Focus. (I assume that pronouns in Focus can only appear as Argument Focus.) However, in both cases the pronoun is referring anaphorically to Pat and there is no reason to assume that the cognitive effort in retrieving the correct antecedent of SHE is more difficult than for she, or in other words that the referent of SHE is less accessible than the one of she.

Summarizing, the use of accented 3rd person pronouns and the difference with unaccented pronouns can be more satisfactorily be described by the requirements of the Information Structure of the clause than by the cognitive status or the accessibility of the respective referents.

2.3.3.4. Accented pronouns and discourse units

I will be short on the correlation of 3rd person anaphoric pronouns and discourse structure: it is very likely that these pronouns mainly refer to discourse entities inside a discourse unit (see for example Van Dijk & Kintsch 1983, Fox 1987, Ariel 1990, Van Hoek 1997). More discussion on the influence of discourse structure on referring expressions and vice versa follows in the sections on the anaphoric demonstratives.

In the next section anaphoric demonstratives referring to salient entities will be discussed.

2.3.3.4. Demonstratives

As cited in 2.3.3.1., Cornish observes that definite descriptions and demonstratives signal something else than 'maintain the referent in the center of attention', especially when the referent is in the center of the attention. Others of course have noticed the same. Before presenting a description of the different uses of salient demonstratives in discourse, I will summarize the views of several scholars on the subject of anaphoric demonstratives (whether
referring to salient or non salient entities), starting with the typological research of Diessel and Himmelmann and followed by what Cornish has collected on anaphoric demonstratives.

**Diessel 1999:** In line with the views of Gundel et al. 1993 and Ariel 1990, Diessel (o.c. 96) states that ‘anaphoric demonstratives are often used to indicate a referent that is somewhat unexpected and not currently in the focus of attention’ and on p. 99: ‘What all anaphoric demonstratives have in common is that they do not just continue the focus of attention; rather, they indicate that the antecedent is not the referent that the hearer would expect in this context (i.e. the most topical NP)’. He has isolated the following uses of anaphoric demonstratives:

1. They may indicate a *topic shift* (p. 96). Although in English and certainly in Hittite topic shifts are expressed by means of accented pronouns (see 2.3.3.1. above), in languages like German, French and Latin demonstrative pronouns are used.
2. They may *reactivate* a participant mentioned some time ago in the discourse (p. 99). This belongs to the centering procedure, see 2.3.4.
3. They may be used to establish a newly introduced discourse referent more firmly as a thematically prominent discourse topic (p. 96ff.). This is called *Immediate Anaphora after first mention* and will be discussed in this section.

**Himmelmann 1996:** Himmelmann o.c. 226 discards the approaches that treat demonstratives as markers of intermediate topicality, accessibility (Ariel 1990: 73) and activation state (Gundel et al. 1993: 275). Instead, ‘demonstratives are used for tracking only if other tracking devices fail’ (p. 227). Crucial use is made of discourse nodes: demonstratives may track in-node, across node, and at a node boundary. Himmelmann restricts himself to in-node tracking: ‘Demonstrative expressions ... are used whenever a second full definite NP mention is necessary for a given referent within a given discourse node — for whatever reason.’ (p. 227). So if the third person pronouns fail, then only a demonstrative may be used inside a discourse node, excluding the use of NPs with definite articles from in-node tracking. Third person pronouns may fail because of:

1. Danger of *ambiguity* (p. 227-8). The examples presented by Himmelmann show topic-shift, so this category coincides with Diessel’s category 1.
2. The *restriction* of third person pronouns to rationals in some languages (p. 228-9). Inanimate participants have to be tracked by demonstratives, as in Tagalog. I will not discuss this further.
3. *Immediate anaphora after first mention* (p. 229). See below.

**Cornish 1999:** Finally, Cornish describes the following effects of demonstrative *descriptions* referring to salient entities (English demonstrative pronouns often refer to propositions and are therefore discussed in 2.3.5. and 2.3.6.):

1. The demonstrative description may be *(re)*classifying (p. 57). This is a case of Immediate anaphora after first mention.
2. The demonstrative description may indicate a *new orientation, a shift in perspective* within the discourse (p. 56). This could also be subsumed under Immediate anaphora (after first mention).
3. The demonstrative description (and pronoun) may signal a transition to a *new discourse unit*, replacing its salient discourse referent for a new object of focus (p. 27). See Apothéloz 1995: 291-300 for French.
Summarizing, on the level of (discourse) semantics salient demonstratives descriptions are (re)classifying (Cornish 1), while the demonstrative pronouns indicate a topic shift (Diessel 1). On the level of structuring the discourse, they may either firmly establish a referent as the discourse topic (Immediate anaphora after first mention, Diessel 3, Himmelman 3, Cornish 2, see section 2.3.3.4.1.), or, more generally, demarcate discourse units (Cornish 3, and section 2.3.3.4.2). In a few very simplified words, demonstratives add something new to either the (salient) referent or to the discourse.

2.3.3.4.1. Immediate anaphora after first mention

When a referent is introduced into the discourse as locally or globally thematically prominent, it is often referred to after this first mention by means of a demonstrative expression (see for example Apothéloz 1995: 291f. for French, Bolkestein & Van de Grift 1994: 287ff. for Latin, Lichtenberk 1996: 386ff. for To'aba'ita38, Terken 1984: 282, 286 for Dutch39). This is especially common in languages that lack a definite article. The function of this demonstrative is to establish the referent more firmly in the discourse. Bolkestein & Van de Grift 1994 distinguish two types of pragmatic function for the antecedent of the demonstrative expression in Latin:

1. The antecedent is expected to function as the Discourse Topic. The referent, a Future Topic in their terms, is often introduced by means of a staging predicate (o.c. 287).
2. The antecedent is in the Focus part of the antecedent clause, and is thus not the expected Discourse (and Sentence) Topic because there are other candidates that are preferred for Topic-hood (o.c. 293ff.).

The situation described under 2. has been discussed for Latin and French in 2.3.3.3.1., Unestablished Topics, ex. 2.46. For 1. we have in Latin (from Bolkestein & Van de Grift 1994: 289, ex. 5b'):

2.52 Erat unus intus Nervius, nomine Vertico, loco natus honesto, qui ... Hic servo ... persuadet ... ut litteras ad Caesarem deferat. (Caes. Gall. 5.45.3-4)
There was a Nervian in the camp, named Vertico, born to an honourable estate, who .... He (hic) persuaded a slave (servo) to deliver a despatch to Caesar.

In To'aba'ita demonstrative NPs are often used to firmly establish the discourse topic:

2.53 ... nia ka toda-a te'e thaari. Thaari ‘eri.
he he:SEQ meet-her one girl. Girl this,

rikila -na ‘e le’a mamana bo’o
appearance-her it:FACT be.nice really INT

... he met a girl. The girl, she (lit.: her appearance) was really beautiful. (Ex. (9) from Lichtenberk 1996: 387)

38 To’aba’ita is a member of the Oceanic subgroup of Austronesian (Lichtenberk 1996: 408, fn. 1)
39 Terken studies the distribution of unaccented and accented expressions in relation to discourse structure. She observed that accented expressions (demonstratives, noun phrases) are often used immediately after they have been introduced.
Cornish (1999: 56) does not explicitly mention Immediate Anaphora after first mention, but states that the demonstrative description may indicate a new orientation, or a shift in perspective. He cites the following reclassifying example:


After introducing a ‘projet de loi’ in the next example, the text continues with a description with the internal make-up of the bill. It is not exactly clear to me whether the *projet de loi* is a Future Topic, or whether it is in Focus without the connotation of becoming a Discourse Topic. The fact that a kind of staging predicate *presenteur* is used brings this example close to example 2.53, where the girl is introduced as the object of *meet*. On the other hand, why are the *he* in 2.53 and Jacques Toubon in 2.54 not the expected Discourse Topics? After all, they are both the Subject, and in 2.53 also the Sentence Topic. So it seems that these two examples represent *Unestablished Topics*. But this is not the case in the next example:

2.55 Un avion s’est écrasé hier. *Cet avion* relie habituellement Miami à New York (De Mulder 1996: 42, ex. 11).

De Mulder discusses this piece of text in order to explain the difference between demonstrative NPs and definite NPs in French. He compares it with

2.56 Un avion s’est écrasé hier. *L’avion/Cet avion* venait de Miami (his ex. 9)

where both NPs are allowed. The difference between the two is that in 2.56 the discourse is more coherent than in 2.55. De Mulders refers to Kleiber (1986) for the correlation between discourse coherence and demonstratives: a demonstrative NP is the preferred anaphoric expression for creating the necessary discourse coherence. This also noted by Cornish 1999: 56 who observes that the two sentences in 2.54 are performing different discourse functions. The first sentence introduces the discourse topic whereas the second one considers the ‘internal make-up of the bill’. He concludes with: ‘Use of the definite description *Le texte* would have led to relative incoherence in this context’ (l.c.).

One of the means of creating discourse coherence consists of Tail-Head linking (Dik 1997b: 438f.). In a Tail-Head linking construction a crucial part of the preceding clause is summarized:

2.57 After a long journey they came to a small village. *In that village/There* they found a place where they could spend the night. (Dik’s ex. 29).

In my opinion the demonstrative determiner in 2.55 functions as a shorthand for a Tail-Head linking device which could be a relative clause in the case of a Subject Topic:

2.58 Un avion s’est écrasé hier. *L’avion qui est écrasé hier* relie habituellement Miami à New York (De Mulder 1996: 42, ex. 11).
When a relative clause (or some other modifying expression) is present it is not necessary to use a demonstrative determiner. This becomes even clearer when viewing the following examples (Maes & Noordman 1995: 265, ex. 15 & 15c):

2.59 In the big cities, air pollution is increasing. [This / that / the]^{41} air pollution is a result of bad policy.

2.60 In the big cities, air pollution is increasing. [The / ?this] increasing air pollution in the big cities is a result of bad policy.

In 2.60 the use of the demonstrative is questionable whereas it is preferred in 2.59. Thus, the demonstrative replaces a more elaborate description that links a clause to its preceding clause by partial repetition of that preceding clause. This mechanism is necessary in order to link discourse units that are not thematically coherent. A similar linking is observed by Apothéloz 1995: 292 in a different context (although he uses the term ‘ancrer’, to anchor). This time the demonstrative is used to connect one speech-act/discourse move with a speech-act/move of another person (his ex. 39):

2.61 Question: Que pensez-vous du succès d’un feuilleton comme Dallas?
Written answer: Je pense que le succès de ce feuilleton est dû au fait que …

Finally, the linking mechanism of demonstratives becomes apparent when a referent is redescribed or classified in such a way that it is not immediately clear that the description is connected with the antecedent.

2.62 On apprend la mort hier de John Sowers. Cet Américain, âgé de 55 ans, était à l’origine de la photocopieuse …
‘We hear of the death yesterday of John Sowers. This American, aged 55, was the inventor of the photocopier …’ (from Cornish 1999: 57, ex. 2.21).

One cannot take it for granted that everyone knows that John Sowers was an American. The classification of Sowers as such needs therefore to be linked to the preceding clause. According to Gundel et al. 1993: 302 this redescription of an activated referent ‘provides a compelling example of a stronger than strictly necessary form being required’. The use of ‘ce’ explicitly signals that the referent is activated (salient in Cornish’ framework), information that would be harder to retrieve without the demonstrative.

Summarizing, I believe that the principle behind Immediate Anaphora after first mention by means of demonstratives might be that the clause containing the demonstrative NP is not thematically connected with the preceding clause. In order to restore discourse coherence a demonstrative NP - a Tail-Head linking device in disguise- can be used, even if the referent of that phrase is highly salient and already expected to become the Discourse and Sentence Topic. On the level of discourse, the initial clause is the introduction or announcement, after which the true story starts. One could even consider this an instantiation of the Principle of the separation of reference and role on discourse level. Lambrecht 1994: 184 formulates this principle in relation to Sentence Topics: "Do not introduce a referent and talk about it in the same clause". In terms of discourse topics and units this could be

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^{40} Besides Himmelmann, Maes & Noordman (o.c. 257) also contest the claim made by Ariel (1988, 1990) that demonstrative descriptions refer to discourse entities with a relatively low degree of accessibility.

^{41} ‘This’ is the most preferred, ‘the’ the least.
paraphrased as: “Do not announce a discourse topic and start talking about it in the same discourse unit”.

2.3.3.4.2. Demarcating discourse units

Fox 1987 found that lexical noun phrases instead of pronouns (i.e., an overspecified expression) referring to salient entities demarcate rhetorical units and Apothéloz 1995: 291ff. (with references) noticed the same for the French demonstrative description. This has been experimentally confirmed by Vonk 2001: 272f. for Dutch overspecified expressions (a name with modifier). The outcome of her experiments showed that overspecified expressions create a discourse discontinuity. So, as with probably Immediate anaphora after first mention, lexical NPs occur on discourse nodes.

The transition to a new discourse unit or rhetorical unit includes two different type of discourse structuring. The first type, entering a new unit and closing the preceding one, assumes that both units function on the same level, they are sequential so to speak. Most examples from Fox and Apothéloz are of this type. To cite part of an example from Fox 1987: 111:

2.63a (4) Albertson will be responsible for academic planning and program review, ...
(5) He also is responsible for UC extension, ...
(6) Albertson has been special assistant to Swain since 1978.

Clauses 4 and 5 form a list describing the responsibilities of Albertson. After that, the description continues with a narration of the past positions of Albertson. This new discourse unit is marked by the lexical NP Albertson.

The other type involves the switch between embedded and main discourse units, between background and foreground units. This can be illustrated by means of Latin (Bolkestein & Van de Grift 1994: 292, ex. 8b):

2.63b Eidem Alexandro et equi magna raritas contingit. Bucephalan eum vocaverunt sive ab ...
sive ab ... XVI talentis ferunt ex Philonici Pharsalii grege emptum etiam tum puero
capto eius decore. Neminem hic alium quam Alexandrum regio instructus ornatu
recepti in sedem (Plin. Nat. 8.154)

Alexander also had the good fortune to own a great rarity in horseflesh. They called the animal Bucephalas, either because of ... or because of ... It is said that he was bought for 16 talents from the herd of Philonicus of Pharsalus, while Alexander was still a boy, as he was taken by his beauty. This horse (hic), when adorned with the royal saddle would not allow itself to be mounted by anybody except Alexander.

As Bolkestein & Van de Grift explain, the ‘great rarity in horseflesh’ is not constituted by the horse’s name, but by its refusal to accept anyone else but Alexander in the saddle. The namegiving is a subsidiary passage, and only the clause with hic returns to the first sentence (o.c. 292). For is resuming an earlier topic after a digression see Bolkestein 2000: 123.

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42 I wonder though what came first. Do we come to expect a discontinuity because discontinuity is part of the semantics of a lexical NP or does a new unit require, among other things, a lexical NP, with the result that a lexical NP is expected to occur on a discourse boundary. In the latter situation discontinuity might not be part of the semantics of a lexical NP.
2.3.3.5. Summary

Demonstrative NPs in English (and demonstrative pronouns in a language like Latin) referring to salient entities, i.e. overspecified NPs, occur generally in two types of context: Immediate anaphora after first mention, and on discourse boundaries. It has generally been accepted that demonstrative NPs and lexical NPs in general are capable of demarcating discourse units, but this has not been asserted of Immediate anaphora after first mention. According to the literature, the function of Immediate anaphora after first mention is to more firmly establish a referent as a global or local discourse topic. However, I believe that the demonstrative expression also here appears on the boundary of a discourse unit. In the case of Immediate anaphora after first mention the new unit is the beginning of the actual narration after the introduction of the referent in the first clause.

But what is the difference between a definite NP and a demonstrative NP? In my view the demonstrative in the demonstrative NP functions as a kind of Tail-Head linking device in disguise. Whereas a NP generally begins a new discourse unit, the demonstrative is capable to link this unit to the rest of the preceding discourse in order to restore the broken discourse coherence. At least, this is how it could work in languages with definite articles.

When discussing the examples I sometimes referred to the Information structure inside the sentence. For example, in 2.52 and 2.63 the Latin demonstrative pronoun is an Established Topic, and the same goes for the French 2.55, 2.56 and English 2.60. The demonstrative NPs in To’aba’ita, 2.53 and French, 2.54, are Unestablished Topics. The question remains whether demonstrative NPs can also occur in Argument Focus.

Combining these results with the results from 2.3.3.3. in Table 2.9, it turns out that (1) within a discourse unit accented pronouns can appear in every slot accept the one for Established Topic, and that (2) demonstrative descriptions, referring across node, can be both kind of Topics. If it is indeed true that demonstrative NPs occur when the discourse coherence is not very strong, then the answer to the question about Argument Focus is clear. Argument Focus clauses require that the rest of the clause is presupposed, which means that the connection with the preceding discourse is maximal. If that is the case, the stimulus for using the demonstrative NP is absent. Therefore, demonstrative NPs probably do not occur in Argument Focus. The ultimate consequence might be that Information Structure is not important at all for across node reference. Leaving this consideration aside, the table is filled in as follows:

<table>
<thead>
<tr>
<th>geographical parameter</th>
<th>continuity procedure</th>
<th>centering procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anaphora</td>
<td></td>
<td></td>
</tr>
<tr>
<td>in-node</td>
<td>E-Topic, S/HE</td>
<td>U-Topic, Focus</td>
</tr>
<tr>
<td>across-node</td>
<td>this/that</td>
<td></td>
</tr>
</tbody>
</table>

Table 2.9: The matrix: continuing & Anaphora

2.3.4. Anaphora and the centering procedure

This section will deal with the centering expressions. The only anaphoric expressions referring to non-salient discourse referents discussed here are the demonstratives. As I said in
the introduction, I do not include definite NPs in the discussion. Furthermore, accented pronouns are not discussed here since I disagree with scholars who assume that accented pronouns can refer to non-salient entities (see section 2.3.3.3.).

The slots to be filled in are:

<table>
<thead>
<tr>
<th>geographical parameter</th>
<th>continuity procedure</th>
<th>centering procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anaphora in-node</td>
<td></td>
<td></td>
</tr>
<tr>
<td>across-node</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E-Topic</td>
<td>U-Topic</td>
</tr>
<tr>
<td></td>
<td>s/he</td>
<td>S/HE</td>
</tr>
<tr>
<td></td>
<td>this/that N</td>
<td>this/that N</td>
</tr>
<tr>
<td></td>
<td>A-Focus</td>
<td></td>
</tr>
</tbody>
</table>

2.3.4.1. Introduction

The function of demonstratives in discourse is quite complicated (see the preceding section), not in the least because demonstratives in discourse have been studied only partially. Two main works on demonstratives, Diesssel 1999 and Himmelmann 1996, focus on in-node use of demonstratives in discourse but hardly discuss them when the antecedents are found across a discourse node. Similarly, Cornish 1999: 54 restricts himself to demonstratives referring to the preceding clause. His framework however is clear in this matter: any expression that refers to an entity that is not in the center of attention is centering. Ariel 1990: 18-19 is the only one that gives statistics on the use of anaphoric expressions including demonstratives at different distances in the discourse. However, she restricts her examples to demonstratives in first mention or in reference to the previous clause. In the next discussion I will refer frequently to Gundel et. al (1993) although I will eventually not use their model as an explanation of the use of demonstratives in discourse.

Despite this lack of verifiable material, what is claimed about demonstratives? Gundel et. al. (1993) show that demonstrative descriptions from samples of English, Japanese, Russian and Spanish spoken and written texts are distributed according to the highest cognitive status they had in their particular contexts in the following way (o.c. 291-292)\(^4\):

<table>
<thead>
<tr>
<th>Language</th>
<th>IN FOCUS</th>
<th>ACTIVATED</th>
<th>FAMILIAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>this N</td>
<td>1</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>that N</td>
<td>10</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>JAPANESE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>kono 'this' N</td>
<td>1</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>sono 'that' N (medial)</td>
<td>18</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>ano 'that' N (distal)</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>RUSSIAN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>êto 'this' N</td>
<td>1</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>to 'that' N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPANISH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>este 'this' N</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>ese 'that' N (medial)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>aquel 'that' N (distal)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^4\) In the following I will only discuss demonstrative descriptions. English demonstrative pronouns are almost always used to refer to propositions and are therefore discourse deictic, not anaphoric. This may of course be different in other languages, as it is in Hittite.
Tabi cc 2.10: Distribution of English, Japanese, Russian and Spanish demonstratives according to highest status (Gundel et al. 1993: 291-292).

For the moment I will not discuss the status ‘in focus’ because it obviously does not apply to referents that have not been referred to for some time.

‘Familiar’ means that the Speaker refers to an entity that is presumably already represented somehow in the mind of the Addressee, either because it is stored in long-term memory or because it is in short-term memory through recent mention or perception (1993: 278). Also representations of referents with ‘activated’ status can be retrieved from long-term memory or may arise from the immediate linguistic or extra-linguistic context. An activated referent is represented in current short-term memory (I.e.). It seems that Gundel et al. differentiate between working memory and current working memory although I do not know how to distinguish ‘familiar’ from ‘activated’ in this case. However, in order to describe anaphoric reference of demonstratives over larger distances or across a discourse node I think we only need to be concerned with long-term memory and with the status ‘familiar’.

Gundel’s et al. thesis is that there is generally a difference in status between proximal and medial or distal demonstrative determiners, proximal often being at least activated and distal being familiar (o.c. 284). The same idea is advocated by Ariel 1990: 51ff., 75: proximal demonstrative determiners indicate higher accessibility of the referent than non-proximal demonstrative determiners. But as can be seen from table 2.10, for example all Japanese demonstratives can refer to entities that are only familiar, albeit infrequently. The question I want to discuss is this: given the fact that all demonstratives can be familiar but not activated, what is the condition that governs the choice of demonstratives with the status familiar?

2.3.4.2. Demonstratives with the status ‘familiar’

The answer can only be based on my discussion of the Hittite material, since (in-depth) studies in other languages dealing with this particular question are not available. In order to exclude entities that are in focus or activated, I limited the Hittite material containing anaphoric demonstrative determiners to those contexts where the demonstrative refers to an entity residing either in a preceding paragraph or in a citation of direct speech. In the latter context the boundary between narration and direct speech constitutes a very important discontinuity. Both boundaries, the paragraph line and the direct speech versus narration boundary, signal the closure of a discourse unit and the de-activation of the referents inside those units. In order to ‘pick them up’, to re-activate them, in Hittite —as in Japanese— all

44 The figures refer to the number of attestations of referential expressions in a corpus of spoken and written sources. See Gundel et al. 1993: 290 n. 20 and 21.

45 This is the same as the Recognitional Use of demonstrative descriptions. Gundel et al o.c. 302 call this use ‘reminder that’.

46 This contradicts their explicit statement on p. 287 that Japanese proximal and medial demonstrative determiners require activation.

47 I suspect that visible discourse node markers such as paragraph lines are generally accompanied by linguistic markers of discourse discontinuity. With literacy not too widespread, combined with the fact that even kings could not write and read, the texts that have come down to us were read aloud. As a result paragraph lines should have been made audible to the addressee. Although one cannot exclude the possibility that the scribe said ‘next section’ each time he came across a paragraph line, or just took a deep breath, it is more likely that linguistic expressions in the text itself indicate discourse boundaries.
three demonstratives may be used. The factors that decide which Hittite demonstrative is used, are their inherent properties: the proximal ka- denotes that a referent is considered as being part of the cognitive space of the Speaker, apa- points at the cognitive space of the Addressee, and asi refers to an entity which is not considered as part of the Speaker's (+ Addressee's) cognitive space but lies outside it. The main difference with the use of definite noun phrases is the intent of the Speaker to state explicitly that some entity belongs to one of the possible cognitive spaces. The discussion with examples follows in section 3.4.

This result is very interesting in view of the different types of deictic systems. As I will show in chapter 3 the Hittite deictic system is person-oriented like Japanese, as contrasted with distance-oriented systems like Spanish or Lezgien (Anderson & Keenan 1985: 282-6, Fillmore 1982: 49-50, Lyons 1999: 108). It has generally been accepted that deictic distance contrasts can be transferred from the real world to the discourse (Lyons 1977: 669ff., Ariel 1990: 51, Lyons 1999: 113). Proximal forms tend to refer to discourse entities at a relatively short distance, non-proximal forms refer to elements that are mentioned further away. Person-oriented systems allow this same kind of use (Lyons 1999: 113). Thus, the speaker oriented demonstrative indicates short distance, and the hearer and non-speaker/hearer oriented demonstratives denote a distance further back in the discourse. This seems to work in a person-oriented system like Latin, where the contrastive couple hic ... ille is to be interpreted as 'the latter ... the former'. But contrastive couples like these do not constitute the main use of anaphoric demonstratives, and it remains to be seen whether the other uses of the anaphoric demonstratives correlate with recentness of mention in the discourse. Indeed, some correlations with-person based, not distance-based, deixis have been observed.

The most important representative of a person-based contrast in discourse is the Speaker-Hearer boundary. Proximal or first person forms can refer to something mentioned by the Speaker, whereas non-proximal forms are used by a Speaker to refer to something that was mentioned by the Addressee (Lakoff 1974: 74, Ariel 1990: 52, Gundel et al. 1993: 279, Lyons 1999: 114). An example from Gundel et al. o.c. 279, their ex. (7):

2.64  A: Have you seen the neighbour’s dog?
B: Yes, and that dog/?? this dog kept me awake last night.

The use of this dog seems extremely odd in a situation like this.

In Hittite this person-based deictic contrast does not cover only Speaker-Addressee boundaries but pervades the whole system, as will be amply illustrated. As far as the theoretical literature on deixis and demonstratives is concerned, this type of transferral of deictic contrasts from world to discourse has not been noted before.

2.3.4.3. Demonstratives with the status 'activated'

48 For Himmelmann 1996: 237 demonstratives that refer across a node do not keep track of a participant, but remind the hearer of the participant. Moreover, this anaphoric use of the demonstrative is similar to or even the same as the recognitional use of demonstratives (I.e.).

49 Although Hittite does not have a definite determiner, it still may be inferred that noun phrases are definite. The main criteria (for the present discussion) are 1) second mention in the discourse: noun phrases have become definite after being introduced in the discourse, 2) indefinites never appear in Initial position in the clause, with the exception of 'conditional' Relative clauses, 3) definites referring to generics, as 'the gods'.

50 However, Bolkestein 2000: 109 noted that 'the former ... the latter' can be expressed both by hic ... ille and by ille ... hic.
In the preceding paragraphs the objective was to discuss demonstratives that had the status 'familiar' and referred across node. Now the status 'activated' will be considered. This status does not coincide with a particular level of saliency. In Cornish' analysis referents with both high-focus and mid-focus attention levels are salient. But in Gundel’s et al. analysis high focus is 'in focus', and mid-focus is 'activated'. But this is not all: Cornish provides some examples of referents referring to elements in the immediate preceding linguistic context that are not salient, but which Gundel et al. would call activated (I assume). The following table of equations results:

<table>
<thead>
<tr>
<th>level of attention focus</th>
<th>Cornish</th>
<th>Gundel et al.</th>
</tr>
</thead>
<tbody>
<tr>
<td>high focus</td>
<td>salient</td>
<td>in focus</td>
</tr>
<tr>
<td>mid focus</td>
<td>salient</td>
<td>activated</td>
</tr>
<tr>
<td>low focus</td>
<td>non-salient</td>
<td>activated - familiar</td>
</tr>
</tbody>
</table>

Table 2.11: Comparison of cognitive states

A referent that is derived from the immediate linguistic or extra-linguistic context, an activated referent, does not have to be salient. A clear example is Cornish' ex. 2.8b, o.c. 31:

2.65 [Personal letter to Cornish, 1989]

Could you send me your *Journal of Semantics* article? We don’t have that in our library [the writer is referring here to the University of Bradford library]

The focus of this part of the letter is on the article written by Cornish. The second clause however does not talk about the article but about the journal. Though already introduced and therefore activated, the journal has to be brought in the center of attention which is done by *that*. Maybe the writer could have been more explicit by using *that journal*. But he could not have used the unaccented pronoun *it* which would have referred to the article. The use of a demonstrative pronoun often implicates a shift in the center of attention and therefore also a shift in discourse topic (Gundel et al. 1993: 297). But why is the *Journal of Semantics* itself not in explicit focus, or salient? After all, it is mentioned in the immediate preceding clause and the elements in those clauses are generally in explicit focus (see 2.2.2.2.). The reason is that modifiers (and presupposed propositional contents) tend to be in low focus (see Cornish o.c. 162 ff. for discussion and references). Thus, activated referents can not only be salient, but also non-salient.

In Gundel's hierarchy we find under the heading 'activated' for English the demonstrative pronouns *this* and *that, this N*, and the stressed pronouns and similar combinations in the other languages. Again, table 2.10 shows that also *that N* may be used in the category 'activated'. The question is again: what explains the choice for one of these expressions if the status is the same? Above we have seen that the person-based and distance-based deictic contrasts can be transferred to the discourse. For Hittite the answer is the same as earlier: the choice for a demonstrative depends on the cognitive space -Speaker's, Addressee's or Other's- that is deemed appropriate by the Speaker.

Besides activation that is induced through mention in the immediate preceding discourse, again the structuring of discourse has to be taken into account (Fox 1987, Cornish 1999: 221ff., Bolkestein 2000: 110, 128ff.. Gundel et al. do not incorporate discourse structure in their discussion). In example 2.65 the referent of *that* is linearly recent, but in the next example the phrase *as well as her uh husband* is hierarchically recent (from Cornish o.c. p. 221, ex. 6.7):

2.66 (1) C: Okay Harry, I have a problem that uh my — with today’s economy *my*
daughter is working.

(2) H: I missed your name.
(3) C: Hank.
(4) H: Go ahead Hank.
(5a) C: as well as her husband.
(5b) They have a child
(5c) and they bring the child to us every day for babysitting.

(5a) follows hierarchically immediately after (1). The sequences (2)-(4) are a digression from the main line of thought which is kept ‘on hold’ during the time the digression is processed. This example actually shows that even referents in focus, in the center of attention do not necessarily lose their ‘in focusness’ after a digression.

Usually however, topics have to be resumed somehow instead of just being continued (see ex. 2.67 = ex. 7b from Bolkestein 2000: 123, see also Dik 1997a: 325 for the notion Resumed Topic). The discourse is not ‘on hold’ as in ex. 2.66:

2.67 L. Cassium L. ... in Thessaliam, C. Calvisium S. ... in Aetoliam misit; Cn. Domitium C. cum legionibus duabus in Macedoniam proficisci iussit. Cuius provinciae ab ea parte quae ..., Menedemus studium profitebatur. Ex his Calvisius ... potitus est, Cassius ... pervenit, ... Domitius ... venit.

He sent L. Cassius to Thessalia, C. Calvisius to Aetolia; he ordered Cn. Domitius to leave for Macedonia. And in that part of that province which ..., Menedemus professed his allegiance. Of these people, Calvisius conquered ..., Cassius arrived ..., Domitius reached ... Civ.3.34-36

The clause starting with ex his returns to the main story line, broken off after iussit. It is not possible to deduce from the discussion in Gundel et al. whether the referent of his ‘these’ should be activated or familiar.

Summarizing, (1) it is sometimes very difficult to distinguish between the statuses ‘activated’ and ‘familiar’, (2) all demonstratives seem to occur in both categories, and (3) it is not clear which place discourse structure holds in the framework of Gundel et al. I therefore choose not to follow Gundel et al. in distinguishing between the statuses ‘familiar’ and ‘activated’ as far as Anaphora is concerned.

2.3.4.4. Summary and table

The general opinion on deictic demonstratives is that proximal demonstratives refer to entities that are somewhat more accessible than non-proximal demonstratives. This difference is believed to be sustained in the discourse as well. As a result, proximal demonstratives should refer to discourse entities that were recently mentioned and non-proximal demonstratives to entities mentioned longer ago. Although this might be true for some languages, especially those with a distance-based demonstrative system, it should not be considered a universal rule. In Hittite for example the structure of the discourse is more important than anaphoric distance: the demonstratives as a class are used to refer to entities across major discourse nodes, irrespective of distance. The difference between the demonstratives themselves depends on whether the referent belongs to the domain of the speaker, addressee or other, from the viewpoint of the speaker (see Chapter 3).
The common denominator in the anaphoric ‘familiar’ and ‘activated’ situations described here is that in both cases the demonstrative pronouns or descriptions refer to elements that are textually accessible but not in the center of attention, not salient. Therefore the demonstratives are here exponents of the centering procedure. Not being centered upon means in this case: not being in the same discourse unit (unless the antecedent is a modifier or presupposed proposition). According to Himmelmann this type of demonstrative NP must be considered Recognitional and not Tracking (Anaphoric). In that case there is no difference between retrieving private, shared information that is discourse new and private, shared information that is discourse old. Both have to be retrieved from long-term memory. For non-salient information we would get the next picture (also see table 2.6):

<table>
<thead>
<tr>
<th>Demonstrative use</th>
<th>Search domain</th>
<th>More identifying information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Situational use</td>
<td>the speech situation</td>
<td>pointing gesture</td>
</tr>
<tr>
<td>Recognitional use</td>
<td>private, shared long term memory (discourse new)</td>
<td>modifier</td>
</tr>
<tr>
<td>Recognitional use</td>
<td>private, shared long term memory (discourse old)</td>
<td>modifier (?)</td>
</tr>
</tbody>
</table>

Table 2.12: Use of non-salient demonstratives.

Demonstratives and the continuity procedure have already been described in 2.3.3.4.

It is not clear to me how the Topic-Focus distribution combines with the Anaphoric centering procedure. The few examples I encountered in the literature seem to allow both the Unestablished Topic and Sentence Focus reading.

<table>
<thead>
<tr>
<th>geographical parameter</th>
<th>cognitive parameter</th>
<th>continuity procedure</th>
<th>centering procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anaphora</td>
<td></td>
<td>E-Topic</td>
<td>U-Topic</td>
</tr>
<tr>
<td>in-node</td>
<td>s/he</td>
<td>S/HE</td>
<td>S/HE</td>
</tr>
<tr>
<td>across-node</td>
<td>this/that N</td>
<td>this/that N</td>
<td>—</td>
</tr>
</tbody>
</table>

Table 2.13: The matrix: Anaphora

2.3.5. Discourse Deixis and the centering procedure

In this section and the next one I will discuss the following slots:

<table>
<thead>
<tr>
<th>geographical parameter</th>
<th>cognitive parameter</th>
<th>continuity procedure</th>
<th>centering procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discourse deictic</td>
<td></td>
<td>E-Topic</td>
<td>U-Topic</td>
</tr>
<tr>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Starting with Levinson 1983: 62, “Discourse deixis has to do with the encoding of reference to portions of the unfolding discourse in which the utterance (which includes the text-

51 Lambrecht 1994 does not discuss the demonstratives in the framework of Topic and Focus.

52 As this theoretic introduction is not concerned with reference in English but merely sketches the framework for the Hittite system, I only will fill the slots with those elements that were found in the literature. For non-salient anaphoric reference this means that I did not find examples of this (N). That does not mean that non-salient anaphoric this (N) does not exist.
referring expression) is located": discourse deictic expressions refer to propositions or events, expressed by clauses, sentences, paragraphs, or an entire story, usually introducing those propositions or events as referents into the universe of discourse. They are not referring to an event or proposition already referred to by a prior noun phrase, which would be anaphoric reference.\(^{53}\)

Two examples (Diessel 1999: 102) illustrate both backward and forward discourse deixis\(^{54}\):

2.68  
a. A: I've heard you will move to Hawaii?  
   B: Who told you that?

b. A: Listen to this: John will move to Hawaii.

Many authors discussing discourse deixis point out that expressions referring to the discourse itself or to the contents of the discourse usually serve to center the attention of the addressee on the referent of that expression (Ehlich 1982, Levinson 1983, Himmelmann 1996, Diessel 1999). However, sometimes an anaphoric pronoun is used to refer to the contents of a linguistic expression. In such a case the content of the expression is already in the center of attention (see 2.3.6.).

An important feature which distinguishes discourse deictic use from other types of reference, such as anaphoric or recognitional use (for demonstratives, see 2.3.3.4., 2.3.4. and 2.3.1.2.), is referential distance. Discourse deictic expressions always refer to the immediately adjacent segment, whereas for example tracking or recognitional demonstratives usually refer to referents further away (Himmelmann 1996: 224, Fillmore 1997: 104). Another difference between discourse deixis and the other types is that referents of discourse deictic expressions usually do not persist in subsequent discourse\(^{55}\). They are mainly used to provide a link between two pieces of discourse (Diessel 1999: 102). In other words, they set up a discourse node (Cornish 1999: 21). The demonstrative this in ex. 2.68b sets up a node corresponding to a narrated event. Sequences of the type This fact ... it ... it ... are very rare (Himmelmann 1996: 225).

Discourse nodes can take different shapes. Already mentioned are nodes like Listen to this, introducing a narrated event. Another type of boundary marking is discussed in Ehlich 1982: 331ff. In Genesis 36:15-19 the Hebrew proximal demonstrative elle (plural of ze) is used to introduce and conclude name lists. In this use the demonstratives establish frames and mark boundaries of text units. Both the introducing and concluding demonstratives announce a shift of the center of attention, a discourse topic shift.

In the preceding paragraphs the discourse deictic unaccented pronoun it, and the demonstrative pronouns this, that and elle were presented in discourse deictic function. Two types of discourse deictic expressions still need to be mentioned. The first type is the

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\(^{53}\) Cornish (1999: 54) uses for Discourse Deixis a definition different from the traditional account: when a referent of any entity order is presupposed in the discourse universe but has low salience, the centering procedure is required to bring the referent in the center of attention. This coincides with the slot Anaphora & Centering procedure.

\(^{54}\) In the following I will mainly concentrate on the discourse deictic use of place deictic words like this and that. As has been noted by many authors, also time deictic words can be re-used, as in 'the last paragraph' and in 'the next chapter'. Other discourse deictic expressions are utterance-initial uses of but, therefore, anyway, to the contrary etc. (Levinson 1983: 85ff.). Levinson also includes topic/comment marking devices under the heading 'Discourse Deixis'.

\(^{55}\) But see Diessel 1999: 109 who notes that the referents of Recognitional demonstratives are usually not persistent in the discourse.
demonstrative determiner with noun, the other one the demonstrative adverb. An example of the demonstrative determiner is:

2.69 then he goes off, . . and that’s the end of that story, . . (Himmelmann 1996: 224)

The main difference with the demonstrative pronoun is according to Myers 1988: 4 (quoted by Cornish 1999: 59), that: ‘the pronoun nearly always refers to a proposition expressed or implied in the previous sentence, while the [determiner + noun] can refer to a proposition expressed or implied in any immediately preceding segment, even in the entire text up to that point’.

The last type of discourse deictic expressions I will discuss is the demonstrative adverb of Manner. According to Diessel (1999: 74), manner demonstratives have not yet received attention in the literature on deixis, apart from being glossed as ‘in this/that way’ or ‘like this/that’. It seems that they are involved in some sort of comparison. As I will show in Chapter 3.5.2.2., this turns out to be valid for only one of the three demonstrative manner adverbs in Hittite.

2.3.6. Discourse Deixis and the continuity procedure

As mentioned above, sometimes an anaphoric pronoun is used to refer to the content of a linguistic expression. The use of such a pronoun means that the content of the expression is already in the center of attention:

2.70 Henry speaks perfect Hungarian - and he knows it! (Cornish 1999: 80)

The predicate ‘know’ requires a third order referent (Dik 1997b: 106ff.), i.e. a proposition as its argument, and the proposition that is in the center of attention is always the immediate preceding one. For more discussion of pronouns and predicates of second, third and fourth order, see Cornish 1999: 79ff.

I assume that the following sentence in the invented, strange dialogue could be expressed:

2.71 A: Does Henry know that he speaks perfect Dutch?
   B: Henry speaks perfect Hungarian - THAT’s what he knows!

The only point I want to make is that it is probably possible to use accented Focus pronouns (this is not the demonstrative but the form replacing non-existent IT (accented it)) in Discourse Deixis - continuing context.

Usually discourse deictic expressions set up a discourse node, that is, they link the unit they are part of with the preceding one. An exception might be the rare use of discourse deictic it (and accented THAT). As with anaphoric expressions one can therefore distinguish between in-node and across-node reference. I have not found any examples in the literature of events and propositions as Unestablished Topics. Its slot is therefore filled by a question mark.
2.4. Summary and conclusions

In this chapter I have given an overview of the uses of certain referential expressions: pronouns, demonstrative pronouns and demonstrative noun phrases. It turned out that not only text versus world or the cognitive state/saliency of an entity (Ariel 1990, Gundel 1993, Cornish 1999) but also other notions such as the pragmatic relations on sentence level (Lambrecht 1994) or the structure of the discourse (Fox 1987) influence the choice of linguistic expressions. In order to describe these expressions I have set up a matrix that combines these four parameters:

- the geographical parameter (2.2.1.). Key words: text versus situation
- the cognitive parameter (2.2.2.). Key words: saliency, memory
- the Topic-Focus parameter (2.2.3.). Key words: Topic, Focus-structure of the clause
- the discourse structure parameter (not treated separately, but see 2.3.3.4.). Key words: discourse units and cohesion.

A combination of these parameters results in the following table for English, although the distribution of English referential expressions is by no means complete and only serves as an illustration. The Hittite material on the other hand will be discussed exhaustively.

<table>
<thead>
<tr>
<th>geographical parameter</th>
<th>continuity procedure</th>
<th>centering procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>E-Topic</td>
<td>U-Topic</td>
</tr>
<tr>
<td>Deictic</td>
<td>sihe</td>
<td>--</td>
</tr>
<tr>
<td>Recognitional</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Anaphora in-node</td>
<td>sihe</td>
<td>s/he</td>
</tr>
<tr>
<td>across-node</td>
<td>dem N</td>
<td>dem N</td>
</tr>
<tr>
<td>Discourse Deictic</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>in-node</td>
<td>it</td>
<td>--</td>
</tr>
<tr>
<td>across-node</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Table 2.15: The matrix: complete

Obviously not one of the parameters can explain the use of referential expression standing on its own.

The Topic-Focus parameter for example, is important when it comes to salient entities, whether they are Deictic, Anaphoric or Discourse Deictic. This parameter explains the difference between accented and unaccented pronouns, with reference inside a discourse unit in case of Anaphora or Discourse Deixis. For the Deictic situation it should follow that
the ‘discourse unit’ consists of both an object that is considered salient through non-linguistic means (dog turning the corner in ex. 2.35) and the expression commenting on it.

Lack of saliency is important because it excludes pronominal reference: the centering procedure slots contain the demonstrative expressions. In other words, demonstratives (re-)introduce non-salient elements from the speech situation, shared memory, or the discourse itself into the discourse. In case of re-activation of an element of the discourse, one could think of demonstratives as linkers. They evoke, re-activate an entity together with the memory representation of the entity’s closed discourse unit, thus creating a link between the new unit and an older one. In the section on non-salient demonstratives (2.3.4.2.) I addressed the question of the difference between proximal and non-proximal demonstratives but could only answer on the basis of Hittite. In Hittite the choice for a demonstrative depends on Speaker attitude: does, in the opinion of the Speaker, the entity belong to the Speaker, Addressee or Other. In order to express this assignment, the Speaker uses ka- ‘this’, apa- ‘that’ and asi ‘that, you’ respectively.

From the preceding paragraph it does not follow that salient referents are only referred to by means of pronouns. Clearly saliency alone cannot explain the difference between pronouns and demonstratives. Here the notion of discourse structure becomes necessary: Salient anaphoric demonstratives, like salient definite NPs, occur on discourse nodes (2.3.3.4.2.). The same probably applies to Immediate Anaphora after first mention (2.3.3.4.1.). The difference between demonstrative NPs and definite NPs is probably whether the Speaker wants to create discourse coherence or not. For example Kleiber (1986) noted that in certain contexts the definite article in French can cause relative incoherence, whereas the demonstrative determiner ce in the same position restores a coherent reading. From that I concluded that a demonstrative links an entity explicitly to the preceding unit as a kind of Tail-Head linking device.

Turning to situationally used demonstratives as linkers, in 2.3.1.3. I followed De Mulder 1996 in his view that deictic demonstratives do not identify or localize an object but simply cue the Addressee to search through the speech situation. They link the attention of the Addressee to the speech situation, and I proposed the same for Recognitionally used demonstratives: linking to memory. Discourse Deictic demonstratives were described as linking discourse units anyway (2.3.5.).

Summarizing, demonstratives, as linkers, create cohesion between elements where that cohesion is not naturally present, independent of the saliency status of the referent. They signal the Addressee to link a referent to the world, a referent to shared memory, and a referent to the same referent in the preceding or following discourse. Pronouns on the other hand occur when cohesion is present. Cohesion may exist between a linguistic expression and the linguistic context containing the antecedent, but also between an expression and a non-linguistic context (see 2.3.2. and above).

To conclude with a hypothesis, in my view one can explain the use of referring expressions by means of two basic factors: (1) cohesiveness of the discourse, where discourse may also denote the domain of non-linguistic mental representations, and (2) spatial domain (world, memory, text).

When the discourse is not cohesive, demonstratives, as linkers, are used to restore cohesion. Definite NPs on the other hand may be used when the discourse is not and should not be cohesive (see the discussion below ex. 2.55). Inside discourse units, that is, when the discourse is already cohesive, the Topic-Focus distinction becomes important when one has to choose between zero, unaccented or accented pronouns.

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56 This linking could be the elusive [+ dem] feature described in Lyons 1999: 20 which is unique to demonstratives but not to definites. As Lyon l.c. and his Chapter 2 shows, deixis, although very important, is not basic to demonstratives and can also be found with definite markers.
The two factors allow a reshuffled matrix (Bold face expressions are likely to be the preferred ones for the geographical the domain):

<table>
<thead>
<tr>
<th>geographical parameter</th>
<th>discourse parameter</th>
<th>reference inside discourse unit</th>
<th>reference across discourse node (including first mention)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>E-Top</td>
<td>Other</td>
</tr>
<tr>
<td>world</td>
<td></td>
<td>θ, s/he</td>
<td>SIHE</td>
</tr>
<tr>
<td>text</td>
<td></td>
<td>θ, s/he</td>
<td>SIHE</td>
</tr>
<tr>
<td>memory</td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 2.16: Reshuffled matrix

Major differences with table 2.15 are that Topic-Focus is only important for reference inside discourse units, that Anaphoric and Discourse Deictic reference are two sides of the same domain, text, and that saliency is less important as a parameter (demonstratives may refer to salient and non-salient entities). Regarding the latter remark, it might be possible that the notion of saliency used here should be redefined. When a clause is uttered that is relatively incoherent in relation to the preceding discourse, it is likely that the entities mentioned in the preceding discourse, including the antecedent of an expression in the new clause, have lost their saliency. Thus, the use of demonstratives as described in 2.3.3.4. might not belong to the continuing procedure at all. The only difference with definite NPs would be that demonstratives restore saliency where it was lost on account of the context.

From a cognitive point of view, cohesive discourse units correlate with working memory so reference inside units and across discourse nodes should correlate with retrieval of mental representations of some referent from working memory (salient entities) and long-term memory respectively (non-salient entities). Thus, cohesion and saliency might be two names for the same phenomenon.

However, since I have set up table 2.16 as a hypothesis, for Hittite I will only use the method which led to table 2.15. In the next chapter the Hittite pronouns and demonstratives will be presented within the order of the framework sketched here.

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