

**A COGNITIVE APPROACH TO ANALYZING DEMONSTRATIVES
IN TUNISIAN ARABIC**

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AMEL KHALFAOUI

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Dedication

To my family and friends

Abstract

Demonstratives have traditionally been analyzed as ‘pointing words’ whose primary function is to indicate relative spatial or temporal distance of a referent from speech participants. Recent research argues that the meaning of demonstratives is not limited to spatial distance and has given alternative accounts for the use of demonstratives that focus on other cognitive and pragmatic meanings (e.g., Gundel, Hedberg and Zacharski 1993, Enfield 2003, Botley and McEnery 2001, OH 2001). This dissertation contributes to research that looks at alternative meanings for demonstratives, focusing on Tunisian Arabic (TA). The goal of the dissertation is two-fold. First, working within the Givenness Hierarchy framework (Gundel et al.), it aims to show how TA demonstratives are used to indicate cognitive status, the assumed memory and attention status of a referent in the mind of the addressee. A combined methodology of questionnaires and corpus analysis is used to test hypotheses formed in a previous study (Khalifaoui: 2004) about proposed correlations between cognitive status and single demonstrative forms in TA and extend the analysis to phrases with double demonstratives. The second goal of this dissertation is to show how other factors can further restrict the choice among certain demonstrative forms that encode the same cognitive status. Specifically, it is shown that when there is more than one activated referent, communicators choose the demonstrative *haḍa* as a determiner, but not as a pronoun, although both the determiner and the pronoun encode the same cognitive status. I argue that Relevance Theory (Sperber and Wilson 1986/1995) provides a cognitive explanation for why communicators avoid the demonstrative pronoun in such case. This dissertation also discusses the advantages and limitations of the questionnaire and the corpus analysis as research tools.

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List of Abbreviations

prox 1	proximate 1
prox 2	proximate 2
nonprox1	nonproximate 1
nonprox 2	nonproximate 2
p	plural
s	singular
emph	emphatic
1	first person
2	second person
3	third person
voc	vocative
f	feminine
m	masculine
past	past tense
fut	future tense
pos	possessive
neg	negation
comp	complementizer
DP	Determiner phrase

Chapter 1: Introduction, literature review, & overview of Tunisian Arabic demonstratives¹

1.1 Introduction

Demonstratives have traditionally been analyzed as ‘pointing words’ whose primary function is to indicate relative spatial or temporal distance of a referent from speech participants. Recent research argues that the meaning of demonstratives is not limited to spatial distance and has given alternative accounts for the use of demonstratives that focus on other cognitive and pragmatic meanings. As will be shown in the review of these alternative approaches in section 1.4 of this chapter, some of these studies even argue against the assumption that distance is part of the meaning of demonstratives based on investigations of demonstrative use in context (e.g., Burenhalt 2003, Enfield 2003).

The motivation for this study is to contribute to research that looks at alternative meanings for demonstratives, focusing on Tunisian Arabic (TA). Another important motivation for this dissertation is to contribute to linguistic description of Tunisian Arabic, which is one of the least researched Arabic dialects.

The goal of the dissertation is two-fold. First, working within the Givenness Hierarchy framework (Gundel Hedberg and Zacharski 1993), it aims to show how demonstratives in Tunisian Arabic are used to indicate cognitive status, the assumed memory and attention status that the intended referent has in the mind of the addressee. Based on a combined methodology of questionnaires and corpus analysis, this dissertation will test hypotheses formed in a previous study (Khalifaoui: 2004) about

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proposed correlations between cognitive status and single demonstrative forms which were very infrequent in the data corpus used for that study. It also extends the analysis to phrases with double demonstrative determiners, one prenominal and one postnominal (e.g., *ha-l-ktab haða* ‘this book’) which were not included in that study. Since the two demonstrative forms that co-occur to form a double demonstrative can be used separately as single demonstrative determiners, the dissertation looks at whether those single demonstrative determiners must require the same cognitive status or not, and whether they have the same cognitive status as the double demonstratives they form.

The second goal of this dissertation is to show how other factors further restrict the choice among demonstrative forms that meet the criteria for the same cognitive status, and to provide theoretical explanations for those restrictions. Specifically, it is shown that when there is more than one possible referent that satisfies cognitive status criteria for reference with the demonstrative *haða*, speakers avoid the demonstrative pronoun *haða*, and choose the same form as a determiner even though both the pronoun and the determiner require the same cognitive status and are therefore expected to be interchangeable when cognitive status criteria for their use are met. I argue that Relevance Theory (Sperber and Wilson 1986/1995) provides a cognitive explanation for why communicators choose a phrase with a demonstrative determiner and not a demonstrative pronoun in such cases.

The dissertation is organized as follows: A literature review on types, morphosyntactic structure, and uses of demonstratives is presented in chapter 1. Next, two approaches to analyzing the use of demonstratives are discussed: 1) traditional approaches that explain the use of demonstratives in terms of spatial distance, and 2)

alternative approaches that seek to explain demonstrative use in terms of other pragmatic and cognitive factors. After that, an overview of Tunisian Arabic followed by an overview of Tunisian Arabic demonstratives with a comparison with other Arabic dialects is given. In chapter 2, results of the pilot and the revised questionnaires conducted to propose cognitive status-form correlations are presented. Chapter 2 also discusses advantages and limitations of the questionnaire and the corpus analysis as research tools and argues that they complement each other. Results of the corpus analysis conducted to complement the questionnaires are presented in chapter 3. Chapter 4 discusses the factors that further restrict the demonstrative *haða* when cognitive status criteria for its use are met, and suggests an explanation within Relevance Theory for why communicators avoid the pronominal demonstrative form in the presence of those restricting factors. Concluding remarks and suggestions for future research will be given in chapter 5.

1.2 Demonstratives: Types, definition, syntax, morphology, and uses

1.2.1 Types

According to Dixon (2003), there are three types of demonstratives: nominal demonstratives, local adverbial demonstratives, and verbal demonstratives. Nominal demonstratives can occur in a phrase with a noun or a pronoun, or can make complete noun phrases by themselves. For example, in the Australian language Yindinj, the demonstrative determiner *yijju* can be used with a noun or with a pronoun as shown in (1) and (2) respectively (65). As shown in (3), the demonstrative *this* in English can make a complete noun phrase (62).

(1) ŋanjɔdi wanjɔ:na-l **yɪɟu** **dungu**
 1 sg do.what-non-past this head
 “What shall we do with this head?”

(2) ŋayu **njundu:banj** **yɪɟu** badja-r- rala
 1sg 2pl this leave-Non.past-now
 “I’m now leaving these-you.”

(3) **This** is hot

Local adverbial demonstratives modify a co-occurring verb. They occur either alone (e.g., “put it here”) or with a noun taking local marking (e.g., “put it (on the table) there.”) (62). Dixon states that some languages have manner adverbial demonstratives, such as “(do) like this, (do) in this way/manner” (62). The third type, verbal demonstratives, include examples like “do it like this”, with an accompanying mimicking action. Verbal demonstratives can occur as the only verb in a predicate or together with a lexical verb. Dixon states that a small number of languages do not have manner adverbial demonstratives but have a subclass of verbs with demonstrative meaning which involve deictic reference to an action. In (4) for example, the Bouma Fijan verb *ene* can be glossed “do like this” (72-73).

(4) [o 'ea]s { 'enee tuu gaa 'eneii } predicate
 art3sg do.like.this aspect just do.like.this
 “He did just like this.” [narrator mimes a spearing action]

The remainder of this section will be concerned with nominal demonstratives, since these are the focus of this dissertation.

1.2.2 Definition

Although there is an agreement in the literature that almost every language has one or more demonstratives, coming up with a list of universal defining characteristics for the class of demonstratives is not an easy task for two reasons. The first reason is that in most languages, 3rd person personal pronouns and the definite article are historically grammaticized from demonstratives. This often makes it difficult to decide whether a given form is a demonstrative when it is going through this process of grammaticization. Even when the definite article and third person pronouns are completely grammaticized, they still share features with demonstratives, making it difficult to find defining features that single out demonstratives as a grammatical class. Dixon points out that there can be synchronic or diachronic connection between articles and nominal demonstratives. In Standard German, for example, the forms *die* (feminine and plural)/*der* (masculine)/*das* (neutral) have definite article function when unstressed and demonstrative function when stressed (67-68). Old English had two nominal demonstratives which were marked for two numbers, three genders, and five cases; from these demonstratives have developed the modern definite article *the*, and the nominal demonstratives *this/these* and *that/those* (Sweet 1898:112-5 cited in Dixon 2003:68). The definite article in French has developed out of the nominal demonstrative *ille* (that) in Latin; and the nominal demonstratives in modern French come from the Latin nominal demonstrative *hic* (this) with strengthening from deictic particle *ecce* (Pope 1934: 322-327 cited in Dixon 2003: 68). Himmelman (1996) points out that “although there is usually general agreement as to what is and what is not considered a demonstrative in a given language, occasionally there is a problem of delimitation” (210).

The second reason that makes coming up with a universal definition for demonstratives not an easy task is that demonstratives vary from one language to another in terms of types and function, which makes it difficult to find universal features. In this section three approaches to defining demonstratives are introduced and discussed.

Diessel (1999)

One approach to defining demonstratives is to give a set of characteristics that define this grammatical class. For example, Diessel (1999) gave three criteria for defining demonstratives. First, they are deictic (pointing) expressions serving syntactic functions. Second, they serve certain pragmatic functions by organizing information flow in a conversation, and by focusing the hearer's attention on objects in the speech situation. Third, demonstratives encode a meaning of spatial distance.

The three criteria given by Diessel are all possible characteristics of demonstratives, but they are not universal features. For example, it is not a universal feature of demonstratives to indicate spatial distance. Diessel himself points out that in a few languages in his sample demonstratives are distance-neutral. As for the pragmatic and deictic features, they are not exclusive to the class of demonstratives, and can be shared by phrases headed by the definite article and 3rd person personal pronouns.

Himmelman (1996)

Being aware of the historical relationship of demonstratives to 3rd person personal pronouns and the definite article, Himmelman (1996) took a different approach by suggesting diagnostic contexts that distinguish demonstratives from the definite article and 3rd personal pronouns. In order to distinguish demonstratives from the definite article,

he suggested that the following two diagnostic contexts “seem to allow for cross-linguistically valid and applicable identification of ‘true’ demonstratives” (210).

- a. The element must be in a paradigmatic relation to elements which – when used exophorically – locate the entity referred to on a distance scale.
- b. The element must not be amenable to the following uses, which are characteristics of the definite article.
 - First mention of entities considered unique in a speech community (e.g., #this/that Queen announced ...)²
 - Associative-anaphoric use such as referring to a trunk for the first time after mentioning a tree (210).

He also suggests the following four diagnostic contexts given in (a-d) for distinguishing demonstratives from 3rd person personal pronouns, by suggesting four characteristics that pronouns do not share with demonstratives (211-212).

- a. In a few languages, third person personal pronouns allow for associative anaphoric use such as referring to the husband for the first time by *he* after mentioning a couple.
- b. 3rd person personal pronouns allow for so-called pronouns of laziness as in (5).

(5) John Doe bequeathed the first house he built to his wife, but Richard Roe deeded it (*this/*that) to his daughter.

- c. In a few languages, 3rd person personal pronouns allow for expletive use as in (6).

(6) It is raining
*This/*that is raining

² The symbol # is used in this dissertation to indicate unacceptability in a given context.

- d. The discourse deictic use (reference to an event or proposition) of 3rd person personal pronouns seems to be more heavily constrained and less frequent than that of demonstratives as shown in (7) from the Pear Stories (224).

(7) Then he goes off, ... and that's the end of **that story**, but then ... it goes back to the farmer.

Himmelman points out that the diagnostic contexts for distinguishing demonstratives from third person personal pronouns that he proposed are “of limited practical value, since they are marginal” (211).

Dixon (2003)

Since demonstratives vary from one language to another in their number, typology, and functions; and since they share characteristics with personal pronouns and the definite article, another approach for defining demonstratives is to find defining criteria for each language separately. For example, Dixon (2003) argues that “it is useful to compare -- for a given language -- some of the properties of nominal demonstratives, first and second pronouns, and third pronouns and the definite article” (68). Dixon compared these forms in English in terms of eight properties as shown in table 1.

Table 1: *Properties of Demonstratives and related items in English* (Dixon 2003:69)

	Nominal demonstratives		1 st and 2 nd person pronouns	3 rd person pronouns		Definite article
	This/these that/those		I,you,we	He,she,they	It	The
1. Can have deictic function	✓	✓	✓	–	–	–
2. Has spatial reference	✓ ^x	✓ ^x	–	–	–	–
3. Can make up whole NP	✓ ^x	✓ ^x	✓	✓	✓	–
4. Can occur with NP with a noun	✓	✓	✓ ¹	– ²		–
5. Substitution anaphora	✓ ^x	✓	–	✓	✓	✓
6. Substitution cataphora	–	–	–	✓	✓	n/a ³
7. Textual anaphora	✓ ^x	✓ ^x	–	–	✓	
8. Textual cataphora	✓ ^x	✓ ^x	–	–	✓	

^x Although this is a property of nominal demonstratives in English, it is not shown by demonstratives in all languages.

¹ This covers NPs such as you women

² It is possible to have sentences such as They, the evil spirits, roamed around in the night, but this is regarded as involving two NPs in apposition (they and the evil spirits) rather than a single NP.

³ Not applicable; only items which make up a whole NP can have anaphoric or cataphoric function.

As shown in table 1, English demonstratives share many features with personal pronouns and the definite article. The only feature that is unique to demonstratives in English is spatial reference, but this feature cannot be generalized to demonstratives in general, because it is not a universal feature. Coming up with a set of defining features must be a language specific criterion. For this reason, Dixon defines demonstratives in general as a grammatical word (or, occasionally, a clitic or affix) other than 1st or 2nd person personal pronouns which can have pointing (or deictic) reference. Although this property is not

exclusive to demonstratives, and can be shared by other grammatical classes such as personal pronouns, it is agreed upon in the literature on demonstrative typology that it is a universal feature of demonstratives to have pointing reference.

1.2.3 Syntactic distribution of nominal demonstratives

Nominal demonstratives are classified into adnominal and pronominal demonstratives. This classification corresponds to the syntactic context in which they occur. Pronominal demonstratives occur as independent phrases by themselves while adnominal demonstratives co-occur with a noun or a pronoun. Crosslinguistically, adnominal demonstratives are more frequent than pronominal demonstratives (Dixon 2003, Diessel 1999, Himmelman 1996). There are demonstratives which occur in copular or non-verbal clauses (e.g., this is John). Diessel (1999) calls them identificational demonstratives, and identifies them as a separate category from nominal demonstratives. He supports this argument by the fact that in certain languages they are formally distinguished (79). For example, demonstrative pronouns and demonstrative identifiers are formally distinguished in Ponapean. Example (8) shows a demonstrative pronoun and (9) shows a demonstrative identifier in a nonverbal clause (Regh 1981: 143, 150 cited in Diessel 1999: 83)

(8) **met** pahn mengila
 this will wither
 “This will wither.”

(9) **iet** noumw naipen
 this/there your knife
 “Here is your knife.”

To simplify things, identificational demonstratives are treated as pronominal demonstratives in this dissertation.

Demonstratives are classified into grammatical categories that correspond to their syntactic distribution. Adnominal demonstratives are referred to as demonstrative determiners/adjectives (henceforth determiners). Pronominal demonstratives are typically referred to in the literature as demonstrative pronouns. While in most languages the same form is used as a demonstrative determiner and as demonstrative pronoun, there are languages where demonstrative determiners and demonstrative pronouns are formally distinguished. Some authors (e.g., Diessel 1999) state that unless demonstratives are formally distinguished, they do not belong to different grammatical categories. Furthermore, in some languages demonstratives co-occur with the definite article (e.g., Hausa, Arabic, and Norwegian).

1.2.4 Morphological features of nominal demonstratives

As noted in Diessel (1999), in certain languages demonstratives are morphologically invariable (e.g., Korean), while in other languages they are inflected for number and gender and/or case (e.g., Guugu, Yimidhirr, Ewondo) (13-21). Diessel also points out that most demonstratives are phonologically unbound, but some nominal demonstratives can cliticize to a noun phrase (e.g., Kilba (Chadic)). Dixon (2003) also notes that although all the demonstratives in his sample that cliticize are adnominal, pronominal demonstratives can also cliticize in languages such as Kawaiisu (Numic). He also points out that certain demonstratives cliticize to a noun phrase, but they are probably never bound to a specific word. He also points out that some languages have a reduced form of a nominal demonstrative for anaphoric function. For example in Longgu (Austronesian), spoken in the Soloman Islands, the forms *nene* (this) and *nina* (that) are shortened to *-ne* and *-na* respectively when used anaphorically (22).

1.2.5 Uses of demonstratives

The two main distinctions of demonstratives stated in the literature are exophoric and endophoric. The term “exophoric” refers to demonstratives used to pick out something in the situational context, while “endophoric” is used as a general term for reference within the text. Diessel (1999) furthermore classifies the endophoric use of demonstratives into anaphoric, discourse deictic, and recognitional. Anaphoric and discourse deictic demonstratives refer to elements of the ongoing discourse. Anaphoric demonstratives are used as tracking devices in the discourse to refer back to previously mentioned entities. They are also used to shift the focus of attention to a new topic. Discourse deictic demonstratives refer to aspects of meaning expressed by a piece of discourse such as a clause, a sentence, or a series of sentences. Recognitional demonstratives have two characteristics that distinguish them from all other uses. First, recognitional demonstratives are used only with a noun, and second they do not refer to something in the discourse or the situational context. They are used to activate specific shared knowledge (105).

Diessel also includes among endophoric demonstratives those which do not refer to entities in the discourse or in the situational context and which mark specific indefinite information, such as the unstressed (indefinite) *this* in English. He notes that what differentiates recognitional demonstratives from the indefinite *this* is that the latter refer to entities that do not represent shared knowledge (109).

1.3 Traditional approaches to analyzing demonstratives

The choice of demonstrative forms has traditionally been explained based on a proximity scale used to indicate temporal or spatial distance from the speech participants. Based on

a crosslinguistic survey, Dixon (2003) presented a typology of parameters of variation associated with demonstratives. He points out that “the major parameters of reference for demonstratives are: spatial -- sometimes extended to temporal-- location, height and stance, and visibility” (85). He illustrates this description with examples of demonstratives from different languages described in terms of scales of spatial distance, height, and visibility. For example, as shown in (10), he indicates that Boumaa Fijian has a three-term system distinguished in terms of spatial distance from the speech participants (86). Demonstratives in the Arakul dialect of Lak (Northeast Caucasian family), on the other hand, are distinguished in terms of reference not only to distance but also to height, as shown in example (11) (Khaidakov 1966: 12, cited in Dixon 2003: 89). As shown in (12), visibility combines with degrees of spatial distance in Kwakiutl, a Wakashan language, yielding a six-term demonstrative system (Boas 1911: 41, cited in Dixon 2003: 90).

- (10) Boomaa Fijian
- | | | |
|--------------|--------------|---|
| <i>Yai</i> | “this/here” | near speaker |
| <i>yaa</i> | “that/there” | mid distance from speaker, often near addressee |
| <i>mayaa</i> | “that/there” | far distance from speaker and addressee |

- (11) Lak
- | | |
|-------------|--|
| <i>aha</i> | close to speaker |
| <i>hava</i> | farther from speaker, but not the same level |
| <i>ho</i> | higher or lower than the speaker |

(12) Kwakiutl

visible, near me
invisible, near me

visible, near thee
invisible, near thee

visible, near him
invisible, near him

Halliday and Hasan (1976) argue that in English, “demonstrative reference is essentially a form of verbal pointing. The speaker identifies the referent by locating it on a scale of proximity” (57). They list the nominal demonstratives *this* and *that*, and the adverbials *here* and *there*; and *now* and *then* in terms of a proximity scale of near and far (not near) respectively.

Halliday and Hasan extend the proximity distinction to demonstrative use within the text. For example, they argue that the tendency to use *this* to refer to utterances made by the speaker himself, and *that* to refer to utterances made by his interlocutor is clearly related to “that of ‘near (the speaker),’ versus ‘not near’; where ‘what I have just mentioned’ is, textually speaking, ‘near me’ whereas ‘what you have just mentioned’ is not.”

Cowell (1964) describes demonstrative pronouns (i.e., nominal demonstratives) in Syrian Arabic in terms of proximity to the speaker and the hearer. He argues that the distal demonstrative *hadaak* refers to something (or someone) relatively far away from the speaker and the addressee, and the proximal demonstrative *haada* is used to refer to something near or associated with the person spoken to (552). He also points out that “The demonstrative pronouns are of course not limited to the presentation of objects in a spatial dimension, but they also indicate “distance” in time ... or conceptual “distance” (552).

Thackston (2000) describes demonstratives in Classical Arabic as “near” demonstratives and “far” demonstratives, where the demonstrative *haaḏaa* indicates “near” and the demonstrative *ḏaalika* indicates “far”.

1.4 Alternative approaches to analyzing demonstratives

The notion that demonstratives primarily encode spatial distance has been challenged in recent studies. For example, based on an analysis of spontaneous interactions of native Lao speakers collected on video, Enfield (2003) argues that the two Lao demonstrative determiners *nii* and *nan* do not encode a meaning of spatial distance. He suggests instead that “pragmatic inference” alone gives rise to the associations of *nii* with things ‘NEAR speaker’ and/or ‘here’, and *nan* with things ‘FAR from speaker’ (115). He explains that Lao speakers choose between the two demonstratives based on conceptions of here-space determined by such factors as physical barriers, manual and attentional focus and speaker’s taking into account of addressee’s presumed access to information.

Based on data collected from American English spoken discourse, Strauss (2002) analyzed the forms *this*, *that*, and *it* in terms of an alternative approach of gradient focus where focus means “the degree of attention the hearer should pay to the referent” (135). She argues that *it* is Low Focus, *that* is medium focus, and *this* is High Focus where the degree of focus correlates with the relative newness and importance of the referent.

Based on corpus analysis, OH (2001) argues against the traditional claims made by a number of linguists (e.g., Greenbaum and Quirk 1990; Halliday and Hasan 1976; Lyons 1977) that “the most basic use of *this* and *that* in English is as deictics (i.e., expressions used for pointing), the two being contrasted in terms of proximity to the speaker” (124-125). OH states that the proximity/ nonproximity distinction is limited and

does not account for all uses of demonstratives. Using Strauss's framework of Gradient Focus (1993a, 1993b) mentioned above, OH analyzed the three demonstratives in a corpus of written advertisements, and showed that the most critical factor that determines the speaker's choice among *it*, *this*, and *that* in the genre of written advertisements is Focus and not proximity. For example, OH found that although the demonstrative *this* is usually used to refer to new and important entities, it is used more frequently than *that* in central reference (i.e., when the referent is all or part of the advertised product) when referring to entities that are already mentioned in discourse. He argues that this constitutes compelling evidence that *this* is a high focus form, since it is used to constantly direct the reader's attention to the advertised product. It is used repeatedly to refer to the advertised product, because it signals a meaning of "newness" and "importance".

Burenhalt (2003) investigated the attentional characteristics of *ton*, a nominal demonstrative in Jahai, a language that belongs to the Northern Aslian subgroup of the Aslian branch of the Mon-Khmer language family, and spoken by groups of foragers in the mountain rainforests of northern Peninsular Malaysia and southernmost Thailand. The demonstrative *ton* was previously considered to encode spatial proximity. Based on analysis of data from a specific-object-identification task, he argues that *ton* does not encode spatial meaning, but it encodes that the referent is already attended to by the addressee. The other four demonstratives in Jahai, on the other hand, are used to divert the addressee's attention to a particular referent.

Gundel, Hedberg and Zacharski (1993) argue that the choice among demonstratives, like the choice among other determiners and pronouns is determined by

cognitive status, the assumed memory and attention status of a speaker's intended referent in the mind of the addressee. Since Gundel et al's Givenness Hierarchy is used in this study; more description of this framework is given in chapter 2.

1.5 Language Facts

1.5.1 Tunisian Arabic

Tunisian Arabic is spoken in Tunisia, North Africa, by approximately 10 million speakers. It is a dialect of Arabic, a language of the Afroasiatic family. It is one of the Maghreb (North African) dialects which include Tunisian, Algerian, Moroccan, and Libyan Arabic. Although the native languages of the Maghreb in general were varieties of Berber, TA is the mother tongue of the vast majority of Tunisians today (Lawson and Sachdev 2000). In order to distinguish it from Standard Arabic (SA), it is referred to as *dariǧa*, *ǧammija*, or *Tunsi*.

Although TA is a dialect of Arabic, its syntax, pronunciation, morphology, and vocabulary are quite different from those of SA. Tunisian Arabic is an SVO language while SA is VSO. Its morphology is also different from that of SA. Saada (1967) indicates that the verb type paradigm in Tunisian Arabic is different from SA. For example, SA uses the discontinuous morpheme –u-i-a to derive passives as in *kuṭiba* (be written), while TA adds the morpheme *t-* to the regular stem to indicate the passive as in *tiktib* (be written). Tunisian Arabic, like many other Maghreb Arabic dialects, has undergone a restructuring in sequences of the type CvCC, which changed to CCvC (Versteegh 1997).

One of the major reasons that made TA vocabulary different from that of SA is the extensive use of words borrowed from Italian, Spanish, French, Berber, and Turkish. Verbs of Romance origin are frequently used by different generations in the dialects of Tunis (Talmoudi 1986). For example, *bannak* (sit down) is derived from the Spanish *banco*; *fakkab* (to play scopa) is adopted from *fkubba* from the Italian *scopa*.

Tunisia is a classic case of diglossia (Lawson&Sachdev 2000). TA is the Low variety and SA is the High variety. SA is the official language of Tunisia, but French also continues to be widely used, since Tunisia is a recent colony of France. SA and French are used in literature, newscasts, and newspapers. TA remains limited to spoken domains such as TV and radio talk shows, cinema, and theatre. Written documents in TA exist in play scripts, folk stories, and folk poems, some of which are out of print. An example of folk tales is the four-volume work of Abdelaziz Al-Irwi (1989) which is now out of print. Hedi Balegh translated *The Little Prince* into TA, and also published a collection of Tunisian proverbs. A newspaper written in Tunisian Arabic, *Al-Sariiħ*, is also out of print.

TA has regional varieties of its own (see Gibson 1998 and Talmoudi 1980). The main regional varieties in Tunisia are: the Tunis dialect, the Sahel dialect, the North-Western Tunisian dialect, the South-Eastern Tunisian dialect, The Sfax dialect, and the South-Eastern Tunisian dialect.

1.5.2 Tunisian Arabic Demonstratives

As mentioned in 1.5.1, Tunisian Arabic has regional varieties of its own. Demonstrative forms used in different regional dialects vary primarily at the phonological level. For example, the plural demonstrative is pronounced *haðum* (*a*) in the

dialect of Tunis, *hađom* (*a*) in the dialect of the North, and *hađukaja* in the dialect of the Sahel. What is referred to in this study as Tunisian Arabic is the dialect of Tunis.

Although Tunisian Arabic has local and manner adverbial demonstratives, the demonstratives that will be considered in this dissertation are nominal demonstratives which consist of demonstrative pronouns and demonstrative determiners. Six demonstrative forms are investigated: *ha* and *hak* which occur as determiners only, *hađa* and *hađaka* which are used as determiners as well as pronouns, and two double demonstratives *ha-N hađa* and *hak N hađaka*. All uses of demonstratives referred to in the literature as exophoric and endophoric will be used in this dissertation without any special distinctions.

1.5.2.1 The demonstratives *ha* and *hak*

The two demonstratives *ha* and *hak* function as pronominal determiners only, and do not carry number or gender features. For descriptive convenience, the demonstratives *ha* and *hak* will be glossed as prox1 and nonprox1, respectively.

Table 2: *The demonstrative ha*

	Masculine	Feminine
Singular	ha-N ³	
Plural		

³ N stands for Noun Phrase

As shown in table 2, the pronominal demonstrative determiner *ha* does not carry number or gender features. In (13), for instance, *ha* remains invariant before the singular feminine NP *l- mra* (the woman) and the singular masculine NP *l- raaʒil* (the man). It also remains invariant before the plural feminine NP *l-nsaa* (the women), and the plural masculine NP *l-rʒaal* (the men) in (14).

- (13) **ha** **l-mra/** **l-raaʒil**
 prox1 the-woman the-man
 “This woman/man”
- (14) **ha** **l-nsaa/** **l-rʒaal**
 prox1 the-women the- men
 “these women/men.”

The demonstrative *ha* cannot be used as a pronoun as shown by the ungrammaticality of example (15).

- (15) * n-ħib **ha**⁴
 1-like prox1
 “I like this”

Table 3: *The demonstrative hak*⁵

	Masculine	Feminine
Singular	hak N	
Plural		

⁴ The symbol * is used here to indicate ungrammaticality.

⁵ Other variants of *hak* identified in the data corpus used in this dissertation are *ak* and *aka*

As shown in table 3, Tunisian Arabic has an invariant prenominal demonstrative determiner, *hak*, that does not carry number and gender features. For example, in (16) *hak* is used with the singular masculine *l-wlid* (the boy) and the singular feminine *l-bnajja* (the girl), and in (17) it is used with the plural masculine NP *l-wlaad* (the boys) and the plural feminine phrase *l-bnaat* (the girls).

(16) **hak** **l-wlid/l-bnajja**
 nonprox1 the-boy/the girl
 “that boy/girl”

(17) **hak** **l-wlaad/l-bnaat**
 nonprox1 the boys/the girls
 “those boys/girls”

Like the prenominal *ha*, *hak* cannot be used as a pronoun as shown by the ungrammaticality of (18).

(18) *n-ħib **hak**
 I-like nonprox1
 “I like that”

1.5.2.2 The demonstratives *haġa*⁶ and *haġaka*⁷

Tunisian Arabic has two non-reduced postnominal demonstratives, *haġa* and *haġaka*, which can function as determiners as well as pronouns. They both carry number and gender agreement features in the singular, and number agreement features only in the

⁶ Another variant of *haġa* identified in the data used in this study is *haġaja*.

⁷ Some tokens of *haġaka* identified in the data are pronounced without an initial [h]. They are pronounced *aġaka*.

plural. For descriptive convenience, the demonstrative forms *haða* and *haðaka* will be glossed as prox2 and nonprox2, respectively.

Table 4: *The demonstratives haða*

	Masculine	Feminine
Singular	(NP) <i>haða</i>	(NP) <i>haði</i>
Plural	(NP) <i>haðum</i>	

As shown in table 4, the demonstrative *haða* is marked for number and gender in the singular, and for number only in the plural. As in (19), the determiner *haða* agrees with the singular masculine NP *l-wlid* (the boy), and in (20) with the singular feminine NP *l-bnajja* (the girl). As shown in (21), the plural determiner *haðum* can occur with either the plural feminine phrase *l-bnaat* or the plural masculine *l-wlaad* (the boys).

- (19) *l-wlid* **haða**
the-boy prox2.3ms
“this boy”
- (20) **l-bnajja** **haði**
the-girl prox2.3fs
“this girl”
- (21) **l-bnaat/l-wlaad** **haðum**
the-girls/the-boys prox2.p
“these girls/boys”

The demonstrative *haða* can be used as a determiner as in examples ((19)-(21)), above, or as a pronoun as in (22) and (23).

(22) A: aʃ ʒib-t?
 what bring.past-2s
 “What did you bring?”

B: ʒib-t **haði**
 bring.past-1s prox2.3fs
 “I brought this (one)”

(23) n-hib **haðum**
 1-like prox2.p
 “I like these”

Table 5: *The demonstrative haðaka*

	Masculine	Feminine
Singular	(N) haðaka	(N) haðika
Plural	(N) haðukum	

As shown in table 5, the postnominal demonstrative *haðaka* carries number and gender agreement features in the singular, as in (24) and (25), and number agreement features only in the plural, as in (26). As shown in (26), the plural form *haðukum* can occur with the masculine phrase *l-wlaad* (the boys) or with the feminine phrase *l-bnaat* (the girls).

(24) **l-wlad** **haðaka**
 the-boy nonprox2.3ms
 “that boy”

(25) **l-bnajja** **haḏika**
the-girl nonprox2.3fs
“that girl”

(26) **l-wlaad/l-bnaat** **haḏukum**
the-boys/the-girls nonprox2.p
“those boys/girls”

The demonstrative determiner *haḏaka* can be used as a determiner as shown in ((24)-(26)) above; and as a pronoun as illustrated in (27) and (28).

(27) A: **ʃkun** **qal-li-k?**
who tell.past.3ms-to-2s
“Who told you?”

B: **haḏaka**
nonprox2.3ms
“that one”

(28) **n-ħib** **haḏukum**
1-like nonprox2.p
“I like those”

1.5.2.3 Double demonstrative determiners

In addition to being used individually, the TA pronominal *ha* and postnominal *haḏa* can co-occur within the same phrase, as shown in (29); and the pronominal *hak* and postnominal *haḏaka* can co-occur within the same phrase as shown in (30). As when they occur separately, *ha* and *hak* must be pronominal and remain invariant, while *haḏa* and *haḏaka* must be postnominal, and are inflected for number and gender in the singular, and for number only in the plural.

(29) **ha** **l-raaʒil** **haða** bahi.
 prox1 the-man prox2.3ms nice
 “This man is nice.”

(30) **hak** **l-raaʒil** **haðaka** bahi.
 nonprox1 the-man nonprox2.3ms nice
 “That man is nice.”

The prenominal *ha* can only occur with the postnominal *haða* and the prenominal *hak* can only occur with the postnominal *haðaka* as shown by the ungrammaticality of (31) and (32).

(31) *ʒa **hak** **l-raaʒil** **haða**
 come.past.3ms nonprox1 the-man prox2.3ms
 “That man came.” (literally, that man this.)

(32) *ʒa **ha** **l-raaʒil** **haðaka**
 come.past.3ms prox1 the-man nonprox2.3ms
 “This man came.” (literally, this man that)

1.5.2.4 Other characteristics of TA demonstrative determiners

TA demonstrative determiners co-occur with the definite article e.g., *ha-l-ktaab* (literally: this the book), *l-ktaab haða* (literally, the book this). TA demonstratives can also be used with proper nouns (e.g., Leila *haði* (literally, Leila this); *hak Sami* (literally, that Sami) but cannot be used with personal pronouns.

Another characteristic of TA demonstratives, which distinguishes them from many other languages (English, for example) is that they can co-occur with possessive determiners. Possessive constructions in TA can be formed in two ways: 1) The possessive morpheme attaches directly to the possessee (e.g., *ktaab-i* (my book)) 2) The

possessive morpheme attaches to separate word *mtaaʕ* (property) which follows the possessee (e.g., *l-ktaab mtaaʕ -i* (my book)). When the possessive marker is attached directly to the possessee, only the postnominal demonstratives *haða* and *haðaka* and the double demonstrative determiners, but not the prenominal demonstratives *ha* and *hak* can be used with the possessive constructions; and the definite article is not used as shown in ((33)-(35)).

- (33) **ktaab-i** **haða**
 book-pos.1s prox1.3ms
 “this book of mine” (literally, this my book)
- (34) **hak** **bint-ik** **haðika**
 nonprox1 daughter-pos2s nonprox2.3fs
 “that daughter of yours” (literally, that your daughter that)
- (35) ***ha** **bint-ik** **mfaat**
 prox1 daughter-pos.2s go.past.3fs
 “This daughter of yours left.” (literally, this your daughter)

When the possessive marker is attached to the separate word *mtaaʕ*, all demonstrative determiners can be used with possessive constructions, and they co-occur with the definite article as shown in ((36)- (38)).

- (36) **l-ktaab** **mtaaʕ** **haða**
 the-book pos.1s prox1.3ms
 “This book of mine”

(37) **ha-l-ktaab** *mtaa fi* **haða**
 prox1-the-book pos.1s prox1.3ms
 “This book of mine” (literally, this the book mine this)

(38) **ha-l-ktaab** **mtaa fi**
 prox1-the-book pos.1s
 “this book of mine”

1.5.3 Comparison with other Arabic dialects

As mentioned in section 1.5.2, Tunisian Arabic has two demonstratives, *haða* and *haðaka*, which function as demonstratives and determiners, two prenominal reduced demonstrative determiners *ha-* and *hak*, and two double demonstratives *ha-N haða* and *hak N haðaka*. In this section I will compare these TA demonstratives to demonstratives in other dialects of Arabic.

The demonstrative forms *haða* and *haðaka*:

Other Arabic dialects also have demonstratives which, like the TA *haða* and *haðaka*, function as pronouns and determiners, and are marked for number and gender. The different Arabic dialects, however, differ in terms of the number of such demonstratives and their order within the determiner phrase. For example, like TA, Syrian and Gulf Arabic⁸ have two demonstratives similar to the TA demonstratives *haða* and *haðaka*. Syrian Arabic has a proximate demonstrative *haada* and a nonproximate *hadaak*⁹ (Cowell 1964: 552). Gulf Arabic has a proximate demonstrative *haaða* and a nonproximate demonstrative (*haa*) *ðaaak*¹⁰ (Holes 1990: 173). Moroccan Arabic has three

⁸ Holes defines *Gulf Arabic* as a term used to refer to “a number of related dialects which are spoken along the Gulf littoral from northern Kuwait to Oman in the south-eastern corner of the Arabian Peninsula.”

⁹ Cowell indicates that there are regional variations in the demonstrative forms.

¹⁰ Holes indicates that there are some regional variations in the demonstrative forms especially in the plurals.

demonstratives. It has a proximate demonstrative *hada* and nonproximate demonstrative *dak* (Benmamoun 2000: 137-8). It also has another nonproximate demonstrative *hadak* (Aoun and Choueiri 1997: 17). Egyptian Arabic has only one demonstrative *da* (Shlonsky 2002: 51).

The order of demonstrative determiners within a phrase also differs among the Arabic dialects. As mentioned above, The TA demonstrative determiners *haða and haðaka* always occur postnominally. The order of Moroccan Arabic and Gulf Arabic demonstratives within the DP is not free either. In Moroccan Arabic, the demonstrative *hada* is postnominal and *dak* is prenominal (Benmamoun 2000: 137-138). The proximate demonstrative *hada* is prenominal (Aoun and Choueiri 1997: 17). The Egyptian demonstrative *da* can occur only in a postnominal position¹¹ (Shlonsky 2002: 51). The order of Gulf Arabic and Syrian Arabic demonstratives within the DP, however, is more flexible. In Gulf Arabic, *haaða and (haa) ðaak* can occur prenominally or postnominally (Holes 1990: 175). In Syrian Arabic, the nonproximate *hadaak* can occur prenominally or postnominally and the proximate *haada* occurs postnominally and less frequently prenominally (Cowell 1964: 556-557).

The prenominal reduced demonstratives *ha-* and *hak*

The characteristic of having an invariant prenominal demonstrative, which functions as a determiner only is not exclusive to Tunisian Arabic. Syrian Arabic has a reduced demonstrative determiner *ha* (Cowell 1964: 556). Similarly, Kuwaiti Arabic has

¹¹ Doss (1979:351) indicates that a prenominal demonstrative in Egyptian Arabic can occur in certain constructions such as curses and invocations (e.g., *jelfan abu di fīfa* ‘damn this life!’). However, she explains that this order is restricted and non-productive and that “the limited occurrences of Dem-Noun, in the present state, constitute residuals from a previous stage during which the variation of word order was a free one.”

a reduced demonstrative determiner *ha* (Brustad 2000: 115). Lebanese and Palestinian Arabic also have an invariant reduced prenominal demonstrative determiner *ha* (Omar 1976:17). Moroccan Arabic has two invariant prenominal demonstrative determiners *had* and *diik* (Brustad 2000: 117,125).

Double demonstratives

The characteristic of having a double demonstrative determiner within the same DP is not common to all other Arabic dialects, but is not exclusive to Tunisian Arabic. For example, Like Tunisian Arabic, Syrian Arabic allows two demonstratives to co-occur within the same DP. The reduced *ha* can co-occur within the same DP with the proximate *haada* or the nonproximate *hadaak* (Cowell 1964: 558). Moroccan Arabic also allows double demonstratives within the same DP. The invariant demonstrative *had* co-occurs with the proximate demonstrative *hada* within the same phrase. The proximate demonstrative determiner *had* co-occurs with *hadak*, and *hadak* is doubled in the same DP (Youssi 1992: 166-167).

Chapter 2: Cognitive status and demonstrative forms in Tunisian Arabic Previous Work and Questionnaires¹²

2.1 Theoretical background: the Givenness Hierarchy

Gundel, Hedberg, and Zacharski (1993) proposed the Givenness Hierarchy (GH), an implicational scale of six cognitive statuses that are relevant in explaining the use of referring expressions in human language. The cognitive statuses on the GH represent the assumptions that speakers make about the memory and attention state of the addressee at the time of the utterance. Gundel et al. argue that different determiners and pronouns have these statuses as part of their conventional meaning. It follows that when speakers choose a particular form, they guide the addressee in restricting possible referents. For example, when speakers use the indefinite article *a* in English, they are only expecting the addressee to identify the type of the referent, but if they use the demonstrative determiner *that*, they restrict possible referents to ones that are familiar (i.e., already in memory) for the addressee.

The Givenness Hierarchy (from Gundel et al. 1993, with relevant forms from English)

In Focus	>	Activated	>	Familiar	>	Uniquely Identifiable	>	Referential	>	Type Identifiable
<i>It</i>		<i>that</i> <i>this</i> <i>this N</i> ¹³		<i>that N</i>		<i>the N</i>		<i>indefinite this</i> <i>N</i>		<i>N</i>

¹² An earlier version of this chapter was published in *Perspectives on Arabic Linguistics XX*, ed. Mustafa E. Mugahzy, 169-186. Amsterdam/Philadelphia: John Benjamins.

¹³ N stands for noun phrase.

2.1.1 The statuses¹⁴

The statuses on the GH are not mutually exclusive. Every status on the hierarchy entails all the lower statuses to the right. The theory thus predicts that a given form can be used for referents that meet the minimal required status, and can also be used in coding higher statuses. For example, the English demonstrative determiner *this*, which signals the status Activated, can be used to encode referents that are in focus, since the status In Focus entails the status Activated. Forms signaled by the highest status, In Focus, are the most restrictive, since their referents must meet the requirements for this status, while forms that signal the lowest status, Type Identifiable, are the least restrictive, since they can be used to code entities with any cognitive status on the hierarchy¹⁵. The six cognitive statuses are briefly characterized below.

Type Identifiable: The addressee is able to access a representation of the type of object described by the expression. This status is necessary and sufficient for the use of the indefinite article *a* in English. For instance, the use of *a* in (39) is appropriate if the speaker can assume the addressee can understand what type of thing the phrase *a restaurant* describes.

(39) I met her in a restaurant.

Referential: The speaker intends to refer to a particular object and thus expects the addressee to not only access an appropriate type-representation, but to either retrieve an

¹⁴ Upper case is used when talking about the statuses themselves, and lower case is used when the statuses are used to describe referents.

¹⁵ Gundel et al 1993 indicate that interaction of the hierarchy with Grice's Quantity Maxim, however, typically gives rise to implicature of non-familiarity when the indefinite article is used, thus further restricting appropriate use in certain contexts .

existing representation of the speaker's intended referent or construct a new representation by the time the sentence has been processed. The status Referential is necessary and sufficient for the appropriate use of the indefinite *this* in colloquial English. In (40), the speaker is expecting the hearer to access the intended referent by constructing a representation of the guy who stopped him to ask directions to the children's hospital by the time the sentence is processed.

- (40) On my way to your house, this guy stopped me and asked me to give him directions to the children's hospital.

Uniquely Identifiable: by using a form that signals this status, the speaker is expecting the addressee to uniquely identify (i.e., associate a unique representation of) the referent based on a previously existing mental representation in his/her memory or to construct a new unique representation by the time the DP is processed. In English, the status Uniquely Identifiable is necessary and sufficient for appropriate use of the definite article *the*. For instance, the phrase *the apartment next to mine* in (41) would be acceptable even if the addressee has no previous knowledge of its referent, since it contains enough descriptive content that will allow the addressee to form a unique representation of the apartment.

- (41) John lives in the apartment next to mine.

Familiar: The addressee can identify the referent intended by the speaker, because s/he already has a representation of it in memory. In English, the status Familiar is necessary and sufficient for appropriate use of the demonstrative determiner *that*. In (42),

the phrase *that apartment (next to mine)* is appropriate only if the addressee already knows about (has a mental representation of) the apartment the speaker is referring to.

(42) John bought that apartment (next to mine).

Activated: A referent is activated if it is represented in current short-term (working) memory of the addressee. In English the status Activated is necessary and sufficient for the appropriate use of the demonstrative pronoun *that*, for the demonstrative pronoun and determiner *this*, and for stressed personal pronouns. For example, the demonstrative pronoun *that* in (43) can be used appropriately to refer to an apartment that both speaker and addressee can see or have just mentioned.

(43) A: That is a good one.

In Focus: A referent is in focus when it is not only in short-term memory but also the current focus center of attention. In English, this status is necessary for appropriate use of the unstressed pronominals. For instance, in (44) the unstressed personal pronoun *it* can be used appropriately to refer to the apartment, because its intended referent is previously mentioned in subject position of the previous sentence and can thus be assumed to be in the addressee's focus of attention.

(44) This apartment is huge. It must be very expensive.

2.1.2 Cognitive status criteria: How does an entity acquire a particular cognitive status?

A referent acquires its cognitive status in the memory of the addressee in different ways.

For example, a referent can acquire the status Activated in the mind of the addressee by being mentioned in the previous sentence, or by being in the immediate spatio-temporal context. Gundel et al. (1993) indicate that membership in the in-focus set is partially determined by the syntactic position of the antecedent. For example, “subjects and direct objects of matrix sentences are highly likely to bring a referent into focus” (279). A list of cognitive status criteria (Gundel 2004) used in this study is given in appendix I.

2.2 Previous Study

In a previous study (Khalifaoui 2004), I proposed correlations between cognitive status and TA pronouns (personal and demonstrative pronouns) and determiners (the definite article and demonstrative determiners) based on my own intuition as well as the judgments of constructed examples given by two other native speakers of Tunisian Arabic. The hypothesized correlations were tested by an analysis of the distribution of relevant forms in a corpus consisting of a recorded radio drama *maal wa ħwaal* (Money and Situations) and a published play *Junuun* (Insanity) (Baccar 2001) where the story revolves around the daily life of a young male who has schizophrenia, his struggle with the disease, and his daily interactions with his psychiatrist and his immediate family members. Results indicated that the pronominal demonstrative determiner *ha*, the postnominal determiner and pronoun *haða*, and the postnominal determiner and pronoun *haðaka* all require at least the status Activated, while the demonstrative determiner *hak*

requires only Familiar¹⁶. For instance, in the constructed example in (45) (Khalifaoui 2004), the use of *hak* is appropriate, because the addressee already has a representation of the doctor in memory.

- (45) rʒaʕti-l-ha **hak** l-tbiiba
 return.past.2s-3fs nonprox1 the-doctor
 “Did you go back to that doctor?”

In (46), however, the use of *hak* is not acceptable, since the car can be assumed to be uniquely identifiable, but not familiar to the addressee. The addressee can be expected to construct a unique representation of the referent based on the descriptive content provided in the phrase.

- (46) The addressee has no previous knowledge of the car
- biʕna **l-karhba/#hak** l-karhba illi .
 sell.past.3p the- car/nonprox1 the-car comp
- ʕrina-ha ʕamnawil
 buy.past.1p-3fs last.year
 “We sold the car/#that car that we bought last year.”

In the constructed example in (47), the use of the demonstrative pronoun *haðaka*, which was determined to require at least activated, is appropriate to refer to the car. The car was determined to be in focus, because it was mentioned twice in the two immediately preceding sentences.

¹⁶ Only demonstratives are discussed here, because they are the focus of this dissertation.

- (47) A: l-karhba yaalja.
 the-car expensive
 “The car is expensive.”
- B: ah mala baʃ t-biʃ-ha ?
 ok so fut 2-sell-3fs
 “Ok, so will you sell it?”
- A: la la ma-n-biʃha-ʃ **haðika**
 no no neg-1-sell-it-neg nonprox2.3fs
 “No, no I don’t sell that one.”

Similarly, example (48) from a play script shows that the demonstrative pronoun *haða* can be used to refer to activated entities. In this example, the speaker uses *haða* to refer to a previous comment he made about himself mentioned in the immediately preceding sentence.

- (48) ħad ma ħab-ni
 one neg love.past.3ms-1s
 “Nobody loved me,”
- w ħad ma ħabn-i
 and one neg love-past.3ms-1s
 “and no one loved me.”
- haða** illi marrað-ni
 prox2.3ms comp make.sick.past.3ms-1s
 “This is what made me sick.”

(Junuun (Insanity): 122)

In (49) from a radio play, the use the demonstrative pronoun *haði* to refer to the woman is appropriate. The woman was mentioned in the immediately preceding sentence in a prominent syntactic position. As shown in the example, the use of *haða*, which requires at least Activated, as a determiner is also possible.

(49) ya rabb-i baʃ ti-rjaʃ l-mra.
 voc god-pos.1s future 3f-comeback the- woman;
 “Oh my God, the woman will come back.”

baʃ ta-ʃmil-ha ʔniya li-l-marche **haði/ l-mra haði**
 fut 3f-make-3fs way to-the-market prox2.3fs/the- woman prox2.3fs
 “This one/this woman will be coming all the time.”

(*maal wa-ħwaal* (Money and Situations))

Example (50), from a radio play, shows that the demonstrative pronoun *haðaka* can be used to refer to activated entities. The referent of the pronoun *haðaka* can be assumed to be activated, because it was mentioned in the immediately preceding sentence.

(50) A: itlha kuul w uskut inti
 keep.2s eat and stop.talking you
 “You eat and stop talking.”

B: ahah Sonia, ʃnuwa “kuul w uskut”, yʃajjiʃ binti
 ahah Sonia what eat and stop.talking please
 “Ahaha Sonia what do you mean by ‘eat and stop talking’?”

ana rani n-ħib li-ħtiram w l-qdar,
 I emph 1s-want the-respect and the-respect
 “Me, I like respect.”

ma-t-kallam-ʃ wild-i hakka
 neg-2s-talk-neg son-pos.1s like that
 “Do not talk to my son like this.”

haðaka nhaar aaxir
 nonprox2.3ms day another

baʃ j-walli aqrab-li-k hatta min xuu-k
 fut 3s-become closer-to-2s even from brother-pos.2s
 “That one, one day will be closer to you than your brother.”

(*maal wa-hwaal* (Money and Situations))

Example 0 shows that the demonstrative *haða* as a pronoun and as a determiner cannot be used to refer to lower than Activated, supporting the hypothesis that this demonstrative form requires at least Activated.

(51) The addressee has no previous knowledge of the doctor

kun-t ʔand **hak** **l-tbiiba/# l-tbiiba haði/ #haði**
 be-past.1s at nonprox1 the-doctor/ the-docotr prox2.3fs/prox2.3fs
 “I saw that doctor/#this doctor/#this.”

Example (52), from a radio play, shows that if we replace *hak* with the demonstrative determiner *ha* or the demonstrative pronoun *haðaka*, the result is infelicitous, since *hak* requires the referent to be at least familiar, while the determiner *ha* and the pronoun *haðaka* require the referent to be at least Activated. This supports the hypothesis that these two forms require at least activated. The referent of the DP *hak l-ħufra* (that hole (meaning that small room)) was determined to be familiar, because the addressee has previous knowledge of the room the speaker is referring to, but the room hasn't been recently mentioned in the conversation.

(52) xalli-ni na-ħki mfa Noura
let-1s 1s-talk with Noura
“Let me talk to Noura.”

hija ti-fhim w-ti-tfahhim,
she 3fs-understand and-3fs-comprehend
“She understands and comprehends.”

ama inti bnayti ya lilla ya lilla ya lilla
but you daughter-1s voc dear voc dear voc dear
“But you, my daughter, oh dear, oh dear, oh dear.”

la j-dawwir ba-trafik ħbayyib.”
neg 1s-approach with-edges a friend
“You are unapproachable.”

faad qut-li-k ja Noura
so tell-to-2s voc Noura
“so Noura, I told you,”

law kaan buu-kum t-baʃbʃ-u bii-h
if be.past.3ms father-pos.3p 2-pamper with-3ms
“If you pamper your father,”

w t-ħinnu ʔlii-h
and 2-be.kind on-3ms
“and be kind to him.”

w t-xarrʒuu-h
and 2-takeout-3ms
min **hak** **l-ħufra/ # ha l-ħufra/# haðika**
from prox2 the-hole/ prox1-the-hole/ nonprox2.3fs
“and take him out of that small room/#this small room/#that one”

w ta-ʔmlu-l-u kaar w qdar
and 2-make-to-3ms respect and respect
“and give him respect,”

ra-hu ma xammam-ʃ fi-l-ʕirs
emph-3ms neg think.past.3ms-neg in-the-marriage
“He wouldn’t have thought of marriage.”

(*maal waħwaal* (Money and Situations))

The final hypothesized correlations between TA demonstrative forms and cognitive status according to Khalfaoui (2004) are given in Table 6.

Table 6: *Hypothesized form-status correlations in the previous study*

In Focus	Activated	Familiar	Uniquely Identifiable	Referential	Type Identifiable
<i>huwa</i>	<i>ha-N</i>	<i>hak N</i>	<i>l-</i>	<i>N</i>	
∅	<i>N haða</i>				
	<i>haða</i>				
	<i>N haðaka</i>				
	<i>haðaka</i>				

2.2.1 Limitations of Previous study

One limitation of the previous study is that the tokens of demonstrative forms identified in the data were very infrequent. The distribution of TA referring expressions according to the highest cognitive status in the corpus analysis used in Khalfaoui (2004) is given in table 7.

Table 7: *Distribution of TA demonstratives in the data corpus used in the previous study*

Form	Total
∅	206
<i>huwa</i>	311
<i>haða</i>	4
<i>haðaka</i>	3
<i>ha N</i>	6
<i>N haða</i>	5
<i>N haðaka</i>	1
<i>hak N</i>	1
<i>l-</i>	156
<i>bare noun (N)</i>	151

As shown in table 7, while tokens of personal pronouns and determiners (the definite article) identified in the data used in the previous study were frequent, the number of tokens of demonstrative forms was very infrequent. For example, only one token for each of the demonstrative determiners *haðaka* and *hak* was identified in the data¹⁷. This limitation makes the results achieved for demonstratives inconclusive and further research to confirm them was needed. One form that especially requires further investigation is the postnominal demonstrative determiner *haðaka*, which was determined in the previous study to require at least Activated. Based on my personal intuition and my observations of TA native speakers' interactions, I suspect that this form requires the

¹⁷ Relative infrequency of demonstratives compared to articles or personal pronouns is common across languages (see Gundel et al. 2003 and Ariel 1988).

lower status Familiar, but is used very infrequently for this status, and much more frequently for the higher status Activated. Another limitation of the previous study is that it included only single demonstratives, since double demonstratives were not included when eliciting data and none were identified in the data corpus.

2.3 Current study

The current study consists of a combined methodology of constructed questionnaires and corpus analysis. This study builds on Khalfaoui 2004 to test form-status correlations for single demonstratives proposed in that study, and to extend the analysis to double demonstratives which were not included in the previous study. The current study also aims to look at whether the distribution of the demonstrative forms according to highest cognitive status in the questionnaires and the corpus analysis reveals other factors that further restrict the use of TA demonstratives which encode the same cognitive status.

The methodology used in this study was improved compared to the methodology used in the previous study. For example, while the previous study used oral elicitations, the current study used paper and pencil questionnaires. Also, while in the oral elicitations conducted in the previous study, only one example was used to test for form-status correlations using one biasing criteria, more than one example to test for every cognitive status were used in the questionnaires. In every example, a different biasing criterion was used. Finally, the database used in the corpus analysis conducted in the current study has been increased in order to increase the chance of identifying more tokens of the demonstrative forms, since the demonstratives identified in the data used in the previous study were very infrequent .

2.3.1 Pilot Questionnaire

2.3.1.1 Participants

A total of 13 participants, 6 female and 7 male, filled in a paper and pencil questionnaire. All participants are adult native speakers of Tunisian Arabic from different educational backgrounds, and are all comfortable reading Arabic. All six female participants and four of the male participants have lived all their lives in Tunisia. The other three male participants have been living in the US for four years or less, and had lived in Tunisia prior to coming to the US. Each participant signed an informed consent that had been approved by the University of Minnesota Institutional Review Board. The informed consent form is provided in appendix II.

2.3.1.2 Materials

The questionnaire devised for this study was written in Tunisian Arabic using Arabic script. Since participants came from different educational backgrounds, everyday language that did not include technical or specialized jargon was used. The questionnaire consists of 11 questions. Each question has a sentence or short conversation with a blank space in it followed by 11 phrases to choose from. Each sentence or short conversation is biased toward a different cognitive status on the Givenness Hierarchy by placing the referent in a particular syntactic position or by placing a preceding indication of the memory and attention state of the addressee with respect to the referent of the phrase that needs to be placed in the blank space. Of the 11 sentences or short conversations, two were biased toward the status In Focus, three toward the status Activated, two toward the status Familiar, two toward the status Uniquely Identifiable, one toward the status

Referential, and one toward the status Type Identifiable. Since a form can acquire a cognitive status in different ways, when more than one sentence or short conversation is biased toward the same cognitive status, different coding criteria were used for biasing each sentence or short conversation.

The 11 phrases that follow each sentence or short conversation consist of 8 phrases with the 8 TA demonstrative determiners and pronouns considered in this study, and three filler phrases that did not contain demonstrative forms. The first filler phrase contains the definite article *l-*, the second one is a bare noun, and the third filler phrase is either a phrase which has a possessive, or a phrase that contains a different word for the referent and which consists of either a bare noun or the definite article. The 11 sentences and short conversations were presented in random order.

2.3.1.3 Procedure

In the written instructions that precede the questionnaire, participants were asked to read each short conversation and the context information that precedes it, and then circle on lists of 11 noun phrases the ones they judged to be acceptable to be placed in a blank space in each short conversation. Two examples from the questionnaire translated into English are provided in (53) and (54). The full questionnaire with English gloss and translation is provided in appendix III. In (53), the context is biased toward the status Familiar by criterion 2 (A referent is Familiar if it can be assumed to be known by the hearer through cultural/encyclopedic knowledge or shared personal experience with the speaker). The information about the addressee's memory and attention state with regard to the gift is given in the explanation that precedes the short conversation.

(53) Speaker B knows that somebody gave Sonia a gift but she was not thinking about it [the gift] before speaker A mentioned it.

A: Sonia ʔʒib-ha.....
Sonia please.past.3ms-3fs
“Sonia was pleased by”

B: ʔraf-t-u baʃ ji-ʔʒib-ha.
know.past.1s-3ms fut 3ms-please-3fs
“I knew it was going to please her.”

1. hak l-kado haḏaka (that gift (literally,that gift that))
2. kaduha (her gift)
3. ha- l-kado (this gift)
4. l-kado mtaʃha (her gift)
5. l-kado haḏa (this gift)
6. haḏaka (that)
7. l-kado haḏaka (that gift)
8. ha-l-kado haḏa (this gift (literally, this gift this))
9. l-kado (the gift)
10. haḏa (this)
11. hak l-kado (that gift)

In example (54), the context is biased toward the status In Focus by criterion 1 in the coding guidelines (the referent is assumed to be in focus if it is in a syntactically prominent position in the immediately preceding sentence). In this example, the referent, the doctor, occurs in a prominent syntactic position in the immediately preceding sentence.

(54) Speaker B doesn't know the doctor that speaker A is talking about

A: ðahr-i maʔaatʃ j-uʒaʃ-ni.
back-pos.1s neg 3ms-hurt-1s
“My back no longer hurts.”

tbiib-i ʕtaa-ni dwa ðarba ðarba
doctor-pos.1s give-past.1s medication effective effective
“My doctor gave me very effective medication,”

B: aʃ ism-u?
what name-pos.3ms?
“What is the name of?”

1. hak *l-tbiib* haðaka (that doctor (literally, that doctor that))
2. *tbiib-k* (your doctor)
3. *ha- l-tbiib* (this doctor)
4. *l-tbiib* (the doctor)
5. *l-tbiib* haða (this doctor)
6. haðaka (that)
7. *l-tbiib* haðka (that doctor)
8. ha t-tbiib haða (this doctor (literally, this doctor this))
9. *tbiibik* (your doctor)
10. haða (this)
11. *hak l-tbiib* (that doctor)

2.3.1.4 Method of analysis

When a form was chosen by participants to be placed in contexts biased toward a particular cognitive status or higher statuses, but not chosen by any participant to be placed in contexts biased toward lower cognitive statuses, that status is determined as the one that is necessary for the appropriate use of that form. For example, if a form is placed in contexts that are biased toward the status Familiar or higher, but not toward the

statuses Uniquely Identifiable, Referential or Type Identifiable, the cognitive status Familiar was determined as the one that is necessary for the appropriate use of that form.

2.3.1.5 Results and discussion

Table 8 shows results of the questionnaire conducted to test hypothesized correlations between cognitive status and TA demonstrative pronouns and determiners based on the previous study. The table shows the distribution of single as well as double demonstrative forms according to the highest cognitive status they were chosen for in the particular context.

Table 8: *Distribution of TA demonstratives according to highest cognitive status in the pilot questionnaire*

	Referent In Focus	Referent Activated	Referent Familiar			
ha-N	20	28				
N haða	12	32				
haða	0	4				
haðaka	1	9				
N haðaka	11	26				
hak-N	8	16	23			
ha-N- haða	8	28				
hak-N- haðaka	6	14	5			

As mentioned in the previous section, when a form was chosen to be placed in a context biased toward a particular status, and not in contexts biased toward any lower statuses, that status is determined as the one that is necessary and sufficient for the appropriate use of that form. For instance, the pronominal demonstrative determiner *hak* was determined to require at least Familiar, since as shown in table 8, it was chosen by

participants to be placed in contexts biased toward the status Familiar and higher, but not in contexts biased toward any one of the lower cognitive statuses.

The distribution of the demonstrative forms according to highest status shows that no demonstrative form was placed in contexts biased toward a status below Familiar, and no demonstrative form was placed in a context biased toward the status In Focus only, indicating that the two minimally required statuses for demonstratives in Tunisian Arabic are Familiar and Activated. Examples based on participants' responses to the pilot questionnaire are given in section 2.3.1.6.

2.3.1.6 Results and discussion

As shown in Table 8, results of the pilot questionnaire confirm that the two demonstrative pronouns *haða* and *haðaka*, and the demonstrative determiners *ha* and *haða* require the status Activated, as these forms were chosen by participants to be placed in contexts biased toward the status Activated, but none of the participants placed them in contexts biased toward the lower status Familiar. Results also show that the double demonstrative *ha-N haða*, which was not considered in the previous study, requires the status Activated, as this form was not placed in contexts biased toward statuses Familiar or lower.

ha-N

In (55) the phrase *ha-l-ħis* (this noise) was chosen by participants to be appropriate to refer to the noise. The referent of the noise can be assumed to be activated, since, as mentioned in the context information, both speaker and addressee could hear it at the time of the utterance.

(55) Both speaker and addressee can hear a noise.

qallaq-ni **ha-l-ħis**
bother.past.3ms-1s prox1-the-noise
“This noise is bothering me”

in (56) where the context is biased toward at most Familiar, however, none of the participants selected the phrase *ha-l-kuntaabli* (this accountant) to refer to the accountant, confirming that *ha* minimally requires the status Activated. The accountant here can be assumed to be at most Familiar, since, as mentioned in the context information, the addressee has previous knowledge of the accountant, but he was not thinking about him at the time of the utterance.

(56) The addressee knows the accountant, but he was not thinking about him before the speaker mentioned him (the accountant).

talb-ik # ha-l-kuntaabli.
call.past.3s prox1-the-accountant.
“This accountant called you.”

N haða

In 0, the phrase with, *l-ħkaaja haði* (this story), was determined to be acceptable to refer to the fact that Leila changes her mind every day, indicating that this form can be used for the status Activated. The referent here can be assumed to be activated, since it refers to a fact that is inferable from the preceding sentence.

- (57) The addressee already knows that Leila changes her mind every day. The speaker knows that the addressee already knows that Leila changes her mind every day.

Leila kul juum t-baddil raj-ha.
 Leila every day 3f-change mind-pos.3fs
 “Leila changes her mind every day.”

w l-ħaq l-ħkaja haði mqałlqit-ni
 and the truth the-story prox2.3fs bothering-1s
 “And this fact is really bothering me.”

None of the participants, however, chose the phrase *l-kado haða* (this gift) to be placed in (58) where the context is biased toward the status Familiar. The gift can be assumed to be at most familiar, since both speaker and addressee know that somebody gave Sonia a gift yesterday, but, as mentioned in the context information, the addressee was not thinking about the gift before it was mentioned to her, and it could not therefore have been activated. This supports the hypothesis formulated in the previous study that the determiner *haða* requires at least Activated.

- (58) Speaker B knows that somebody gave Sonia a gift but she was not thinking about it [the gift] before speaker A mentioned it.

A: sonia ʕʕib-ha # l-kado haða
 sonia please.past.3ms-3fs the-gift prox2.3ms
 “This gift pleased Sonia”

B: ʕraf-t-u baʃ ji-ʕʕib-ha.
 know.past-1s-3ms fut 3ms-please-3fs
 “I knew it was going to please her”

ha-N haða

Participants chose the double demonstrative *ha-N haða* to be placed in (59) where the context is biased for the status Activated. The referent of the apartment can be assumed to be activated, because it is mentioned in the immediately preceding sentence.

- (59) Speaker B knows the apartment that speaker A is talking about, but she was not thinking about it [the apartment] before A mentioned it.

A: Salwa naqlit min dar-ha l-qdima
Salwa move.past.3fs from house-pos.3fs the-old

w-ƣraat burtmaan
and-buy.past.3fs apartment
“Salwa moved from her old house and bought an apartment.”

B: ih fi-bal-i w **ha- l-burtmaan** **haða**
yes in-mind-pos.1s and prox1- the-apartment prox2.3ms

huwa illi ħabbit ni- ƣrii-h ana
he comp want.past.1s 1-buy-3ms I
“Yes and it is this apartment that I wanted to buy.”

Evidence that the double demonstrative *ha-N haða* requires the status Activated is that none of the participants chose to place this form in contexts biased toward the cognitive status Familiar or lower. For example, none of the participants chose this form to be placed in (60) where the context is biased toward the status Familiar, since as shown in the context information, the addressee has previous knowledge of the gift but she was not thinking about it at the time the speaker mentioned it.

- (60) B knows that somebody gave Sonia a gift but she was not thinking about it [the gift] before speaker A mentioned it.

A: Sonia ʔʒib-ha #ha l-kado haða
 Sonia please.past.3ms-3fs prox1 the-gift prox2.3ms
 “This gift pleased Sonia”

B: ʔraf-t-u baʃ ji-ʔʒib-ha.
 know.past-1s-3ms fut 3ms-please-3fs
 “I knew it was going to please her”

hak-N

Distribution of the demonstrative forms in table 8 confirms that the prenominal demonstrative *hak* requires only the status Familiar, since this form was placed in contexts biased for referents that were at most familiar but not in contexts biased toward any of the lower statuses. Results of the pilot questionnaire also show that the double demonstrative *hak N haðaka*, which was not considered in the previous study, requires only the status Familiar. In (61) the referent of *hak l-kado* can be assumed to be familiar, since both speaker and addressee know that somebody gave Sonia a gift yesterday, but when speaker A mentioned the gift, there was no reason to assume the addressee was thinking about it, and therefore it could not have been already activated.

- (61) Speaker B knows that somebody gave Sonia a gift but she was not thinking about it [the gift] before speaker A mentioned it.

A: Sonia ʔʒib-ha hak l-kado
 Sonia please.past.3ms-3fs nonprox1 the- gift
 “That gift pleased Sonia”

B: ʔraf-t-u baʃ ji-ʔʒib-ha.
 know.past-1s-3ms fut 3ms-please-3fs
 “I knew it was going to please her”

None of the participants, however, chose the demonstrative *hak* to be placed in (62) where the context is biased toward at most uniquely identifiable, confirming results of the previous study that *hak* requires familiarity and hence its choice in contexts where it is used for at most Uniquely Identifiable would be unacceptable. In (62), the speaker is asking the addressee about a house that she (the speaker) has never seen before. The addressee answers the question by giving information about the house and also about a kitchen in the new house. The referent of the kitchen can be assumed to be uniquely identifiable, having acquired this status via bridging to the DP *l-daar l-ʒdiida* (the new house) which is already activated. The speaker cannot assume that the addressee has a previous representation of the kitchen in memory and therefore, she is not justified to assume that it is familiar.

(62) A: baahja l-daar l-ʒdiida?
 good the-house the-new
 “Is the new house a good one?”

B: ih ama l-ku ʒina/ #hak l-kuʒina zyira
 yes but the-kitchen/nonprox1 the-kitchen small
 “Yes, but the kitchen is small”

hak N haðaka

Participants chose the double demonstrative *hak N haðaka* to be placed in (63) where the context is biased toward the status Familiar. This shows that this form can be used to refer to familiar entities.

- (63) The addressee knows the accountant, but he was not thinking about him before the speaker mentioned him (the accountant).

talb-ik **hak** **l-kuntaabli** **haðaka**
 call.past.3s nonprox1 the-accountant. nonprox2.3ms
 “That accountant called you.”

Evidence that the double demonstrative *hak N haðaka* requires Familiar is that none of the participants determined it to be acceptable to be placed in (64) where the context is biased toward the status Uniquely Identifiable. In (64), the speaker knows that the hearer has no previous knowledge of the grocer and is not therefore expecting him to retrieve a representation from memory. The only expectation the speaker can have is that the addressee can construct an individuated representation of the referent based on the phrase *l-ḡattaar lli bi-ḡnab-na* (the grocer next door).

- (64) Speaker A and speaker B are sitting in their office at work talking. Speaker A doesn't know the grocer that speaker B is talking about.

A: tu-ftur fi l-daar l-sbaaḥ?
 2s-eat in the-house the-morning?
 “Do you eat at home in the morning?”

B: ma nu-ftur-ḡ l-sbaaḥ fi-l-daar. kul juum ni-tḡadda
 neg 1-eat-neg the-morning in-the-house every day 1-pass

l-# hak l-ḡattaar lli bi-ḡnab-na haðaka
 to –nonprox1 the-grocer comp in-side-pos.1p nonprox2.3ms

ni-ḡri kaskruut
 buy sandwich
 “I don't eat at home in the morning. I stop everyday by that grocer next door and buy a sandwich.”

The choices made by the participants who filled in the pilot questionnaire confirm results of the previous study about single demonstratives. Based on personal intuition, and observations of interactions of native speakers, I suspect that the demonstrative determiner *haḏaka* requires the status Familiar and not the higher status Activated as was indicated by results of the previous study and the pilot questionnaire conducted in the current study.

As mentioned in section 2.3, one goal of the current study is to extend the analysis to double demonstratives which were not included in the previous study. Results of the pilot questionnaire suggest that while *ha N haḏa* requires the same cognitive status, Activated, as the two single demonstratives that form it, *hak N haḏaka* requires the same status, Familiar, as the prenominal *hak* but not as the postnominal *haḏaka* which requires at least Activated¹⁸. Form status correlations according to the pilot questionnaire results are given in table 9.

¹⁸ Results of the revised questionnaire and corpus study however, indicated, that *hak N haḏaka* also requires the same cognitive status as the two single demonstratives that form it.

Table 9: *Form-Status correlations according to results of the pilot questionnaire*¹⁹

In Focus	Activated	Familiar	Uniquely Identifiable	Referential	Type Identifiable
	<i>ha-N</i>	<i>hak N</i>			
	<i>N hađa</i>	<i>hak N hađaka</i>			
	<i>hađa</i>				
	<i>hađaka</i>				
	<i>N hađaka</i>				
	<i>ha-N hađa</i>				

2.3.2 Revised Questionnaire

In this section, I will explain how the pilot questionnaire was revised in terms of content, number of questions, and number of participants, and give reasons for those revisions. The full revised questionnaire with English gloss and translation is provided in appendix IV.

2.3.2.1 Materials

The questions given in the pilot questionnaire are maintained in the revised questionnaire. The written instructions, the context information that precede the sentences or short conversations as well as the sentences and short conversations, however, were improved based on written comments made by three participants who filled in the pilot questionnaire, and on suggestions made by Jeanette Gundel. An example of how the context that precedes short conversations was improved is given in (65). The context

¹⁹ The forms marked in boldface were not considered in the previous study (Khalifaoui 2004).

explanation provided in (65) from the pilot questionnaire explicitly states that the addressee has no previous knowledge of the referent, but it does not explicitly eliminate the possibility that the referent is in the immediate spatio-temporal context.

- (65) B doesn't know the grocer that A is talking about. A knows that B doesn't know the grocer.

A: tu-ftur fi l-daar l-sbaaħ?
 2-eat.2s in the-house the-morning
 "Do you eat at home in the morning?"

B: ma nu-ftur-ŷ l-sbaaħ fi-l-dar.
 neg 1-eat-neg the-morning in-the-house.
 "I don't eat at home in the morning."

kul juum ni-tʃadda..... ni-ŷri kaskruut
 every day 1-stopby 1-buy sandwich
 "Every day, I stop buy a sandwich."

Information about presence in the extralinguistic context is very crucial, because if participants in the questionnaire assume that the speech participants can see the grocer at the time the conversation was taking place, they may assume that the referent is activated by being in the immediate spatio-temporal context, and therefore choose a form that requires at least Activated²⁰. As shown in (66), it was indicated in the biasing context in the example from the revised questionnaire that both speaker A and speaker B are sitting in their office at work. This additional information eliminates the possibility of assuming that the referent, the grocer, is in the immediate spatio-temporal context.

²⁰ It was verbally clarified to participants in the pilot questionnaire that the grocer was not in the immediate spatio-temporal context.

(66) A and B are sitting in their office at work talking. A does not know the grocer that B is talking about

A: tu-ftur fi l-daar l-sbaaḥ?
2-eat.2s in the-house the-morning
“Do you have breakfast at home in the morning?”

B: ma nu-ftur-ʃ l-sbaaḥ fi-l-daar.
neg 1-eat-neg the-morning in-the-house.
“I don’t have breakfast at home in the morning.”

kul juum ni-tʃadda..... ni-ʃri kaskruut
every day 1-stopby 1-buy sandwich
“Every day I stop I buy a sandwich.”

In addition to making improvements to the questions of the pilot questionnaire, three more questions were added, thus increasing the number of questions from 11 to 14. One of the added questions was biased toward the status In Focus, and two questions toward the status Activated. The cognitive status biasing criteria used in the added questions in the revised questionnaire were not used in the pilot questionnaire. For example, the context in (67) is biased toward the status Activated, using the criterion (It is something in the immediate spatio-temporal context that is activated by means of a simultaneous gesture or eye gaze). This criterion was not used when biasing for the cognitive status Activated in the pilot questionnaire.

(67) The speaker is standing in front a watermelon merchant. He pointed to one watermelon and said:

brabbi uzin-l-i
please weigh-to-me
“Could you please weighfor me.”

1. hak l-dillaŋa haði ka (that watermelon (literally, that watermelon that))

2. l-dillaŋa (the watermelon)

3. ha-l-dillaŋa (this watermelon)

4. dillaŋti (my watermelon)

5. l-dillaŋa haði (this watermelon)

6. haðika (that)

7. l-dillaŋa haðika (that watermelon)

8. ha l-dillaŋa haði (this watermelon)

9. dillaŋa (watermelon)

10. hak l-dillaŋa (that watermelon)

11. haði (this)

2.3.2.2 Participants

The number of participants in the revised questionnaire was increased from 13 to 20.

Of the 20 participants, nine participants are the same as in the revised questionnaire, and 11 are new participants. The 20 participants who filled in the revised questionnaire consist of 10 females and 10 males. One major reason for increasing the number of participants is that based on my personal intuition and my observations of TA native speakers' interactions, I suspect that the demonstrative determiner *haðaka* might require the status Familiar and not the status Activated. It is possible that the reason participants

did not choose this form to refer to familiar entities is that although this form might require the status familiar, it is used more frequently to refer to activated and in-focus entities. Since the pilot questionnaire did not confirm my suspicion, the number of participants was increased in order to increase the chance for this demonstrative form to be used.

2.3.2.3 Procedure and method of analysis

The same procedure and method of analysis used in the pilot questionnaire was used in the revised questionnaire.

2.3.2.4 Results

Table 10: *Distribution of TA demonstratives according to highest cognitive status in the revised questionnaire*

	In Focus	Activated	Familiar	Uniquely Identifiable	Referential	Type Identifiable
<i>ha-N</i>	40	68				
<i>haða</i>	1	15				
<i>N haða</i>	33	74				
<i>hak N</i>	20	36	36			
<i>haðaka</i>	4	19				
<i>N haðaka</i> ²¹	20	47	17			
<i>ha-N haða</i>	29	51				
<i>hak N haðaka</i>	17	41	11			

Table 10 shows the results of the revised questionnaire. The table shows the distribution of the single as well as the double demonstrative forms according to the highest cognitive status for which they were chosen. The revised questionnaire confirmed results of the

²¹ This form is marked in boldface, because the result is different from the pilot questionnaire.

pilot study about the demonstrative pronouns *haða* and *haðakaka*; The double demonstrative determiners *ha-N haða* and *hak N haðaka* as well as the demonstrative determiners *ha*, *hak* and *haða*, but not the postnominal determiner *haðaka*. While in the pilot questionnaire, none of the participants chose the determiner *haðaka* to be placed in contexts biased toward statuses lower than Activated, Table 10 shows that 17 tokens of *haðaka* were placed in contexts biased toward the status Familiar, indicating that the status Familiar and not Activated is sufficient for the use of this form. I suggested in 2.3.1.5 that the reason participants did not choose the demonstrative determiner *haðaka* to be placed in contexts lower than Activated is that although this form requires the cognitive status Familiar, it is used more frequently for the higher statuses Activated and In Focus. Increasing the number of participants in the revised questionnaire increased the chance of this form to be used. As shown in Table 10 and in examples (68) and (69), the demonstrative determiner *haðaka* was placed in both contexts biased toward the status Familiar in the revised questionnaire.

- (68) Speaker A knows the gift but she was not thinking about it [the gift] before speaker B mentioned it.

A: mʃ-iit tallit ʃla Sonia Ibaariḥ
 go-past.1s visit-past.1s on Sonia yesterday
 “I went to visit with Sonia yesterday.”

B: brabbi ʃʒib-ha **I-kado** *haðaka*
 please please.past.3ms-3fs the-gift nonprox2.3ms
 “Did she like that gift?”

- (69) Both A and B know the accountant but speaker A was not thinking about him (the accountant) before B mentioned him.

A: ma tlab-ni ħad?
neg call.past.3ms-1s someone”
“Did anyone call me?”

B: talb-ik **I-kuntaabli** *hađaka*
call.past.3ms-2s the-accountant nonprox2.3ms
“That accountant called you”

Results achieved in the revised questionnaire about the demonstrative *hađaka* confirm my suspicion that this form requires the lower cognitive status Familiar and not Activated as was indicated by results of the previous study and the pilot questionnaire discussed in this chapter.

Distribution of the two demonstratives *hak* and *hađaka* also supports my suspicion that although both demonstrative forms require at least Familiar, the demonstrative *hak* is used more frequently than *hađaka* to refer to at most Familiar entities. Although both *hak* and *hađaka* require at least Familiar, the number of tokens of the demonstrative *hak* chosen by participants is much higher than the number of tokens chosen for *hađaka*. As shown in table 10, 36 tokens of *hak* and only 17 tokens of *hađaka* were chosen to refer to familiar entities.

The finding that the determiner *hađaka* requires at least Familiar and not the higher cognitive status Activated is also important with respect to the double demonstrative *hak N hađaka*. We can make the conclusion that this double demonstrative encodes the same cognitive status, Familiar, as the single demonstratives that form it.

We can therefore make the general conclusion that in terms of cognitive status, double demonstratives in Tunisian Arabic can only be formed from single demonstrative forms

that require the same cognitive status, and that double demonstratives require the same cognitive status as the single demonstratives that form them.

Table 11: *Form-status correlations according to results of the revised questionnaire*

In Focus	Activated	Familiar	Uniquely Identifiable	Referential	Type Identifiable
	<i>ha-N</i>	<i>hak N</i>			
	<i>N hađa</i>				
	<i>hađa</i>	<i>hak N hađaka</i>			
	<i>hađaka</i>	<i>N hađaka</i> ²²			
	<i>ha-N hađa</i>				

2.3.3 Summary and results achieved in both questionnaires

As shown in table 11, all TA demonstratives require at least the status Familiar (i.e., in memory). A similar characteristic is found in studies of other languages. For example, Gundel et al. (1993) conducted a crosslinguistic study where they proposed correlations between the different statuses on the Givenness Hierarchy and various pronouns and

²² This demonstrative form is marked in boldface, because the result is different from that of the pilot questionnaire.

determiners in Mandarin Chinese, English, Japanese, Russian, and Spanish. They found that except for Chinese, where the distal demonstrative determiner *nèi* only requires the status Uniquely Identifiable, all demonstrative forms in these languages require the status Familiar or higher²³. Ariel (1988) also argues that demonstrative phrases are mid accessibility markers which refer to less accessible information than personal pronouns, and to higher accessible information than full definite DPs without a demonstrative determiner. She found in her empirical study that demonstratives refer to something previously mentioned in the text or present in the physical surroundings. Botley and McEnery (2001) conducted a corpus study of English demonstratives and found that they have an accessibility status intermediate between that of pronouns and definite article DPs.

Other referring expressions that were used in the filler phrases, however, were chosen by participants to be placed in contexts biased toward statuses lower than Familiar. For instance, none of the participants chose a demonstrative form to be placed in (70) where the context is biased toward the context Uniquely Identifiable. Participants, however, chose the definite article *l-* to be placed in (70). In this example, the kitchen is not in memory, but the addressee can construct a unique representation of the kitchen by way of a bridging inference to the house, which is activated. A demonstrative would not be acceptable, since the speaker cannot expect the addressee to have a representation of the kitchen in memory.

²³ Gundel et al. noted that “the fact that the highest number of demonstrative determiners was found in the Chinese data would appear to support observations that the demonstrative determiner is beginning to function like a definite article in Chinese” (300).

(70) Speaker B bought a house and speaker A is asking her about it, because she has not seen it yet.

A: bahija l-daar l-ʒdida?
good the-house the-new?
“Is the new house nice?”

B: ih ama **l-kuʒina** zʔiira
yes but the-kitchen small
“Yes but the kitchen is small.”

Similarly, none of the participants chose a demonstrative to be placed in (71) where the context is biased toward the status Referential. In (71) the speaker is expecting the addressee to construct a representation of the referent (the book she saw in the library) by the time she finishes processing the sentence. Participants, however, chose the bare noun *karhba* (car) to be placed in (71).

(71) Speaker A is not talking about a particular car.

A: smaʔ-t illi Leila t-ħib ti-ʃri **karhba**
hear.past-1s comp Leila 3s-want 3fs-buy car
“I heard that Leila wants to buy a car.”

Results of the pilot and the revised questionnaires given in table 8 and table 10, respectively also indicate that except for the proximate demonstrative pronoun *haða*, all forms were also chosen to be placed in contexts higher than the required ones. This is expected, since every status on the GH entails all lower statuses. For example, in (72), the double demonstrative *ha-N haða*, which requires at least activated, was judged to be acceptable in a context biased for the higher status In Focus. The referent of the phrase

ha-l-mra haði (this woman) can be assumed to be in focus, since it was mentioned in a syntactically prominent position in the immediately preceding sentence.

(72) The addressee knows the neighbor that the speaker is talking about.

A: ʒarti hija illi ʕawnit-ni ʕla tanðif l-daar.
 neighbor-pos.1s she comp help.past.3fs-1s on cleaning the- house
 “It is my neighbor who helped me clean the house.”

l-ħaq nas mlaah **ha-l-mra** **haði.**
 the truth nice prox1-the-woman prox2.3fs
 “This woman is really nice” (literally, this woman this is really nice).

2.3.4 Significance of the choices made by participants in the pilot and the revised questionnaires: other factors that further restrict the use of demonstrative forms

Since one of the goals of this dissertation is to look at factors other than cognitive status that further restrict the choice among demonstrative forms, breaking down results of the questionnaires given in tables 8 and 10 by context shows that even when certain forms meet the cognitive status criteria for appropriate use in certain contexts, none of the participants placed them in those contexts, indicating that there are other factors that further restrict the choice of those forms. For example, participants placed the demonstrative *haða* as a determiner in (73), but none of the participants placed *haða* as a pronoun in this context, even though both forms require at least Activated, and are therefore expected to be interchangeable in this context. In this example, the noise in can be assumed to be activated, because both the speaker and the addressee can hear it at the time of the utterance.

(73) both speaker and addressee can hear a noise.

qallaq-ni **l-his** **haða /# haða**
bother.past.3ms-1s the-noise prox2.3ms/prox2.3ms
“This noise/#this is bothering me”

Participants, however, chose *haða* both as a pronoun and as determiner to be placed in other contexts biased for the status Activated. Chapter 4 will look at factors that render the choice of *haða* as a determiner but not as pronoun possible in contexts where both forms satisfy the same cognitive status criteria. An explanation within the framework of Relevance Theory (Sperber & Wilson 1986/1995) for why speakers avoid the demonstrative pronoun *haða* when those factors are present will also be given.

Results of the questionnaire studies also revealed that in certain contexts, participants chose the demonstrative determiners *haða* and *haðaka* and in other contexts they chose only *haða*, even though both forms satisfy cognitive status criteria for use when the referent is activated or in focus. For example, participants chose the demonstrative determiner *haða* but not *haðaka* in (74) where the context is biased toward the status In Focus, even though both forms satisfy the criteria for use when the referent is in focus.

(74) B doesn't know the doctor that A is talking about

A: *ḏahr-i maʕatʃ ju-ʒaʕ-ni.*
back-pos.1s neg 3m-hurt-1s
“My back does not hurt anymore.”

tbiib-i ʕta-ni dwa ḏarba ḏarba
doctor-pos.1s give-past.3ms-1s medication effective effective
“My doctor gave me very effective medication.”

B: *aʃ ism-u l-tbiib haḏa/# l-tbiib haḏaka*
what name-pos.ms the-doctor prox2.3ms/the-doctor nonprox2.3ms
“What is the name of this doctor/ # that doctor?”

A brief analysis of the factors which restrict the choice of the demonstrative *haḏaka* will be given in the future research section in chapter 5, and a possible explanation in terms of the importance of interlocutors' previous knowledge of the referent prior to the current conversation will be explored. It is possible that even if *haḏaka* satisfies cognitive status criteria, speech participants must have shared knowledge of the referent prior to the current conversation.

2.4 Advantages of the questionnaire as a research tool

One advantage of using the questionnaire as a research tool to determine form-status correlations is that it is a controlled environment which allows for all demonstrative forms to be tested against all cognitive statuses. This advantage avoids the possibility of associating a form with a higher status than the one it requires, a result that might occur when relying only on corpus data if all the tokens of a particular form in the data corpus happen to be used for higher cognitive statuses than the one it minimally requires. The questionnaire also allows for determining cognitive status for forms that occur infrequently in a data corpus.

Another advantage of the questionnaire is that since participants are asked to determine whether the different forms are acceptable in the different contexts, their choices reveal other factors that further restrict the use of the different forms. As will be shown in chapters four and five, even though certain forms meet cognitive status criteria for being used in certain contexts, participants decided they were not acceptable in those contexts, indicating that there are further factors that determine the choice among demonstrative forms.

2.5 Limitations of the questionnaire as a research tool: Why do we still need a corpus study?

One limitation of the questionnaire as a research tool is that it was not possible to use cognitive status criteria that require a large amount of text. Specifically, it was not possible when designing the questionnaire to bias for the status Familiar using the criterion which requires a referent to be mentioned anywhere previously in the discourse, but not recently enough to be activated. Such data was available, however, in the corpus study. For example, in (75), from a folk story, the referent of the phrase *hak l-miskiin* (that poor man) was determined to be familiar, because its referent, the man to whom the narrator is referring, was mentioned earlier in the story.

- (75) w raʒɪ-u **l-hak** **l-miskiin**
 and return-past.3p to-nonprox1 the-poor
 “and they returned to that poor man,”
- xarʒ-uu-h min l-ħabs
 release-past.3p-3ms from the-jail
 “and released him from jail”

(hikayaat Al-Irwi: 12)

Another shortcoming of constructed short pieces of text is that they do not reflect the influence of discourse type on the distribution of demonstrative forms which satisfy criteria for use for the same cognitive status, a finding that has been supported by other studies on demonstratives (e.g., OH 2001, Mulkern 2003). In order to compensate for the shortcomings of the questionnaire, a corpus study was conducted to complement the questionnaires. The corpus study is discussed in chapter 3.

Using different research techniques in order to support the same conclusion is referred to as converging evidence (Stanovich 2004). Stanovich points out “When evidence from a wide range of experiments, each flawed in somewhat different way, or carried out with techniques of differing strengths and weaknesses, points in a similar direction, then the evidence has converged” (119).

Chapter 3: Corpus study²⁴

3.1 Introduction

A corpus analysis was conducted to complement the questionnaires discussed in chapter 2. The goal of the corpus study is to see if the distribution of the TA demonstrative forms according to highest cognitive status they are used for in naturally occurring data supports the results achieved in the constructed data of the questionnaire studies. The corpus study also made it possible to determine cognitive-status correlations using certain cognitive status criteria that were not possible to use in the short text and fragments in the questionnaire. Another important goal of the corpus study as a different research tool is to see if it reveals other factors that further influence the choice among demonstrative forms which satisfy criteria for use for the same cognitive status. Specifically, this study aims to see whether discourse type in Tunisian Arabic influences the choice among demonstrative forms as indicated in other studies of other languages (e.g., OH 2001, Mulkern 2003).

3.2 Criteria for data selection

A conscious effort was made to include text from different genres to avoid genre-specific influence on the results. As mentioned in section 1.5.2, demonstratives used in different regional dialects in Tunisia vary primarily at the phonological level. For consistency, all the data selected for this study consist of the same demonstrative forms used in the questionnaires and described in section 1.5.2 in terms of syntactic distribution and phonological form. Finally, the data includes both written and spoken discourse, as well

²⁴ An earlier version of this chapter was presented at the North American Conference on Afroasiatic Linguistics 36 (NACAL 36), Chicago, Illinois, March 14-16, 2006.

as planned and spontaneous discourse. The data corpus used in this dissertation consists of a folk story entitled *l-fitaan w l-ħaddad* (The Devil and the Blacksmith) written down from memory by a TA native speaker in his late thirties; a recorded radio drama entitled *maal wa ħwaal* (Money and Situations) about a woman who is trying to convince her two nieces to prevent their father from marrying his fiancée; two episodes of the American soap opera *Days of our Lives* retold in Tunisian Arabic from memory by a male TA native speaker in his late thirties, and recorded; Volume I and Volume IV from the published folk tales *Hikaajaat Al-Irwi* (The Tales of Al-Irwi) (Al-Irwi, vol.1 & vol.4, 1989) ; two articles from an out-of-print newspaper *Al-Sariih*; texts from a published translation of the book *The Little Prince* (Balegh 1997); a recorded spontaneous conversation between two male native speakers of Tunisian Arabic in their twenties, discussing three possible blue prints for a house that is being built; a published play *Junuun* (Insanity) (Baccar 2001) where the story revolves around the daily life of the main character, a young male who has schizophrenia, his struggle with the disease, and his daily interactions with his psychiatrist and his immediate family members; and a published play script entitled *Masrah Ali Al-Douaji* (Baccar 2002). The recorded radio drama *maal wa ħwaal* (Money and Situations) and the play script *Junuun* (Insanity) were used in the previous study discussed in chapter 2. A total of 167 tokens of all the TA demonstrative forms were identified in this data corpus. The distribution of the tokens of each demonstrative form identified in the data corpus used in the corpus study is given in table 12.

Table 12: *Distribution of TA demonstratives in the data corpus*

Demonstrative from	Number of tokens
ha-N	17
hađa	39
N hađa	10
hak N	43
hađaka	25
N hađaka	19
ha-N hađa	5
hak N hađaka	8

3.3 Method of analysis

Written and recorded data were transcribed using the unified IPA code Doulos SIL, glossed word-by-word, and translated into English. In coding for cognitive status, three steps were followed. First, every phrase with a demonstrative form was identified. Second, the referent of every phrase was identified. Third, the highest cognitive status of the referent of each phrase with a demonstrative form was determined. Coding was done by the primary investigator, a native speaker of Tunisian Arabic. Two other trained coders who do not know Tunisian Arabic were consulted on coding decisions²⁵. In determining the highest cognitive status of a referent, the same coding guidelines²⁶ used

²⁵ The secondary coders are Jeanette Gundel and Linda Humnick.

²⁶ As noted earlier, the coding guidelines are provided in appendix I.

for the questionnaire studies were used. For example, in (76) from a recorded retelling of an American soap opera, the referent of the demonstrative pronoun *haðika* satisfies criterion 1 in the coding guidelines for the In Focus status (The referent is mentioned in a syntactically prominent position). It is the subject of the main clause of the preceding sentence.

(76) *dima ti-ħlim bi-ha hija l-blasa w hija zYira*
 always 3fs-dream with-fs she the-place when she little
 “She always saw the place in her dreams when she was little.”

maj t-imfi hija fi-l-lil haðika
 emph fs-walk she in-the-night nonprox2.3fs
 “That one sleepwalks at night.”

(Soap Opera)

In (77), however, the phrase with the double demonstrative *haka l-spanifilli ħkit-li-k ſi-h haðaka* (that Hispanic man I talked to you about) does not meet the criteria for In Focus or Activated. It does, however, meet criterion 1 for the status Familiar (the referent was mentioned at any time previously in the discourse). The Hispanic man to whom the speaker is referring is previously known by both speaker and addressee, but has not been recently mentioned, and therefore cannot be assumed by the speaker to be activated.

(77) w **haka** **l-spaniʃ** **illi**
 and nonprox1 the-spanish com

ħki-t-l-k **ʃlii-h** **haðaka**
 talk-past.1s-to-2s about-3ms nonprox2.3ms
 “and that Hispanic man that I talked to you about.”

l-raaʒil w mart-u
 the- man and wife-poss-3ms

illi hɾab mʃa l-uxra
 comp escape-past.3ms with the-other
 “The man and his wife, the one who ran away
 with the other one (woman).”

maw ja-ħki huwa w-jaha
 emph 3ms-talk he and-her

l-bariħ willa ʃnija
 the-yesterday or what
 “He was talking with her yesterday or what.”

(Soap Opera)

As will be shown in the examples discussed in this section, results of the corpus study will show that a form can be used for the status it minimally requires but also for higher statuses. Further evidence that a form requires a particular cognitive status will be indicated by showing its unacceptability to refer to entities that have a lower cognitive status than the one it minimally requires. In making these acceptability judgments, I mostly relied on my own intuition and the intuition of two other native speakers of Tunisian Arabic.

3.4 Results and discussion of the corpus study

Table 13: *Distribution of TA demonstratives according to highest cognitive status in the data corpus*

	In Focus	Activated	Familiar	Uniquely Identifiable	Referential	Type Identifiable
<i>ha-N</i>	2	15				
<i>haða</i>	16	23				
<i>N haða</i>	1	9				
<i>hak N</i>	6	5	32			
<i>haðaka</i>	17	8				
<i>N haðaka</i>	8	3	8			
<i>ha-N haða</i>		5				
<i>hak N haðaka</i>	1	3	4			

Table 13 shows the distribution of TA demonstrative forms in the data corpus according to the highest cognitive status they are used for. As shown in the table, these results strongly confirm results of the pilot questionnaire with respect to all demonstrative forms except the demonstrative determiner *haðaka* which was determined to require at least Activated in that study, and confirms results of the revised questionnaire with respect to all demonstrative forms. The table also shows that all the TA demonstrative forms examined in the corpus analysis were used for cognitive statuses they were determined to minimally require in the questionnaire study, or for higher statuses, but not for lower cognitive statuses.

Table 13 shows that the demonstrative determiners *ha-*, *haða* and the double demonstrative *ha-N haða* as well as the demonstrative pronouns *haða* and *haðaka* were used to refer to entities that are at least activated, but not to entities with cognitive statuses lower than Activated, confirming results of the questionnaire studies that these demonstratives require at least Activated. The Examples given in this section support the conclusion that these forms can be used to refer to entities that are activated, but not to entities that have a cognitive status lower than Activated.

N haða

Example (78) shows that the demonstrative determiner *haða* can be used to refer to activated entities. In (78), the speaker is asking the addressee about a closet on the blue print they are discussing. The referent of the phrase *l-plakaar aðaja* (this closet) is activated by a simultaneous gesture made by the speaker pointing to the blue print they are both looking at.

(78) zuuz miitru w θlaθiin **l-plakaar** **aðaja?**
 two meters and thirty the-closet prox2.3fs
 “Is this closet two meters and a half?”

(Blue Print)

Evidence that the determiner *haða* minimally requires the status Activated is that it cannot be used to refer to at most familiar entities. For example, in (79), the demonstrative determiner *haða* cannot replace the demonstrative *haðaka*, which requires at most Familiar, to refer to the second blue print, since the blue print cannot be assumed to be activated. In (79), both the speaker and the addressee know the second blue print,

but the blue print has not been recently mentioned, and is not in front of them. The addressee cannot therefore expect it to be activated in the mind of the addressee.

(79) w l-plã l-θani **haðaka**
 and the-blue.print the-second nonprox2.3ms
 “and that second blue print,”

w l-plã l-θani **#haða**
 and the-blue.print the-second prox2.3ms
 “and that second blue print.”

illi ʃmalt-u ... lli ʃmalt-u...
 comp make.past.1s-3ms comp make.past.1s-3ms

lli ʃiʒbi-k inta
 comp please-2s you
 “Which you made ... which you made which you liked.”

(Blue Print)

ha-N

Example (80) from a radio play shows that the demonstrative determiner *ha* can be used to refer to activated entities that are activated. Speaker B uses the phrase *ha-l-klaam* (*these words*) to refer to the utterance just made by speaker A.

- (80) A: ama waaʒib mtaʕ-ik,
 which obligation pos-1s
- li-mra mazilna hatta ma-ʕrafna-haa-ʃ
 the-woman yet even neg-know-3fs-neg
- w-baʕda bdaa-t t-quum bi-l-waaʒib mʕaa-na?
 and-already start-past.3s 3fs-fulfil with-the-duty with-3p?
 “What obligation are you talking about? We haven’t even
 known the woman and she already started fulfilling
 obligations with us.”
- B: biik ma-qul-t-ʃ **ha-l-klaam** waqtilli ʕall-iit
 why neg-say.past-2s-neg prox1-the -talk when open-past.2s
- ʕin-iik w lqii-t-ha ʕand ras-ik
 eyes-pos.2s and find-past.2s-3fs by head-pos.2s
 “Why didn’t you say these words when you opened your eyes
 and found her by your head.”

(*maal waʕwaal* (Money and Situations))

Example (81) from the same radio play shows that the demonstrative *ha* cannot replace *hak*, which requires only Familiar. The referent of the phrase *hak l-ʕufra* (that small room) was determined to be Familiar, because the addressee has previous knowledge of the room the speaker is referring to, but there is no reason to believe it is already familiar. This supports the hypothesis formulated in the questionnaires that the demonstrative form *ha* requires at least Activated.

(81) xalli-ni na-ħki mfa Noura
let-1s 1s-talk with Noura
“Let me talk to Noura.”

hija ti-fhim w-ti-tfahhim,
she 3fs-understand and-3fs-comprehend
“She understands and comprehends.”

ama inti bnayti ya lilla ya lilla ya lilla
but you daughter-1s voc dear voc dear voc dear
“But you my daughter, oh dear, oh dear, oh dear.”

la j-dawwir ba-trafik ħbayyib.
neg 1s-approach with-you a friend
“You are unapproachable.”

ʕaad qut-li-k ja Noura
so tell-to-2s voc Noura
“So Noura, I told you,”

law kaan buu-kum t-baʕʕ-u bii-h
if be.past.3ms father-pos.3p 2-pamper with-3ms
“If you pamper your father.”

w t-ħinnu ʔlii-h
and 2-be.kind on-3ms
“and be kind to him.”

w t-xarrʕuu-h min **ħak** **l-ħufra/ # ha l-ħufra**
and 2-takeout-3ms from prox2 the-hole/# prox1-the-hole
“and take him out of that small room”

w ta-ʔml-u-l-u kaar w qdar
and 2-make-to-3ms respect and respect
“and give him respect,”

ra-hu ma xammam-ʃ fi-l-ʕirs
emph-3ms neg think.past.3ms-neg in-the-marriage
“He wouldn’t have thought of marriage.”

(maal waħwaal (Money and Situations))

ha-N haða

As shown in (82), the double demonstrative *ha-N haða* can refer to activated entities. The speaker uses the phrase *ha-l-mħal haða* (this store) to refer to the location where he and the speaker are exchanging a conversation. The location is activated by being in the immediate spatio-temporal context.

- (82) qaal-l-u ja sidi ana saariq.
tell.past.3ms voc sir I thief
- ama tawwa fi **ha-l-mħal** **haða** tub-t
but now in prox1-the-place prox2.3ms repent-past.1s
“Sir, I am a thief, but now in this place I repented.”

(*Hikajaat Al-Irwi* (Tales of Al-Irwi): 125)

The double demonstrative, however, cannot replace the demonstrative determiner *haðaka* in (83), since the referent of the phrase *ħarik haðaka* (that neighbor of yours) is at most familiar. This confirms results of the questionnaire studies that the double demonstrative *ha-N haða* requires at least Activated.

- (83) l-druuħ maħnaha ma-j-baan-ħ l-barra.
the – stairs that is neg-1ms-appear-neg the-outside
“which means that the stairs don’t show on the outside.”
- Ø ma ja-ħmillik-ħ muħkla mħa **ħar-ik** **aðaka**
neg 3m-do-to-you-neg problem with neighbor-pos.2s nonprox2.3ms
“They won’t cause you a problem with your neighbor
(literally, that your neighbor)”

(Blue Print)

haḏaka

Example (84) shows that *haḏaka* as a pronoun can be used for the cognitive status Activated. The boy can be assumed to be activated, since he was mentioned in one of the immediately preceding sentences.

(84) ajja tiktib l-sdaq ʕarris l-wlid
so written the-marriage contract get.married.past.3ms the-boy.
“So the marriage contract was written and the boy got married.”

lakin la-ʕrusa bint akaabir w **haḏaka** barrani
but the-bride daughter high-class and nonprox2.3ms outsider
“However, the bride is the daughter of a high class family
and he is an outsider.”

(*Hikajaat Al-Irwi* (Tales of Al-Irwi): 125)

Evidence that the pronoun *haḏaka* requires at least Activated is that it cannot replace forms that require only Familiar. For example, *haḏaka* cannot replace the phrase with the double demonstrative *aka l-spanish illi ḥki-t-l-k ʕlii-h haḏaka* (That Hispanic man I talked to you about) in (85), because the Hispanic man cannot be assumed to be activated in the mind of the addressee. He is previously known by both speaker and addressee, but he has not been recently mentioned by the speaker in the retelling of a soap opera.

(85) A: maj wild-it fadda wlad min-hum
 emph give-birth-past.3fs holding boy form-3ms
 “She gave birth ... she was holding one of the boys.”

muʃ ʔarif aʃ ta-ħki
 neg know what 3fs-say
 “I don’t know what she was saying.”

B: bnaja bnajja. ʃnija axir
 girl girl what else
 “A girl, a girl, what else?”

A: w **haka l-spaniʃ**
 and nonprox1 the-spanish

illi ħki-t-l-k ʔlii-h haðaka
 com talk-past.1s-to-2s about-3ms nonprox2.3ms
 “and that Hispanic man that I talked to you about.”

l-raaʒil w mart-u
 the- man and wife-poss-3ms

illi hrab mʔa l-uxra
 comp escape-past.3ms with the-other
 “The man and his wife. The one who ran away
 with the other one (woman).”

maw ja-ħki huwa w-jaha
 emph 3ms-talk he and-her

l-bariħ willa ʃnija
 the-yesterday or what.
 “He was talking with her yesterday or what.”

(Soap Opera)

haða

In (86) from the folk story *The Devil and the Blacksmith*, the blacksmith blamed the devil for being in jail. He used the demonstrative pronoun *haða* to refer to his current situation. The referent of the phrase *haði* (this) was determined to be activated by being part of the immediate context.

(86) w huwa akkaka fi-l-ħabs w tal ʕli-h l-ʕitan
and he like that in-the-jail and appear-past on-3ms the-devil
“While he was in jail the devil appeared to him.”

dar-l-u l-ħaddaad w qal-l-u
turn-to-3ms the-blacksmith and say-past-to-3ms
“The blacksmith turned to him and said:”

‘tawwa **haði** ʕamla ta-ʕmil-ha fi-ja?
now prox2.3fs deed 2-do-3fs in-me
“Why have you done this to me?”

(The Devil and the Blacksmith)

As shown in table 13, the demonstrative determiners *hak*, *haðaka*, as well as the double demonstrative determiner *hak N haðaka* were used to refer to referents that can be assumed to be familiar, activated, and in focus, but none of them was determined to refer to entities that have lower statuses, confirming results achieved in the questionnaires that these three forms require only Familiar. The examples given in this section support the conclusion that these forms can be used to refer to entities that are familiar, but not to entities that have a cognitive status lower than Familiar.

hak N

Example (87), from a published folk story shows that the demonstrative determiner *hak* can be used to refer to at most familiar entities. The referents of both phrases *hak l-silfa* (that merchandise), and *hak l-ḥiḥḥa* (that hut) were determined to be at most familiar, because they were mentioned previously in the story, but have not been mentioned recently enough to be activated.

(87) qaal li-l-ḥammal:
say.past.3ms to-the- camel man
“He told the camel man.”

barra lquddaam muḥ mḥaja
go ahead neg with-1s
“go ahead without me.”

kif timḥi li-l-basra imḥi l-si flaan
when 2-go to-the-basra go to-sir man
“When you go to Basra, go to Mr. Man
(no specific name mentioned)”

w sallim l-u **hak** **l-silfa**
and give to-3ms nonprox1 the-merchandise
“and give him that merchandise”

w ḥbid ḥliiha nisf ḥhar
and remain.past.3ms half month

and he sick in nonprox1 the-hut
w huwa mriiḥ fi **hak** **l-ḥiḥḥa**
“And he remained sick in that hut for half a month.”

(*Hikajaat Al-Irwi* (The Tales of Al-Irwi):11)

As shown in (88), if we replace the definite article in the phrase *l-druuʒ* (the stairs), whose referent is at most uniquely identifiable, with *hak*, we cannot expect the addressee to identify the intended referent, since the definite article *l-* requires that the addressee is only expected to assign a unique representation of the speaker’s intended referent. In (88) the referent of the phrase *l-druuʒ* (the stairs) was determined to be uniquely identifiable, because the speaker is referring to the stairs that will be built, but the stairs haven’t been mentioned anytime earlier in the conversation. The speaker, therefore, can expect the hearer to only assign a unique representation to the stairs. The fact that *hak* cannot replace the definite article *l-* in this example supports results of the questionnaires that *hak* requires at least the status Familiar.

- (88) *baʃ* *j-ʒi* *min-na* *l-druuʒ*
 fut 1s-become from-here the-stairs
 “The stairs will be on this side.”
- baʃ* *j-ʒi* *min-na* **#hak** **l-druuʒ**
 fut 1s-become from-here nonprox1 the-stairs
 “#Those stairs will be on this side.”

(Blue Print)

hak N haðaka

Example (89) shows that the double demonstrative *hak N haðaka* can be used to refer to at most familiar entities. The referent of the phrase *hak l-spanifilli ħkit-l-k ʕii-h haðaka* (that Hispanic I talked to you about) was determined to be familiar, since the speaker already mentioned the Hispanic man earlier in the retelling of the soap opera.

(89) A: maj wild-it fadda wljad min-hum
emph give-birth-past.3fs holding boy from-3ms
“She gave birth ... she was holding one of the boys.”

muf farif af ta-ħki
neg know what 3fs-say
“I don’t know what she was saying.”

B: bnajja bnajja. fnija axir
girl girl what else
“a girl, a girl. What else?”

A: w **hak** **l-spanif**
and nonprox1 the-spanish

illi ħki-t-l-k **ɣlii-h** **haðaka**
com talk-past.1s-to-2s about-3ms nonprox2.3ms
“and that Hispanic man that I talked to you about.”

l-raaʒil w-mart-u
the- man and wife-poss-3ms

illi hrab mɣa l-uxra
comp escape-past.3ms with the-other
“The man and his wife, the one who
ran away with the other one (woman).”

maw ja-ħki huwa w jaha
emph 3ms-talk he and her

l-bariħ willa fnija
the-yesterday or what.
“He was talking with her yesterday, or what.”

(Soap Opera)

None of the tokens of the double demonstrative *hak N haðaka* identified in the data used for this study was determined to refer to at most uniquely identifiable entities confirming results of the questionnaires that it requires at least Familiar. For example in (90) from a

radio play, if we replace the definite article *l-* in the phrases *l-mabsim* (the smile) or *l-mantiq* (the words) with the double demonstrative *hak N haḏaka*, the result would be infelicitous. Both phrases were determined to be uniquely identifiable by bridging to the phrase *ṣaxtuura* (a beautiful woman), which is already activated, but they were not themselves already mentioned anytime earlier in the discourse.

(90) *fiq-t* *ʔla* *ṣaxtuura*
 wake up.past-1s on beautiful woman
 “I woke up and found a beautiful lady”

l-mabsim/ # hak ***l-mabsim haḏaka*** *tabruri*
 the-smile/ nonprox1 the-smile nonprox2.3ms sleet
 “The smile/that smile (literally that smile that) is beautiful,

w ***l-mantiq/ # hak*** ***l-mantiq haḏaka*** *ʔsal*
 and the-words/ nonprox1 the-words nonprox2.3ms honey
 “and the words are charming,”

w *t-ḥib-ni* *n-qul-ha* *ṣkuun-k* *willa* *ʔlaaʃ* *ʒiit*
 and 2-want-1s 1-say-3fs who-2s or why come.past.1s
 “and you want me to ask her who she was or why she came.”

(*maal wa-hwal* (Money and Situations))

N haḏaka

The corpus study confirmed the results achieved in the revised questionnaire, but not in the pilot questionnaire that the demonstrative determiner *haḏaka* minimally requires the status Familiar. In (91) for instance, the DP *ḥmuha haḏaka* (literally, her father-in-law that) was determined to be at most familiar, because it was mentioned earlier in the story, but not more recently.

(91) raʒil-ha ma ta-ħsbuu-ʃ
 husband-pos.3fs neg 3fs-respect-neg
 “She has no respect for her husband.”

∅ ħaasba nafs-ha ʔaamla ʔlii-h mziija
 considering self-pos.3fs doing on-3ms favor
 “She thinks she did him a favor”

kiif rðaat w-xðaat-u.
 when accept.past.3fs and marry.past.3fs-3ms
 “when she accepted to marry him.”

tu-ħkum fii-h
 3fs-control in-3ms
 “She controls him.”

ama ħmu-ha haðaka ʔaqal min tafʃa ʔand-ha
 as father.in.law-pos.3fs nonprox2.3ms less than small.thing for-3fs
 “As for her father-in-law (literally her father-in-law that), he has no
 importance for her.”

(*Hikajaat Al-Irwi* (Tales of Al-Irwi) 125)

As shown in (92) from retelling of a soap opera, the demonstrative determiner *haðaka*, however, cannot replace the definite article *l-* in the phrase *l-sikritira mtaʕu* (his secretary), confirming that it requires at least Familiar. The referent of the phrase *l-sikritira mtaʕu* was determined to be at most uniquely identifiable, since it contains enough descriptive content to create a unique referent, but the addressee has no previous knowledge of her.

(92) A: bu-ha ma maat-ʃ ju-ðhur-1-i
 father-3fs neg die-past.3ms-neg 3ms-appear-to-3ms
 “Her father didn’t die, I think.”

(the hearer confirming what speaker A just said)

B: ih ma mat-ʃ ih
 yes neg die.past.3ms- neg yes
 “Yes, yes, he didn’t die.”

A: ih huwa w **l-sikritira mtaʃu/ # l-sikritira** mtaʃu **haðika**
 yes he and the-secretary pos.3ms/the-secretary pos.3ms prox2.3fs

j-ʃissu ʃli-ha
 3p-watch on-her
 “Yes he was watching her with his secretary.”

(Soap Opera)

Consistent with the Givenness Hierarchy claim that each cognitive status entails all lower statuses, results of the corpus study showed that demonstrative forms were used for the cognitive statuses they minimally require, but also for higher statuses. In (93), the demonstrative pronoun *haðaka* which encodes the cognitive status Activated, was used twice for the cognitive status In Focus. Referents of both tokens of the demonstrative *haðaka* were determined to be In Focus by criterion 1 (It is the referent of a DP in a syntactically prominent position in the main clause of the immediately preceding sentence.)

(93) w famma illi fi-h stydjo
 and there comp in-3ms studio
 “and there is the one which has a studio”
 (“the one” here refers to another blue print)

illi ma-fiʒb-ik-ʃ inta **haðaka**
 comp neg-please.past-2s.-neg you nonprox2.3ms
 “That one which you did not like.”

haðaka l-avātaʒe mtaʃ-u,
 nonprox2.3ms the-advantage pos-3ms

fi kawnu l-druʒ ʒaj ldaxil.
 in being the-stairs being inside
 “That one has the advantage of having the stairs inside.”

(Blue Print)

Similarly, example (94) shows that the double demonstrative *hak N haðaka* which encodes the status Familiar is used for the higher status Activated. The referent of the phrase *hak l-buliis haðaka* (that policeman) was determined to be activated, because it is mentioned in the immediately preceding sentence.

(94) w zab-u uxt-u **haka**²⁷ **l-buliis**
 and bring-3ms sister-pos.3ms nonprox1 the-policeman
 “and they showed the sister of that policeman.”

hak **l-buliis** **haðaka** bidu
 nonprox1 the-policeman nonprox2.3ms emph

uxt-u fi-l-sbitar haazza wlad
 sister-pos.3ms in-the-hospital holding boy
 “That policeman himself, his sister is in the hospital holding a baby”

(Soap Opera)

²⁷ *haka* is a variant of *hak*.

Example (95) from the same soap opera shows that the demonstrative determiner *haḏaka*, which only requires familiarity, is used for the cognitive status In Focus. The referent of the phrase *uxtha haḏika* (literally, that her sister) was determined to be in focus, because it is the subject of the immediately preceding clause.

- (95) Ø ḥattu-ha fil-ḥabs w mʃat-l-ha uxt-ha
 put-past.3p-3fs in-the-jail and go-past.3fs-to-3fs sister-pos-3fs
 “They put her in jail and her sister went to visit her....”
- uxt-ha** **haḏika** hak l- k
 sister-pos.3fs nonprox2-3fs nonprox1 the...
- mʃaat t-tul ʕli-ha ʔadika fi-l-ḥabs
 go-past.3fs 1.fs-see on-her there in-the-jail
 “That sister, that ... (unfinished phrase) went to see her there in the jail.”

(Soap Opera)

Results of the corpus study also support the result achieved in the revised questionnaire, but not in the pilot questionnaire, that the demonstrative determiner *haḏaka* requires the cognitive status Familiar and not Activated. Distribution of this form according to the highest status it was chosen for given in Table 12 also supports the suggestion that although this form requires at least the status Familiar, it is used more frequently for the higher statuses Activated and In Focus. As shown in the table, of the 19 tokens of *haḏaka* identified in the data, 8 were used to refer to familiar entities and 11 were used to refer to activated and in-focus entities.

One goal of the corpus study was to see if discourse type influences the distribution of certain demonstrative forms, as was found in previous studies (OH 2001, Mulkern 2003). Results of the corpus study given in table 13 indicate that of the 43

tokens of the demonstrative *hak* that were identified in the data corpus, 32 were used to refer to familiar entities, 5 to activated entities, and 6 to in-focus entities. Breaking down the results of the corpus study by discourse type indicates that all the tokens of *hak* that were used to refer to activated or in focus entities occurred in narrative discourse. A brief discussion of this finding and a possible explanation using Mulkern’s notion of Imposed Saliency (Mulkern 2003) will be explored in the future research section in chapter 5. The final form-status correlations according to results of the questionnaires and the corpus study are given in table 14.

Table 14: *Final form-status correlations*²⁸.

In Focus	Activated	Familiar	Uniquely Identifiable	Referential	Type Identifiable
	<i>ha-N</i>	<i>hak N</i>			
	<i>N- hađa</i>				
	<i>hađa</i>				
	<i>hađaka</i>	<i>hak N hađaka</i>			
	<i>ha-N hađa</i>				
		<i>N hađaka</i>			

²⁸ Summary of the results of the questionnaires and the corpus study were presented at the 10th International Pragmatic Conference, Göteborg, Sweden, July 8-13, 2007.

Chapter 4: A Cognitive explanation of communicators' avoidance of ambiguous forms: The case of the demonstrative *haða*²⁹

4.1 Introduction

Results of the questionnaires and the corpus study presented in Chapters 2 and 3 indicate that the demonstrative *haða* as a pronoun and as a determiner encodes the cognitive status Activated. Consistent with the Givenness Hierarchy claim that a form can be used for the cognitive status it minimally requires and also for higher statuses, results of these studies showed that *haða* as a pronoun and as a determiner was also used to refer to in-focus entities.

An examination of the questionnaires conducted in this dissertation, however, indicated that in some contexts where the demonstrative pronoun and the demonstrative determiner meet cognitive status criteria (i.e., Activated or In Focus), participants chose only the demonstrative determiner and not the demonstrative pronoun while in other contexts, they chose both forms, indicating that there are other factors that further restrict the use of the demonstrative pronoun. For example, in (96) participants chose both the demonstrative pronoun and the phrase with the demonstrative determiner *l-kalb haða* (this dog), in order to refer to the dog.

²⁹ Previous versions of this study were presented at the I North American Workshop on Pragmatics (I NAWPRA), Glendon College, York University, Toronto, Canada, October 3-5, 2008 and at the 23rd Arabic Linguistic Symposium, University of Wisconsin, Milwaukee, USA, April 3-5, 2009.

(96) Speaker B knows the dog that A is talking about

A: kalb-na sYiir barʃa ma j-naʒʒim-ʃ j-ʕiss ʕla l-daar
dog-pos.1s small a lot neg 3ms-can-neg 3ms-watch on the-house
“Our dog is very small. It can’t watch the house.”

B: mniin ʃrit-u inti **l-kalb haða/ haða?**
where buy-3ms you the-dog prox2.3ms/ prox2.3ms
“Where did you buy this dog/this one?”

in (97) from the pilot questionnaire, however, none of the 13 participants who filled in the questionnaire selected the demonstrative pronoun *haða* alone to refer to the doctor, while 6 participants chose the phrase with the demonstrative determiner *l-tbiib haða* (this doctor) to be placed in this context.

(97) B doesn't know the doctor that A is talking about

A: ðahr-i maʃatʃ ju-ʒaʕ-ni.
back-pos.1s neg 3m-hurt-1s
“My back does not hurt anymore.”

tbiib-i ʕta-ni dwa ðarba ðarba
doctor-pos.1s give-past.3ms-1s medication efficient efficient
“My doctor gave me very efficient medication.”

B: aʃ ism-u **l-tbiib haða**
what name-pos.3ms the-doctor prox2.3ms
“What is the name of this doctor?”

This chapter will be concerned with investigating contexts where the two forms can be interchangeable and contexts where only the demonstrative determiner is possible. Remarks on avoiding pronouns and using full noun phrases are given by Himmelman (1996) and Schiffrin (2006) who argued that pronouns are avoided when there is more than one possible referent. Himmelman explains that one reason full NP demonstrative

expressions replace pronouns is when there is more than one possible antecedent (227). Schiffrin points out that “next-mention pronouns are less frequent when their referent is potentially ambiguous than when there is no potential for ambiguity” (172). This chapter builds on this explanation and further uses the Givenness Hierarchy Theory to explain why both the determiner and the pronoun can pick out the same referent, and why it is theoretically possible for an ambiguous demonstrative pronoun to pick out all the possible referents. This study also uses Relevance Theory to give an explanation for why communicators avoid the demonstrative pronoun when they expect it to be ambiguous. The chapter also highlights the importance of grammatical agreement and non-verbal communication in disambiguating the intended referent. Specifically, this chapter will address two questions: 1) What factors other than cognitive status further restrict the choice of the demonstrative pronoun *haða* when cognitive status criteria for its use are met? 2) Why do communicators avoid the demonstrative pronoun and choose the demonstrative determiner with a noun in the presence of those restricting factors? First, this chapter discusses the factors that restrict the choice of the demonstrative pronoun *haða* in contexts where cognitive status criteria for its use are met (i.e., when the referent is at least activated). Next, I argue that Relevance Theory provides a cognitive explanation for why communicators do not use the pronoun, but rather choose the demonstrative determiner with a noun when those restricting factors are present.

Examples used in this chapter are taken from the questionnaires discussed in chapter 2 as well as seven pieces of data from the data corpus used in this dissertation: Volume I and Volume IV from the published folk tales *Hikaaajat Al-Irwi* (The Tales of Al-Irwi) (Al-Irwi, vol.1 & vol.4, 1989) ; two episodes of the American soap opera *Days*

of our Lives retold in Tunisian Arabic from memory by a male native speaker of Tunisian Arabic, and recorded; two articles from an out-of-print newspaper *Al-Sariih*; texts from a published translation of the book *The Little Prince* (Balegh 1997); a recorded spontaneous conversation between two male native speakers of Tunisian Arabic in their twenties, discussing three possible blue prints for a house that is being built; a published play *Junuun* (Insanity) (Baccar 2001) where the story revolves around the daily life of a young man who has schizophrenia, his struggle with the disease, and his daily interactions with his psychiatrist and his immediate family members; and a published play script entitled *Masrah Ali Al-Douaji* (Baccar 2002).

4.2 Factors that further restrict the use of the demonstrative pronoun *haða* when cognitive status criteria for its appropriate use are met.

As noted in the introduction of this chapter, there are certain examples where none of the participants chose the demonstrative pronoun *haða* even when the referent was at least activated. An examination of these cases indicates that the demonstrative pronoun was avoided, because there was more than one possible referent that meets cognitive status criteria for its use, and which shares the same agreement features with it. In (97), for example, none of the participants chose the demonstrative pronoun *haða* to refer to the doctor who had been activated and in fact brought into focus by way of mention in subsequent position of the previous sentence. The demonstrative pronoun *haða* in this example can refer to either the doctor or the medication, which are both at least activated and are both singular masculine. The phrase with the demonstrative determiner *l-tbiib haða* (this doctor) allows the speaker to refer unambiguously to the doctor, because the

conceptual content of the noun explicitly indicates that it is the doctor and not the medication that the speaker is referring to.

Example (98) further supports the argument that speakers do not choose a demonstrative pronoun, but rather choose a phrase with the demonstrative determiner, when there is a competing referent that satisfies cognitive status criteria that allow reference with the demonstrative *haða*. In (98), when the merchant told the Little Prince that taking certain pills saves fifty three minutes, the Little Prince asked him about the reason for saving fifty-three minutes. In his question, he used the phrase with the demonstrative determiner *l-θlaaθa w xamsiin dqiiqa haði* (these fifty-three minutes). In this example, a demonstrative pronoun might not lead the addressee to identify the fifty-three minutes as the intended referent, since the pronoun can refer to either the fifty- three minutes or the pills. Both of these possible referents are at least activated and are singular feminine. The only way the speaker can expect the addressee to pick out the intended referent is by using the phrase with the demonstrative determiner to state that his question is about the fifty- three minutes and not the pills.

(98) A: ʕlaaʕ t-biiʕ fi l-ħraabʕ, saʔl-u l-ʔamiir l-sayiiir
 why 2-sell in the-pills, ask-past.3sm-3sm the-prince the-little
 “Why do you sell the pills the little prince asked him.”

B: t-rabbiħ barʕa waqt! ʒaawb-u l-taaʒir.
 3fs-benefit a lot time reply.past.3sm-3sm the-merchant
 “It saves a lot of time replied the merchant.”

l-xubaraa ʕamlu ħsabaat-hum
 the-experts make-past.3p calculations-pos.3p
 “The experts made their calculations.”

t-rabbiħ ʔlaaʔa w xamsiin dqiiqa
 3fs-makegain three and fifty minute
 “It saves fifty-three minutes.”

A: w aʕ na-ʕmlu bi-ha l-ʔlaaʔa w xamsiin dqiiqa haʔi?
 and what 1-do with-3fs the –three and fifty minute prox2.3fs
 “And what do we do with these fifty three minutes?”

(Al-Aamiir Al-sayiiir (The Little Prince: 109)

While in examples (97) and (98) above, there is only one competing referent that meets the criteria for being referred to with the demonstrative *haʔa*, examples (99) and (100) show that the competing referent can be a possible one among many. In (99), the Little Prince referred to his body as *l-bdan haʔa* (this body), because a demonstrative pronoun could refer to multiple things in the immediate spatio-temporal context, including the Little Prince’s body. Even if the speaker uses extralinguistic means like a gesture, it might not pick out the referent as the entire body and not, for instance, part of The Little Prince’s body. By using the phrase with the determiner, on the other hand, the speaker can expect the addressee to identify the intended referent.

(99) fhim-t? l-buqfa bfiida jaasir!
 understand-2s the-place far a lot

l-bdan haða ma n-naʒʒim-ʃ n-hizz-u
 the-body prox2.3ms neg 1-can-neg 1-carry-3ms
 “Do you understand? the place is very far!, and I can’t carry this body.”

(*Al-Amiir Al-sayir* (The Little Prince): 131)

Similarly, in example (100) from the pilot questionnaire, the noise can be assumed to be activated, since both interlocutors could hear it. The use of a demonstrative pronoun to refer to the noise, however, might not guide the addressee to identify it as the intended referent. Although the referent is in the immediate spatio-temporal context, it is not possible to use non-linguistic communication, such as eye gaze or a gesture to disambiguate it. The competing referent can be anything or anyone that could be a source of annoyance at the moment the sentence was uttered. A phrase with a determiner, on the other hand, can guide the hearer to identify the referent, since the conceptual content of the noun specifies that what is being referred to is the noise that was taking place at that time.

(100) Both speaker and addressee can hear a noise.

qallaq-ni **l-his** **haða**
 bother.past.3ms-1s the-noise prox2.3ms
 “This noise is bothering me.”

Similarly, in example (101) from a newspaper article, speaker A is discussing a blue print with speaker B. He points to a closet and refers to it by using a demonstrative determiner and a noun. Since there are other closets and other things on the blue print that could also

be at least activated, the referent of the demonstrative pronoun could be the intended closet or anything else on the blue print. Even the use of a gesture here might not be helpful in distinguishing the shape of the closet from other shapes on the blue print.

- (101) A: ʒuʒ mitru w θlaθin **l-plakaar** **aða**ja ?
 two meters and thirty the-closet prox2.3ms
 “Is this closet two meters and a half?”

(Blue Print)

When there is no competing referent that satisfies the criteria for being referred to with the demonstrative *haða*, the demonstrative pronoun can be used without causing any ambiguity. In (96) repeated here in (102), both the demonstrative pronoun and the demonstrative determiner were judged to be acceptable. The pronoun *haða* can be used to refer to the dog without causing any ambiguity, since the dog is the only referent that meets cognitive status criteria to be referred to with the demonstrative determiner.

- (102) A: kalb-na sʒiir barʒa ma j-naʒʒim-ʃ j-ʒiss ʒla l-daar
 dog-pos.1s small very neg 3ms-can-neg 3ms-watch on the-house
 “Our dog is very small. It can’t watch the house.”

B: mniin ʃrit-u inti **l-kalb** **haða/ haða**
 where buy-3ms you the-dog prox2.3ms/prox2.3ms
 “Where did you buy this dog/this (one)”

Similarly, in (103), the speaker is a journalist who is sarcastically commenting on a singer who waits a long time before producing a new work. The use of the pronoun here is not ambiguous, since the new work is the only activated third person referent that can be referred to with the pronoun *haða*.

(103) aʃ qul-t t-ħaððir fi intaaʒ ʒdiid?
 what say-past.3ms . 2s-prepare in work new
 “What did you say ... you are preparing a new work?”

ah **ħaða** illi qul-t
 ah prox2.3ms comp say-past.2s

baʃ t-qaddim- hu-l-na ʕaam 3000
 fut 2s-present-3ms-to-3p year 3000.
 “Ah this one is the one you said you would present to us in the year 3000.”

(Al-Sarih Tuesday, May 20th, 1997, p.20)

Similarly, in example (104) from a play script, the speaker uses a demonstrative pronoun to refer to a previous comment he made about himself. The addressee here can be expected to unambiguously identify the speaker’s comment about himself, that no one loves him as the intended referent, since there is no other activated referent that can be appropriately referred to with the pronoun.

(104) ħad ma ħab-ni
 one neg love.past.3ms-1s
 “No one loved me,”

w ħad ma ħabn-i
 and one neg love-past.3ms-1s
 “and no one loved me.”

ħaða illi marrað-ni’
 prox2.3ms comp make.sick.past.3ms-1s
 “This is what made me sick.”

(*Junuun* (Insanity): 122)

Examples ((96)-(104)) discussed so far in this section indicate that when there is a competing referent that satisfies cognitive status criteria for being referred to with the demonstrative pronoun *hađa*, speakers avoid the pronoun, and use a phrase with a demonstrative determiner. The conceptual content of the noun can be expected to help guide the addressee to the intended referent. As was indicated in examples ((102)- (104)), in the absence of a competing referent that causes ambiguity, both the demonstrative pronoun and the demonstrative determiner can guide the addressee to identify the intended referent.

As will be shown in examples ((105)-(109)), however, communicators do not always avoid the demonstrative pronoun when there is a competing activated referent. As will be shown in the examples, when communicators have available linguistic means such as grammatical agreement between the demonstrative and the referent or non-linguistic means such as eye gaze or a gesture that can help them explicitly and unambiguously indicate the intended referent, they still use the pronoun. As the examples show, when the referent is mentioned anytime previously in the text, speakers use linguistic means to disambiguate the referent. When the referent is in the spatio-temporal context, speakers use linguistic and/or non-linguistic means. For example, in (105) a boy whose father has always told him stories about how lions are strong and brave is commenting to his father on a weak lion they saw. The demonstrative pronoun does not give rise to ambiguity here; since, as mentioned in the example, the boy was able to use eye gaze when referring to the lion. He also gave the addressee linguistic information by using the word *siid* (lion) later in the sentence. By using these non-linguistic and

linguistic means, the speaker can expect the addressee to identify the intended referent as the lion, and not another entity in the spatio-temporal context.

(105) ʔaad l-wlad yzar-lu w qaal-l-u:
so the-boy look.past.3ms-to-3ms and say.past.3ms-to-3ms
“So the boy looked at the lion and said:”

ya baba amma **haða** muʃ siid?
voc dad but prox2.3ms neg lion
“Dad, but isn’t this a lion?”

(Al-Sariih, Tuesday, March 25th 1997: 9)

In (106) from the pilot and the revised questionnaires, participants who filled in the questionnaires chose both the demonstrative determiner and the demonstrative pronoun to refer to the apartment. In this example, both the house and the apartment can be assumed to be activated, and are therefore candidates to be referred to with the pronoun *haða*. However, since the house is marked for feminine grammatical gender, and the apartment for masculine grammatical gender, choosing the demonstrative pronoun that is marked for masculine grammatical gender, makes it possible for the speaker to guide the addressee to the intended referent, which is the apartment.

(106) A knows the apartment that B is talking about

A: Salwa naql-it min daar-ha l-qdima
Salwa move.past.3fs from house-pos.3fs the-old

w-ʃraa-t burtmaan.
and-buy.past.3fs apartment
“Salwa moved from her old house and bought an apartment”

ma ʃaat-ʃ t-ħib tu-skun fi daar.
neg buy.past.3fs 3f-want 3f-live in house
“She no longer wants to live in a house.”

B: ih fi bal-i w **l-burtmaan** *haða/ haða*
yes in-mind-pos.1s and the-apartment prox2.3m/ prox2.3m

huwa illi ħabb-iit ni-ʃrii-h ana
he comp want-past.1s 1s-buy-3ms I
“Yes, and it is this apartment/this one which I wanted to buy.”

In example (107), from the revised questionnaire, participants in the questionnaire chose both a demonstrative pronoun and a demonstrative determiner to refer to the watermelon. The speaker is standing in front of a watermelon pile, points to a particular watermelon, and asks the grocer to weigh it for him. If the speaker uses a pronoun alone s/he might not expect the addressee to identify the intended watermelon. By adding a hand gesture, the speaker helps guide the addressee to identify the watermelon he wants to buy and distinguish it from the other watermelons in the pile.

(107) The speaker is standing in front a watermelon merchant. He pointed to one watermelon and said:

brabbi uzin-l-i **l-dillaʃa** **haði**
please weigh-to-me the-watermelon prox2.3fs
“Can you please weigh this watermelon for me.”

In (108) from a published play script, a woman is commenting to her maid on the age of an electrician who came to the house to do some repairs. The use of the demonstrative pronoun only here is possible, since, as shown in the example, the two women have had a recent conversation about the electrician’s age. Using the phrase *haḏa illi qult syiir* (Is this the one you said was young) helps guide the addressee to the intended referent, and singles him out from among other possible competing referents in the immediate context.

(108) A: [...] kbiir-ʃ?
 old-neg?
 “He isn’t old?”

B: ih ma hu-ʃ kbiir
 yes neg he-neg old
 “Yes, he is not old”

A: daxxl-u
 make.enter-3ms
 “bring him in.”

(tu-xruʒ Sofia)
 1fs-go out Sofia
 “Sofia went out”

haḏa illi qult syiir ?
 prox2.3ms comp say-past.2s young
 “Is this the one you said was young”

(Masraħ Ali al-douaji (The theatre of Ali Al-douaji): 28)

In (109) from a published folk story, the speaker gave his friend’s son a bag full of money and asked him to take it to his father, and to say hi to him. The gesture of handing the bag to the boy explicitly indicates that the intended referent of the demonstrative

pronoun is the bag and not something else in the surrounding context. As shown in the example, a demonstrative determiner with a noun is also possible here.

(109) w madd-u li-l-wlid w qaal l-u
 and hand.past.3ms-3ms to-the-boy and say.past.3ms to-3ms
 “and he handed it to the boy and told him”

xuuð hiz **haðaaja**³⁰ l-buu-k
 take take prox2.3ms to-father-pos.3ms

w sallim ʕlii-h
 and say.hi to-3ms
 “Take this to your father and say hi to him.”

(*Hikayat Al-Irwi* (The tales of Al-Irwi): 34)

The argument that has been made in the discussion of the examples given above is that speakers use the demonstrative pronoun *haða* to refer to activated or in-focus entities when there is no competing referent, or when they can use linguistic or non-linguistic means to disambiguate the referent. When there is a competing referent that cannot be resolved based on the pronoun alone, speakers use a phrase with the determiner, because the conceptual content of the noun helps guide the addressee to identify the intended referent. The use of a phrase with a demonstrative determiner, however, is not used only for the need of disambiguating the intended referent. In example (103) repeated here in (110), a phrase with the demonstrative determiner can also be used, indicating that a phrase with the demonstrative determiner is not used only when the referent is ambiguous.

³⁰ *haðaaja* is a variant of *haða*.

(110) af qul-t t-ħaððir fi intaaʒ ʒdiid?
 what say-past.3ms. 2s-prepare in work new
 “What did you say ... you are preparing a new work?”

ah **haða/ l- intaaʒ haða** illi qul-t
 ah prox2.3ms/the-work prox2.3ms comp say-past.2s

baʃ t-qaddim- hu l-na ʃaam 3000
 fut 2s-present-3sm to-3p year 3000

Ah this (one)/this work is the one you said you would
 present to us in the year 3000.”

(Al-Sarih Tuesday, May 20th 1997, p.20)

Examples (111) and (112) give further evidence that a phrase with a demonstrative determiner is not used only when there is ambiguity. In both examples the speakers use a phrase with the demonstrative determiner *haða* even though there is only one possible referent. In example (111), speaker A uses the phrase *l-trajjih haða* (this try) to refer to speaker B’s comment that the street is his home.

(111) A: jilzmik t-rawwah
 need 2s-go.home
 “You need to go home.”

B: daar-i huuni
 home-pos.1s here
 “My home is here.”

A: maa jaakil-ʃ **l-trajjih haða** mʃaa-ja
 neg work-neg the-attempt prox2.3ms with-1s
 “This try doesn’t work with me.”

(*Junuun* (Insanity): 122)

Similarly, in (112) the speaker uses the phrase with *haða* as a determiner, *saħibna*

haða, (this friend of ours) to refer to the Little Prince, although there is no other activated referent that competes with the Little Prince.

(112) immala min quwwit l-dahfa
so from strength the-astonishment
“So from the power of astonishment,”

w min ʔab.rabbi qʔadt baahit
and from amazement staty.past.1s astonished
“and from the amazement, I stayed astonished.”

w ʔin-ayya maħlula qad l-maahja
and eyes-pos.1s open wide
“with my eyes widely open.”

fi l-wlajjad haða illi hbat
in the-boy prox2.3ms comp comedown.past.3ms
“in this boy who came”

ma na-ʔrif mn-iin
neg 1s-knwo from-where
“I don’t know from where”

ma ta-nsaawif illi kun-t waħdi
neg 2s-forget comp be.1spat alone

fi l-xla w l-qifaar
in the-wilderness and the wilderness
“don’t forget that I was alone in the desert,”

ʔakθar min ʔalf kilu metr
more than thousand kilo meter
“more than a thousand kilometers.”

bʔiid ʔla ʔaqrib buqfa maskuna
far from closest place inhabited
“far from the closest inhabited place.”

lakin **saħibna** **haða** l-wlajjid l-s yīr
 but friend.pos.1s prox2.3ms the-boy the-young
 “but this friend of ours, the little boy,”

ðhar-l-i kajinnu fi ha-l-xla w l-qifaar
 seem-to-1s like in prox1-the wilderness and the-emptiness

la mijjit bi-l-tʃab w la mijjit bi-l-ʃar
 neg dead with-the-tiredness and neg dying with-the-hunger
 “seemed to me as if he he is neither exhausted nor
 starving in this wilderness.”

(*al-ʔamiir al-sa yīr* (The Little Prince):7)

The question that remains is: why do communicators avoid the use of a pronoun when its referent cannot be unambiguously identified. In the next section, I will argue that Relevance Theory provides a principled answer to this question.

4.3 Relevance and ambiguity

The Givenness Hierarchy Theory explains the appropriate use of the demonstrative *haða* as a determiner and as a pronoun in terms of cognitive status. Part of the meaning of the demonstrative *haða* as a determiner and as pronoun is that it picks out entities that are activated, and since In Focus entails Activated, *haða* can also refer to in-focus entities. It was shown in section 2, however, that when speakers do not expect their addressees to be able to unambiguously identify their intended referent, they do not choose the pronoun, but rather choose a demonstrative determiner with a noun, even if the referent is at least activated. The Givenness Hierarchy explains that both forms can be used to refer to entities that are activated or in focus, but it does not explain why speakers do not choose a pronoun when there is more than one possible activated referent. In the remainder of

this chapter, I argue that Relevance Theory (Sperber & Wilson 1986/1995) provides a cognitive explanation for why speakers do not choose a demonstrative pronoun when there is more than one activated referent.

4.3.1 Relevance of an input to an individual

According to Relevance Theory, an input such as an utterance is relevant to an individual when it yields a positive contextual/cognitive effect: a worthwhile conclusion that matters to her/him (Sperber & Wilson 2006: 608). An input may yield positive contextual effects in different ways: It may yield contextual implications, it may strengthen an existing assumption, and it may contradict an existing assumption (Sperber & Wilson 1995: 108-117). Sperber and Wilson also point out that the most important type of contextual effect is contextual implication. Contextual implications are context-dependent assumptions derived by combining the input with background information. For example, if I meet a speaker of English at a conference, and I cannot tell whether he is from England or New Zealand, when I hear him mentioning that he likes the coffee in New Zealand, I may draw the conclusion that this person is from New Zealand. Positive contextual effects are a necessary condition for relevance. If an input does not add worthwhile change to a person's representation of the world, it is not relevant. For example, false conclusions yield contextual effects, but they are not positive contextual effects. Moreover, according to Relevance Theory, relevance is not only a matter of cognitive effects. Deriving positive contextual effects costs time and effort on the part of the addressee. Thus, relevance may be assessed in terms of cognitive effects and processing effort. According to Relevance Theory:

- a. Other things being equal, the greater the positive cognitive effects achieved by processing an input, the greater the relevance of the input to the individual at the time.
- b. Other things being equal, the greater the processing effort expended, the lower the relevance of the input to the individual at that time (2006: 609).

According to Relevance Theory, humans have an automatic tendency to maximize relevance. It follows from this that addressees tend to pick out the most relevant inputs and process them so as to maximize their relevance. This universal tendency is described in the Cognitive Principle of Relevance: Human cognition tends to be geared to the maximization of relevance (2006: 610).

4.3.2 Relevance and Communication

Sperber and Wilson (2006) argue that this universal tendency to maximize relevance makes it possible for communicators to predict and manipulate the mental states of their addressees (610). As they point out, “Knowing your tendency to pick out the most relevant inputs and process them so as to maximize their relevance, I may be able to produce a stimulus which is likely to attract your attention, activate an appropriate set of contextual assumptions, and point you toward an intended conclusion” (2006: 610).

But how do communicators achieve this goal? Sperber and Wilson explain that if communicators stop at the stage of having the intention to communicate their meaning to the addressees, communication does not take place. In order to give evidence to the addressees that there is a meaning to be communicated, communicators produce an ostensive stimulus such as an utterance, a sound, or a gesture. According to Relevance Theory, an ostensive stimulus carries not only the information or the meaning a communicator wants to transmit, but also the message that there is something worth processing. Therefore, part of the reason for designing an ostensive stimulus is to attract

the audience's attention and encourage them to presume that it is relevant enough to be worth processing (2006: 611). This is described in the Communicative Principle of Relevance: Every ostensive stimulus conveys a presumption of its own optimal relevance. Optimal relevance here means that the input is worth the addressees' processing effort, and that it is the most relevant message in terms of the speaker's abilities and preferences (2006: 612).

A communicator has to choose from a range of stimuli the one that s/he can expect to attract their audience's attention. Sperber and Wilson argue that it is to the interest of the communicator to be understood, "and therefore, to make as easy as possible for the addressee to understand her. An addressee who doubts that the communicator has chosen the most relevant stimulus compatible with her communicative and informative intentions – a hearer, say, who believes that he is being addressed with deliberate and unnecessary obscurity – might doubt that genuine communication was intended, and might justifiably refuse to make the processing effort required" (1995: 157).

Thus, since communicators are aware that their audience picks out only relevant inputs, they do not choose the demonstrative pronoun *haða* when they cannot expect their audience to unambiguously identify the intended referent. Their addressee might conclude that the input does not yield sufficient contextual effects to be worth the processing effort. As Sperber and Wilson point out "What if two essentially different interpretations seem to come simultaneously to the mind of the addressee, and they are both consistent with the principle of relevance? In that case the addressee will be unable to decide what the informative intention was, and communication will fail" (1995: 169).

In this sense, whether or not the addressee engages in processing a demonstrative pronoun whose referent cannot be expected to be unambiguously identified, they cannot be expected to derive the speaker's intended meaning.

Communicators know, therefore, that it is to their advantage to choose a phrase with a demonstrative determiner in such cases, because they expect it to seem relevant enough to their addressees to attract their attention, and to direct them to the intended referent. The conceptual content of the noun makes it possible for the addressee to access only one possible referent and derive worthwhile conclusions that matter to him/her. When communicators can utilize linguistic means such as grammatical agreement, or extra linguistic means such as a gesture or eye gaze that can make the pronoun a relevant enough input that can direct their audience to the intended referent, they still use the pronoun.

4.4 Conclusion

This chapter has provided a theoretical explanation for why a demonstrative pronoun can be ambiguous and why communicators in such cases avoid using a demonstrative pronoun and use a phrase with a determiner instead. First, I argued that communicators avoid a demonstrative pronoun and use a phrase with a demonstrative determiner instead when there is more than one referent which is at least activated and which carry the same grammatical agreement as the demonstrative pronoun. The use of a demonstrative pronoun results in ambiguity, because it can pick out any one of the possible activated referents. When there is more than one possible referent, the conceptual content of the noun in a phrase with a determiner can be expected to explicitly guide the addressee to the intended referent. It was also shown that

communicators use the pronoun *haða* even when there is more than one activated referent when they can use disambiguating means such as a gesture, eye gaze, or grammatical agreement.

Second, I argued that Relevance Theory provides a cognitive explanation for the reason communicators choose a phrase with the demonstrative determiner when they do not expect a pronoun to unambiguously pick out the intended referent. Being aware of the human tendency to pick out only relevant inputs, speakers do not choose the pronoun, because they do not expect it to attract their audience's attention and guide them to the intended conclusion. A phrase with a determiner on the other hand, can explicitly lead the addressees to identify the intended referent and derive worthwhile conclusions that matter to them.

Although the focus of this chapter is the distribution of referring expressions in Tunisian Arabic, it is not claimed that the explanation for why speakers choose a phrase with a demonstrative determiner when they expect a pronoun to be ambiguous is specific to Tunisian Arabic. With respect to demonstrative pronouns, however, the potential for ambiguity in such a case is more frequent in languages like Tunisian Arabic than in languages such as English, because demonstrative pronouns in Tunisian Arabic can refer to both animate and non-animate entities. On the other hand, speakers of Tunisian Arabic have more linguistic means to disambiguate the referent of the pronoun, because demonstratives are marked not only for number agreements, but also for agreement in gender.

Chapter 5: Concluding remarks and future research

5.1 Conclusion

This dissertation has contributed to research which argues that the meaning of demonstratives is not limited to relative spatial distance from the speaker/hearer, by showing how the interpretation and distribution of demonstratives in Tunisian Arabic is determined by pragmatic and cognitive factors. First, working within the Givenness Hierarchy framework, it was shown how the appropriate use of demonstratives in Tunisian Arabic is determined by the cognitive status encoded by demonstrative forms. Results of the questionnaires and the corpus study conducted in this dissertation indicated that the demonstrative pronouns *haḏa*, *haḏaka*; the demonstrative determiners *ha* and *haḏa*; and the double demonstrative *ha-N haḏa* require the cognitive status Activated, while the demonstrative determiners *hak*, *haḏaka*, and the double demonstrative *hak N haḏa* require only Familiar. Consistent with the Givenness Hierarchy predictions, results of the questionnaires and the corpus study indicate that demonstrative forms were used not only for the statuses they minimally require, but also for higher statuses. It was also shown that, in terms of cognitive status, double demonstratives are only formed from single demonstrative forms that require the same cognitive status, and that double demonstratives require the same cognitive status as the single demonstratives that form them.

In addressing the question of whether there are other factors that further explain the choice among demonstrative forms that satisfy the same cognitive status criteria, results of the questionnaires and the corpus study indicated that there are other factors that further restrict or influence speaker's choices of the demonstrative forms. One of

these factors was discussed in chapter 4 where it was argued that irresolvable ambiguity restricts the use of the demonstrative pronoun *hađa*, even when cognitive status criteria for its use are met. I argued that Relevance Theory provides a cognitive explanation for why communicators avoid an ambiguous pronoun in such cases. Communicators avoid an ambiguous demonstrative pronoun, because they do not expect it to attract the attention of their addressees and direct them to the intended referent. By using a phrase with a demonstrative determiner, on the other hand, they can explicitly lead their addressees to identify the intended referent and derive worthwhile conclusions that matter to them.

Two more factors will be discussed in the future research section in this chapter, and will be addressed in future studies. The first one is the influence of the speech participants' shared knowledge of the referent on the use of the demonstrative *hađaka* when cognitive status criteria for its use are met. The second is the influence of Mulkern's notion of Imposed Saliency (Mulkern: 2003) on the distribution of the demonstrative *hak* in narrative discourse.

The dissertation also highlighted research methodology. Both research tools that were used were discussed in terms of their limitations, and in terms of how they complement each other. As a research tool, the questionnaire has some advantages over the corpus study in determining form-status correlations. It increases the chance of avoiding the possibility of associating a form with a higher cognitive status than the one it minimally requires, since it is a controlled environment that allows for testing every demonstrative form against every cognitive status, a result which might occur in text analysis. For example, the demonstrative determiner *hađaka* which is rarely used for the

status it minimally requires, Familiar, can be mistakenly misanalyzed as requiring the higher status Activated. The questionnaire as a research tool also allows for determining correlations between cognitive status and forms which are not used very frequently, and might be hard to identify in a data corpus. For example, since speakers of Tunisian Arabic do not use double demonstratives very frequently, only five tokens of the double demonstrative *hak N haḍaka* were identified in the data corpus. Another advantage of the questionnaire is that participants' choices give further insights into other factors that further restrict the choice among demonstrative forms. As shown in chapter four, and will be shown in the future research section of this chapter, when communicators avoid a demonstrative form when cognitive status criteria for its use are met, it indicates that there are other factors that further restrict its use.

It was also indicated that the corpus analysis was needed to complement the questionnaires. The larger texts in the data corpus allows one to code for the cognitive status Familiar using the criterion: the referent is mentioned anytime previously in the discourse. This criterion was not possible to use in the questionnaire, because it is formed of short conversations. The corpus analysis also allowed for investigating the influence of discourse type on the distribution of demonstrative forms according to the highest cognitive status they are chosen for. As will be discussed in the future research section in this chapter, the corpus analysis conducted in this dissertation suggests that narrative discourse might influence the distribution of the demonstrative *hak* according to the highest cognitive status it is used for.

Finally, this study has contributed to linguistic description of Tunisian Arabic, which is one of the least researched Arabic dialects.

5.2 Future Research

The use of the demonstrative determiner *hak* for the need of imposed salience

Results of the corpus study given in table 12 indicate that of the 43 tokens of the demonstrative *hak* that were identified, 32 were used for the status that this form conventionally encodes, Familiar, while only 11 were used for the higher statuses Activated and In Focus. Breaking down the results of the corpus study by discourse type indicates that all the tokens of *hak* that were used to refer to activated or in-focus entities occurred in folk stories. In (113), for example, the referent of the phrase *hak l-taaʒir* (that merchant) can be assumed to be activated, because it is mentioned in one of the two immediately preceding sentences.

- (113) Ja-ħkiiw ʕla taaʒir,
3p-talk about merchant
“Once upon a time there was a merchant,”
- w kul taaʒir ʔla maal-u faaʒir
and every merchant about money.pos.3ms careful
“and every merchant is careful about his money,”
- hak** **l-taaʒir** (kiifma n-qulu fi baʕdaad)
nonporox1 the merchant like 1-say in Baghdad
- b-ħwaant-u w b-xiir-u
with-stores-pos.3ms and with-wealth.pos.3ms
- w b-xmiiru
and with-property-pos.3ms
“That merchant (let’s say in Baghdad) has stores, wealth, and property.”

Similarly, in (114) the referent of the phrase *hak l-ħaddad* (that blacksmith) was determined to be in focus, because it is mentioned in a prominent syntactic position in the immediately preceding sentence.

- (114) min yudwa sbaħ aka³¹ l-ħaddad tbiib
 from tomorrow bcome.past.3ms nonprox1 the-blacksmith doctor
 “The following day, that blacksmith became a doctor.”
- illi ʕand-u rukba tu-ʒaʕ fi-h
 com pos-3sm knee 3m-hurt in-3ms
- ja-ḏrb-u **hak l-ħaddad** bi-l-mtarqa ʕli-ha ja-rtaaħ
 3ms-tap-3ms nonprox1 the-blacksmith with-the-hammer on-3fs 3ms-heal
 “If a person has arthritis in his back, the blacksmith hits him on it with the hammer and s/he heals; and if someone has a stomach pain”

(The Devil and the Blacksmith)

Two questions arise here: First, why is it that all the tokens of *hak* used to refer to entities higher than Familiar occurred in folk stories? Second, why was *hak* not used for statuses higher than Familiar in non-narrative discourse?

A possible answer to the first question is that the use of *hak* more frequently to refer to activated or in-focus entities in folk stories results from the influence of narrative discourse. Specifically, it is possible that speakers use *hak* to impose greater salience on important characters in the story.

Other studies found that discourse type influences the use of demonstratives or other referring expressions. For example, as mentioned in section 1.4, OH argues that the most critical factor that determines the speaker's choice among the English

³¹ As mentioned above, the form *aka* is a variant of the demonstrative form *hak*.

demonstratives *it*, *this*, and *that* in the genre of written advertisements is Focus, where Focus means the degree of attention the hearer should pay to the referent. For example, OH found that although the English demonstrative *this* is usually used to refer to new and important entities, it is used more frequently than *that* in central reference (i.e., when the referent is all or part of the advertised product) when referring to entities that are already mentioned in discourse. He argues that this constitutes compelling evidence that the demonstrative form *this* is a high focus form; since it is used to constantly direct the reader's attention to the advertised product. It is used repeatedly to refer to the advertised product, because it signals a meaning of “newness” and “importance” (135-136).

Mulkern (2003) introduces the notion of imposed salience: The “amount of prominence or foregrounding given to an entity by the speaker in an utterance for the purpose of signaling how the speaker intends the hearer to rank discourse entities relative to one another” (24-25). She argues that one important way speakers impose greater salience on a particular entity is through their use of referring expressions. When a speaker uses an expression which is lower on the Givenness Hierarchy (Gundel et al. 2003) than expected, s/he imposes greater salience on that entity by indicating to the addressee that there are additional contextual assumptions (25). Mulkern points out that since processing an expression that is lower in cognitive status requires more processing effort, “the expectation on the part of the addressee, then, is that this effort will yield additional contextual effects, such as more information about the referent, or information about the speaker’s attitude toward the referent” (27).

Thus, it is possible that in narrative discourse, *hak* is used to refer to certain in-focus or activated entities such as prominent characters or important objects, for the

purpose for adding contextual effects by informing the addressee of the attitude of the speaker toward those characters. However, since results of the questionnaires conducted in this dissertation also indicate that participants chose the demonstrative *hak* to refer to entities which are familiar, but also to activated and in-focus entities, follow up work is needed to investigate whether the use of *hak* for the purpose of imposed salience is limited to narrative discourse.

The remaining question is: why was *hak* used only for the status it conventionally encodes, Familiar, but not for the higher statuses, Activated and In Focus, in non-narrative discourse? It is possible that the infrequent use of *hak* to refer to entities with a cognitive status higher than Familiar results from an interaction of the Givenness Hierarchy with Grice Quantity Maxim (Grice 1975). Gundel et al. (1993) and Gundel and Mulkern (1998) suggest that since the Givenness Hierarchy forms an implicational scale, it gives rise to conversational implicature. Gundel et al. point out that “although the conventional meaning of the indefinite article in English (what it explicitly signals) is simply that the referent is at least type identifiable, use of this form conversationally implicates by Q1 that the addressee cannot uniquely identify the referent” (296). They also note that since conversational implicature is not an essential inference, a phrase with the indefinite article can be uniquely identifiable, or even familiar in some contexts (296).

Thus, it is possible that while the demonstrative *hak* conventionally encodes the meaning Familiar, it conversationally implicates not activated, or in focus. However, since conversational implicature is not a necessary inference, the demonstrative *hak* can be used to refer activated or in-focus entities when communicators want to inform their addressees of their attitude for the purpose of imposed salience. In other words,

communicators use *hak* to conversationally implicate that the referent is not activated or in focus unless they need to communicate their attitude toward the intended referent and add contextual effects. In order to test these possible explanations, further analysis of narrative and non-narrative texts is needed.

5.2.2 Further restrictions on the demonstrative *hađaka*: The role of communicators' previous knowledge of the referent

Results of the questionnaire and corpus studies conducted in this dissertation indicate that the demonstrative determiner *hađa* signals the status Activated, and that the demonstrative determiner *hađaka* signals the status Familiar. Consistent with the Givenness Hierarchy predictions, results of the questionnaires as well as the corpus study indicate that both forms were used for the statuses they minimally require, and also for higher statuses. In both studies, tokens of the demonstrative determiner *hađa* were determined to be acceptable in contexts biased toward the statuses Activated and In Focus, and tokens of the demonstrative *hađaka* were determined to be acceptable to be placed in contexts biased for the statuses Familiar, Activated, and In Focus.

Since both forms can be used for the statuses Activated and In Focus, we expect them to be interchangeable when referring to activated or in-focus entities. Results of the questionnaires conducted in this dissertation, however, suggest that in contexts where both forms satisfy cognitive status criteria (i.e., Activated or In Focus), they are not always interchangeable. In some of those contexts both forms were determined to be acceptable, while in others only the demonstrative *hađa*, but not the demonstrative *hađaka* was determined to be acceptable. This suggests that there are other factors that further restrict the use of the demonstrative *hađaka*. For example, in ((115)-(117)) both

forms are acceptable, while in (118) and (119) only *haða* as a determiner but not as a pronoun was possible.

(115) The addressee knows the neighbor that the speaker is talking about.

ʒarti hija lli ʕawn-it-ni ʕla tanðiif l- daar
neighbor-pos.1s she comp help-past.3fs-me on cleaning the-house
“It is my neighbor who helped me clean my house.”

l-ḥaq nas mlah **l-mra** **haði/** **l-mra** **haðika**
the truth nice the woman prox2.3fs/the-women nonprox2.3fs
“This woman/that woman is really nice.”

(116) B knows the apartment that A is talking about but was not thinking about it before A mentioned it.

A: Salwa naql-it min dar-ha l-qdima
Salwa move.past-3fs from house-pos.3fs the-old

w-ʕraa-t burtmaan
and-buy-past.3fs apartment
“Salwa moved from her old house and bought an apartment.”

B: ih fi-bal-i
yes in-mind-pos.1s

w **l-burtmaan** **haða/l-burtmaan** **haðaka**
and the-apartment prox2.3ms/ the apartment nonprox2.3ms

huwa illi ḥabbit ni-ʕri-h ana
he comp want.past.1s 1-buy-3ms I
“Yes and it is this apartment/that apartment that I wanted to buy”

(117) The addressee already knows that Leila changes her mind everyday. The speaker knows that the addressee already knows that Leila changes her mind everyday.

A: Leila kul jum t-baddil raj-ha.
 Leila every day 3f-change mind-pos.3fs
 “Leila changes her mind everyday”

B: w inti mqaqq-ik **l-mawḏuuḥ haḏa/ l-mawḏuuḥ haḏaka**
 and you bothering the-topic prox1.3ms/the-topic nonprox2.3ms
 “Is this issue/that issue bothering you?”

In examples (118) and (119) on the other hand, only the determiner *haḏa*, but not the determiner *haḏaka* was chosen to refer to the noise and the doctor, respectively.

(118) Both speaker and addressee can hear a noise.

qallaq-ni **l-his haḏa/** # **l-his haḏaka**
 bother.past.3ms-1s the-noise prox2.3ms/ the-noise nonprox2.3ms
 “This noise/# that noise is bothering me”

(119) B doesn't know the doctor that A is talking about

A: ḏahr-i maḥatʃ ju-ʒaḥ-ni.
 back-pos.1s neg 3m-hurt-1s
 “My back does not hurt anymore.”

tbiib-i ʔta-ni dwa ḏarba ḏarba
 doctor-pos.1s give-past.3ms-1s medication efficient efficient
 “My doctor gave me very efficient medication.”

B: aʃ-ism-u **l-tbiib haḏa/** # **l-tbiib haḏaka?**
 what-name-pos.3ms the-doctor prox2.3ms/ the doctor nonprox2.3ms
 “What is the name of this doctor/ # that doctor”

The fact that *haḏaka* requires at least Familiar and can therefore be expected to refer to activated or in-focus referents, the restriction on this form in certain contexts where the referent is activated cannot be explained in terms of cognitive status and

indicates that there are other factors that further restrict its use. The question then arises as to what other factors further restrict the choice among the demonstrative determiners *hađa* and *hađaka* in contexts where cognitive status criteria for their use are met. One possible explanation for this restriction to be investigated further in future research is that this difference in use may have to do with the speech participants' previous knowledge of the referent prior to its previous mention. The demonstrative *hađaka*, seems to be restricted if the speech participants do not have shared knowledge of the referent prior to its recent mention, even if the referent is evoked in recent discourse.

In examples ((115)-(117)), where both forms were determined to be acceptable, the referent is known by the speaker and the addressee prior to the current conversation. In example (115) the neighbor can be assumed to be in focus, since it is mentioned in a prominent syntactic position in the previous sentence. Both speaker and addressee also have previous knowledge of the neighbor prior to the current conversation. Similarly, in (116) the apartment can be assumed to be activated, since it is mentioned in one of the two immediately preceding sentences. As mentioned in the context explanation that precedes the example, the apartment is also previously known by the speech participants prior to the current conversation. In (117), the fact that Leila changes her mind everyday can be assumed to be activated, since it is a fact stated in the previous sentence. It is also previously known by both speech participants prior to the current conversation.

In (118) and (119) where only *hađa*, but not *hađaka* was determined to be acceptable, the intended referent is not known by both speech participants prior to the current conversation. In example (118), the phrase *l-ħis hađaka* (that noise) is not acceptable, while the phrase *l-ħis hađa* (this noise) is acceptable to refer to the noise. The

noise is not something that is previously known by the speech participants, since it is taking place at the time of the current conversation. In (119) the doctor is known by speaker A but not by speaker B prior to the current conversation.

Cognitive status does not seem to explain this further restriction on *haḏaka*, since according the Givenness Hierarchy framework, recent previous mention in discourse is a sufficient criterion for a referent to be assumed to be activated or in focus. Examples ((115)-(117)), however, seem to indicate that recent previous mention in the discourse is not a sufficient condition for the appropriate use of *haḏaka*, since it has to be combined with the condition that both the speaker and the addressee already have shared knowledge of the referent prior to its recent mention³².

Although the notion of shared knowledge of a referent by the speech participants introduced here seems to be similar to Prince's information status Hearer-Old³³ (Prince 1988), the information status Hearer-Old does not seem to account for this restriction either. According to Prince, for something to be hearer-old, the speaker either presumes that the hearer already has a mental representation of that entity, or if it is discourse-old by being introduced any time previously in the discourse regardless of whether the hearer has a previous mental representation of it or not (5). For example, according to Prince, the referent of the phrase *l-tbiib haḏaka* which was just mentioned in the conversation in (119) repeated here in (120) is considered hearer-old, because the doctor was just mentioned by speaker A. As mentioned above, however, the phrase *l-tbiib haḏaka* cannot be used here, since the doctor is known prior to the current conversation by speaker A only.

³² It is possible that it is only the speaker who needs to have previous knowledge of the referent.

³³ Upper case is used to refer to the status itself, and lower case is used when the status is used to describe a referent.

(120) B doesn't know the doctor that A is talking about

A: *ðahr-i maʕatʃ ju-ʒaʕ-ni.*
back-pos.1s neg 3m-hurt-1s
“My back does not hurt anymore.”

tbiib-i ʕta-ni dwa ðarba ðarba
doctor-pos.1s give-past.3ms-1s medication effective effective
“My doctor gave me very effective medication.”

B: *aʃ-ism-u l-tbiib haða/ #l-tbiib haðaka?*
what-name-pos.3ms the-doctor prox2.3ms/ the doctor nonprox2.3ms
“What is the name of this doctor/ # that doctor?”

Prince’s Hearer-Old status does not seem to account for the further restriction on *haðaka* either, because recent previous mention in the discourse is a sufficient condition for an entity to be hearer-old. It is not clear at this point whether a non-recent previous mention in the discourse (e.g., a referent is introduced at the beginning of a story and then reintroduced in the middle of that story) counts as previous knowledge in the sense that seems relevant for the restriction on *haðaka*, since the questionnaire consists of short pieces of text. Further research is therefore needed to address the following questions: 1) Is the demonstrative *haðaka* always restricted when speech participants do not have previous knowledge of the referent prior to its recent mention? 2) Is *haða* less preferred or even sometimes restricted when a referent is previously known by the participants? 3) Does non-immediate previous mention in the discourse (e.g., a referent is introduced at the beginning of a story and then reintroduced in the middle of that story) count as previous knowledge of the referent and restrict the demonstrative *haðaka*? 4) Is there a possible correlation between previous knowledge and the proximate non-proximate

distinction (i.e., is the nonproximate *hađaka* allowed only when the referent is previously known to the interlocutors prior to the current conversation)?

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Appendix I: Coding Protocol for Statuses on the Givenness Hierarchy (Gundel, Hedberg and Zacharski 1993)³⁴

Last updated July, 2004

1. USING THE CODING PROTOCOL

The terms IN FOCUS, ACTIVATED, FAMILIAR, UNIQUELY IDENTIFIABLE, REFERENTIAL, AND TYPE IDENTIFIABLE each describe a cognitive status on the Givenness Hierarchy (Gundel, Hedberg and Zacharski 1993). Cognitive statuses are properties of cognitive entities/mental representations. When determining cognitive status using the protocol, imagine you are the speaker/writer and ask yourself what you can assume about the cognitive status of the intended interpretation/referent for the addressee at the point just before the form is encountered. Check the criteria for each status in the order they are listed below. That is, start with the cognitive status IN FOCUS. If none of the criteria apply, try ACTIVATED. If none of the criteria apply, try FAMILIAR, and so on. Stop when you find a criterion that applies. This is the highest cognitive status for the referent/interpretation you are checking.

A referent is IN FOCUS if it meets at least one of the following criteria:

1. It is mentioned in main clause subject position in the immediately preceding sentence/clause.

(1) Midge pushed thick, wiry black hair back from her square forehead with a sturdy brown arm. Nothing unsubstantial or fairylike about her. (from Murder after Hourse, Agatha Christie)

(2) John Kerry lost in Ohio. This cost the Senator the election.

2. It is mentioned earlier in the same sentence.

(3) You can wear my scarf if you can find it.

(4) If you stand on this chair, the chair will break.

3. It is mentioned in syntactic focus position of the immediately preceding clause (i.e., postcopular position of a cleft or existential sentence).

(5) There was a mouse on the table. It was very large.

(6) It was the dog that Bill was afraid of. He was very large.

³⁴ Note: These are sufficient, not necessary criteria.

4. It is a higher level topic that is part of the interpretation of the preceding clause (whether it is overtly mentioned there or not).

(7) The kitchen has a new countertops and a beautiful tile floor. There's also a big walk-through closet. Would you like to take a look at it? Both the kitchen (criterion 4) and the closet (criterion 3) are in focus.

5. It was mentioned in the two immediately preceding clauses.

(8) It was the dog that Bill was afraid of. Small animals didn't usually frighten him. He was very large.

(9) A: She will be nice to Gerda and she will amuse Henry, and she'll keep John in a good temper and I'm sure she'll be most helpful with David –

B: David Angkatell?

A: Yes. He's just down from Oxford. (from Murder after Hours, Agatha Christie)

6. It is the event denoted by the immediately preceding sentence.

(10) John fell off his bike. This happened yesterday.

A referent is ACTIVATED if it meets one of the following criteria.

1. It is mentioned in one of the immediately preceding two sentences.

(11) Central to the case was a Lewinsky-Tripp conversation that Mrs. Tripp taped on Dec. 22, 1997. This was the last talk between the two women that Mrs. Tripp recorded.

2. It is something in the immediate spatio-temporal context.that is activated by means of a simuaneous gesture or eye gaze)

(12) (looking at the wrench) Please hand me that (wrench (over there))

3. It is a proposition, fact, or speech act associated with the eventuality (event or state) denoted by the immediately preceding sentence(s).

(13) A. John fell off his bike.

B. That's not true.

(14) A. John fell off his bike.

B. Can you say that again.

A referent is FAMILIAR if it meets one of the following criteria.

1. It was mentioned at any time previously in the discourse.

(15) A Phillipine Airlines jet with 290 people aboard was hijacked today by a man who took everyone's money and then parachuted to the ground outside Manila's airport and the passengers were let off safely. The jetliner left Davao City, in the southern Phillipines, for the 90-minute flight to Manila with 278 passengers and 12 crew aboard, PAL said. The hijacker, wearing a blue ski mask and carrying a handgun...

2. It can be assumed to be known by the hearer through cultural/encyclopedic knowledge or shared personal experience with the speaker.

(16) If one takes a step back and looks at the rest of this week's music-group news, the situation looks bad for ugly, unpredictable rock 'n' roll: one of the most popular American rock bands of the 90's

A referent is UNIQUELY IDENTIFIABLE if it meets one of the following criteria:

1. The referring form contains adequate descriptive/conceptual content to create a unique referent.

(17) s: hello can I help you

u: yeah I want t- I want to determine the maximum number of boxcars of oranges that I can get to Bath by 7 a.m. tomorrow morning so hm so I guess all the boxcars will have to go through oran- through Corning because that's where the orange juice factory is [Trains Corpus. Heeman & Allen 1995]

2. A unique referent can be created via a 'bridging inference' by association with an already activated referent.mm(e.g., A house....the front door)

(18) She got into bed,laid her head on the pillow, and in two minutes was sleeping like a child. (from Murder after Hours, Agatha Christie)\

(19) (Looking at a box) I think the bottom fell out.

A referent exists, is REFERENTIAL, if it meets one of the following criteria.

1. It is mentioned subsequently in the discourse.

(20) When my youngest child was 3 or so, we were at a friend's house visiting and my friend was babysitting her infant nephew.

2. It is evident from the context that the speaker intends to refer to some specific entity.

(21) I want to tell you about this strange guy I saw today.

An interpretation is TYPE IDENTIFIABLE if the sense of the phrase (the descriptive/conceptual content it encodes) is understandable.

(22) I don't have a VCR and neither does my neighbor.

(23) Whenever Mary passes that store, she always picks up a newspaper.

Appendix II: Consent form

Reference in Tunisian Arabic

You are invited to be in a research study of reference in Tunisian Arabic. You were selected as a possible participant, because you are a native speaker of Tunisian Arabic. We ask that you read this form and ask any questions you may have before agreeing to be in the study. This study is being conducted by: Amel khalfaoui, graduate student at the University of Minnesota

Background Information

The purpose of this study is to evaluate claims for reference based on evidence from other languages

Procedures:

If you agree to be in this study, we would ask you to do the following things:

- 1) Read the explanation that precedes each sentence or short conversation.
- 2) Read the short sentence or conversation
- 3) Read the 11 choices and circle the ones you judge to be appropriate to be placed in the blank space in the preceding sentence or short conversation.

Risks and Benefits of being in the Study

This study has no risks or benefits.

Compensation:

There is no compensation for this study

Confidentiality:

The records of this study will be kept private. In any sort of report we might publish, we will not include any information that will make it possible to identify a subject. Research records will be stored securely and only the researcher will have access to the records.

Voluntary Nature of the Study:

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of Minnesota. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions:

The researcher conducting this study is: Amel Khalfaoui. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at 612-331-2340, khal0035@umn.edu. My advisor is Jeanette Gundel, 612-624-7564, Gunde003@umn.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; (612) 625-1650.

You will be given a copy of this information to keep for your records.

Statement of Consent:

I have read the above information. I have asked questions and have received answers. I consent to participate in the study.

Signature: _____ Date:

Signature of Investigator: _____ Date:

Appendix III: Pilot Questionnaire (with English gloss and translation)

Instructions:

In this questionnaire there are short texts with blank spaces in them. In every short text speaker (A) says something to speaker (B). Sometimes speaker (B) does not reply. Every short text is preceded by a context explanation and followed by 11 choices.

- 1) Read the context explanation that precedes each sentence or short conversation.
- 2) Read the short sentence or conversation
- 3) Read the 11 choices and circle the ones you judge to be appropriate to be placed in the blank space in the preceding sentence or short conversation.

A knows the neighbor that B is talking about.

A: ʒarti hija lli ʕawn-it-ni ʕla tanðif l-daar
neighbor-pos.1s she comp help-past.3fs-1s on cleaning the-house
“It is my neighbor who helped me clean the house”

l-ħaq nas mlaah
the truth people nice
“..... is really nice”

B: (no reply)

1. hak l-mra haðika (that woman (literally, that woman that))
2. ʒarti (my neighbor)
2. ha- l-mra (this woman)
4. l-ʒara (the neighbor)
5. l-mra haði (this woman)
6. haðika (that)
7. l-mra haðika (that woman)
8. ha l-mra haði (this woman (literally, this woman this))
9. l-mra (the woman)
10. haði (this)
11. hak l-mra (that woman)

A knows the apartment that B is talking about

A: Salwa naql-it min daar-ha l-qdima
Salwa move.past.3fs from house-pos.3fs the-old

w f'raa-t burtmaan
and-buy.past.3fs apartment
“Salwa moved from her old house and bought an apartment.”

B: ih fi-bal-i w..... huwa lli ħabb-it ni-ƒrii-h ana
yes in-mind-pos.1s and..... he comp want.past.1s 1-buy-3ms I
“Yes and its which I wanted to buy.”

1. hak l-burtmaan hađaka (that apartment (literally, that apartment that))
3. nafs l-burtmaan (the same apartment)
4. ha- l-burtmaan (this apartment)
4. burtmaan (an apartment)
5. l-burtmaan hađa (this apartment)
6. hađaka (that)
7. l-burtmaan hađaka (that apartment)
8. ha l-burtmaan hađa (this apartment (literally, this apartment this))
9. l-burtmaan (the apartment)
10. hađa (this)
11. .hak l-burtmaan (that apartment)

Both A and B can hear a noise.

A: qallaq-ni
bother.past.3ms-1s
“ is bothering me”

1. hak l-ħis haḏaka (that noise (literally, that noise that))

2. l-ḏaʒiʒ (the noise (in standard Arabic))

3. ha- l-ħis (this noise)

4. l- ħis (the noise)

5. l- ħis haḏa (this noise)

6. haḏaka (that)

7. l- ħis s haḏaka (that noise)

8. ha l-ħis haḏa (this noise (literally, this noise this))

9. ħis (a noise)

10. haḏa (this)

11. hak l-ħis (that noise)

B already knows the fact that Leila changes her mind everyday. A knows that B already knows the the fact that Leila changes her mind everyday .

A: Leila kul jum t-baddil raj-ha.
Leila every day 3f-change mind-pos.3fs
“Leila changes her mind everyday.”

w-l- haq mqallqit-ni
and the- truth bothering-1s
“and is really bothering me.”

B: (no reply)

1. hak l-ħkaja haðika (that story (literally, that story that))

2. ha-l-ħkaja (this story)

3. ħkajit-na (our story)

4. tbiʕit-ha (her story)

5. l-ħkaja haði (this story)

6. haðika (that)

7. l-ħkaja haðika (that story)

8. ha l-ħkaja haði (this story (literally, this story this))

9. l-ħkaja (the story)

10. haði (this)

11. hak l-ħkaja (that story)

B knows that somebody gave Sonia a gift but she was not thinking about it [the gift] before A mentioned it.

A: Sonia ʕzib-ha.....
Sonia please.past.3ms-3fs
“Sonia was pleased by”

B: ʕraf-t-u baʃ ji-ʕzib-ha.
know.past-1s-3ms fut 3ms-please-3fs
“I knew it was going to please her.”

1. hak l-kadə haðaka (that gift (literally, that gift that))

2. kaduha (her gift)

3. ha- l-kadə (this gift)

4. l-kadə mtaʕha (her gift)

5. l-kadə haða (this gift)

6. haðaka (that)

7. l-kadə haðaka (that gift)

8. ha l-kadə haða (this gift (literally ,this gift this))

9. l-kadə (the gift)

10. haða (this)

11. hak l-kadə (that gift)

B knows the accountant, but he was not thinking about him before A mentioned him [the accountant]

A: talb-ik
call.past.3ms-2s
“ called you,”

B: waqtah?
when
“when ?”

1. hak l-kuntaabli haḏaka (that accountant (literally, that accountant that))
2. l-muḥasib (the accountant (in standard Arabic))
3. ha- l- l-kuntaabli (this accountant)
4. kuntaabli (an accountant)
5. l-kuntaabli haḏa (this accountant)
6. haḏaka (that)
7. l-kuntaabli haḏaka (that accountant (literally, this accountant this))
8. ha l-kuntaabli haḏa (this accountant)
9. l-kuntaabli (the accountant)
10. haḏa (this)
11. hak l-kuntaabli (that accountant)

(B) bought a house and (A) is asking her about it. (A) has not seen the house yet. (B) knows that (A) has not seen the house yet.

A: bahja l-daar l-3diida?
good the-house the-new?
“Do you like the new house?”

B: ih ama l-ku3ina zyira
yes but the-kitchen small
“Yes, but the kitchen is small.”

1. hak l-l-ku3ina ha3ika (that kitchen (literally, that kitchen that))

2. ku3intha (its kitchen)

5. ha- l-ku3ina (this kitchen)

4 . l-ku3ina mta3ha (its kitchen)

5. l-ku3ina ha3i (this kitchen)

6. ha3ika (that)

7. l-ku3ina ha3ika (that kitchen)

8. ha l- ku3ina ha3i (this kitchen (literally, this kitchen this))

9. l-ku3ina (the kitchen)

10. hak l-ku3ina (that kitchen)

11. ha3i (this)

A is not talking about a particular car.

A: smaŋ-t illi Leila t-ħib ti-ʃri
 hear.past-1s comp Leila 3s-want 3fs-buy
 “Leila wants to buy.....”

B: (no reply)

1. hak l-karhba haðika (that car (literally, that car that))

2. karhba (a car)

3. ha- l-karhba (this car)

4. krihba (a car (diminutive))

5. l-karhba haði (this car)

6. haðika (that)

7. l-karhba haðika (that car)

8. .ha l-karhba haði (this car (literally, this car this))

9. l-karhba (the car)

10. hak l-karhba (that car)

11. haði (this)

B doesn't know the grocer that A is talking about. A knows that B doesn't know the grocer

A: ma nu-ftur-ʃ l-sbaħ fi-l-dar.
neg l-eat-neg the-morning in-the-house.

kul jum ni-tʃadda..... ni-ʃri kaskrut
every day l-pass l-buy sandwich
“I don't eat at home in the morning. Everyday, I stop by and buy a sandwich.”

1. hak l-ʃattar lli biʒnabna haḍaka (that grocer next door (literally, that grocer next door that))
2. l-ʃattar l-li biʒnab darna (the grocer close to our house)
3. ha l-ʃattar lli biʒnab darna (this grocer next door)
4. l-ʃattar lli biʒnabna aħna (the grocer next door)
5. l-ʃattar lli biʒnab darna haḍa (this grocer next door)
6. haḍaka (that)
7. l-ʃattar l-li biʒnabna haḍaka (that grocer next door (literally, hat grocer next door that))
8. ha l-ʃattar l-li biʒnabna haḍa (this grocer next door (literally, this grocer next door this))
9. l-ʃattar l-li biʒnabna (the grocer next door)
10. haḍa (this)
11. hak l-ʃattar lli biʒnabna (that grocer next door)

B does not know the book that A is talking about. A knows that B does not know it [the book].

A: l-bariḥ ḡuftḡla numuw l-tifl
the-yesterday see.past.1s.....on development the-child
“Yesterday, I saw a book on child development in the library.”

B: (no reply)

1. hak l-ktaab haḏaka (that book (literally, that book that))

2. l-ktaab (the book)

3. ha- l-ktaab (this book)

4. ktaab (book)

5. l-ktaab haḏa (this book)

6. haḏaka (that)

7. l-ktaab haḏaka (that book)

8. ha l-ktaab haḏa (this book, (literally, his book this))

9. ktaab taḡfun (a nice book)

10. haḏa (this)

11. hak l-ktaab (that book)

A doesn't know the doctor that B is talking about

A: ðahr-i maʔatʃ j-uʒaʔ-ni.
back-pos.1s neg 3m-hurt-1s
“My back doesn’t hurt anymore.”

tbiib-i ʔta-ni dwa ðarba ðarba
doctor-pos.1s give-past.3ms-1s medication effective effective
“My doctor gave me very effective medication.”

B: aʃ ismu?
what name-pos.3ms?
“What is the name of?”

1. hak 1-tbiib haðaka (that doctor (literally, that doctor that))
2. tbiib-k (your doctor)
6. ha- 1-tbiib (this doctor)
4. 1-tbiib (the doctor)
5. 1-tbiib haða (this doctor)
6. haðaka (that)
7. 1-tbiib haða ka (that doctor)
8. ha t-tbiib haða (this doctor (literally, this doctor this))
9. tbiibik (your doctor)
10. haða (this)
11. hak 1-tbiib (that doctor)

Appendix IV: Revised Questionnaire (with English gloss and translation)³⁵

Instructions

In this questionnaire there are 14 questions. In every question, there is a context explanation followed by a short conversation between two people (A) and (B) or a sentence followed by 11 choices.

- 1) Read the context explanation that precedes each sentence or short conversation.
- 2) Read the short sentence or conversation
- 3) Read the 11 choices and circle the ones you judge to be appropriate to be placed in the blank space in the preceding sentence or short conversation.

Question 1

B knows the dog that A is talking about

A: kalb-na sYiir barfa ma j-na33am-f j-fiss fla l-daar
dog-pos.1s small very neg 3ms-can-neg 3ms-watch on the-house
“Our dog is very small. He can’t watch the house.”

B : mniin frit-u inti ?
where buy-3ms you
“Where did you buy?”

1. hak l-kalb haḏaka (that dog (literally, that dog that)
2. kalbik (your dog)
3. ha- l-kalb (this dog)
4. l-kalb l-sYiir (the small dog)
5. l-kalb haḏa (this dog)
6. haḏaka (that)
7. l-kalb haḏaka (that dog)
8. ha l-kalb haḏa (this dog (literally, this dog this))
9. l-kalb (the dog)

³⁵ As mentioned in section 2.3.2.1 in chapter 2, the revised questionnaire consists of the 11 questions given in the pilot after being revised, and three additional questions.

10. haða (this)

11. hak l-kalb (that dog)

Question 2

Speaker B knows that Samia has been ill.

A: fi baalik ill Samia murðit?
in mind-pos.2sm comp Samia got.sick
“Do you know that Samia got sick?”

B: ih taʕbit-ha barfa
yes make.tired-3fs much
“Yes, was very serious.”

1. hak l-marða haðika (that illness (literally, that illness that))

2. marða (illness)

3. ha- l-marða (this illness)

4. l- marða (the illness)

5. l- marða haði (this illness)

6. haðika (that)

7. l-mra haðika (that illness)

8. ha l-mra haði (this illness (literally, this illness this))

9. marðitha (her illness)

10. hak l-marða (that illness)

11. haði (this)

Question 3

A knows the neighbor that B is talking about.

A: ſkuun ſawnik ſla tanðiif l-daar?

Q help.past.3ms on cleaning the house
“Who helped you clean the house?”

B: ʒarti hija lli ſawnit-ni.

neighbor-pos.1s she comp help-past.3fs-1s
“It is my neighbor who helped me clean the house”

l-ħaq nas.mlaah
the- truth nice
“..... is really nice”

1. hak l-mra hađika (that woman (literally, that woman that))
2. ʒarti (my neighbor)
3. ha- l-mra (this woman)
4. l-ʒara (the neighbor)
5. l-mra- hađi (this woman)
6. hađika (that)
7. l-mra hađika (that woman)
8. ha l-mra hađi (this woman (literally, this woman this))
9. l-mra (the woman)
10. hak l-mra (that woman)
11. hađi. (this)

Question 4

B knows the apartment that A is talking about

A: Salwa naql-it min daar-ha l-qdima
Salwa move.past.3fs from house-pos.3fs the-old

w-ʃraa-t burtmaan.
and-buy.past.3fs apartment
“Salwa moved from her old house and bought an apartment.”

ma ʔaatʃ t-ħib tu-skun fi daar.
neg 3fs-want 3fs-live in house
“She no longer wants to live in an apartment.”

B: ih fi-bal-i w..... huwa lli ħabbit ni-ʃrii-h ana
yes in-mind-pos.1s and..... he comp want.past.1s 1-buy-3ms I
“Yes and its which I wanted to buy.”

1. hak l-burtmaan haḏaka (that apartment (literally, that apartment that))
2. nafs l-burtmaan (the same apartment)
3. ha- l-burtmaan (this apartment)
4. burtmaan (an apartment)
5. l-burtmaan haḏa (this apartment)
6. haḏaka (that)
7. l-burtmaan haḏaka (that apartment)
8. ha l-burtmaan haḏa (this apartment (literally, this apartment this))
9. l-burtmaan (the apartment)
10. haḏa (this)
11. hak l-burtmaan (that apartment)

Question 5

Someone and his friend are talking and hearing a noise. One of them said:

A: qallaq-ni
bother.past.3ms-1s
“..... is bothering me”

1. hak l-ħis haḏaka (that noise (literally, that noise that))

2. l-ḏaʒiʒ (the noise (in standard Arabic))

3. ha- l-ħis (this noise)

4. l- ħis (the noise)

5. l-ħis haḏa (this noise)

6. haḏaka (that)

7. l- ħis s haḏaka (that noise)

8. ha l-ħis haḏa (this noise (literally, this noise this))

9. ħis (a noise)

10. haḏa (this)

11. hak l-ħis (that noise)

Question 6

B knows the fact that Leila changes her mind everyday.

A: Leila kul juum t-baddil raj-ha.
Leila every day 3f-change mind-pos.3fs
“Leila changes her mind everyday.”

B: w inti m-qallqik ?
and you 3ms-bothering
“and is..... bothering you?”

1. hak l-mawḏuuḥ haḏaka (that story (literally, that story that))
2. mawḏuuḥha (her story)
3. ha-l-mawḏuuḥ (this story)
4. l-mawḏuuḥ (the story)
5. l-mawḏuuḥ haḏa (this story)
6. haḏaka (that)
7. l-mawḏuuḥ haḏaka (that story)
8. ha l-mawḏuuḥ haḏa (this story (literally, this story this))
9. mawḏuuḥ (the story)
10. haḏa (this)
11. hak l-mawḏuuḥ (that story)

Question 7

speaker A knows that the gift but she was not thinking about it [the gift] before B mentioned it.

A: mʃiit talliit ʃla Sonia l-baariḥ
go.past.1s see.past.1s on Sonia the-yesterday
“I went to see Sonia yesterday.”

B : brabbi ʃʒib-ha.....
please please.past.3ms-3fs
“Did she like?”

1. hak l-kadə haḏaka (that gift (literally, that gift that))
2. kaduha (her gift)
3. ha- l-kadə (this gift)
4. kadə (gift)
5. l-kadə haḏa (this gift)
6. haḏaka (that)
7. l-kadə haḏaka (that gift)
8. ha l-kadə haḏa (this gift (literally, this gift this))
9. l-kadə (the gift)
10. haḏa (this)
11. hak l-kadə (that gift)

Question 8

Both A and B know the accountant, but B was not thinking about him (i.e., the accountant) before A mentioned him.

A: ma tlab-ni ħad?
neg call.past.3ms-1s nobody
“No body called me?”

B: talb-ik
call.past.3ms-2s.....
“.....called you.”

1. hak l-kuntabli hađaka (that accountant (literally, that accountant that))
2. l-muħaasib (the accountant (in standard Arabic))
3. ha- l-kuntabli (this accountant)
4. kuntabli (an accountant)
5. l-kuntabli hađa (this accountant)
6. hađaka (that)
7. l-kuntabli hađaka (that accountant)
8. ha l-kuntabli hađa (this accountant (literally, this accountant this))
9. l-kuntabli (the accountant)
10. hađa (this)
11. hak l-kuntabli (that accountant)

Question 9

(B) bought a house and (A) is asking her about it because she has not seen it yet.

A: bahija l-daar l-ʒdida?
good the-house the-new?
“Do you like your new house?”

B: ih ama..... ʒYiira
yes but small
“Yes, but small.”

1. hak l-kuʒina haðika (that kitchen (literally that kitchen that))

2. kuʒinitha (its kitchen)

3. ha- l-kuʒina (this kitchen)

4. l-kuʒina mtaʕha (its kitchen)

5. l-kuʒina haði (this kitchen)

6. haðika (that)

7. l-kuʒina haðika (that kitchen)

8. ha l- kuʒina haði (this kitchen (literally, this kitchen this))

9. l-kuʒina (the kitchen)

10. hak l-kuʒina (that kitchen)

11. haði (this)

Question 10

A is not talking about a particular car.

A: smaŕ-t illi Leila t-ħib ti-ƣri
hear.past-1s comp Leila 3s-want 3fs-buy

“I heard that Leila wants to buy..... .”

1. hak l-karhba hađika (that car (literally, that car that))
2. karhba (a car)
3. ha- l-karhba (this car)
4. krihbba (a car (diminutive))
5. l-karhba hađi (this car)
6. hađika (that)
7. l-karhba hađika (that car)
8. ha l-karhba hađi (this car (literally, this car this))
9. l-karhba (the car)
10. hak l-karhba (that car)
11. hađi (this)

Question 11

(A) and (B) are sitting in their office at work talking. (A) doesn't know the grocer that (B) is talking about.

A: tu-ftur fi l-daar l-sbaaħ?
2-eat in the-house the-morning?
“Do you eat at home in the morning?”

B: ma nu-ftur-ŷ l-sbaaħ fi-l-daar.
neg 1-eat-neg the-morning in-the-house.

kul jum ni-tŷadda..... ni-ŷri kaskruut
every day 1-pass 1-buy sandwich
“I don't eat at home in the morning. Everyday, I stop by and buy a sandwich.”

1. hak l-ŷattar l-li biŷnabna haḏaka (that grocer next door (literally, that grocer next door that))
2. l-ŷattar l-li biŷnab darna (the grocer close to our house)
3. ha l-ŷattar l-li biŷnabna (this grocer next door)
4. l-ŷattar l-li biŷnabna aħna (the grocer next door)
5. l-ŷattar lli biŷnabna haḏa (this grocer next door)
6. haḏaka (that)
7. l-ŷattar lli biŷnabna haḏaka (that grocer next door)
8. ha l-ŷattar l-li biŷnabna haḏa (this grocer next door (literally, this grocer next door this))
9. l-ŷattar lli biŷnabna (the grocer next door)
10. haḏa (this)
11. hak l-ŷattar l-li biŷnabna (that grocer next door)

Question 12

A woman is talking to her friend about a book. Her friend has never heard of it (i.e., the book).

A: l-bariħ fi l-maktba ſuft ſla numuw l-tiſl
the-yesterday in the library see.past.1son development the-child
“Yesterday, I saw a book on child development in the library.”

ama ma naſſamtſ n-xarrſu
but neg can.past.1s-neg 1s-check out
“but I couldn’t check it out.”

1. hak l-ktab haḏaka (that book (literally, that book that))

2. l-ktab (the book)

3. ha- l-ktab (this book)

4. ktab (book)

5. l-ktab haḏa (this book)

6. haḏaka (that)

7. l-ktab haḏaka (that book)

8. ha l-ktab haḏa (this book (literally,this book this))

9. ktab taħfuun (a nice book)

10. haḏa (this)

11. hak l-ktab (that book)

Question 13

(B) doesn't know the doctor that (A) is talking about

A: ðahr-i maʕaatʃ j-uʒaʕ-ni.
back-pos.1s neg 3m-hurt-1s
“My back doesn’t hurt anymore.”

tbiib-i ʕta-ni dwa ðarba ðarba
doctor-pos.1s give-past.3sm-1s medication effective effective
“My doctor gave me very effective medication.”

B: aʃ ismu?
what name-pos.3ms
“What is the name of?”

1. hak l-tbiib haðaka (that doctor (literally, that doctor that))
2. tbiib-k (your doctor)
3. ha- l-tbiib (this doctor)
4. l-tbiib (the doctor)
5. l-tbiib haða(this doctor)
6. haðaka (that)
7. l-tbiib haðka (that doctor)
8. ha l-tbiib haða(this doctor (literally, this doctor this))
9. tbiibik (your doctor)
10. haða (this)
11. hak l-tbiib (that doctor)

Question 14

The speaker is standing in front a watermelon merchant. He pointed to one watermelon and said:

A: brabbi uʒin-l-i
 please weigh-to-me
 “Can you please weigh.for me.”

1. hak l-dillaʒa haði ka (that watermelon (literally,that watermelon that))
2. l-dillaʒa (the watermelon)
3. ha-l-dillaʒa (this watermelon)
4. dillaʒti (my watermelon)
5. l-dillaʒa haði (this watermelon)
6. haðika (that)
7. l-dillaʒa haðika (that watermelon)
8. ha l-dillaʒa haði (this watermelon (literally, this watermelon this))
9. dillaʒa (watermelon)
10. hak -dillaʒa (that watermelon)
11. haði (this)

Appendix V: Sample of coded text

Title: The devil and the blacksmith

Language: Tunisian Arabic

Primary coder: Amel khalfaoui

This text is a folk story written down from memory by a male native speaker of Tunisian Arabic in 2004. He wrote it in Tunisian Arabic using Arabic script.

#The devil and the blacksmith 001

θamma ʒmaʕa šhaab
there group friends
“There is a group of friends,”

kul jum fi-l-lil ji-t-qaabl-u
every day in-the-evening 3-refl-meet-p

fi garage saħib-hum l-ħaddad ja-ħki-w w j-nakt-u.
in garage friend-pos.3p the-blacksmith 3-talk-p and 3-telljokes-p
Every evening, they meet in the the garage of their blacksmith friend to talk and tell jokes.”

#The devil and the blacksmith 002

fi nhar mi-l-nharat
in day of - the-days
“One day,”

t-ħal mawðuʕ ʕla l - ʃ itan
refl-open.past.3sm subject on the-devil
“a topic about the devil came up.”

l-ʒmaʕa l-kul bda-w j-sibb-u fi- l-ʃ itan
the-group the-all start.past-p 3-curse-p in- the-devil
“The whole group started cursing the devil”

#The devil and the blacksmith 003

tlaffit saħib-hum l-ħaddad
turn.past.3ms friend-pos.3p the-blacksmith

w qal-il-hum ‘bi-l-lah ja ʒmaʕa
and say.past.3ms-to-3p “with-the-god voc group

jizzi-w kul ʃay t-waħl-u-h fi-l- ʃitan
stop-p every thing 2-blame-p-3ms in-the-devil

w huwa xati-h’
and he not-3ms

“Their friend the blacksmith and told them: ‘please people, stop it, you blame everything on the devil, and he is innocent’.”

#The devil and the blacksmith004

ajja zad-u l- ʒmaʕa ʃwaya w min baʕd
so stay.past-3p the-group little and from after

kul waħid haz ruħ-u w mʃa
every one take.past.3ms self-pos.3ms and go.past.3ms

‘tu-sbaħ ʃla xir tu-sbaħ ʃla xir’
2- have morning on good 2-have morning on good

“The group stayed a little longer and then everyone left ‘good night, good night’.”

#The devil and the blacksmith 005

wi-l-ħaddad j-ħaððir fi ruħ-u
and-the-blacksmith 3-prepare in self-pos.3ms

baʕ j-sakkir l-garage waʔ iða b-waħid dxal ʃli-h
to 3-close the-garage and with-someone enter.past.3ms on-3ms
“While the black smith was getting ready to lock the garage, someone came in.”

#The devil and the blacksmith006

[dialogue]

A: ʕaslama t-faððil ʃkun inti ?
hello 2-come in who you ?
Hello, come in. Who are you?"

B: ana l-ʃitan w rani min bikri qaʕid
I the-devil and emph from early staying.3ms

baħða-kum w smaʕt ħkajat-kum l-kul
near-2p and hear.past.1s story-pos.2p the-all
“I am the devil and I have been sitting close to you and the group and heard
all your stories.”

w ha-ni xall-it ħatta l-ʒmaʕa rawħu
and here-1s let.past-1s till the-group gohome.past.p

w ðhart-l-ik baʕ nu-ʃkr-ik xatir-hum l-kul
and appear.past.1s- to-2s to 1-thank-2s because-3p the-all

sabb-u-ni illa inti l-waħiid illi dafiʕ-t ʕli-ja
curse.past.3p-1s except you the-only one comp defend.past-1s on-1s

“Here I am, I waited till the group left home, and appeared to you to thank you,
because they all cursed me except you. You are the only one who defended me.”

#The devil and the blacksmith00 7

aja aʕ qawl-ik n-rud-li-k [ha-l-ħdid
so what opinion-pos.2s 1s-make-to-2s prox 1-the-iron

illi fi-l-garage l-kul³⁶ ðhab
comp in-the-garage the-all gold
“What if I turn all this iron in the garage into gold.”

³⁶ ha-l-ħdid illi fi-l-garage; RF1; ACT; 2; = The iron that is in the blacksmith’s garage

#The devil and the blacksmith 008

ahaa muʃ ħal. hakkaka n-nas l-kul j- ʃukk-u fi-k
no neg solution that way the-people the-all 3-suspect-p in-2s

w j-qulu “kifaʃ l-ħaddad s-tayna
and 3m-say how the-blacksmith refl-becomerich.past.3ms

fi-lila w-nhar .
in-night and-day

“No, [this is] not a good solution. That way, everybody will be suspicious of you and say ‘the balck smith got rich so quickly’.”

#The devil and the blacksmith009

ama ta-ʃrif ʃ kifaʃ rit- ʃ [aka l-mtarqa
but 2S-know how see.past.3ms-neg nonprox1 the-hammer

illi ta-ðrab bi-ha ʃla l-ħdid]³⁷
com 2-hit with-3fs on the-iron

“But, you know what, you know that hammer that you hit the iron with?”

ana baʃ n-rudd-uk t-dawi bi-ha
I fut 1-turn-2s.acc 2-heal with-3fs
“I will make you heal with it.”

#The devil and the blacksmith 010

ahawka illi tu-ʒʃ-u blasa ta-ðrb-u inti
so com 2-hurt-3ms place 2-hit-3ms you

b-[hak l-mtarqa]³⁸ ʃli-ha ja-rtaħ
with-nonprox1 the-hammer on-3fs 3ms-heal

³⁷ Aka l-mtarqa illi ta-ðrab bi-ha ʃla l-ħdid; RF2; ACT; 2; = the hammer that the blacksmith uses in his work.

³⁸ hak l-mtarqa; RF2; FOC; 5

w-akkaka ti-s-tayna w ma- j-ʃuk fi-k ħad
 and-like.that 2-refl-get.rich and neg-3ms-suspect in-2s someone
 “So whoever hurts somewhere, you tap him/her with that hammer on that place, and this way nobody gets suspicious about you.”

#The devil and the blacksmith 0011

min yudwa sbaħ [aka l-ħaddad]³⁹ tbiib
 from tomorrow bcome.past.3ms nonprox1 the-blacksmith doctor.
 The following day that blacksmith became a doctor.”

illi ʃand-u rukba tu-ʒaʃ fi-h
 com pos-3sm knee 3m-hurt in-3ms
 “If someone has a knee that hurts,”

ja-ðrbu [hak l-ħaddad]⁴⁰ bi-l-mtarqa ʃli-ha ja-rtaħ
 3ms-tap-3ms nonprox1 the-blacksmith with-the-hammer on-3fs.acc 3ms-heal
 “The blacksmith hits it with the hammer, and he heals.”

wi lli ʃand-u bard fi ðahr-u willa miʃt-u tu-ʒaʃ
 and comp pos-3ms cold in back-pos. 3ms or stomach-pos.3ms 3f-hurt
 “if a person has arthritis in his back, that balcksmith hit him on it with the hammer, and s/he heals; and if someone has a stomach pain”

#The devil and the blacksmith 012

w bda [aka l-ħaddad]⁴¹ ji-t - ʃ har fi-l-blaad]
 and start.past nonprox1 the-blacksmith 3m-rfl-bcome.famous in-the-country

ʕismaʃ jalli ma ti-smaʃ- ʃ l-ħaddad mtarqt-u
 listen voc neg 2- hear-neg the-blacksmith hammer-pos. 3ms

t-ʒammid l-maʕ
 3fs-freeze the-water

“That blacksmith started becoming famous in the country. Everybody is telling everybody else ‘Did you hear about the blacksmith’s hammer which has magical powers?’.”

³⁹ aka l-ħaddad; RF3; Act; 1; = the main character in the story

⁴⁰ hak l-ħaddad; RF3;FOC;1

⁴¹ aka l-ħaddad; RF3; FOC; 3

#The devil and the blacksmith 013

aw l-sultan mtaʕ [aka l-blad aḏika]⁴² ʕand-u bint-u
so the-sultan pos nonprox2 the-country nonprox2.3fs pos-3ms daughter-pos.3ms

t-ʕani min wʕiʕa fi ras-ha ḥar-u fi-ha l-tubba
3f-suffer from pain in head-pos.3fs worry-past.3p in-3fs the-doctors
“The Sultan of that country has a daughter who suffers from migraine that the doctors
couldn’t treat.”

#The devil and the blacksmith 0 14

nash-u-h l-ḥaʕja mtaʕ-u
advise-past.3ms-3ms the-advisors pos-3ms

qalu-l-u ‘bint-ik ma-j-dawi-ha kan l-ḥaddad’
tell-past.3p-to-3ms “daughter-your neg-3m-treat-her only the-blacksmith.”
‘They told him “the only one who can treat your daughter is the blacksmith”.’

#The devil and the blacksmith 015

∅ stadʕa-w l-ḥaddad li-l-qsar
invite-past.3p the-blacksmith to- the-palace
“They invited the blacksmith to the palace.”

∅ dxal li-l-qsar ∅ farḥ-u bi-h
enter.past.3ms to-the-palace welcome-past.3p with-3ms
“He entered the palace and they welcomed him.”

#The devil and the blacksmith 016

∅ hazz-u-h li-l-bnaja
take-past.3p-3ms to-the-girl
“They took him to the girl.”

ʕbid ∅ [aka l-mtarqa mtaʕ-u]⁴³
take out-past nonprox1 the-hammer pos-3ms
“He took out his hammer.”

⁴² aka l-blad aḏika, RF4; FAM; 1; = the country where the story is taking place.

⁴³ aka l-mtarqa mtaʕ-u; RF2; FAM; 1

waxxir w-qaddim w nzil
move back.past.3ms and- move.forward.past.3ms and push.past.3ms

ʕla [aka l-bnaja]⁴⁴ fi ras-ha
on nonprox.1 the-girl in head-pos.3fs
“He moved back and forth and hit that girl on the head.”

ʕab-ha jabsa
turn.past-3fs hard
“He killed her.”

#The devil and the blacksmith 017

dar-u bi-h l-ħurras mtaʕ l-qsar
turn-past.3P with-3fs the-guards pos the-palace

w hazzu-h li-l-ħabs
and take-past.3p-3ms to-the-jail
“The palace guards surrounded him and took him to jail.”

#The devil and the blacksmith 018

w huwa akaka fi-l-ħabs w tal ʕli-h l-ʕitan
and he like that in-the-jail and appear-past on-3ms the-devil
“While he was in jail the devil appeared to him.”

dar-l-u l-ħaddad w qal-l-u
turn-to-him the-blacksmith d say-past-to-3ms

“tawwa [ħaði]⁴⁵ ʕamla ta-ʕmil-ha fi-ja?”
now prox2.3fs deed 2-do-3fs in-me
“The blacksmith turned to him and said ‘why have you done this to me?’”

⁴⁴ aka l-banaya; RF5; ACT; 1; = the daughter of the Sultan

⁴⁵ ħaði; RF6; ACT; 2 = the blacksmith being in jail

#The devil and the blacksmith 019

xzar-l-u l -ʃitan w qal-l-u
look-past-to-3ms the-devil and say-past.3ms

‘tawwa [haði]⁴⁶ ħkaya xayif min-ha?’
“now prox2.3f s story afraid from-3fs.
“The devil looked to him and said ‘does this thing scare you?’”

maw huma yudwa baʃ j-hizzu-k li-l-ma ʃ nqa
emph hey tomorrow fut 3p-take-2s to- the execution room,
“So tomorrow, they will take you to the execution room,”

w j-qulu-l-k ʃahhid
and 3p-say-to-2s say l-ʃahada
“and ask you to say l-ʃahada”

inti qul-l-hum ma n-ʃahid- ʃ “fi ʃahhid minna...”
you tell-to-3p neg 1s-say.l-ʃahada-neg “in say.l- ʃahada from.here.”
“and you tell them that you won’t say l- ʃahada, they will say “say ʃahada.””

tawwa Ø j-raʔu-k li-l-ħabs
so 3p-return-3s to-the-jail
“so, they will put you back in jail.”

w inti aʃmil l-hum kul yum nafs l-ħkaya
and you make to-them every day same the-story
“and you do to them the same thing everyday.”

#The devil and the blacksmith 020

aya fraħ [aka l-ħaddad]⁴⁷ bi-l-fikra
so bcome-past happy nonprox1 the-blacksmith with-the-idea
“The blacksmith was happy with the idea.”

⁴⁶ haði; RF6; ACT; 2

⁴⁷ aka l- ħaddad; RF3; FAM; 1

min yudwa Ø hazz-u-h li-l-maʃnqa
from tomorrow take.past-3p-3ms to-the-execution room
“The following day they took him to the execution room.”

Ø qal-u-l-u ‘ja fulan ʃahhid’
say.past-3p-to-3ms voc person say 1 - ʃ ahada
“They told him ‘say I-ʃahada’”

#The devil and the blacksmith021

Ø qal-l-hum ‘ma n-ʃahhid- ʃ’
say.past-to-3p “neg 1- say 1-ʃ ahada-neg
“He told them ‘I won’t say I - ʃ ahada’.”

marra θnin walla-w Ø nizz-u ʃli-h
once twice become.past-3p puʃ.past-3p on-3ms
“They tried once and twice and then executed him”

w maat ki-l-ʒifa
and die.past.3ms like-the-corpse
“and he died like a corpse.”

w [aðika]⁴⁸ nhayat illi j-tabbaʃ l-ʃitan ja-lʃn[u w-yaxzi-h
and prox2.3fs end comp 3-follow he-devil 3m-damn-him
“And that is the end of that who follows the devil, may God damn him”

⁴⁸ aðika; RF 7; ACT; 2; = the event of the black smith being executed