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Contents

Demonstratives in Narrative Discourse: A Taxonomy of Universal Uses

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1. Introduction[1]

Little is known regarding the similarities and differences in the use of demonstratives exhibited by various unrelated languages. The standard procedure in reference grammars is to give a few examples for straightforward situational use (pointing to visible entities located at various degrees of distance away from the speaker), and to add a remark stating that the demonstratives may also be used anaphorically to refer back to a referent previously introduced in the discourse. This procedure is based on the assumption — also underlying much of the theoretical work on demonstratives[2] — that straightforward situational use is, in some sense, the basic use of demonstratives and that anaphoric use is derived from it. Assuming this, then, the fact that a demonstrative may be used anaphorically becomes a noteworthy fact. But is this really the case? Are demonstratives not universally amenable to anaphoric use? How about other frequently noted uses of demonstratives such as the discourse deictic use? Put more generally: Which uses of demonstratives may be safely assumed as universally attested in natural languages? Which are language specific?

This paper reports some of the problems encountered in an attempt to answer this question, as well as some preliminary results. The focus is on the first part of the question, i.e. the universal aspect.

The analysis is based on a fairly smallish corpus of natural discourse data from 5 languages, which is described in Section 2. It is limited to non-conversational (primarily narrative) discourse since conversational data is not

available for any of the languages except English. Given the number of languages and the size of the corpus for each language, it is clear that this study is exploratory in nature.

One major problem concerning this topic is the difficulty that sometimes occurs in distinguishing demonstratives from 3rd person pronouns and definite articles. As is well-known, in almost all cases where one is familiar with the historical sources, definite articles as well as 3rd person pronouns historically derive (are grammaticized) from demonstratives. I will not discuss here in detail the intricate interrelations between demonstratives, definite articles and 3rd person pronouns. However, a brief discussion regarding the major distinctions between these three classes of grammatical elements (henceforth: *gram classes*) is necessary in distinguishing the 'true' or full demonstratives from the other two gram classes (see Section 3). Furthermore, the fact that definite articles and 3rd person pronouns are grammaticized demonstratives constitutes the basis for the following discussion and will be repeatedly addressed.

Another issue concerns the distinction between pronominal and adnominal (adjectival) uses of demonstratives. In particular (see Section 4), the use of demonstrative pronouns generally seems to be more restricted than that of adnominally-used demonstratives (at least in non-conversational discourse). This restriction can be seen in two respects: Quantitatively, demonstrative pronouns tend to occur less frequently than adnominally-used demonstratives. Qualitatively, there are fewer contexts for use of demonstrative pronouns than for adnominally-used demonstratives. Furthermore, this tendency is also occasionally reflected in the morphological make-up of the demonstrative paradigm: In some languages, the pronominal forms are morphologically more complex than the adnominal ones and are clearly derived from the latter. The opposite, however, does not seem to occur.

The major problem addressed here is in identifying and classifying different uses of demonstratives (Section 5). Four such uses are identified in which demonstratives may or have to be used in all of the languages in the sample, and which can be reasonably assumed as universal. Three of these, i.e. the situational, tracking (anaphoric), and discourse deictic uses, are well-known from the literature. The fourth, called *recognitional use* in this paper, has until now received little attention despite the fact that it is a fairly prominent use for one (usually the distal) demonstrative in each of the languages under investigation. This use is characterized by the fact that the

intended referent has to be identified via specific, but presumably shared, knowledge.

The relative independence and viability of each use is shown by the fact that there are special markers or constructions for each of them in at least one of the languages of the sample. Furthermore, various subtypes and language specific idiosyncrasies are noted for each use. In Section 5.1, it is argued that the indefinite (or introductory) *this* in English should be considered a subtype of situational use. In Section 5.2, it is hypothesized that the situational and the discourse deictic uses have more in common than usually assumed, i.e. the feature of establishing a new referent in the universe of discourse. Section 5.3 discusses issues surrounding the tracking use, and Section 5.4 argues for the existence and viability of recognitional use.

The final section (Section 6) provides a summary by way of introducing two supercategories, each comprising two of the four major types just mentioned. This is followed by a brief discussion of some implications and consequences of the proposed classification for the following issues concerning demonstratives: universality of uses, the presumed basicness of situational use, further grammaticization, and markedness.

2. Data

The data base for this paper consists mostly of oral narratives. This is due to the fact that this genre is the one most readily available for cross-linguistic comparison. Preference is given to those narratives in the transcripts for which pause units and perhaps other intonational features are indicated. Pause units are important in making a rough comparison of the overall frequency of demonstratives across various languages since these units are fairly easily and uncontroversially identifiable in any specimen of spontaneous spoken language.

The languages discussed in this study and the sources of the data are the following:

English: The Pear Stories in the appendix to Chafe (1980) which, apart from satisfying the criteria mentioned above, are also easily accessible for cross-checking interpretation of the data. Examples from this source are preceded by a number according to the following format: First, a Roman numeral indicates the speaker, followed by an Arabic number indicating the

pause unit. Thus, an example marked XII.23 contains the 23rd pause unit of the 12th speaker's Pear narrative. It is assumed throughout this paper that the reader is familiar with the story, including its participants and props.

Ik, a Kuliak language spoken in north-eastern Uganda: Data from Serzisko (1992), which contains two complete interlinearized narratives segmented into pause units and paragraphs. Pauses have been measured instrumentally. The texts collected by Serzisko stand out in their almost complete lack of filled pauses.

Ik is generally considered a VSO language (see Serzisko (1992: 164-167, 173-176) for further evaluation of such a claim). There is no definite article in Ik. Verbs are inflected for person. The ending for 3.SG, however, is zero. Furthermore, free emphatic forms exist for the 3.SG as well as the 3.PL personal pronouns, which differ from the demonstratives.

Nunggubuyu, a non-Pama-Nyungan language of northern Australia: data from Heath (1980a), where the pause units (indicated by commas) have not been instrumentally established but merely by acoustic impression.[3] So far, the uses of demonstratives have been systematically checked and classified only in the first six narratives. Heath (1984: Chapt. 7), however, provides useful statistics for all the demonstratives appearing in the texts in Heath (1980a). Although these statistics do not directly pertain to the issues discussed here, they provide some indirect evidence regarding these topics.

Nunggubuyu is a so-called non-configurational language characterized by extensive class-marking on both nominals and verbals (combined with person-marking in the case of the latter). Apart from a fairly complex system of demonstratives, a complete set of free pronominal forms exists for all persons and classes. There are no articles in this language.

Tagalog, a well-known Austronesian language of the Philippine type: data consist of two spontaneous narratives, (Readings 13 and 15) from the excellent textbook by Wolff (1991), which were recorded on location in the Philippines, and a narrative I recorded in the province of Batangas in 1984. The original recordings for the two narratives from Wolff are included on the cassettes accompanying the textbook. I have retranscribed them from these tapes, including the false starts and deviations which had been deleted in the textbook version, and have measured the pauses instrumentally.

Tagalog is considered a predicate-initial language. The morphosyntactic distinction between nouns and verbs is but weakly developed. All referential expressions — except those preceded by a preposition — are marked by a specific article occurring phrase-initially (also simply called NP-marker). There is no person-marking on predicates. Personal pronouns are frequently used, and 3rd person pronouns are clearly distinct from demonstratives.

Indonesian, another well-known Austronesian language which is quite different from Tagalog: data consist of three texts (one a personal narrative, one a narrative of two events that happened during the schooldays of the storyteller, and one a procedural text) which I recorded myself in Palu (Central Sulawesi) in 1993. Pauses have been measured instrumentally. The speakers are bilingual and trilingual, respectively, speaking local Sulawesi languages in addition to Indonesian. Both acquired Indonesian in their childhood, have received university education in Java and are government officials. They use Indonesian most of the time both in public and at home.

Indonesian is generally considered a SVO language. The distinction between nouns and verbs is much more clearly developed here than in Tagalog. Verbs are not person-marked. No articles exist. Personal pronouns are frequently used. 3rd person pronouns are clearly distinct from demonstratives.

Despite the fact that all these texts may be broadly characterized as oral narratives, it is obvious that these data-sets are far from homogeneous, both quantitatively and qualitatively. For example, the Pear Stories, given the way they are elicited, may well be considered a genre of their own and are clearly radically different from Nunggubuyu myths.

Given the nature of the materials, it is clear that quantitative generalizations will be of extremely limited value. In the appendix, token numbers for the uses of demonstratives in these data-sets may be found. This gives a glimpse into the frequency distribution of the forms and functions investigated. I generally do not offer percentages since I do not consider the nature of the corpus and the number of tokens sufficient for making statistically sound frequency statements.

Thus, the focus of this study is the qualitative analysis of the demonstratives occurring in these data-sets. That is, the goal is to account for all the occurrences of demonstratives in these data-sets, with special emphasis on those instances which are not easily subsumed under one of the generally known usage types.[4] Furthermore, note that for the primary purpose of this paper — to establish potentially universal types of demonstrative uses — a single example exemplifying the use in question is sufficient.

In order to further broaden the data-base and test the validity of claims across different genres, I will occasionally draw on larger corpora of more formal varieties for two of the languages. For English, this is the SUSANNE-

corpus prepared by G. Sampson (Release 1, 9/1992), a convenient, fully analyzed (tagged) excerpt of the Brown Corpus of written American English (ca. 128,000 words evenly distributed among 4 genres (press, belle lettres, learned writing, and fiction)). For Tagalog, these are the texts in Bloomfield's (1917) grammar, all of which have been dictated by a single, highly educated speaker. These texts (24,426 words) consist of folk tales and a few personal narratives. Despite their age and the circumstances of their recording, they may still be considered representative of a modern formal variety of Tagalog (see Wolff 1987 for further assessment).

3. Defining Characteristics of Demonstratives

As mentioned above, definite articles and 3rd person pronouns are, in many languages, historically derived from demonstratives. The pervasiveness of this grammaticization process makes it sometimes difficult to decide whether a given element is to be considered a demonstrative, an article or a pronoun. It is rather common in descriptive grammars to encounter remarks such as 'demonstrative X is sometimes used like a definite article'. Thus, 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. Since we are interested in cross-linguistic generalizations about the use of 'true' demonstratives, it is necessary to briefly discuss some characteristics distinguishing demonstratives from articles and 3rd person pronouns. The following two characteristics seem to allow for a cross-linguistically valid and applicable identification of 'true' demonstratives:

a. the element must be in a paradigmatic relation to elements which — when used exophorically — locate the entity referred to on a distance scale: as proximal, distal, etc.
b. the element should not be amenable to the following two uses which are characteristic for definite articles:[5]
   - *larger situation* use: demonstratives are generally not usable for first mention of entities that are considered to be unique in a given speech community (**Yesterday, this/that queen announced ...*, **This/that sun was about to approach its zenith*).[6]
   - *associative-anaphoric* use as exemplified by the following example from the Pear Stories where replacing the definite article in *the branch* by a demonstrative would sound fairly odd:

XIII.11. on a ladder, . . picking pears, {.15}
XIII.12. from **a tree**, and putting it in his . . apron, {.25}
...
XIII.20. it's like they have a microphone right {laugh begins} next to **the branch** so you could hear him picking off thee {.35}

A simpler version of the first prerequisite would state that only those elements locating the entity referred to on a distance scale are considered demonstratives. The reason for not doing so is this: In several languages, there are elements which share highly specific morphosyntactic features with distance-sensitive demonstratives and, for this reason, have to be considered demonstratives, though distance is irrelevant to their semantics. An example, further discussed below, is the so-called anaphoric or 'remember' demonstrative common in Australian languages. Another example, involving further complications not to be explained here, are demonstratives such as the German *dies/e/er* or the French *ce/cette*, which are neutral with respect to distance.

As for the second prerequisite, note that there are other contexts of use which do not permit the use of demonstrative determiners. One such further diagnostic context is a first mention in the subject position of generic statements such as *The mango season is in February and March*. In my data however, no examples of generic statements are found. Furthermore, descriptive grammars of lesser known languages — in my experience, at least — never contain information concerning this point. Thus, this diagnostic context is of only limited practical value.

Given these criteria, it follows that I consider all elements which are only used in one or more of the four uses discussed in Section 5 as 'true' demonstratives. In particular, elements which only allow for tracking ('anaphoric') use are demonstratives and not a kind of article (as often assumed or implied in the literature) if they are in a paradigmatic relation to distance-marked elements (thus fulfilling the first prerequisite). Tracking devices such as English *aforementioned* or Indonesian *tersebut*, on the other hand, are not demonstratives since the first prerequisite is not fulfilled for these elements.

Unfortunately, the diagnostic contexts for distinguishing demonstrative and 3rd person pronouns — at least the ones that have come to mind so far — are of limited practical value since they are marginal as well in natural discourse. The following contexts may be considered diagnostic for distinguishing demonstrative and 3rd person pronouns:

First, 3rd person pronouns may be used in associative-anaphoric contexts, as illustrated by the following (constructed) example:

(1) GER *Vor meinem Büro stand ein Ehepaar. Er war groß,* in front of my office stood a couple. He was tall, *breitschultrig ...*[7] broad-shouldered

Unlike associative-anaphoric use of definite NPs, however, this use is extremely rare for 3rd person pronouns; and probably possible only in a few languages.

Second, 3rd person pronouns allow for so-called *pronoun of laziness* (or *bound-variable*) readings where the pronoun acts as a placeholder for its antecedent but does not refer to the same entity as its antecedent and thus is not co-referential with it. Compare the following example from Hintikka & Carlson (1977: 16):

(2) John Doe bequeathed the first house he built to his wife, but Richard Roe deeded it (*this/*that)[8] to his daughter.

Third, in a few languages 3rd person pronouns allow for expletive use as in:

(3) a. It is true that we never talked about this before.
b. *This/that is true that we never talked about this before.

However, the number of languages where expletive use is possible for a 3rd person pronoun seems to be fairly small. Among the languages I am somewhat familiar with it is only modern European languages such as English, French and German where this use occurs.

Fourth, the discourse deictic use (reference to an event or proposition) of 3rd person pronouns seems to be more heavily constrained (and less frequent, cf. Section 5.2) than that of demonstrative pronouns. For example, in the formula *that is* (or its Latin equivalent *id est*), *that* can not be substituted by *it*. Furthermore, the English *it* may never be used for forward (cataphoric) reference,[9] cf. for example *this/*it is what I believe:...* or *she claimed this/ *it:...* However, not all demonstratives are amenable to such a use. The English *that*, for example, is generally claimed not to allow for a cataphoric use.[10] The exact nature and extent of other constraints on the discourse deictic use of 3rd person pronouns are not yet clear to me.

To conclude this discussion on pronouns, let us briefly apply the mentioned criteria to a case where it is notoriously unclear whether the element in question is a 3rd person pronoun or a demonstrative, i.e. the case of Latin *is, ea, id*. This element is generally dealt with under the heading *demonstratives* (together with the clear demonstratives *hic*, *iste* and *ille*). The most common name applied to this element is *anaphoric pronoun* or *anaphoric demonstrative*, but then it is also said that it functions like a 3rd person pronoun. The confusion is not surprising given the fact that the most common use of 3rd person pronouns is anaphoric (tracking) use. Applying the criteria established above it is clear that *is, ea, id* is not a 3rd person pronoun.[11] To my knowledge, no associative-anaphoric, *pronoun of laziness*, or expletive use of this pronoun is mentioned in the literature. Furthermore, free, unconstrained use is made of this pronoun for discourse deixis. Note, in particular, the high-frequency use in the formula *id est* and the fact that it may be used cataphorically as in:

(4) LAT *cred-o, **id** cogit-asti:*
believe-1.SG.PRES ANAPH:ACC.SG.N think-2.SG.PRF
'quidvis satis est dum viv-at modo'
whatever enough BE.3.SG.PRES as_long live-3.SG.PRES just
I guess you thought this: 'Whatever, it's okay, as long as she is just alive' (Ter. Heaut. 641)

The criteria mentioned in this section are all qualitative in nature and fairly rigorous, i.e. imposing clearcut boundaries between the three gram classes in question. This is surely not the entire story. Given the fact that demonstratives are grammaticized time and again into definite articles and 3rd person pronouns, one would expect transitional phenomena and borderline cases. In order to deal with these adequately, one would need a much more fine-grained battery of criteria. That would include criteria that allow stating significant changes within usage types of demonstratives. For example, if it could be established that there are quite strict constraints on tracking use for 'true' demonstrative pronouns, then any relaxation of these constraints for a given demonstrative pronoun in a given speech variety could be taken as evidence for the claim that this demonstrative is on the way to becoming a 3rd person pronoun. This could be further supported by quantitative evidence (increased frequency of use of the demonstrative in question). Frequency certainly is at the heart of the kinds of remarks, mentioned above, such as 'demonstrative X is used like a 3rd person pronoun'. But to firmly ground

such remarks, one needs a well-supported scheme of what typical frequencies are for demonstratives in respect to an overall corpus, a certain genre, a certain use in comparison to other uses, etc. I will not be able to present such a scheme here, but the following two sections address issues I consider relevant to such a scheme.

4. Demonstrative Adjectives and Demonstrative Pronouns

It is often assumed that the pronominal use of demonstratives is in some sense more basic than their adnominal use.[12] This, however, does not seem to be the case. On the contrary, adnominal use tends to be clearly more frequent than pronominal use. Furthermore, if there is any formal distinction at all between pronominal and adnominal forms, the former tend to be morphologically more complex than (and are sometimes clearly derived from) the latter. Finally, for pronominal use, restrictions exist in various languages regarding the entity referred to by a demonstrative. I am unaware of such restrictions for adnominal use.

Let us first address the last point. As well-known, the English demonstratives may not be generally used in pronominal reference to humans except in equative clauses (cf. Halliday and Hasan 1976: 62, Fillmore 1982: 55).[13] Similar constraints hold true in Japanese, Chinese, Indonesian, and probably many other languages.[14]

Turning now to the second point, first note that, in the majority of languages, the same form may be used pro- and adnominally, e.g. most Indo-European languages (with the exception of the Romance languages), Austronesian languages, Australian languages, Papuan languages, Chinese, Turkish, etc. In a few languages, the pronominal and the adnominal form are clearly distinct and equally complex, as in French (*celle* vs. *cette*). Both cases are neutral with respect to the claim made above. In some languages, however, the pronominal forms are clearly derived from the adnominal forms. In Ik, this is done by combining the demonstrative root with the nominal substitute *ɗa* 'the one' (cf. Serzisko 1992: 187,198). The paradigm for the singular appears in Figure 1.

	ADNOM	PRO
PROX	na	ɗana
DIST	ke	keɗa

Figure 1. Singular of demonstratives in Ik

Another example is provided by the Dravidian languages where the derivation is synchronically no longer transparent, but historically, the demonstrative pronouns consist of a demonstrative root (usually PROX *i:* and DIST *a:*) and, supposedly, former nouns denoting 'man', 'woman' etc. (cf. Caldwell 1913: 420f). The following forms of the distal demonstrative from Kannada (Sridhar 1990: 209) may suffice as an example:

ADNOM	DIST.M.NOM.SG	DIST.F.NOM.SG	DIST.NOM.PL
a:	avanu	avaLu	avaru

Figure 2. Forms of the distal demonstrative in Kannada

As for the frequency distribution, it turns out that across the sample on which this study is based, pronominal use makes up about one third of the uses of demonstratives, adnominal use thus being twice as frequent as pronominal use. See Table 1. The number of pronominal uses in Ik is particularly low since in this language discourse deixis — a cross-linguistically major use of demonstrative pronouns — is expressed by an adnominal construction (see below, Section 5.2).

Table 1. Adnominal vs. pronominal uses of demonstratives in the sample

	ADNOM	PRO	TOTALS
Pear Stories	122	52	174
Ik	89	8	97
Indonesian	73	27	100
Tagalog	42	27	69

Nunggubuyu poses a special problem because of the lack of configurationality in this language (cf. Heath 1984: 497-506; Heath 1986). That is, it is not clear what should be counted as an adnominal use, and what as a pronominal one.[15] If one considers a demonstrative and a co-referential noun occurring within the same pause unit as the Nunggubuyu equivalent of an adnominal use, then the frequency distribution in the Nunggubuyu sample does not correspond to that in other samples. Rather, 'pronominal' and 'adnominal' uses are more or less equally frequent in the Nunggubuyu sample (27 and 26 tokens, respectively). This may be due to the comparatively high number of situational uses (in direct speech) in the present sample, but one certainly needs a much larger sample to substantiate facts.

The frequency data listed in the table above, of course, are also not sufficient for firmly establishing this tendency. Let us, then, briefly look at two larger corpora for a broader perspective. Unfortunately, the larger corpora available to me represent much more formal varieties of speech and thus are not directly comparable to the data listed above.

In the SUSANNE-corpus of written English (cf. the final paragraph of Section 2 above), the said tendency is also manifest, albeit with some interesting deviations. The relevant data are given in Table 2.

Obviously, conspicuous differences exist between distal and proximal demonstratives and, for the proximal ones, between singular and plural forms. These differences are due to three factors:

1. Only the singular forms of the demonstrative pronouns are amenable to discourse deictic use, which accounts for the majority of the pronominal uses of these forms. Examples:

   G01:0190 Most of them are Democrats and nearly all consider themselves, and are viewed as, liberals. **This** is puzzling to an outsider conscious of the classic tradition of liberalism, because ....

Table 2. Adnominal and pronominal uses of demonstratives in the Susanne corpus

	ADNOM	PRO	TOTALS
THAT	105 (44%)	132 (56%)	237
THOSE	32 (37%)	55 (63%)	87
THIS	381 (64%)	215 (36%)	596
THESE	180 (82%)	39 (18%)	219
TOTALS	698 (61%)	441 (39%)	1139

G02:1380 The concept of nationalism is the political principle that epitomizes and glorifies the territorial state as the characteristic type of social structure. But it is more than **that**.

2. Only the distal demonstratives are used in constructions with establishing modifiers (*those who/that which* and related constructions), as in:

   A03:1680 **Those** who backed a similar plan last year hailed the message.

   A03:0920 Similar payroll tax boosts would be imposed on **those** under the railroad retirement system.

   A08:0470 In this historic square are several statutes, but the one that stands out over the others is **that** of Gen. Andrew Jackson, hero of the Battle of New Orleans.

   53 of the 55 pronominal tokens of *those* and 39 tokens of pronominal *that* are of this kind. For *those*, then, this usage clearly accounts for the surprisingly high proportion of pronominal uses.

3. Unlike for all the other forms, the major use of *these* is the tracking use. All but 5 of the 39 tokens of *these* are of this type, for example:

   G18:0020 AMONG THE RECIPIENTS of the Nobel Prize for Literature more than half are practically unknown to readers of English. Of **these** there are surely few that would be more rewarding discoveries than Verner von Heidenstam, the Swedish poet and novelist who received the award in 1916 and whose centennial was celebrated two years ago.

Note, incidentally, that in this example, a demonstrative is used in reference to humans, contrary to the general rule reported at the beginning of this section. Nevertheless, this is clearly an 'exception'.

What is of more interest here is the fact that the extremely low percentage of pronominal uses for *these* seems to be due to the fact that its primary use is the tracking use. Or, conversely, the higher percentages for the other forms of the demonstrative are due to the fact that they are amenable to more varied uses. These are clearly genre-dependent. Both extensive discourse deixis as well as the establishing modifier-construction are characteristic of planned speech.

Let us now turn to the other larger corpus: Bloomfield's Tagalog texts. Here, a tendency for pronominal use to be about half as frequent as adnominal use of demonstratives is *not* discernible. Rather, adnominal and pronominal uses appear with roughly the same frequency; cf. Table 3.

Table 3. Adnominal and pronominal uses of demonstratives in Bloomfield's Tagalog texts[16]

	ADNOM	PRO	TOTALS
PROX	109	125 (43)	234
MED	3	2 (2)	5
DIST	68	12 (7)	80
TOTALS	180 (56%)	139 (44%)	319

This corpus is conspicuous for its extremely frequent use of the proximal demonstrative *pronoun* for tracking participants. Of the 125 tokens for this pronoun, 43 are discourse deictic, 6 situational and 76 tracking. This is the largest proportion of pronominal tracking use in any of the samples (examples and discussion in section 5.3). The medial demonstrative occurs only in direct speech.

The data presented in this preliminary exploration of frequency distributions make clear that there are various factors involved in the differences in distribution between adnominal and pronominal uses, and that there is no straightforward way to establish a typical distribution for these two formal classes. Neverthless, since the skewings in the larger corpora are due to isolatable, genre-dependent factors, it still seems worthwile to follow up on the hypothesis that, in accordance with the facts discussed at the beginning of this section, pronominal use is, in general, distinctly less frequent than adnominal use and that specific factors are involved if this does not hold true.

5. Major Usage Types of Demonstratives

This section presents the four types of demonstrative uses which account for nearly all uses of demonstratives in the data-sets described above. My concern is mainly with adnominal uses, since these make up the majority of uses in the sample and are also more varied than the pronominal ones.

Several considerations have been proposed as relevant for the classification of demonstrative uses in particular and the function of (definite) NPs in general. Apart from the supposedly basic distinction between situational and non-situational uses on which most authors agree, there is no generally accepted schema for the further classification of demonstrative uses. I am

aware of three proposals which specifically concern demonstratives. Halliday and Hasan (1976: 57-76) focus on non-situational uses (endophora), in particular, on uses providing for textual cohesion. Within the non-situational uses, their major distinction is between anaphora and cataphora. Fillmore (1982: 47-57) is primarily concerned with morphosyntactic aspects and situational use of demonstratives. As for non-situational uses, he identifies the following: text reference (called discourse deixis here), shared vs. unshared knowledge (the former corresponding to my *recognitional use*), serial order (contrastive tracking) and 'others'. Hauenschild (1982: 178) bases her classification on "the manner of fixing the referent of the noun phrase". There are three major categories to this classification, i.e. pragmatic (situational and 'pure' discourse deixis), semantic (tracking and 'impure' discourse deixis) and syntactic (main clause head of relative clause) uses (1982: 172-174).

Instead of discussing in detail the pros and cons of these proposals and other proposals regarding the function of (definite) NPs in general, let me just briefly list the major criteria or categories found in many of these proposals:

- formal criteria: pronominal vs. adnominal; simple vs. complex NP;
- information flow categories[17];
  - type of context (linguistic, general knowledge, etc.);
  - activation state (given, new, in focus, etc.);
  - discourse function (tracking, identifying, etc.);
- referent type (entity, location, linguistic entity (word, text segment, etc.), proposition, etc.).

The following classification of demonstrative uses is based primarily, but not exclusively, on discourse function. The other criteria are also invoked in establishing subtypes, but none of these criteria is applied in a rigorous way. Instead, the major consideration — arrived at after quite extensive experimentation with all of the criteria just mentioned — was the attempt to capture clusters of formally interrelated uses. That is, the use of the same marker or construction for apparently different uses is considered a strong argument for subsuming both uses in one major category. This holds true in particular for constructions showing evidence of further grammaticization.

5.1. Situational use

Situational use, i.e. reference to an entity present in the utterance situation, is characterized by two features: First, it involves a deictic center and, correla-

tively, the phenomenon of "taking a point of view" (Fillmore 1982: 38). Second, it serves in establishing a referent in the universe of discourse or, as Lyons (1979: 102) says, it is "one of the principal means open to us of putting the intensional correlates of entities into the universe of discourse". In languages where more than two demonstratives exist, there are usually some which are amenable only to situational use. For the languages of the sample, this is the case for Nunggubuyu, where the distal demonstrative may be used only in this way (cf. Heath 1984: 270).

Situational use is possible on various levels of displacement and shifts of perspective in the context of non-conversational discourse. First, it is possible to refer to people or things which are actually present in the setting where the narrative takes place, cf. the following example from Nunggubuyu (speaker switches to English in NUN122):

NUN120 *niwayawayamangi niwayawayamangi wiyindangany{}*
i -RED=wayama -ngi wiyindangany
3.M.SGa-RED=proceed-PAST2 Wiyindanagany
went along (to) the place Wiyindangany.

NUN121 *wiyindangany{}*
wiyindangany
Wiyindanagany
Wiyindangany,

NUN122 ***this one** country{}*
this man's country

Heath (1980a: 43) comments on this example: "A man of the Murungun clan was present at the recording; Wiyindangany is in Murungun country."

There are several examples like this in Heath (1980a), including five references to the recording linguist (cf. Heath 1984: 280). Haviland (1992: 28-34) presents further interesting extensions of this use, which he calls *local anchored space*. This includes the possibility of using a proximate demonstrative and a pointing gesture in reference to a non-present (actually deceased) major participant of the narrative, in which the demonstrative and pointing gesture are directed towards the site where the house of this participant formerly stood.

Another context where demonstrative reference to locations in the utterance situation is made is the indication of distance or height measures; as seen in the following examples from the Pear Stories and Nunggubuyu, respectively:

X.70. they he had like wicker baskets, about **this tall**. {.65}

NUN171 *he been tie 'em up niwuwaba:*{}
niwu =waba-V
3.M.SG_ANA(wu)a=wrap-PAST2
he tied up some of it into a bundle (as a torch),

NUN172 ***yuwa:ni** ngunyju **ya:ni***{}
yuwa:-ni ngunyju ya: -ni
DIST -ANA like PROX-ANA
It was about this long (speaker indicates two points representing the length of the stringy bark torch).

This use is especially common in languages such as Nunggubuyu, which lack abstract units of linear measure such as 'meter' (cf. Heath 1984: 332).

Related to this use is demonstrative reference to a part of the speaker's body in order to indicate where something happened to a protagonist ('She hit him here (on the back)'). This, however, is usually done with demonstrative adverbs, thus making it not directly relevant to the present discussion (see Heath 1984: 330 for some examples from Nunggubuyu).

Following Hauenschild (1982: 173), I would also include self-reference to a linguistic unit or act (*this article*, *in this book*) within situational use. Examples from the sample include the following:

XII.16. it's very funny to make **this** {.35}
XII.17. **telling**. {3 .15 {.9} A—nd u—h {1.25 . . . tsk}}

IND1.1 ***ini** ceriteranya waktu*{1.2}
PROX story-3.SG.POSS time
This is a story from the time

This use is sometimes considered a subtype of the discourse deictic use due to the type of referent involved. But apart from the reflexive component, I cannot detect a major difference between this use and a 'straighforward' situational use (pointing to a book and saying *this book*). Likewise, what is the difference between a door on which is written *This door may only be opened in case of emergency* and an article in which the first line reads *In this article...*? Furthermore, the demonstratives and constructions which may be used in this way are a proper subset of those generally encountered in situational use. At least I do not know of any special constructions or demonstratives for self-reference to linguistic units.

In the preceding examples, the demonstratum, though not necessarily the referent,[18] was actually present in the utterance situation. We may now turn to

a kind of situational use where the demonstrative refers to an entity in a narrated situation rather than the actual utterance situation. The most common of these uses is in direct speech, and thus common enough to need no further discussion and exemplification.

While direct speech involves only a temporary and usually clearly indicated shift from the utterance situation to the narrated situation, it is also possible to shift the whole narrative perspective and to pretend that the narrated event is actually happening right in front of the narrator and the audience. This has been called *Deixis am Phantasma* by Bühler (1934: 121ff). Such a shift does not have to be complete, but allows for various intermediate degrees. As Fillmore (1981: 158) points out, deictics are among those elements for which such a shift is very common. The following is an example from the Pear Stories:

X.89. And he's heading . . you see a scene where he's . . coming on his bicycle **this way**, {.5}

More examples and discussion can be found in Heath (1984: 328-331) and Haviland (1992) for Australian languages, Hanks (1990: 217-223) for Yucatecan Maya, and Mithun (1987: 189f) for Tuscarora.

A special instance of *Deixis am Phantasma*, I maintain, is the introductory (first mention) use of a proximate demonstrative well-known in (colloquial) English. This use, called *new-this* by Wald (1983: 93), is generally considered a category of its own and discussed as an alternative to introductory NPs with an indefinite article. Wald (1983: 97) explicitly rejects the idea of linking this use with other situational uses. Instead, he proposes to 'derive' it from the anaphoric use of *this* (1983: 102,112). In my opinion, an indefinite NP alone is never sufficient to firmly establish a discourse referent in the universe of discourse. Instead, this usually requires a sequence of two mentions, i.e. an indefinite NP followed by a definite one.[19] *New-this*, on the contrary, has this force, which it shares with proper situational uses. It is distinct from the latter in that the referent is not present in the utterance situation and thus cannot literally be pointed to. But, this is also true for other *Deixis am Phantasma*-uses. Thus, *new-this* shares an essential feature of the situational use of demonstratives, while it does not share anything in particular with the anaphoric use (apart from the fact that it is unstressed, also possible in situational use).

As noted by Wald (1983: 96), these *new-this*-like uses have not as of yet been attested/described for languages other than English. For Tagalog and Indonesian, I checked the possibility of such a use with several speakers, all of whom found such constructions odd and said that one should use a quantifier to introduce new participants into a narrative.[20] Note that this is not to say that demonstratives may never occur in first mentions in other languages. But such uses in first mentions may be based on (presumed) shared-knowledge rather than being truly new, introductory mentions as in English. This will be illustrated in Section 5.4 with reference to German *dies* and data from Australian languages.

Situational use as presented here is certainly no longer the kind of use that is relatively straightforward and describable simply in terms of the concrete and immediate situation surrounding speaker and hearer, as is so often assumed in the descriptive as well as the theoretical literature. The typical examples employed to illustrate and elicit situational use of demonstratives are most certainly simple and straightforward in this sense. But are these examples representative of the actual use of demonstratives in natural face-to-face interaction? Recent work by Hanks (1990) and Fuchs (1992) clearly shows that this conception of situational use is far too simplified. In particular, an account of actually occurring uses is not possible in terms of speaker, hearer, and physical utterance situation alone. Instead, the context for seemingly straightforward situational uses is as complex as the context for other uses and involves interactional as well as cultural knowledge.

In fact, if one follows the proposals made by Hanks, Fuchs, and other authors (cf. the contributions in Duranti and Goodwin 1992, and Auer and di Luzio 1992), it becomes impossible to define a given use solely in terms of the context in which it occurs. In their line of thinking, the context of an utterance is not given in advance to shape the unfolding discourse as a fixed constant, but is, instead, first interactively established by the participants in a communicative act. It is, then, not the case that the concrete and immediate utterance situation is the indexical default ground which is immediately, and without further interaction, accessible to the communicating parties (Hanks 1992). A proximal *here* may refer to the very utterance situation, the village, or the world: What it pertains to in a given communicative situation has to be interactively established. In this way, there is no difference as to whether utterance situation, country, or world are referred to.

Even if one does not subscribe to the kind of dialectic interplay between various levels and elements in shaping communicative events envisaged in this approach, it is clear that situational use involves more than the simple

physio-temporal coordinates of the utterance situation. On the other hand, it is also clear (and in no way denied by any of the authors mentioned) that the kinds of examples discussed in this section all involve an essentially spatial notion of relative distance to some deictic center. Inasmuch as this feature is less clearly perceived in (or even absent from)[21] the other uses to be reviewed below, it may be considered the major characteristic of situational use.

Another possibly distinct feature of situational use might be the occurrence of a concurrent distinctive gesture. Hardly any data is available on the use of gestures with transposed demonstratives (Haviland 1992 is a notable exception). If it could be established that in *Deixis am Phantasma* and first mention uses gestures are employed similar to those employed in pointing to entities present in the immediate situation, this would obviously provide very strong support for the classification proposed here.

5.2. Discourse deictic use

Discourse deixis is to be understood here as reference to propositions or events. Lyons (1977: 668) calls this *impure text deixis*. It covers both *text reference* and *extended reference* in the sense of Halliday & Hasan (1976: 52). An example from the Pear Stories:

IX.60. then he goes off, . . and that's the end of **that story**, but then . . it goes back to the farmer. {.6}

The kind of referent and the way of determining the referent involved in this use is a matter of great controversy (see Webber 1991 for a recent discussion). In particular, it is difficult to state in a general manner which segment of the preceding (or, less frequently, following) discourse is pointed to in this use since this may range from a single clause to a whole story. This problem, I think, is due to the fact that no referent exists in advance to which one may point. Instead, the referent is first created at the very moment when this use occurs. In this regard, the discourse deictic use is similar to the situational one. In both uses, a referent is established in the universe of discourse for the first time. They differ quite substantially in the way this is done. In particular, the kind of demonstratum involved is very different, i.e. an entity or a location in the case of situational use and a discourse segment in the case of discourse deictic use.

Note that although the size of the segment pointed to in discourse deixis is variable, it is always an immediately adjacent segment. This fact sets this use clearly apart from the tracking and recognitional uses in which the demonstratum is usually located farther away.

A subtype of discourse deictic use is the reference to a point in time in a sequence of narrated events or, in expository and procedural texts, a sequence of arguments or acts. Examples from the sample include the following:

VI.77. right at **that moment** the three boys come walking . . by, munching on the pears, {.5}

A conspicuous feature of discourse deictic use is the fact that it is usually a single mention, i.e. the referent which is first established in this use is not referred to again in the following discourse. It is generally created only for the one predication it occurs in. Even in scientific writing there are hardly any chains of the following kind: *This fact .... it .... it ...*

In some languages, there are special forms of the demonstrative for discourse deictic use. In Nunggubuyu, a special series of forms, called *predicative* by Heath, serves this function (among others). In Ik the usual expression used for discourse deixis consists of a demonstrative plus noun. In the sample, the expression 'these matters' occurs 13 times in this function, cf.:

IK_93	iɗiwiɗiwa	kɔto	eaata	**mɛna-a**	**ni**	ɒos-ikᵉ {0.5}
	receive	then	sister:ABS	matter-ACC	PROX.PL	ear-DAT
	The sister (really) put all these matters in her ears.					

With respect to the other languages of the sample, it is noteworthy that discourse deictic use is the single most frequent among the pronominal uses (see tables in the appendix). Furthermore, the use of a pronoun for discourse deixis in general tends to be more frequent than the use of an adnominal construction for this purpose. Thus, it may be hypothesized that discourse deixis is *the* typical use for demonstrative *pronouns*, unless special constructions exist, such as in Ik and Nunggubuyu.

Note in this regard that in many languages, discourse deixis can only be accomplished with demonstratives since 3rd person pronouns may be employed only in reference to entities (often only to rationals). As for the languages of the sample, this is the case for all of them with the exception of English. In English, however, the discourse deictic use of demonstratives seems to be much more common than that of the pronoun *it*. Webber (1991) provides the data shown in Table 4 on the use of demonstrative pronouns and *it* in scientific writing and newspaper articles:

Table 4. Distribution of it and demonstratives in discourse deictic vs. tracking uses from Webber (1991: 125 FN4)[22]

	IT	DEM	TOTALS
D-DEIX	15 (16%)	81 (84%)	96
TRACK	79 (98%)	2 (2%)	81
TOTALS	94	83	177

5.3. Tracking use

Tracking use makes reference to (usually major) participants, which helps the hearer keep track of what is happening to whom. It is often called anaphoric or co-referential use, but both of these terms are also used in much wider senses. Thus, *anaphora* generally also covers the discourse deictic use discussed in the preceding section. *Co-reference* is also used to designate the relation existing between two nominal expressions in apposition or between a person marker and a co-referential NP within the same clause. Note that a tracking expression does not necessarily refer to strictly the same entity as its antecedent expression since this entity may have changed substantially between the time of the two mentions (see Brown and Yule 1983: 201-204 for some drastic examples).

Compared to other tracking devices, such as so-called zero anaphora, 3rd person pronouns, and definite full NPs, the use of demonstrative expressions (pronominal as well as adnominal ones) for tracking is relatively infrequent in non-conversational discourse. As shown by the tables in the appendix, the tracking use is also far from being the major use with respect to the other uses of demonstratives. These tables also show that there is generally one demonstrative (usually the proximal one) specialized for the tracking use. However, there is significant cross-linguistic variation with respect to these observations, which warrants further investigation.

What, then, is the specific role of demonstratives in contrast to that of the other tracking devices mentioned above? There are basically two proposals regarding this issue. On the one hand, it has been proposed that demonstratives are used for tracking referents whose topicality (Brown 1983), accessibility (Ariel 1990: 73) or activation-state (Gundel et al. 1993: 275) is intermediate between that for personal pronouns and that for definite full NPs. This proposal

is rather vague, making it unclear what it actually predicts. In particular, it does not explain why demonstrative tracking expressions are comparatively rare.

On the other hand, it has been proposed that the tracking use of demonstratives involves contrast to another, similar referent (Linde 1979: 351, Sidner 1983: 320-323) or a shift in focus of attention (Sidner 1983: 323-327).[23] That is, demonstratives are used for tracking only if other tracking devices fail. This proposal makes crucial use of the notion of discourse node (or paragraph boundary) which has recently become more and more popular in studies on anaphora.[24] Three different scenarios have to be distinguished in respect to this notion: A tracking use may occur (a) within a discourse node, (b) across a discourse node boundary, and (c) at a discourse node boundary. The default (unmarked) expressions are different in each case and hence, it may be expected that the use of a demonstrative expression involves a different motivation for each case. So far, it remains unclear to me what the factors are in the latter two cases, so let me just briefly comment on the first one.

Following Levinson's (1987, 1991) approach to anaphora in terms of conversational implicatures, one may state the default case for in-node tracking as follows: Within one discourse node (or paragraph), personal pronouns (including person or agreement markers) implicate unproblematic co-reference, while definite full NPs implicate non-co-reference (within the discourse node). Demonstrative expressions, it may then be hypothesized, are used whenever a second full definite NP mention is necessary for a given referent within a given discourse node — for whatever reason. Consider the following example from the Pear Stories where the use of *they* in VII.17 for refering to *the colors* would be ambiguous since *the pears* would also be a possible antecedent:

VII.10. Something that I noticed about the /movie/ particularly unique was that the colors . . were {.35}
VII.11. just {.5}
VII.12. very strange. {.6 {.2}
VII.13. Like {.3}}
VII.14. the green was a {2.2}
VII.15. inordinately bright green, {.55}
VII.16. for the pears, {.4 . . and {.25}}
VII.17. **these colors** just seemed a little {.5}
VII.18. kind of bold, almost to the point of {1.15}
VII.19. being artificial. {2.25 {.6} tsk {.1} A—nd {.75}}

The use of *the colors* in VII.17, on the other hand, would implicate the beginning of a new node which would highlight some other feature or fact about the colors (cf. Sidner's 1983: 326f remarks on a similar example). Thus, the standard tracking devices carry unwarranted implicatures, and for this reason, a demonstrative expression is chosen.

Bloomfield's Tagalog texts abound with examples where ambiguity resolution motivates the employment of a (proximal) demonstrative pronoun. These include the following:

BL100.36 *... kanyang sarili na sya y walang*
kanya -ng sarili na siya ay wala -ng
3.SG.DAT-LK self LK 3.SG PM NEG.EXIST-LK
*magagawa kay **Hwan**, sapagkat **ito** y nasa*
ma -RED1-gawa kay Hwan sapagká't ito ay na -sa
IRR.STAT-RED1-do DAT.PN John because PROX PM STAT-LOC
katwiran.
ka-tuwid -an
??-straight-LOC
(When Juan had said this, the mayor could not restrain his laughter and only said) to himself that he could do nothing to Juan, for the latter was in the right.

BL88.9 *Sinabi ny Andres sa ama ni **Hwan** na **ito** y*
in -sabi ni Andres sa ama ni Hwan na ito ay
REAL(UG)-say GEN.PN Andres LOC father GEN.PN John LK PROX PM
matalino at dapat ipadala sa paaralan.
ma -talino at dapat i -pa -dala sa pa-aral -an
IRR.STAT-talent and should UGt-CAUS-bring LOC ??-study-LOC
Andres told Juan's father that Juan was gifted and ought to be sent to school.

Examples such as these account for the extremely high number of demonstrative *pronouns* in the Bloomfield sample which was noted at the end of Section 4. Note that these texts are not spontaneous but represent a planned variety of speech. In the spontaneous texts, examples of this kind do not occur.

Ambiguity resolution certainly is an important factor, triggering the employment of demonstratives for in-node tracking, but it does not account for every instance. Another factor pertains to the fact that in some languages, such as Tagalog, the use of 3rd person pronouns is restricted to rationals. Hence, demonstratives have to be employed in tracking inanimate participants, as in the following example:

BL106.35 *Ang mga dinaratnan naman ng **bala** ay*
ang mga in -RED-dating -an naman ng bala ay
SPEC PL REAL(UG)-RED-come_upon-LOC really GEN bullet PM
*sinasangga **ito** ng kanyang kamay, parang*
in -RED-sangga ito ng kanya -ng kamay para-ng
REAL(UG)-RED-ward_off PROX GEN 3.SG.DAT-LK hand like-LK
sumasangga sa isang pukol lamang.
um -RED-sangga sa isa-ng pukol lamang
ACT-RED-ward_off LOC one-LK hit only
Those who are reached by a bullet try to ward it off with their hand, like one who is warding off a mere throw.

A further typical context for tracking use of demonstratives within a discourse node is what Lichtenberk (this volume) calls 'immediate anaphora after first mention' and which he amply exemplifies with data from To'aba'ita. This strategy for the introduction of a new participant seems to be very common in languages where no definite article exists. An example from the Tagalog sample is the following:

TAG003 *may kasaysayan sa isang manlalakbay*{0.7}
may ka-saysay -an sa isa-ng maN -RED-lakbáy
EXIST ??-statement-LOC LOC one-LK IRR.ACT-RED-travelling
(one incident) is told about a traveller;

TAG004 *ang **manlalakbay** **na ito** ay si Pepito*{1.3}
ang maN -RED-lakbay na ito ay si Pepito
SPEC IRR.ACT-RED-travelling LK PROX PM PN Pepito
this traveller (his name) was Pepito.

But in languages such as English where a definite article exists, there is as well "a certain aversion to the use of a *the*-form immediately after the word is introduced; a demonstrative is more usual in such cases" (Christophersen 1939: 29). Hence, it is more common to find sequences such as *Once upon a time there was a king. **This** king had ...* instead of ***The** king had ...* As Lichtenberk (this volume) points out, this strategy is generally used only in those instances where the new participant is "thematically prominent, either globally or locally".

5.4. Recognitional use

In the recognitional use,[23] the intended referent is to be identified via specific, shared knowledge rather than through situational clues or reference to preceding segments of the ongoing discourse. A central feature of this use is that the speaker anticipates problems with respect to the information used in referring to a given referent. That is, the speaker is uncertain whether or not the kind of information he or she is giving is shared by the hearer or whether or not this information will be sufficient in allowing the hearer to identify the intended referent. Such use could always be (and in fact often is) accompanied by a *you know*? or *remember?*-type of tag question. A typical example is the following from the Pear Stories:

XII.15. it was filmed in California, **those dusty kind of hills that they have out here by Stockton and all**, {.9+ {.9} so . .}

This example also exhibits two secondary features of recognitional use. This use often involves referents of only peripheral importance (low topicality). That is, it tends to be a non-tracking mention, but not necessarily. Furthermore, there is a tendency to incorporate additional anchoring or descriptive information into a recognitional mention to make the intended referent more accessible. Thus, recognitional use often involves relative clauses or other modifiers of similar complexity.

Before discussing more examples and details of this use, let us briefly review some of the rather scarce literature in which this use has been acknowlegded or at least indirectly hinted at.

The most explicit account of this use I am familiar with is Auer (1981 and 1984), who discusses the use of the German demonstrative *dies* in conversation. Auer speaks of *indexicality marking* and characterizes it as follows:

> "Intermediate techniques for introducing referential items reflect the more-or-less character of assessing another participant's background knowledge. ... The demonstrative ... marks explicitly the (...) necessity to fill in features of context. ... The speaker underlines that what he or she says verbally is not enough and that additional information has to be taken from the context." (Auer 1984: 636)

Recognitional use in conversation, Auer argues, signals to the hearer that a given referential expression may be elaborated if necessary. That is, it is an invitation to initiate a repair sequence in case the hearer has trouble in identifying the intended referent. In the following example from Auer (nr. 6, 1984: 637), the hearer does initiate a repair sequence (in 04) but hits upon the intended referent in the process of doing so:

GERMAN conversation[26]

01 Ta: *was hast n(dann) gelesn* (0.2)
what PERF-you PART-Q then read
what did you read then

02 X: *(ja) diesen Aufsatz von dem Olson*
well that paper by the PN
well that paper by Olson

03 (1.5)

04 Ta: *was isn des für einer* (0.4)
which is-Q-PART that one
which one is that

05 *ach so: (0.2) von dem hab ichimmer noch nix mitgekriegt*
I see about that PERF I still yet nothing heard
oh I see: (0.2) I still don't know anything about that one

Hearers are not 'obliged', Auer says, to accept this inivitation or to respond to the offer made by the speaker in any explicit way. They may choose to simply disregard this offer, as in the following example (nr. 7 in Auer 1984: 637):

GERMAN conversation

01 X: *was isn eigentlich mit diesem:*
what happened-Q-PART I-am-wondering to that
Haustelephon was mir immer khabt ham;
internal phone which we always had PERF
I'm wondering what happened to that internal phone we used to have;

02 N: *des haut nimmer hin,*
that works no-more V-PREF
it doesn't work any more,

Auer's paper provides further details on the conversational foundation of this use, in particular, an account of how it fits into the overall system of referential techniques available to conversationalists.

The strongest evidence I am familiar with for the viability of recognitional use — both in conversational and non-conversational discourse — is provided by several Australian languages (Pama-Nyungan as well Non-Pama-Nyungan ones), where a special recognitional demonstrative exists.[27]

This demonstrative is often called anaphoric demonstrative in the grammars, but the explanations and examples added make it clear that it is not a regular marker of tracking mentions. Thus Goddard (1983: 54) notes with respect to the 'anaphoric' demonstrative *panya* in Yangkunytjatjara:

> "*Panya* ANAPH (roughly 'you know the one') calls the listener's attention to the fact that he or she is already familiar with a referent. It is not usually used about things which are fully topical — ie already being talked about, but rather to re-introduce something into the conversation ...
> Actually, *panya* ANAPH does not presuppose an explicit mention in previous discourse, but simply that the addressee be able to call to mind the intended referent, ..."

Wilkins (1989: 121) glosses the corresponding demonstrative *nhenge* in Mparntwe Arrernte as 'remember' and defines it as "something from before which I (the speaker) think that you (the addressee) should be able to remember".

The major evidence for the claim that these so-called 'anaphoric' demonstratives are not anaphoric (tracking) in a strict sense is the fact that they allow for first mention uses. Heath (1980b: 161f) relates the following conversational example of a first mention use of the 'anaphoric' demonstrative in Nunggubuyu:

> "Often I would head into the Aboriginal part of the village ... obviously in search of my regular informant. If he was not at home, someone else there would say to me before I could open my mouth:
>
> *ni=ya-nggi* *bu-gu-ni* ***nu:ba-gi-yung***
> 3.SG.M=go-PAST2 ANAPH-LOC.ADV-ALL M.SG:ANAPH-SG-ABS
> 'That one went there'
>
> Both the Anaph pronoun and the Anaph allative adverb were based on the speaker's assumption that I had considerable familiarity with my informant. ... It was also assumed that I knew where the informant was likely to be when he was not at home."

A non-conversational example for a first mention use comes from the very first line (second pause unit) of Heath's (1980a) collection of Nunggubuyu texts:

NUN1.1. *bagu* *winingambangambi:ni* ***nu:birni***
ba -gu wini -RED=ngambi-ni na -uba -rni
ANAPH-LOC.ADV 3.M.DUa-RED=bathe -PAST2 M.DU -ANAPH -M.DU
nawulmurwa: { }
na -wulmur -wa:
M.DU-circumcised-DU
Two unmarried (boys) were bathing (in a billabong).

Note that this first mention use of the 'anaphoric' demonstrative in Nunggubuyu is different from introductory *new-this* in English. The audience is assumed to be familiar with the protagonists of the myth (which is identified in the first pause unit by just one word, *majbarrwarr* 'olive python'). Thus, the information given in the verbal prefix (3rd masculine dual) is actually sufficient in identifying the referent. This is evidenced by the fact that in many of the myth tellings in Heath's collection, the first full nominal reference to a central character is made only after the story is already well on its way (cf. for example text 5 Heath 1980a: 37ff). In the example above, then, *nu:birni nawulmurwa:* serves just as a reminder, meaning something like 'you know the ones, those two unmarried ones'.

This brief review of some remarks and examples found in the literature may suffice in establishing the viability of recognitional use. We will now turn to discussing some further features and subclasses of this use, based on the data found in the present sample.

First, let us clarify the kind of shared knowledge characteristic of recognitional use which distinguishes it from other referential mentions based on shared knowledge. Wald (1983: 113), discussing the unstressed *that* in English, relates this use to the familiarity principle well-known from the research on definite articles (cf. Christophersen 1939; Hawkins 1978; Prince 1981). However, demonstratives may not occur in two of the typical familiar uses of the definite article, i.e. the larger situation and the associative-anaphoric use (cf. Section 3 above). That is, the kind of familiarity (or shared knowledge) involved in recognitional use of demonstratives must be somewhat different from the one involved in these familiar uses of the definite article. The difference pertains to the fact that the kind of knowledge involved in the familiar uses of the definite article is considered to be generally shared among the members of a given speech community. It does not involve a specific interactional history common to the communicating parties in a given communicative event. Recognitional use of demonstratives, on the other hand, draws on specific, 'personalized' knowledge that is assumed to be shared by the communicating parties due to a common interactional history or to supposedly shared experiences. It is only with respect to this kind of

knowledge that uncertainty on the part of the speaker regarding the availability of this knowledge to the hearer reasonably may arise. It makes no sense, under normal circumstances, to doubt knowing the referents of expressions such as *the sun* or *the president*.[28]

Given this specific, 'personalized' kind of shared knowledge, there may be various reasons as to why the speaker is uncertain in his or her assessment regarding the availability of this knowledge to the hearer. As noted at the beginning of this section, one reason may be the fact that the speaker is incapable in coming up with an appropriate expression for the intended referent. In the Pear Stories, references to the paddle ball are frequently of this kind. Compare, for example:

V.48. and this one's . . playing with one of **those** {1.6}
V.49. **those wooden things** that you hit with a ball. {1.1}

More generally, one often finds demonstratives as a sort of fill-in when the speaker is searching for a more appropriate expression as exemplified by the following Tagalog example, where the pointed brackets enclose a series of false starts:

TAG13_5	*mamulot*	*nung*	*mga*	*bunga*
	maN-pulot	noon-ng	mga	bunga
	IRR.ACT-pick	DIST.GEN	PL	flower
	(Their occupation was) to pick those flowers			

TAG13_6	***yung***	***bunga***	***<nanga***	***bungang***	***gina yung>***
	DIST	flower		flower	use DIST
	those flowers <those flowers whi.. us.. those>				

TAG13_7	*yung*	*ginagamit*	*sa*	*pagngangà*
	iyon-ng	in-RED1-gamit	sa	pag-ngangà
	DIST-LK	REAL(UG)-RED1-use	LOC	GER-betel_nut
	those used for chewing betel nuts			

Such fill-ins involving a demonstrative may also be found at the end of a series of attempts to find an appropriate phrasing, signalling that the speaker is not fully content with these attempts but regards them as sufficient for the hearer to get the basic idea. Cf. the following example from the Pear Stories:

X.81. and there's just this scene where he's coming this way, . . on this dirt road, and there's hills in the background, it's like {.7}
X.82. it might . . almost look {.3}
X.83. sort of like southern California. {.25}

X.84. Inland. {.75}
X.85. Sort of thing. Not {.45}
X.86. obviously not desert, . . but . . **sort of that** {.25}
X.87. **kind of a** {.2}
X.88. **of an area**. {1.45}
X.89. And he's heading . . you see a scene where he's . . coming on his bicycle this way, {.5}

In this context, the demonstrative has characteristics of two usage types: On the one hand, it vaguely points back to the immediately preceding propositions and could thus be classified as discourse deictic. On the other hand, it also conveys one of the typical features of recognitional use, i.e. the invitation to the hearer to ask for elaboration if this should be necessary (note the rather long pause in X.88). This use is to be distinguished from discourse deictic use proper where no such invitiation is extended, as in the following example:

XVIII.47. And then there's a shot of u—m {.45}
XVIII.48. uh three kids, {.3}
XVIII.49. sort of {.15}
XVIII.50. u—h standing, {.65}
XVIII.51. by the roadside, . . a—nd you don't know at first whether they're hostile or not, /and/ you get a shot, {2.05 {.8} /the—n/ u—m {.35}}
XVIII.52. they're sort of {.5}
XVIII.53. standing there, grinning, {3.2 and uh {1.1} tsk . . u—h {1.5}}
XVIII.54. it could . . i {creaky} **that look** could be interpreted as a menacing grin, or a {.5}
XVIII.55. i {creaky} or a friendly grin, or just the way kids are, {.4+ and {.4}}

X.86 is thus a kind of borderline case between recognitional and discourse deictic use (in the table in the appendix it has been counted as recognitional).

The inclusion of these and similar examples among the recognitional uses may seem a bit far-fetched at first sight. But note that in all languages of the sample, it is always the demonstrative generally employed for recognitional use that is also found in these contexts. In English (and all of the other languages except Nunggubuyu) this is the distal demonstrative. So far, I have not come across any explanation for the fact that it is always the distal demonstrative that is found in hesitations and false starts. Linking this phenomemon to the fact that the distal demonstrative is the typical demonstrative for recognitional use provides a straightforward explanation of this fact.

It even seems possible to add the presence of hesitation phenomena to the list of secondary features of recognitional use mentioned above. As seen from

the examples presented in this section, recognitional use typically occurs before pauses (cf. also Auer 1984) and often involves brief hesitations and false starts. So far, however, I have not been able to work out the quantitative evidence necessary to substantiate this impression. To do this, it is necessary to show that in recognitional use pausal position, hesitations, etc. are significantly more frequent than in the other uses of demonstratives.

Let us now turn to the most difficult issue regarding recognitional use. All the examples discussed so far involved first mentions, and most examples for recognitional use are, in fact, first mentions. However, it seems to me that later mentions of a given referent may also be recognitional rather than tracking, though this may be difficult to discern (and to decide) in a given instance. Before addressing the problem in delimiting these two kinds of uses for demonstratives, let us review some examples.

The clearest examples perhaps of later mentions that are recognitional rather than tracking are of the following kind: One often finds a demonstrative as part of expressions referring to peripheral participants, props and the like within intercalated backflashes to earlier episodes of a given narrative. In the following example from Indonesian, the speaker seems to have doubts about the accessibility of *pakean* 'clothes'[29] and first simply adds *tadi,* meaning here 'the ones I mentioned a moment ago' — a typical tracking marker in this language. But then, obviously uncertain whether this is in fact enough to remind one of the earlier episode, he adds a complete definite description involving two modifiers and a distal demonstrative:

IND 085 *langsung ganti pakean* {0.9}
direct change clothes
(and rather) immediately changed clothes,

IND 086 *tadi* {0.5}
a_moment_ago
the ones,

IND 087 ***pakean yang kotor itu yang bawa olaraga***{0.6}
clothes REL dirty DIST REL carry sport
those dirty clothes worn while exercising,

IND 088 *ganti dengan pakean skola*{2.1}
change with clothes school
changed (them) with the school uniform

The speaker has mentioned the fact that they used to change their clothes on the way to school in the preceding episode (22 pause units ago). The distal

demonstrative *itu* in IND087 makes it clear that the information given in this unit is but a reminder.

There is a similar example from the Pear Stories. Early on in the narrative (units 18-25), the speaker comments extensively on the sound track of the film, which obviously struck her as quite amazing. When she talks about the sound produced by the paddle ball (unit 61f), she briefly comments again on the sound track, using a distal demonstrative:

XI.18. there's no— . . dialogue in the film, but there . . is {1 .0}
XI.19. a lot of sound effects. {1.1}
XI.20. Which are not {.55}
XI.21. totally u—m {1.45}
XI.22. consistent. I mean . . sometimes they'll be really loud, {.35}
XI.23. Has anybody told you that before? Or r you're not supposed to tell me that. {1.2}
XI.24. Sometimes he'll put a pear down, it'll go bla. . . Really loud. Bla. . . And sometimes he'll put a pear down, and there won't be any noise at all. I don't know if {1.7}
XI.25. that's on purpose. {2.0 { 1.2} U—m {.4}}
....
XI.61. it's making {.45}
XI.62. loud noises inconsistently. {3.05 {laugh} {.8} A—nd u-m {1.3}}
XI.63. it wasn't a really funny film, . . it was just . . that . . **that sound part** /was really neat/. It was funny. {1.55}

The *that* in XI.63 serves as a reminder that the speaker already commented at length on the sound part and thus explains why she is laughing in XI.62.

In both of the preceding examples, the demonstrative serves to remind the hearer of a preceding episode rather than helping her to keep track of a given referent. Note that no new information is given with respect to the entity referred to in the demonstrative expression. This also holds for the following examples which involve the further complication that here, reference is made to major participants, making the distinction between recognitional and tracking use even more difficult to perceive. Such examples, however, are extremely rare in the sample.

The first example comes from Ik. The context is the following: A group of girls comes home from the river late in the evening and finds out that there is no fire in their house. Their relatives refuse to give them fire. They nevertheless enter the house and will be able to make a fire anyway because one of the children had earlier on hidden firesticks in the ashes. This fact is

recounted in IK229. In IK230-231 the speaker clarifies the identity of the child who had done this by reminding the audience of an episode that had occurred earlier (100 pause units ago (units 129-132)):

IK_227 *ro-ata hoa-a budam^{o}* {0.5}
enter-3.PL house-ACC dark-?
They entered the house, it was dark

IK_228 *biira ts'ada iya-d^{e}* {0.5}
lack fire:ABS be-DP
There was no fire there

IK_229 *oko na be o-ko̱ta ima ts'adi-a kawa-ako̱k^{e}* {1.4}
well PAST PAST put-AND child:ABS fire-ACC ashes-inside-DAT
The child had put fire(sticks) into the ashes

IK_230 ***ima ke na ko̱a sab-eek^{e}*** {1.6}
child:ABS DIST.SG REL go river-DAT
The child that went to the river

IK_231 *oko nabe o-ko̱ta ima ts'adi-a kawa-ako̱-k^{e}* {1.3}
well PAST put-AND child:ABS fire-ACC ashes-inside-DAT
That child had put fire(sticks) into the ashes

Other examples concern the Nunggubuyu 'anaphoric' demonstrative. Apart from the first mention uses discussed above, this pronoun may also be employed for later mentions which, in fact, accounts for the majority of its uses in the present sample. Viewed superficially, these examples may simply be classified as tracking uses. But closer inspection shows that this demonstrative is not regularly used for tracking mentions. It is only used if the speaker is, for some reason, momentarily uncertain whether the hearer is 'remembering' the intended referent. In the following example, the speaker himself creates a little confusion since he is momentarily unable to come up with an adequate expression for the intended referent. He then hastens to reassure the hearer that the intended referent is the familiar one, 'that little boy, you know, we have been talking about all along':

NUN178 *aba naa:ng wunuwalwaljiny*
aba na -a:ng wunu =walwalja -ny
now M.SG-whatchamacallit 3.PL_3.M.SGa=fight_over-PAST1
nu:bagiwuy *nawirrinyung*{}
na -uba -gi-wuy na -wirri-nyung
M.SG-ANAPH-SG-ALL M.SG-small-SG
now whatchamacallit, they were fighting over (control of) that little (boy).

Note that the use of the demonstrative in this example may not be explained in terms of ambiguity resolution (a typical scenario for tracking use); there is nothing else except the boy that Emu and Gecko could be fighting over. And, the hearer already knows that they are fighting about him.

To conclude this discussion of later mentions, the general issue of what distinguishes recognitional and tracking uses with respect to these mentions remains to be addressed. An answer to this question obviously depends on how rigorously tracking use is defined. Since several aspects regarding tracking use are still unclear to me — in particular, the factors involved in tracking use which crosses discourse nodes — I have but a preliminary answer to put forth. In line with the features characteristic of recognitional first mentions, recognitional later mentions have the distinct flavor of a reminder. With respect to later mentions, the reminder is not so much aimed at the referent per se but rather, to the whole episode in question. There is generally no new information presented regarding the referent. Furthermore, there is no doubt that the hearer should, in principle, be able to recall both referent and episode. Tracking use, on the other hand, is characterized by the fact that the speaker is fully aware of an 'objective' problem in accessing the intended referent, a problem that renders standard reference tracking devices (pronouns, definite NPs) inapplicable. The prototypical instance of such a problem is the presence of two (or more) equally plausible referents as possible antecedents for a given mention. The demonstrative in this use, then, does not serve to remind the hearer about an earlier episode concerning the intended referent but helps the hearer pick out the correct referent among several similar, equally accessible referents.

Finally, note that several other important issues regarding this use have not been addressed here. The most important among these is the question of whether recognitional use is generally restricted to one (usually the distal) demonstrative. Another, distantly related issue concerns the possibility of whether the establishing modifier-constructions briefly mentioned at the end of Section 4 (*those who* etc.) may be considered as a further, grammaticized subtype of recognitional use. The obligatoriness of distal demonstratives in these constructions — which, as far as I know, to date has not yet been explained — seems to suggest such a possibility.

6. Summary and Prospects

In the preceding section, the following four major types of use for demonstratives have been presented:

- **situational use**, which involves the notion of relative distance to some deictic center and serves to establish a referent in the universe of discourse.
- **discourse deictic use**, which involves pointing to an adjacent discourse segment and serves in establishing a proposition or an event (or a sequence of these) as a referent in the universe of discourse.
- **tracking use**, which involves reference to entities (usually major participants) already established in the universe of discourse during the preceding interaction and serves to help the hearer in keeping track of what is happening to whom.
- **recognitional use**, which involves reference to entities assumed by the speaker to be established in the universe of discourse and serves to signal the hearer that the speaker is referring to specific, but presumably shared, knowledge. It invites the hearer to signal the need for further clarification regarding the intended referent or to acknowledge that he or she, in fact, knows what the speaker is talking about.

With respect to the criteria generally used in classifying nominal expressions (listed at the beginning of Section 5), this classification is obviously a rather mixed bag. For example, tracking use generally involves active or semiactive activation states, recognitional use generally involves semiactive or inactive activation states, and situational and discourse deictic uses always involve inactive activation states. In situational, tracking and recognitional use, an entity is referred to, in discourse deictic use, a proposition or event. Discourse deictic and tracking uses generally consist of simple nominal expressions (or pronouns), recognitional use generally involves complex nominal expressions.

The proposed classification is based primarily on discourse function or, more precisely, on interactional goals. From the way the four uses have been presented above (and in Section 5), it is clear that they belong to two major supercategories which represent the two major interactional goals involved in the use of demonstratives: Demonstratives are used either in establishing a referent in the universe of discourse for the first time (situational and discourse deictic uses) or to single out[30] a certain referent among already established referents (tracking and recognitional uses).

Further distinctions within these two major supercategories (and within each of the four major types) then make use of various criteria, including those generally acknowledged criteria mentioned above. With respect to the establishing goal, the major distinction pertains to the kind of referent involved (an entity in the case of situational use, a proposition or event in the case of discourse deictic use). With respect to the goal of singling out a given referent, the major difference pertains to the kind of problem involved in making a successful reference. In tracking use, the referent is well-established in the universe of discourse and the hearer is well aware of its choice among similar referents. In recognitional use, the problem consists in the assessment of the hearer's knowledge, i.e. whether the hearer is in fact aware of the existence of the intended referent in the universe of discourse. For a brief discussion of the various subtypes of demonstrative uses, see Section 5.

The viability of the four major types is supported by formal evidence. That is, for each of these uses, it was possible to point out at least one demonstrative element or construction in at least one of the languages of the sample which was amenable only to this one use. Formal evidence for the viability of the two supercategories has not yet been discovered.

Figure 3 gives a schematic summary of all the demonstrative uses discussed in this paper. Since various overlaps and transitional areas between the different types of demonstrative uses exist, these uses are not arranged in a

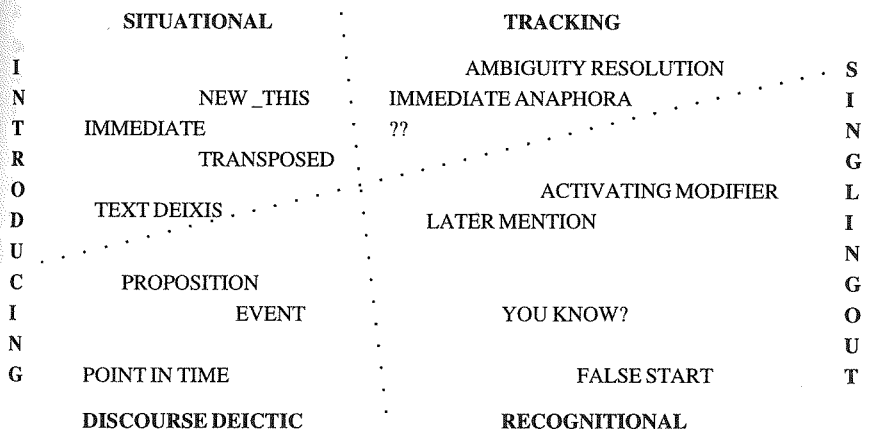

Figure 3. Major usage types of demonstratives[31]

symmetrical or rectangular fashion. For the same reason, the boundaries are indicated by dotted lines only. The areas allotted to each of the four major uses broadly reflect the relative frequency of these uses in the sample.

The arrangement of the subtypes (indicated by small caps) attempts to capture the various overlaps and transitional areas which exist between them. Only some of these overlaps and transitional areas have been explicitly addressed in this paper. At the end of Section 5.4, borderline cases of recognitional/discourse deictic and recognitional/tracking use are discussed. Further overlaps and transitions not explicitly discussed include the following: The transition between *text deixis* and (especially propositional) *discourse deixis* is well-known (cf., among others, Lyons 1979). *Transposed situational uses* may often also be classified as *tracking uses* (when the protagonists have been mentioned before). New_*this* and *immediate anaphora after first mention* both serve to firmly establish a new protagonist in the universe of discourse.

The future application of this classification to a variety of issues concerning demonstratives is expected to further support its viability and usefulness. These issues include the following:

As for universal uses of demonstratives, the classification provides the explicit hypothesis that it is all of these four major uses and only these four major uses that are universally attested in natural languages.[32] This includes the claim that languages may vary considerably with respect to the number of subtypes distinguishable within each type, the kinds of constraints on the uses for each type, the overall frequency of use for each type, etc. In this way, the classification provides a schema that allows for a much more precise statement of the kind of cross-linguistic differences briefly discussed in Sections 3 and 4.

As for the presumed basicness of situational use already questioned at the end of Section 5.1, it is somewhat surprising that all languages allow for uses of demonstratives other than those pertaining to the immediate situation of utterance. Of course, these other uses can be regarded as transpositions or extensions of the supposedly basic immediate situation use. And this would be a plausible assumption, if the transpositions and extensions occurred in a scattered, non-systematic fashion. However, if the hypothesis advanced here — that all of the four major uses are universally attested in natural languages — is correct, the pervasiveness and regularity of the assumed transpositions makes the very assumption of such transpositions somewhat suspect. In

particular, it is hard to see how the recognitional use may be derived from the immediate situation use.

As for the further grammaticization of demonstratives to articles and 3rd person pronouns, the proposed classification provides a more explicit (and, I think, more reasonable) hypothesis regarding the starting point of these developments. To date, the standard statements on this matter vaguely refer to the 'anaphoric use' of demonstratives and assume that the frequency of this 'anaphoric use' for one of the demonstratives somehow dramatically increases, leading to either the rise of a definite article or a 3rd person pronoun. On the basis of the proposed classification, it seems more reasonable to assume that the starting points for these two developments are clearly different. That is, 3rd person pronouns develop from tracking use, definite articles from recognitional use.[33] Furthermore, in Section 3, I have argued that there are specific uses characteristic for definite articles and 3rd person pronouns, respectively. As long as an originally demonstrative element is not amenable to these uses, it only confuses cross-linguistic generalizations if this element is considered a definite article or 3rd person pronoun. The claim of beginning or ongoing grammaticization may be supported by pointing out the relaxation of constraints for a given use, which also shows in a remarkable change in frequency distribution (some preliminary remarks on the issue of frequency distribution are found in Section 4).

Finally, an issue not addressed at all in this paper concerns markedness distinctions within a given system of demonstratives. There are not many explicit claims on this issue, but the few that exist (for example, Lyons 1977: 647, claiming that *that* in English is unmarked) always make claims for the demonstratives in general, irrespective of use. The frequency data discussed in Section 3 and in the appendix, as well as the observations detailed in Section 5 regarding formal phenomena characteristic for a given type of use, make it highly questionable as to whether it is possible (and useful) to determine the respective markedness of demonstratives in such a general way. Instead, I would propose the hypothesis that the markedness relations are different for each use. For example, in 2- or 3-term systems of demonstratives, such as English, Indonesian or Tagalog, the distal demonstrative seems to be the unmarked choice for recognitional use and the proximal demonstrative for tracking use.

Abbreviations

ABS	absolutive	M	masculine
ACC	accusative	MED	medial
ACT	actor	N	neuter
ADV	adverbial	NEG	negative/negation
ALL	allative	NOM	nominative
ANA	ana-class (Nunggubuyu)	PL	plural
ANAPH	anaphoric	PM	predicate marker
AND	andative	PN	proper nouns
APPL	applicative	POSS	possessive
CAUS	causative	PRES	present tense
DAT	dative	PRF	perfect
DIST	distal	PROX	proximal
DP	dummy pronoun	REAL	realis
DU	dual	RED	reduplication
EXIST	existential	REL	relativizing element
F	feminine	SG	singular
GEN	genitive	SPEC	specific article
GER	gerund	STAT	stative
IRR	irrealis	UG	undergoer
LK	linker	UGt	undergoer theme
LOC	locative		

Conventions in examples

{ } end of pause unit (numbers indicate pause length in seconds)

< > false starts

NOTES

1. I wish to thank Bill Croft, Hans-Jürgen Sasse, Eva Schultze-Berndt, and Fritz Serzisko for very valuable discussion and comments on an earlier version of this paper. Special thanks to Louisa Schaefer for checking and improving my English.

2. See, for example, Brugmann (1904) or Lyons (1975, 1977, 1979).

3. Heath (1980a) does not explain what kind of units the commas used in the presentation of the texts delimit. However, in the discourse chapter of Heath (1984: chapter 17), he segments a sample text into strings where each string "constitutes an intonational or breath group; i.e, is normally followed by a brief pause" (1984: 590).

4. Cf. Geluykens (1992: 2) for some pertinent remarks regarding the respective merits and drawbacks of quantitative and qualitative approaches to discourse data.

5. I make use here of Hawkins' (1978, 1991) classification and terminology for the uses of the English definite articles which are, in turn, based on Christophersen (1939). Hawkins (1978: 149f) claims that in English demonstratives are only useable in visible-situation and tracking uses. This appears to be not entirely correct, as we will see below.

6. This is not to say that the demonstratives may never be used in reference to entities of this kind. Of course they may be so used, for example, in contrastive comparisons (*this president ... but that president ...*), etc.

7. The pronoun *er* has to be stressed in this context. Note that throughout this paper the difference between stressed and unstressed uses of demonstratives is neglected since for three of the data-sets (English, Ik, and Nunggubuyu) the relevant information is not available.

8. The demonstratives are possible in a tracking reading, i.e. that Roe is giving Doe's first house to his daughter.

9. Halliday and Hasan (1976: 56) analyze expletive use of *it* as in *it is true that ...* as cataphoric uses but it seems doubtful to me whether *it* here really points forward in any useful sense (see Bolinger 1977: 66-89 for an extensive discussion on this and related issues concerning expletive *it*). If that were the case, one would expect that in other languages where no pronoun equivalent to *it* has been grammaticized in this kind of construction the use of demonstratives would be possible in this context. This, however, does not seem to be the case.

10. But see the remarks in Quirk et al. (1972: 702) on the following example: *I like that. Bob smashes up my car ...* Furthermore, Manny Schegloff (p.c.) has informed me that in his English conversational data, the following kind of cataphoric use of *that* is attested several times: *That's what I came for, I want you to ...*

11. Carvalho (1991) reaches the same conclusion for different reasons.

12. I am not concerned here with the third possible syntactic function of demonstratives, i.e. the adverbial function. In most language I have looked at, a clear formal distinction exists between forms serving this function and forms for the adnominal/pronominal use (for example, English *here* vs. *this/these* or Tagalog *doon* 'there' vs. *iyon* 'that (distal)'; an

exception is the Salishan languages). The adverbial function seems to be the most basic of all demonstrative functions in that adnominal and/or pronominal forms are often historically derived from adverbial ones and that the adverbial uses are the most frequent ones.

13. In German, in utterances such as *Dies ist mein Bruder* 'This is my brother', the neuter form of the demonstrative is used rather than the masculine one. Therefore, it is unclear to me whether it is actually correct to claim for this type of equative clauses that the demonstrative really refers to the pronoun.

14. In Australian languages, however, demonstrative pronouns are freely used to refer to persons (cf. Goddard 1983: 53, Heath 1984: 280, Wilkins 1989: 112).

15. Note that Heath, in his extensive chapter on demonstratives (1984: Chapter 7), does not distinguish between these two uses and does not even raise the issue throughout the chapter.

16. The numbers in parentheses in the pronominal column indicate the number of discourse deictic uses.

17. Cf., among many others, Chafe (1976, 1980, 1987); Du Bois (1980); Prince (1981); Givón ed. (1983); Sidner (1983); Ariel (1990); Webber (1991); Gundel et al. (1993); Du Bois and Thompson (In prep.) provide a recent survey and a proposal for a systematic classification.

18. Cf. Nunberg (1978) on this distinction.

19. This is drastically oversimplified since there are many factors 'enhancing' the establishing force of an indefinite NP, such as presentative constructions or subject position. Furthermore, in this regard, there is a clear difference between true indefinite articles and the numeral 'one', which are often regarded as equivalent in their discourse function. There is no space, however, to discuss this here in detail. The skeptical reader may wish to take a look at the referential management of 'the goat' in the Pear Stories, for which the two-step procedure is used in all narratives (if the goat is mentioned twice at all). Cf. also Marslen-Wilson et al. (1982: 349-351) on the necessity of constructing "mental locations" and the insufficiency of proper nouns in achieving that.

20. From table I in Gundel et al. (1993: 284) I take it that they also did not find such uses for Chinese, Japanese, Spanish, and Russian.

21. This is not the place to indulge in a discussion of localist and related accounts of apparently non-spatial uses of demonstratives (for a recent contribution, see Mulder 1992). In section 5.4, we will discuss a kind of demonstrative that clearly lacks a spatial basis — the so-called anaphoric demonstratives found in many Australian languages. In this regard, then, I agree with the following statement by Hanks (1992: 52): "The standard assumption that space is always foundational in deixis is an inconvenient fiction not borne out comparatively."

22. Of the 81 discourse deictic uses of the demonstratives, 62 involve *this* and 19 *that*.

23. Distantly related to this second proposal as well, it seems, is the proposal by Kirsner (1979) and Leonard (1985), who claim that demonstratives signal high ("greater urging of the hearer to find the referent") and low ("lesser urging of the hearer to find the referent") deixis (Kirsner 1979: 358). Their proposal is meant to hold for all uses of demonstratives, not just the tracking ones. It remains unclear, however, how other tracking devices figure in this approach.

24. See, for example, Fox (1987); Tomlin & Pu (1991); Webber (1991); Vonk et al. (1992).

25. I have adopted Sacks and Schegloff's (1979) term *recognitional* as a name for this use, since to my knowledge, there is no established term in use. Note that Sacks and Schegloff's use of the term is much broader in that it covers all referring expressions that are successful in locating a referent in the universe of discourse shared by speaker or hearer. Proposals for better terms, especially ones highlighting the central feature of assessing the adequacy of the referent-identifying information, are highly welcome.

26. Transcription, glosses and translation by Auer; some details of the conversational transcription format have been omitted.

27. I suspect that, in languages where one or more demonstratives are said to be employed in reference to invisible entities, these may well turn out to be also recognitional demonstratives.

28. This is not to say that an expression such as *that president* is impossible. Actually, special effects may arise when reference is made by way of a recognitional use under circumstances which do not warrant such a use. The specific, personalized knowledge on which this use is based then leads to the kind of emotional connotations known as sympathy- or camaraderie-uses of demonstratives in the literature (cf. Chen 1990: 148-151 for a brief survey).

29. In standard Indonesian the word for 'clothes' is *pakaian*, with a diphtong /ey/. This diphtong is regularly reduced to a simple mid front vowel in the colloquial varieties of Indonesian in Sulawesi (and elsewhere in the archipelago).

30. The verb *single out* is meant to underline the fact that demonstratives do more in the task of locating an intended referent in the universe of discourse than either definite articles or 3rd person pronouns. I am not in a position to present a fully worked out account on the differences between these three gram classes with respect to this task. Auer (1984) makes the following proposal which seems to provide a useful start in further exploring this issue. He distinguishes between unproblematic or *en passant* reference for which definite articles and 3rd person pronouns are used, and reference involving some kind of complication (such as the uncertainty characteristic of recognitional use) for which demonstratives are used.

31. The question marks in the area for tracking indicate that several contexts for tracking use of demonstratives remain to be identified.

32. The only other use I am aware of as possibly being universal as well is the so-called emotional use of demonstratives (for example, the sympathy-*that* frequently used by doctors and nurses as in *How is that throat?*; cf. also note 28 above). But cross-linguistic data on this use are so scarce that it is impossible to seriously support or falsify a claim to this respect. Furthermore, it could be the case that the so-called emotional use may be analyzed as a specialized subtype of the recognitional use.

33. I am presently preparing a monograph on the grammaticization of (definite) determiners which presents further evidence supporting this assumption.

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Appendix

This appendix presents a tabulary overview of the data on which this study is based. The demonstrative uses are classified according to the categories discussed in Section 5. Adnominal and pronominal uses are listed separately.

Note the following general considerations which have been applied in analyzing the data:

Immediate repetitions of a demonstrative as in:

X.122. you know **that that** kind of thing that you {.4}

as well as repetitions of the phrase containing the demonstrative as in:

III.63. what does **this guy** {laugh} you know what does **this guy** really think. I guess he thinks that {.95}

have only been counted once.

Ad*pro*nominal uses have been counted as adnominal ones.

Morphologically complex forms of which demonstratives form a part have generally not been included. Note, in particular, that in some languages, there are formally complex demonstratives of manner corresponding to the English *like this/like that* (for example Indonesian *begini/begitu*) which are not considered here.

Format of tables

In each table, adnominal (ADNOM) and pronominal (PRO) uses are listed in separate columns. The numbers in brackets next to ADNOM and PRO indicate the totals for each of these uses.

The names of the usage types are abbreviated as follows:

SITUAT situational use
D-DEIX discourse deictic use
TRACK tracking use
RECOG recognitional use

Each table is followed by one or more comments which, among other things, states the number of unclassifiable uses (all of which are not included in the tables).

Pear Stories

Sample consists of the Pear narratives published in the appendix to Chafe (1980); number of pause units = 1798.

Table 5. Demonstrative uses in the Pear Stories

	ADNOM (122)		PRO (52)	
	PROX	DIST	PROX	DIST
SITUAT	41	2	4	
D-DEIX	11	8	13	19
TRACK	40	3	5	6
RECOG		17		5
TOTALS	92	30	22	30

Comments:

4 occurrences of *this* and 1 occurrence of *that* were not classifiable due to unclear context.

The 41 tokens classified as adnominal situational include 26 first mentions, 4 of which are produced in a row by Speaker 2 (units 19ff) and might simply be counted as one instance. Furthermore, it includes the collocation *this way* (7 times), cf. Section 5.1.

As for the collocations with *like*, those functioning as manner adverbials (5x *like this* and 2x *like that*) have not been included. However, constructions such as *anything like that* (e.g. X.196 *the southern part of the United States, or anything like that*) have been included and classified as recognitional.

Nunggubuyu

Sample consists of texts 1-6 in NMET (Heath 1980a: 17-49) all of which are myths; pause units (Heath's commas!) = 422.

The following table for Nunggubuyu includes only non-predicative (= prefixed) forms of demonstratives. The predicative forms are employed in adverbial functions and for discourse deixis.

Expressions where a demonstrative occurs immediately adjacent to a noun (either before or after) have been classified as adnominal uses, those where a demonstrative occurs alone within a pause unit as pronominal ones.

Table 6. Demonstrative uses in six Nunggubuyu myths

	ADNOM (26)			PRO (27)			
	PROX	MED	ANAPH	PROX	MED	DIST	ANAPH
SITUAT	6	1		8	6	1	
D-DEIX							1
TRACK			1				5
RECOG			18				6
TOTALS	6	1	19	8	6	1	12

Comments:

No adnominal uses for the distal demonstrative are attested

As mentioned above, discourse deixis is primarily done with predicative forms. The token frequency of these forms is displayed in the following table, together with that of the adverbial forms:

Table 7. Predicative and adverbial forms of demonstratives in six Nunggubuyu myths

	PROX	MED	DIST	ANAPH	TOTALS
PREDICATIVE	14	8	3	6	31
ADVERBIAL	11	7	10	23	51

Ik

The sample consists of two oral narratives, i.e. texts 1 and 6 in Serzisko (1992: 85-88,213-266); pause units = 745.

Table 8. Demonstrative uses in two Ik narratives

	ADNOM (89)		PRO (8)	
	PROX	DIST	PROX	DIST
SITUAT	10	9		2
D-DEIX	17			3
TRACK	37	1	2	1
RECOG		15		
TOTALS	64	25	2	6

Comments:

7 uses of the proximal and 2 uses of the distal demonstrative are not included in this table since the meaning/syntax is unclear and does not allow for classification.

Indonesian
Sample consists of 3 oral narratives, recorded and transcribed by the author; pause units = 769.

Table 9. Demonstrative uses in three Indonesian narratives

	ADNOM (73)		PRO (27)	
	PROX	DIST	PROX	DIST
SITUAT	9		1	
D-DEIX	2	9	4	11
TRACK	9	22		11
RECOG		22		
TOTALS	20	53	5	22

Comments:
1 occurence of proximal *ini* was not classifiable.

Tagalog
Sample consists of 2 oral narratives from Wolff et al. (1991), text 13 (pp.588-590) and text 15 (pp.692ff), and one oral narrative recorded and transcribed by the author; pause units = 489.

Table 10. Demonstrative uses in three Tagalog narratives

	ADNOM (42)			PRO (27)		
	PROX	MED	DIST	PROX	MED	DIST
SITUAT	2		1	4	3	
D-DEIX	4		2	4	2	8
TRACK	6	2	17	2	1	3
RECOG			8			
TOTALS	12	2	28	10	6	11

Comments:
1 medial and 4 distal uses were not classifiable.

Anaphora in Russian Narrative Prose: A Cognitive Calculative Account

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In this paper I am going to propose a model of referential device selection in a sample of Russian written narrative prose. I will argue that the most important factor in a referent's pronominalizability is the cognitive notion of activation. In particular, I will propose an arithmetical model which calculates referents' activation at any given point and thus accounts for every instance of referential device selection in the sample discourse.

This paper is structured as follows. After the Introduction (1), I present a theoretical cognitively-oriented model of anaphora in section 2. In section 3 relevant facts about the discourse sample employed and about the Russian language will be reviewed. Section 4 contains a discussion of activation factors and their numerical values. All calculations explaining the referential choices in the sample discourse are also presented in section 4. In sections 5 and 6 two additional components of the model of anaphora are briefly discussed. Concluding remarks are found in section 7. Appendix 1 contains the sample discourse with an English translation. Appendix 2 is an illustration of the proposed calculative methodology.

1. Introduction

For the last fifteen years or so, anaphora has been the subject of a number of very interesting and productive accounts. One group of these accounts is very rich in taking into consideration a great number of different discourse factors influencing the choice of referential devices (e.g. Clancy 1980; Givón 1983;