

The Grammatical Nature and Discourse Power of Demonstratives

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It might be assumed that the syntactic functions of demonstratives are universal: those that appear with nouns function as determiners or specifiers of the nouns, while those that occur alone function as pronouns. In many languages, however, the distribution of demonstratives in connected speech indicates that they are not functionally equivalent to those in languages like English.

For most languages, it is relatively easy to elicit structures that seem to parallel English demonstrative adjectives. Languages do vary in the number of demonstratives they contain (this/that/yonder) and the distinctions they encode (near speaker/near hearer, visible/invisible, etc.). Still, demonstrative constructions often appear equivalent across languages. The examples cited in the following discussion come from a single language, to avoid continual reorientation to new forms, but they were chosen to illustrate characteristics of a large set of areally and genetically unrelated languages. The Tuscarora sentences in 1) and 2) were provided by the late Elton Greene of Lewiston, New York, as translations of the accompanying English sentences.

- 1) Kyè:ní:kã: uhsa?kã: ?neh, se?tsí ukwè:neh.
this knife too it is dull
'This knife is too dull.'
- 2) Hè:ní:kã: áha:θ, yuhurã?áhá: ?nye?.
that horse it is getting old
'That horse is getting older.'

Like their English counterparts, the demonstratives kyè:ní:kã: 'this/these' and hè:ní:kã: 'that/those' distinguish entities according to their distance from the speaker.

Demonstratives in languages like Tuscarora are surprisingly pervasive in spontaneous discourse, but they do not always precede nouns. They may follow them, as below. (These and all subsequent examples come from spontaneous connected speech.)

- 3) Uhtsíhrã? kyè:ní:kã:, wahra?nã?tyã: ?nã?, wahra?nú: ryáhnã?.
bear this he tried he struggled
'The bear tried, he struggled.'
- 4) Hé?thu yahwa?ã:rã?nã?w u?né:wa:k hè:ní:kã: ...
there she blew ghost that
'She blew (at) that ghost'

Like their English counterparts, these demonstratives can cooccur with numbers, but either order is possible.

- 5) Hè:ní:kã: nè:yá:kã: wa?nyekyétkaht.
those two of them they two chased me
'Those two chased me.'
- 6) Há:ne? hésnã: ã:tsí, kyè:ní:kã: ráha?r,
this then one this he is a member
'At this time, he and a certain member of the tribe
kyè:ní:kã: kã:ne? wè:yúhre:, wa?nyã?nã: ruh,
this here it is amazing they two became friends
became very good friends'

Why would speakers choose to reverse the constituents of noun phrases?

A closer look at languages of this type reveals that demonstratives and associated nouns do not necessarily form syntactic units equivalent to their English counterparts. In English, common count nouns must be preceded by a specifier such as an article, possessive, or demonstrative in most contexts. Sentences like 7) are ungrammatical without them.

- 7) *Tidy gardener put hoe in shed.

Multiple English specifiers do not cooccur before a noun. All perform the same syntactic function, so any one is sufficient.

- 8) *The my this tidy gardener put a your that hoe in the his that shed.

There are many languages, however, that do not require specifiers before nouns.

- 9) Eká:θ?ah wa?kú:ri:k.
girl it bit her
'It bit a/the little girl.'

In some of these languages, optional definite markers may appear with nouns. Demonstratives can cooccur with these markers. Tuscarora has no exact equivalent to the English definite article, but an optional particle há? precedes nouns and other constituents functioning as nominal arguments, and is often translated 'the'.

- 10) Wahrá:rã:ku? (há?) kátšyãh.
he took out the fish
'He took out the fish.'

Demonstratives can appear both before and after há?.

- 11) Wahrahã:rãhsã? kyè:ní:kã: há? .. kátšíhtšuh.
he hollered this the it is crafty
'The fox hollered.'

- 12) *Neyuhskané:kã:t hészã: ãkayã?na?rihã: tyã?*
 it is peculiar then they will teach them
 'They would teach them something peculiar,

ha? kyè:ní:kõ: akaye?ðhahðñhstãhã:wa?k, ...
 the this they would hold supreme power
 how to have a certain supreme power.'

Demonstratives can also cooccur with possessed nouns.

- 13) *ðatkãhthu kyè:ní:kõ: ki?rwãhðeh.*
 watch this my tail
 'Watch this my tail.'

In languages of this type, there is actually no internal motivation for assuming that the demonstratives function syntactically as determiners, since they are not necessary for grammaticality, and since the elements that might function as determiners all cooccur freely.

There is in fact little evidence that these demonstratives even form syntactic constituents with adjacent nouns. Unlike English determiners, demonstratives in these languages may be separated from adjacent nouns by intonation breaks. Note the pause and falling pitch between the demonstrative and noun in 14).

- 14) *Wã?tkahã:hi:ð hészã:ní:kõ:, .. ruya?kwãhehr.*
 it met it that he body carries
 'It met that dinosaur.'

Such structures can exhibit a range of intonation patterns. Demonstratives may be separated from adjacent nouns by a long pause and fall in pitch as above, by a shorter pause and little pitch change, or by no discernible break at all. The variety does not indicate contrasting syntactic structure, although it may reflect different pragmatic conditions. It is similar to the range of intonation patterns that can accompany coordinate predicates in English. They may be clearly separated intonationally, as in 'She surreptitiously examined her bank statement, and regretfully decided that it was time to take action', or they may show little intonational separation at all, as in 'she sat down and cried'. The syntactic structure is the same.

There is little evidence within languages of this type that demonstratives even belong in two sharply separate categories: adjectives and pronouns. Demonstratives have the same forms whether nouns are present or not.

- 15) *Tãihtrãhsi kyè:ní:kõ: (X)!*
 'Untie this (X)!'

 16) *Tha?ðahstã:wi:k hészã:ní:kõ: (X)!*
 'Leave that (X) alone!'

In fact, all demonstratives are referential in their own right, although they may be semantically coreferential with adjacent nouns. They are syntactically equivalent to the nouns, appositives, a fact that is consistent with their variable order. Note that in Tuscarora, a demonstrative and a coreferential nominal may both be preceded by *ha?*, the particle that precedes nominals.

- 17) *Wakkú:wanãh, ha? kyè:ní:kõ: ha? kaye?tskã:rù:rã?*
 I am large the this the they are Tuscarora
 'I am chief of these Tuscarora

kayetakrã:tih.
 they dwell (specific)
 people here.'

The absence of separate demonstrative adjectives is especially typical of languages with obligatory pronominal affixes or clitics within verbs. Because the bound pronouns refer to core arguments, verbs in such languages can and often do function as complete clauses in themselves. Coreferent nouns, when present, do not bear precisely the same syntactic relationships to verbs that subject and direct object nouns bear in English; they function as appositives to the pronominal affixes (Mithun 1985). They also do not serve as heads of noun phrases, that is, hierarchical structures containing determiners and adjectives. (Such languages usually lack a special syntactic class of attributive adjectives as well.) The resulting 'flat' structures are a mark of what are sometimes termed nonconfigurational languages. (See among others Hale 1983 and Heath 1986.)

Since demonstratives in these languages do not perform obligatory syntactic functions in noun phrases, it might be assumed that they bear a light functional load. All of the sentences cited above would be syntactically grammatical without them. Their omission might seem to have little semantic effect: without the demonstrative, 17) would mean something like 'I am chief of the Tuscarora people'. Yet demonstratives are surprisingly pervasive in connected discourse in many types of languages. As their ubiquitousness attests, they perform crucial functions in the packaging of information.

Demonstratives serve a powerful orienting role. At the beginning of narratives, for example, proximate demonstratives ('this/these') are typically used to focus the attention of the audience on a specific event, time, place, or character. Mr. Greene often used demonstratives to open Tuscarora stories, as in 18).

- 18) *U:nãha? kã:ð, aðã yakwakõt í:ð?ah,*
 long ago used to when we were children
 'Long ago, when we were children

yākhitā?nyā?θeh *kā:θ* *kyè:ní:kē:* *utkahryéhtšhreh,*
 they visit us used to this story
 people used to visit us, and they would

kayā?tkáhrih.
 they tell
 tell this story.'

Proximate demonstratives are typically used to focus the attention of the audience on a specific point in time. Another Tuscarora legend opened with general remarks on the stone giants who used to roam, killing people and animals. The speaker then drew the attention of the listeners to a particular time:

- 19) *U:nā* *hésnā:* *ā:tší* *thyahwáhe:t* *kyè:ní:kē:*,
 now then one time this
 'Now this one time,

kakutehyahrutšhrā?u?y *ne?skāhē:weh ...*
 they crowd gathered large somewhere
 a large crowd gathered somewhere ...'

Proximate demonstratives can provide spatial orientation. The passage in 20) comes from an historical account of the capture of an American general by the British during the war of 1812.

- 20) *wa?kayā?nathē:re:t* *kyè:ní:kē:* *yuhwé?nu?*
 they took him away this island
 'They took him away and left him

yahwa?kayā?na?ní?rē? *wa?kayā?na?níhtrē:t.*
 they left him they tied him up
 on this island, tied up.'

The center of action moves to the island at this point, where a group of Tuscaroras will make a daring rescue by canoe.

Major protagonists are frequently introduced with proximate demonstratives. Demonstratives are appropriate for this purpose, since they point out a center of interest. A proximate ('this/these') is used because such protagonists establish the center of the action and our vantage point. The passage in 21) comes from a legend about the slaying of a monster. We are first told that the Indians in the area were bothered by a dinosaur who went around destroying homes and killing people. Our attention is then directed to three people in particular with the proximate deictic 'these'.

- 21) *U:nā* *hésnā* *ā:tší* *thyawáhe:t,*
 now then one time
 'Now then one time,

kyè:ní:kē: *āhsō:* *tikā:vá:kē* *wa?kayātù:rá:thē?.*
this three of them they went hunting
 these three men went out hunting.'

Distal demonstratives ('that/those') are used to point out important entities at a distance from our vantage point. The men introduced above were enjoying themselves when all of a sudden, they heard something chasing them. They spied the dinosaur and began to run. The dinosaur caught the slowest runner and carried his body off. It then returned to chase the second. This runner is referred to by a distal demonstrative 'that'; the audience does not follow the victim, but watches from a distance.

- 22) *U:nā* *nektí:ha?nā?t ...* *wahrú:tkaht* *hē:ní:kē:*
 now second it chased him that
 'Now the second one, it chased that one.'

After the dinosaur has caught the second runner and carried the body off to store as food, our attention is drawn to the third runner. This time a proximate demonstrative 'this' is used. This third runner will assume center stage, and it is through his eyes that we will watch subsequent events.

- 23) *U:nā* *hē:snā:* ... *ahsāha?nā?t,* ... *kyè:ní:kē:* *rare:rúhe?.*
 now then third this he's running
 'Now then the third one, this one's running,

ù:nā *nehruhwihsāhé:yū:* *Rayā?né:ri:* *āhрутáhki?w.*
 now his strength is dead he knows it will catch him
 he's already exhausted. He knows it will catch up to him.'

Once a vantage point has been established, other characters can be pointed out with respect to it. In the middle of the chase, a handsome young man appears, sent by the Holy Spirit, and asks what seems to be the trouble. After all is explained, he tells the hunter not to worry, and steps behind a tree. As the emissary moves away from the hunter (and us), he is designated by a distal demonstrative 'that'. As he returns, a proximate demonstrative 'this' is used.

- 24) *Yahwahrakwa?ná:θe:?* *hē:ní:kē:* *rakwá:tihs,*
 he went around that young man
 'He went around behind the tree, that nice young man,

nahrayá:kē? *kyè:ní:kē:* *kāhreks ... yuyāhwiθna?níhrā?.*
 he came out this lion it wing standing
 and then (this one) came back out as a winged lion.'

Once characters or objects have been introduced, demonstratives can function to link subsequent mentions of them. As the winged lion goes to meet the aforementioned dinosaur, the dinosaur

is reidentified with a demonstrative, an overt reminder that this is the dinosaur we were discussing earlier.

- 14) *Wa?tkahá:hi:θ hē:ní:kē:, .. ruya?kwáhehr.*
 it met it that he body carries
 'It met that dinosaur.'

Such a device is particularly useful in a language without definite articles.

Demonstratives can be exploited to distinguish characters in narratives. The vantage point of the audience is usually that of the major protagonist, so he or she is consistently identified by a proximate demonstrative 'this (one)'. Other characters are referred to by a distal demonstrative 'that (one)'. During the fight between the nice young man (now a winged lion) and the dinosaur, our viewpoint is that of the young man. This fact serves to distinguish reference to the two adversaries during the fight.

- 25) *wé:yúhre: wa?nyúhtíhr, kyè:ní:kē: wahrahti:nāh,*
 it is very they are even this he pleaded
 'It was a very even fight, and so this one pleaded,

wahrāhrā? naktl:rá:nheh.
 he said help me
 he said, "Help me!"

Demonstratives are not limited to pointing out human beings, although of course people are more often foregrounded in narrative than objects. During a discussion of how to make cornbread, the speaker described how he would first go after ashes, then boil water, put the ashes in the kettle with the water, stir, add beans, add corn, boil until the skin peeled off of the kernels, wash the corn, grind it into meal, mix in beans, then add some boiling water to make dough. He then said:

- 26) *U:nā ākyé:ti? kyè:ní:kē: ha? utá?nareh.*
 now I'll make this the bread
 'Now I'll make this bread.'

The demonstrative signals a return to the bread, still the primary topic of the discussion.

Demonstratives are not used every time an entity is referred to. They normally function to focus or refocus the attention of the audience. They appear at the beginning of episodes, when a new scene is set, or as our attention shifts back and forth between characters. They do not usually appear with each verb when a single character accomplishes a rapid, conceptually unified series of actions. The dinosaur's attack on the second hunter was described as in 27, for example:

- 27) *Wahruyé:nā:?, θakáha?w, ne?skāhē:we yahwa?ká:yā?,*
 it caught him back it carried it somewhere it left it
 'It caught him, carried him back, and left him somewhere.'

(The pronominal patient changes from masculine to neuter here because the dinosaur caught the hunter alive, but carried and stored only his body.) In this way, the demonstratives establish a certain rhythm in the flow of information.

In fact in many languages, demonstratives play a major role in manipulating the flow of information. In spontaneous spoken discourse, speakers tend to introduce only one significant new piece of information at a time. A newsworthy action, along with constituents identifying a new agent, patient, location, and time, are rarely introduced simultaneously within a single intonation unit. In languages where verbs contain bound pronouns, it is not unusual for intonation units to consist only of a single verb, or of a verb with a single argument or adverbial. A typical distribution of information over intonation units can be seen in 28), the opening of an anecdote. Each intonation unit, set off here on a different line, introduces a significant new piece of information.

- 28) *ā:tših .. thyahwáhe:t ..*
 one time

kyè:ní:kē: rā:kweh,
 this man

rutáhskwayā? ... ā: ... rù:nā:θkwarā? ...
 he animal has toad

ra?ehnā?kyeh kā?rā?.
 on his hand it's at home

'One time this man had a wart on his hand.'

The intonational structuring mirrors the conceptual structuring, with breaks between foci of attention.

Demonstratives can perform a crucial role in controlling the length of intonation units. Often demonstratives stand in for longer constituents, pointing to their expansions in preceding or following intonation units. The passage in 29), for example, opened the account cited earlier of the British-American war. Instead of introducing the war and the participants all at once, the speaker identified them in separate intonation units. The demonstrative in the third line signals the participation of those fighting and points to their fuller identification later.

- 29) *U:nāha?,*
 long ago

kyè:ní:kā: tikahà:wi?
this so it carries

kyè:ní:kā: kayō?rì:yus
these they are fighting

kyè:ní:kā: wahstāhá:ka:?
these Boston inhabitants

tisnō? kuráhku:, ...
and British

'Long ago, when the Americans and the British were at war ...'

In this particular passage, the intonation units followed in rapid succession, but they were still prosodically distinct. The demonstratives do not indicate syntactic structure, but they do mark information structure. The passage would be syntactically grammatical without them, but they are useful in focussing our attention and in overtly linking the content of intonation units.

This use of demonstratives can also contribute to the efficient functioning of pragmatic word order. In languages where all core case relations are established within the verb, word order is not necessary for disambiguating syntactic relations (Mithun 1984, 1986). Instead, it functions pragmatically: constituents are ordered according to their descending order of newsworthiness. The most significant, unpredictable information appears early, followed by increasingly predictable and incidental information. Such a system is of course most efficient if the number of constituents is not excessive. Ordering ten words according to their relative contribution to the discourse is a more complex operation than ordering two or three, and the result is more difficult to interpret. When demonstratives stand in for elaborate constituents, they permit more effective use of pragmatic ordering. In the account of the British-American war, we are told that a certain General Porter befriended a Tuscarora man. This man had been taught special skills, in particular, the power of being invisible. When the general was captured by the British, that Tuscarora man decided to rescue him. When we are told of this, the verb, representing a new action, appears first. The hero, who has already been introduced, appears last. He is pointed out with a demonstrative, since our attention must shift back to him from the British and the general. The demonstrative also suggests a further identification of the man. We had not been told his name before.

30) Yahwahráhrku? kyè:ní:kā:,
he went there this

... tšáks rayá:ōāh.
Obadiah he is named

'This man, whose name was Obadiah, left to go there.'

As the translation of 30) illustrates, structures involving demonstratives in such languages can resemble English relative clauses pragmatically. They provide further information about a particular entity. English 'that' has involved into a formal marker of syntactic dependence (unstressed θet), however. Demonstratives in structures like 30) serve only as semantic links, not syntactic ones. The clauses in which they appear are grammatically independent. The second line in 31) functions similarly as a parenthetical appositive. The demonstrative simply links the entities involved explicitly.

31) U:nā hésnā: ú: ?nā? ... ōáhe?
now then next bean

ōáhe? .. kyè:ní:kā: tikatkwā:rà:yē:t,
bean this it is red

nāyakwā:yéhra:k.
we'll mix in

'Now then beans, red beans, we'll mix in.'

Demonstratives may appear in any position in such constructions, or they may not appear at all.

Structures involving demonstratives in these languages can also resemble English complement constructions, at least superficially. Both proximate and distal demonstratives can stand in for clausal arguments.

32) tisnō? twa?kà:ye: ?r kyè:ní:kā:,
and it happened this

.. utštāhreh.
stones

wa?kà:yē?nā?
they became

'and it happened that they turned into stones.'

There are no language-internal reasons to accord these constructions special syntactic status. The demonstratives may be stressed, and may be followed by falling pitch, unlike the English 'that' of complement constructions. The clauses they refer to are finite, containing full specification of core arguments and tense and aspect.

Demonstratives in many languages share basic lexical meanings with their English counterparts: they point out entities in terms of relative distance. They do not necessarily function in the same way, however. In English, demonstratives perform certain

language-specific syntactic functions. Demonstrative adjectives fill an obligatory syntactic role as specifiers in noun phrases; although speakers may choose which specifier they will use, they may not choose whether or not to use one. The English distal demonstrative pronoun *that* has developed into an overt marker of dependent syntactic structure in relative and complement clauses.

In languages like those described here, demonstratives have been grammaticized to the extent that they constitute a closed lexical class, but they are not required for syntactic grammaticality. They do not function as specifiers, nor do they mark syntactically dependent structures.

Whether demonstratives function as formal markers of syntactic structure or not, they can perform powerful roles in the organization of discourse: in establishing orientation, in tracking entities, and in controlling the flow of information. Some of these functions are particularly useful in languages that lack obligatory marking for definiteness, and in those characterized by morphologically complex words and pragmatic word ordering. When used in these ways, demonstratives constitute devices that speakers can exploit at will. They are evoked by textual considerations rather than by syntactic context. Some speakers may be more systematic in their use of them than others, and individual speakers may vary from one situation to the next in their exploitation of them, but they are pervasive, powerful tools. It is easy to overlook their function in the moulding of discourse if they are examined only in isolated, elicited sentences, rather than in spontaneous, connected speech.

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Taking: A Study in Lexical Network Theory
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Classical semantics is characterized in large measure by a set of constraints on adequacy: Semantic theory is to characterize such relations as synonymy, antonymy, and hyponymy for words, and entailment and contradiction for sentences. This set of initial constraints led to a view of semantics as a form of logic, and the insights that came out of it were very limited: notions of logical form, including predicate-argument structure, coreference, binding of variables, scope of logical operators, propositional functions, classical semantic roles, etc. The constraints themselves assumed a view of meaning as based on truth, which led to the application of model theory to linguistics (cf. Lakoff, 1968). Though a number of real insights have come from this approach, it has failed to account for most of the phenomena of natural language semantics.

Within the cognitive semantics tradition, the first major advance was Fillmore's frame semantics. Fillmore (1975, 1978, 1982, 1985) took seriously the conditions of adequacy proposed earlier by semantic field theorists, namely, to show the systematic relationships among the words in a given field (e.g., *buy, sell, cost, price, goods*, etc.). He argued that words had to be defined relative to schematic structures called frames (alternatively, schemas) and investigated many of the properties of those frames.

In succeeding years, Langacker (1987) and Talmy (1985) added a further major criterion for the adequacy of a semantic theory, namely, that generalizations involving the meanings of grammatical morphemes in the world's languages be describable. In applying this criterion, they demonstrated the need for incorporating into semantics the study of image-schemas and the relationships among them.

Most recently, the work of Brugman (1981, 1984) has explicated and applied a criterion of adequacy suggested in a variety of earlier works: The semantic relatedness criterion, which requires that all the regularities governing relationships among meanings be stateable in fully general terms. Brugman has applied this criterion to an account of the internal semantic structure of polysemous lexical items. The semantic relatedness criterion has led to a major line of research in contemporary semantics: The theory of lexical networks, which sees a lexical item as a network of minimally differing senses, with links of a small number of types.

The addition of these adequacy criteria for semantics has placed more *constraints* on what constitutes an adequate semantic analysis, and has led to a thorough rethinking of the nature of semantics itself. For example, the development of metaphor research over the past decade has been a result of the implicit application of the semantic relatedness criterion, and this has led to a theory of cognitive semantics in which abstract concepts are for the most part understood in terms of metaphorical mappings (see Lakoff and Johnson 1980). In short, the application of these criteria have led not merely to an understanding of the structure of the lexicon, but, more significantly, to a new semantic theory.

The study of the systematic relationships among the meanings of lexical items is therefore not mere lexicography. It is a theoretical endeavor of the most significant sort. It is this endeavor that lies behind much of the most interesting work in contemporary semantic theory, including the study of conceptual metaphor and metonymy, as well as the empirical investigation of image-schema structure through the study of image-schema transformations (see Lakoff, 1987, case study 2, and Lakoff and Brugman 1986). By studying precisely what the minimal differences are between the senses of lexical items,

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