The forms of referring expressions chosen by speakers are not random, as has been shown by the work of contributors to this volume and others. The forms can be correlated with at least two kinds of factors. One is the speaker’s assessment of the background knowledge shared by the hearer. This factor can be reflected in such choices as definite versus indefinite noun phrases. A second is the speaker’s assessment of the attention state of the hearer, the degree to which information is active within consciousness at the moment. This factor can be reflected in such choices as full noun phrases versus pronouns. The speaker’s choice of expression can be interpreted as a clue to the hearer in identifying the intended referent: within the realm of shared knowledge or not, within current focal consciousness or not. Recent discussions of such correlations appear in Ariel 1988, 1990, and 1991; Gundel, Hedberg & Zacharski 1990, 1993; Chafe 1987, 1994; Fretheim 1991, 1992 a, b; and elsewhere.

As noted by several of these authors, form involves more than a choice of words. Grammatical structure and intonation, or prosody, play key roles as well. For practical reasons, the role of intonation has often been accorded less attention than the choice of lexical category, because it is rarely represented in written language. It is perhaps best observed in spontaneous conversation, where speakers are actively engaged, moment-by-moment, in establishing and confirming reference. Here the role of intonation in signalling relative accessibility will be examined in conversation from Central Pomo, an American Indian language of Northern California. The speakers are Mrs. Frances Jack and Mrs. Florence Paoli.
Central Pomo contains an inventory of referring expression types similar to those of many other languages of the world: indefinite noun phrases, proper names (first and last), definite noun phrases, definite noun phrases with distal or proximal demonstratives, demonstratives alone, stressed and unstressed independent pronouns (based on the distal demonstrative), special empathetic pronouns (similar to the logophoric pronouns of African languages or the long-distance reflexives of Icelandic), and null anaphora. As would be expected, choices among these categories reflect both the identifiability of referents and their relative accessibility, their assumed activation state within the mind of the hearer (Mithun 1990). Here, the role of prosody in signalling accessibility will be examined within one set of options, full noun phrases (including names).

1. Noun phrases representing new referents

Entities are typically first introduced into Central Pomo discourse by full noun phrases, as in other languages. Those noun phrases representing new referents exhibit certain prosodic characteristics.

As is well known, speech is not produced in a steady stream, but rather in series of intonation units. An intonation unit consists of ‘a sequence of words combined under a single, coherent intonation contour, usually preceded by a pause’ (Chafe 1987:22). Such units are typically characterized by an overall decline in volume, pitch, and speed. In the material cited here from Central Pomo, each intonation unit is represented on a separate line, as in (1). The women had been discussing differences between their language, Central Pomo, and another language, Kashaya. Handed a glass of water, Mrs. Paoli replied “Yáhwit’ ‘thank you’. At this point, Mrs. Jack commented that another woman, named Annie Lake, claimed there was no word for ‘thank you’ in her language, Northern Pomo.

(1) Central Pomo intonation units

\[
\begin{align*}
\text{Annie} & \quad ?i: \quad ?e, \\
\text{Annie} & \quad \text{be} \quad \text{is} \\
\text{ti}-\text{ya}=k^{h}e \quad \text{et} \quad \text{can} = m = \text{mu-}l = \text{da} \\
\text{self-PL=OBL} & \quad \text{language} \quad \text{cop=that=in} \\
\text{yáhw} = \text{čh}=\text{w}=\text{w} \quad \text{thank.you} \quad \text{lack-PRF} \\
\text{‘Annie [said] there’s no “thank you” in their language.’}
\end{align*}
\]
The three intonation units of this sentence can be seen in Figure 1, made with the aid of the CECIL speech analysis system (Computerised Extraction of Components of Intonation in Language). The top display represents the intensity of the utterance, heard as loudness. The bottom display shows the fundamental frequency or $F_0$, heard as pitch. The peaks on the top graph correspond roughly to syllable peaks. The two sections with little intensity show where pauses separate the units. Each of the intonation units is characterized by a general fall in both volume and pitch.

Example (1) illustrates an important characteristic of noun phrases introducing new entities. The noun phrases ‘Annie’ and ‘their language’ were both completely new within the conversation, although both were known to the

Figure 1: (1) ‘Annie said there’s no “thank you” in their language.’
speaker and addressee. Each was introduced in a separate intonation unit. This structure is in accord with Chafe’s hypothesis (1987, 1994) that an intonation unit normally contains no more than one new idea. The noun phrase ‘their language’ is the only constituent of its intonation unit. Annie is introduced with a kind of presentative construction, the empty verb ‘be, do’.

Presentative constructions typically involve verbs of existence as in (1), verbs of position, or verbs of action that move entities into the scene. Such verbs add little new information of their own. Describing how her grandmother used to make bread from pepperwood nuts, Mrs. Paoli explained that she would grind the nuts then shape the mush into a ball, perhaps adding water. The water, a new entity, was brought into the scene with the verb ‘put on’.

(2) New entity with presentative verb of motion

\[ Q^{	ext{̄}} \text{á dat-lút-in hlá-li.} \]

water pushing-add-as maybe

‘Maybe [she] was putting water on it.’

Sometimes noun phrases representing new entities appear with non-presentative verbs. These verbs share a crucial feature with presentative verbs, however, in not introducing new information of their own. Mrs. Jack had asked Mrs. Paoli whether she had heard many stories from the elders. Mrs. Paoli gave the reply in (3).

(3) New entity with accessible verb

\[ čářs=va ba-čów-a-d-an \text{ } \text{e, ...} \]

M’s.F-TOP orally-tell-IMPRF-IMPRF COPULA

‘My grandfather used to tell

\[ šiyel=da méti. \]

evening=in such

that kind of thing in the evening.’

The verb ‘tell’ does not represent a completely new idea because it appears in the context of a question about hearing stories. The first line of (3) thus contains only one brand new idea, the grandfather.

Finally, noun phrases referring to new entities may appear as components of a lexicalized unit representing a single idea. The function of the intonation unit in (4) is not to introduce the berries, but rather the single general concept of berrypicking.
2. Noun phrases representing accessible referents

Full noun phrases are also used to identify entities termed ‘accessible’ by Chafe, referents that are not entirely new, but also not given. They are assumed to be semi-active within the mind of the hearer. They may be semi-active because of a close association with an entity that is already fully active within focal consciousness, or because they had been mentioned earlier but have since faded somewhat from focal consciousness. Accessible entities, like new ones, cannot be represented by pronouns or null anaphora, because their reference would not be recoverable.

Noun phrases representing accessible entities may be uttered in separate intonation units, just like those representing new ones. Unlike those introducing new referents, however, they need not occupy an intonation unit of their own, since they do not convey new information. After she had remarked that Annie said there was no word for ‘thank you’ in Northern Pomo (example (1) above), Mrs. Jack pointed out that they (the Central Pomo) did have such a word. Mrs. Paoli responded that she didn’t think Annie understood their language.

(5) Accessibility by association

**FJ:** Yá=ʔkʰe nÁ=ʔka met' .. ḵanú.  
1.PL=OBL CONTRASTIVE=INFERENTIAL such word  
‘But we do have such a word.’

**FP:** Yá=ʔkʰe ḵanú mu-l yá-q' tʰín  
1.PL=OBL language that know not.IMPRF  
‘I don’t think she understands our language.

t'a- mu-l Annie.  
guess that Annie  
that Annie.’
‘Our language’ represents an accessible entity at this point, assumed to be semi-active within consciousness. It is not given, not fully active; the Central Pomo language had not been overtly mentioned for some time, and if a pronoun were substituted for it, the sentence would make little sense. The Central Pomo word for ‘language’ is actually the same as that for ‘word’, čan, but its reference in the first line is not the same as in the second. In the first line, čan refers to a specific kind of word, and in the second, to the language in general. The notion of the language is presumed to be semi-active in the second line because of its relationship to the previous statement as a whole.

The fact that ‘our language’ is not new is reflected in the prosodic structure of Mrs. Paoli’s response, shown in Figure 2. It does not occupy a

Figure 2: (5) ‘I don’t think she understands our language, that Annie.’

![Graph showing prosodic structure of Mrs. Paoli’s response.](image)
separate intonation unit of its own, even though the second part of the line conveys new information, the lack of knowledge.

Referents may also be accessible because of an earlier mention. After Mrs. Paoli commented that she doubted that Annie understood Central Pomo (example (5) above), she added that Annie didn’t care to learn. The two women mused about why that would be, pointing out that Annie was related to them. Mrs. Jack then recalled that about 5 years earlier, Annie had been eating lunch at the Senior Citizens’ Center. At that time, she had told Frances’ mother-in-law (the mother of Frances’ husband Mitch), that she didn’t know the Hopland language (Central Pomo). Mrs. Jack’s comment is in (6). Mitch’s mother had not been mentioned before; since she was new at this point, she was introduced in a separate intonation unit. The language had been mentioned previously, but considerable discussion had intervened since its last mention, so it had faded from consciousness. The noun phrase representing this accessible entity, the language spoken in Hopland, appeared in the same intonation unit as the verb representing new information, ‘not know’.

(6) Accessibility from earlier mention

\[
\begin{align*}
?i=\text{ma} & \quad \text{mu-l,} & \text{BE=FACTUAL that} \\
\text{Mitch}=\text{to} & \quad \text{t\textsuperscript{h}=l} & \text{NEW} \\
\text{Mitch}=\text{PATIENT} & \quad \text{mother}=\text{PATIENT} \\
\text{t\text{\textsuperscript{e}}}=\text{n-ba} & \quad \text{t\text{\textsuperscript{b}}}=\text{d\text{\textsuperscript{\textendash}}} & \text{tell-IMPRF-and self QUOTATIVE} \\
\text{Hopland}=\text{\textsuperscript{2}k\textsuperscript{l}=e} & \quad \text{\textsuperscript{2}can\textsuperscript{u}=\text{e}l} & \text{\textsuperscript{2}\text{\textsuperscript{\textendash}}ud. ACCESSIBLE} \\
\text{Hopland}=\text{from word}=\text{the not.know} \\
\end{align*}
\]

‘[She] told Mitch’s mother that she doesn’t know the Hopland language.’

The prosodic structure of (6) can be seen in Figure 3. There is no intonation break between ‘the Hopland language’ and ‘not know’.

3. Noun phrases representing given referents

As is well known, pronouns and/or null anaphora are normally used only for given referents, those presumed to be active within the consciousness of the hearer. They are not the only choices for given entities, however. Full noun phrases are also often used to refer to given referents. They show different
grammatical and prosodic characteristics than those representing new or accessible information.

Central Pomo exhibits a basic SOV word order, although other orders appear with particular pragmatic functions (Mithun 1993). Noun phrases representing given entities usually appear to the right of the verb with a distinctive prosodic contour. They are typically pronounced in a monotone, at a lower volume, pitch, and speed than the preceding material. Such a noun phrase can be seen in the example cited earlier as (5).
Prosodic Cues to Accessibility

(5) Final noun phrase representing given referent

\[ Yá=\text{?k}^e \quad \text{čanú} \quad yá-\text{q} \quad \text{t}^\text{h} \text{ín}, \ldots \]

1.PL-OBL language know.PRF not

'I don’t think she understands our language,

\[ \text{t}^\text{a}- \quad \text{m}^\text{u} \text{t} \quad \text{Annie}. \]

guess that Annie

that Annie.'

The pitch and volume contours can be seen in Figure 3. The volume of the second line, containing the given referent, is unchanging, the pitch is significantly lower than that of the previous line, and the speed is reduced.

Constructions with postverbal nominals are used for several purposes. They most often reconfirm the identity of a given referent when several entities are active at the same time. They may signal discourse structure, providing a summary at the end of an episode or scene. During the conversation, Mrs. Jack and Mrs. Paoli tried to reconstruct a story they had heard as children. Bear Old Lady was preparing to take her children out berry picking. She warned the children not to pick more than they could eat, so that nothing would be wasted. The warning is in (7).

(7) Given noun phrases as a text structuring device

\[ \text{"t}^\text{i}-\text{ya} \quad \text{qa-wá-}^\text{č}, \]

self-PL biting-go-IMPRF.PL

"Only what you can eat,

\[ \text{m}^\text{i}=\text{da} \quad \text{há-me?} \quad \text{mé-n-aw}=\text{š}^\text{ke}", \]

there=at reach-IMP.PL so-much=only take only that much",

\[ \text{?d}\text{om}^\text{a} \quad \text{hi-h-} \text{du-w}, \]

QUOT say-PRF-IMPRF-PRF

it seems she said,

\[ \text{m} \text{á}^\text{t}^\text{ú}^\text{l}=\text{?e} \quad \text{k}^\text{ú}^\text{či} \quad \text{=m}^\text{ú}^\text{t}^\text{ú}^\text{ya}=\text{l}. \]

given

old.lady=the children cop=3.PL=patient

the old lady to her children.'

It was not necessary at this point to clarify the identity of the referents, as they were the only participants present and it was obvious who was giving instructions to whom. The reiteration of the noun phrases served to close this portion of narrative as a separate scene. The story was resumed after a pause and pitch
reset, with particles that typically open new scenes, with a shift to the mother and children out walking around, picking berries.

(8) Subsequent change of scene

\[\text{Mu-l} \quad \text{?doma} \quad \text{me-n}, \]
that QUOTATIVE so

'So then, they say,

\[q'dí \quad \text{hlá-?w-ač}, \]
good go.PL-around-IMPRF.PL

they were walking around,

\[q'dí \quad \text{hlá-?w-ač}, \]
good go.PL-around-IMPRF.PL

walking around, [filling up their baskets].'

Noun phrases representing given information thus function quite differently in discourse from those activating new information or reactivating accessible information. Instead of activating a referent for subsequent use, they often serve to close a scene before a change in referents.

4. Conclusion

The Central Pomo conversational material provided here illustrates the fact that the relative accessibility or activation state of referents is signalled by more than a choice of referring expressions. Referring expressions from a single category, full noun phrases, are used not only for new and accessible entities, but on occasion for given ones as well. The differences in their activation states are reflected by differences in prosodic structure: in segmentation into intonation units and in prosodic contours. It would be easy to miss these cues to relative accessibility if we failed to consider the most common use of language: dynamic, interactive conversation.

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