

***DISCOURSE STUDIES
IN
MESOAMERICAN LANGUAGES***

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DISCOURSE STUDIES IN MESOAMERICAN LANGUAGES

Volume 1: Discussion

Linda K. Jones, editor
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INTRODUCTION

In a field as varied and complex as contemporary linguistics, the dissemination of information from one practitioner of the discipline to another is a major problem. For one thing, there is an enormous spread of interest within current linguistics. The scope and variety is such that linguists tend to become specialists on a narrow front: e.g., phonology (or some specific variety of phonology), syntax, development of language, language disorders, diachronic linguistics, discourse, conversation--or what have you. Specialization of this sort has built-in dangers, for very often research finds or conceptual frameworks in one field of specialization have important implications for another field of specialization. As a result the overly narrow specialist loses competence in his own field of specialty by failing to look beyond its borders. Add to this the further parochialism resultant from a hangover of the sectarianism of our immediate linguistic past--in which one read papers by and interacted with only those who consented to his own particular brand of linguistics--and scholarly interaction is even further reduced. Finally, add to both the above the tendency among field workers to specialize in one linguistic area of the world over against others, and it is evident that dialog among scholars can be reduced to a minimum. In the end one can find himself interacting with and reading the works of linguists limited to his field of specialty, sharing his particular approach and interested in his chosen linguistic area. Obviously, an occasional excursus beyond such self-imposed boundaries is called for.

Admittedly the present volume should be of interest to students of discourse and/or those interested in Mesoamerican languages--as well as to those accustomed to the general sort of approach here embodied. Nevertheless, it is hoped that the material included here can have a certain significance over and beyond these restrictive boundaries. The study of discourse is not a specialization; rather it embodies new perspectives for any student of human language. In this new perspective the study of verbs, nouns, and particles comes alive in a sense not previously possible, and some apparently disconnected linguistic phenomena are seen to have broad connections. That the material is Mesoamerican is, in a sense, incidental; a similar study in any linguistic area would be significant. And, again, the significance of any such study should outrun the theoretical perspectives of those who conducted it.

Specifically: seventeen field investigators of the Mexican and Central American branches of the Summer Institute of Linguistics were brought together for a two month's workshop at Ixmiquilpan in the Mexican state of Hidalgo during the summer of 1978. As director of the project, I was assisted by Larry and Linda Jones and Stephen Thrasher as linguistic consultants. The language families and stocks represented were Mayan, Totonacan, Otomanguan, Utoaztecan, and Algonquian. While the first four are typically Mesoamerican, the representative of Algonquian (Kickapoo) is a recent newcomer.

The avowed aims of the project were to investigate monolog discourse structured from a twofold perspective: that of uses of tense-aspect in verbs, and participant reference (including nouns, pronouns, verb affixes, and null). Ultimately this proved to be practically equivalent to accounting for discourse functions of verbs and nouns, along with substitutes for the latter. But other matters inevitably came in by the board, e.g., the function of certain sequence signals and mystery particles.

Out of the study various conclusions emerged: (1) that tense-aspect distinctions are best explained in reference to the texture of connected discourse; (2) that different discourse genre feature different ensembles of tense-aspects; (3) that other features of verb inflection can enter in and complicate the picture; (4) that the explanation of a mystery particle of apparently random distribution can reveal very sophisticated patterns; (5) that varying ways of introducing, tracking, and removing participants involve highly systematic rules; (6) that full understanding of such rules ties into: (a) thematic structuring of discourses and paragraphs; (b) and consideration of dominance in participant interaction--with dominance and thematicity not fully isomorphic.

While few of the above are startlingly new, much of previous discourse research was solidly confirmed and amplified. Perhaps the most significant advances are: (1) the synthesis involved in recognizing multiple levels of information relevance (see Jones and Jones); and (2) the recognition of thematicity and dominance as intertwining considerations in participant reference (see Part 5).

As for the significance of relative levels of information relevance (as over against a simple division of a discourse into foregrounded and backgrounded material), this is the main point of the Jones and Jones paper. In relating this new material to previous work, it should be noted that (1) *backbone* or *eventline*--used interchangeably in the Colombia-Panama-Ecuador volumes (Longacre and Woods, eds. 1976-7)--referred there rather to significant or major events than routine events on the eventline. Thus, in the Guajiro materials of Mansen and Mansen, the verb auxiliary *calacá*, was considered to mark 'important events', not simply events *per se*. (2) What was lacking in the South American

materials was a careful exploration of the routine eventline as marked in discourse. (3) The Mexican workshop program brought into clear focus the distinction between privileged events and routine events in narration with consequent terminological refinements. The Jones and Jones paper makes these refinements and attempts to relate all this to recent work of the Pikes' on referential hierarchy, to work on foregrounding in discourse by Hopper and others, and my own work on marking of discourse peak (Longacre 1976a). The result is a new and insightful synthesis.

One feature that repeatedly is illustrated in the material of this volume can be summarized in the rubric *peak as zone of turbulence*, i.e., at the peak of a discourse we do not have the usual discourse flow but distortion of this flow by a superimposed marking of prominence. In the generally heightened style that is characteristic of a peak, features that mark either the routine eventline or the more major events may be absent or replaced by other features. For this reason, analytically speaking, the peak is the worst of all places to begin the study of the discourse structure of a text.

The Totonac materials--to cite data which I am especially familiar with--illustrate the manner in which apparently unrelated matters come together rather dramatically in the study of discourse. The apparently disparate features that are relevant here are: tense-aspect of verbs; suppression of reference to subjects by verb affixation; uses of adverbial and relative clauses; prefixes of negation and frustration in verbs; use of the conjunction *tuncan* 'and then'; and meaning and function of a mystery particle *-tza'*. These various features are seen to mark levels of information relevance and peak: (1) The eventline is indicated by choice of the preterite tense-aspect, but only non-collateral, independent preterites are to be regarded as on the eventline. (2) The mystery particle *-tza'* labels supportive material which is crucial to something which is on the eventline. (3) Preterites in adverbial and relative clauses are seen not to be on the eventline in that they may on occasion take *-tza'*. Furthermore, adverbial clauses are often used in back-reference where they refer to a previous event but are not in and of themselves reporting anything. This is further evidence of their off-the-line status. (4) Relative clauses, even though having a verb in the preterite, may likewise be marked with *-tza'*, marker of crucial supportive material. Again, the attributive function of relative clauses agrees well with their off-the-line status. (5) Independent preterites which are prefixed with *tū* 'negative' and *ti-* 'frustrative' may likewise take *-tza'*. That they are thus marked as important supportive materials (collateral) agrees with their status as non-events rather than events--in spite of the occurrence of the preterite. (6) *Tuncan* 'and then' marks the clause which it introduces as containing especially foregrounded material, i.e., important rather than routine events. (7) While for various

reasons involving thematicity and dominance the identity of the subject of a clause may be suppressed by use of the suffix -ca/can, the identity of the global participant (central character) may not be suppressed except as in (8) below. (8) Under the special conditions which prevail at peak several of the above rules are qualified or suspended: (a) Under certain conditions the imperfect rather than the preterite occurs on the eventline, or better, the distinction between preterite and imperfect, i.e., on-the-line and off-the-line, is suspended and only imperfects occur. (b) The identity of the global participant may be suppressed with -ca/can (with the adversary, who is being defeated, made thematic at the peak of the action). (c) Multiple -tza' marking can occur in the same clause, while this is not the case elsewhere (where one or two -tza' per clause is more normal). In summary, Totonac illustrates well a 'prominence' conspiracy that embraces many apparently disparate features and involves several features of the verb morphology.

This volume is prepared, then, with the hope of reaching as its audience not only a few people with special interest in Mesoamerican languages, but the more general linguistic reader to whom such concerns as those just illustrated are relevant.

This introduction would not be complete without a word of appreciation to Linda Jones for her meticulous work in editing these materials for publication. Without her considerable investment of energy and time these data would either not have been published or would have emerged in much less readable form. I also acknowledge the help of Larry Jones and Stephen Thrasher as linguistic consultants along with Linda and myself. Marilyn Thrasher and Carolyn Kent assisted us in the many secretarial duties incidental to the project. All of us further take the occasion to express our gratitude to the directorate of the Mexican Branch of the Summer Institute of Linguistics for their help in many details of workshop operation and to the colleagues with whom we worked for those two months. And last, but by no means least, our appreciation to the speakers of Mesoamerican languages who are the sources of these data. Our best wishes to the indigenous peoples of Mesoamerica in their search for the good life.

Robert E. Longacre
Dallas, Texas

MULTIPLE LEVELS OF INFORMATION IN DISCOURSE¹

by Larry B. Jones and Linda K. Jones

This article sets forth the theoretical framework which underlies many of the articles in the volume, especially in Parts 2 and 3. Central to this framework is the proposition that information in discourse is structured, with multiple levels of information that may be marked by specific grammatical devices in various languages (the multiple-levels hypothesis). This is a revision of schemes by Longacre (1976b), Longacre and Levinsohn (1978), and Hopper (1977), and others, who proposed simple bipartite structures of information. In the native American languages examined in this volume, more than two levels in narrative are grammatically attested; all mark a minimum of three levels--background, events, and peak. This appears to be a minimum, or basic, information structure. In addition, some languages distinguish what Jones and Jones describe as two levels of background (ordinary and significant background) and/or two levels of events (ordinary and significant events). Generally, languages employ a single grammatical device for each level of information that they distinguish. However, at peak some languages permit choice among a number of devices, e.g., a shift in tense and/or aspect, extra words, decrease in connective material, etc. In the final sections of the article, the multiple-levels hypothesis is extended to non-narrative discourse, and areas for further research are suggested.

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The purpose of this paper is to present the theoretical framework underlying a number of papers in this volume. In particular, we propose a structure of information in discourse which includes multiple degrees, or levels, of significant information, any of which may be grammatically marked in a given language. Evidence is given from some of the languages described more fully elsewhere in the volume.²

1 Referential content structure and thematic structure in text

We assume a basic distinction between the REFERENTIAL CONTENT OR INFORMATION STRUCTURE and the THEMATIC STRUCTURE of a text. (Other structures may need to be distinguished as well, e.g., the grammatical structure, but these are not in focus here.) The referential content in narrative texts, for example, includes events, participants, setting, background, etc. In a text these elements are organized in some fashion--this is the referential content/information structure.

In addition, there is generally a thematic organization, or structure, even in narrative texts, e.g., abstract themes such as love, war, man-against-nature, or underdog-comes-out-on-top. Themes reflect the rhetorical unity of a text; a text bears a message or messages. There is a pragmatic flavor to theme, since there is a sense in which theme is related to purpose and the author-audience relationship.

In most texts the content/information and thematic structures are blended together considerably, and individual threads of information and thematicity at times may be inextricably intertwined. Nonetheless, we have found it profitable to analyze these two structures separately, recognizing that some overlap is inevitable.

It appears that one or other of the structures is dominant or more apparent in different types of discourse. For example, it seems that thematic structure is dominant in expository discourse, while content structure dominates narrative (i.e., participants and events are generally more apparent in narrative than themes are). The remainder of this paper will narrow focus to only the referential content/information structure of texts. For further discussions of thematic structure, the reader is referred to Linda Jones 1977 and the article by T. L. Schram near the end of this volume.

2 The hypothesis of multiple levels of information in discourse

Let us now focus on the referential content/information structure of narrative discourse. A metaphor might be helpful in illustrating the theoretical statements we wish to make. A simple view of narrative might be to liken it to a string of beads, with each bead

representing an event. A string of beads of identical size, tightly strung, represents a view in which a narrative is regarded as consisting of sequences of events all of similar import to the narrative. This is not an accurate view of most narratives, however, since generally there is background, setting, elaboration, and other similar material of secondary interest. This suggests a simple modification of the metaphor: the string of beads (again of identical size) are not tightly strung; rather, the string shows between the beads in places.³ Here we have a more plausible view of narrative discourse with two degrees of significance of information: primary (the events as represented by the beads) and secondary (background, elaboration, etc., represented by the bare string).

In recent years, many leaders in the study of discourse have found it useful to view discourse information in this way, that is, as an essentially bipartite structure composed of more significant information (often called BACKBONE or FOREGROUND) and less significant information (BACKGROUND). Longacre (1976b) suggested that the waw predicate construction in classical Hebrew set apart the significant events (what he called *backbone*) from the other information in a narrative. Similarly, Hopper (1977) proposed that significant information (which he called *foreground*) may be marked as distinct from other information in discourse by the use of a characteristic verb aspect or tense. Longacre and Levinsohn (1978) have listed a number of ways in which languages may mark backbone information in discourses: the use of certain tenses and/or aspects, particles, conjunctions, or backreference.⁴ All these studies agree in suggesting a simple bipartite structure of information in discourse: more significant vs. less significant.

However, recent investigations in native American languages indicate that *more than two* degrees of significant discourse information may be marked in some languages. To modify the bead metaphor again, instead of beads of all identical size, there may be beads of different sizes, some larger than others. That is, information may be of different LEVELS (another metaphor) of importance. Specifically, various analyses in this volume indicate that, in narrative discourses, the following levels⁵ may be grammatically marked as distinct levels of significant information: BACKGROUND information; especially SIGNIFICANT BACKGROUND information; ORDINARY EVENTS; significant or BACKBONE EVENTS; very significant or PIVOTAL EVENTS; and in addition, the single most significant event or event sequence, called PEAK. See the scheme in Diagram 1. Thus, we shall propose a structure of information in discourse which includes *multiple levels of significant information which may be marked by specific grammatical devices in various languages*. This we refer to as the MULTIPLE-LEVELS HYPOTHESIS. A systematic treatment of this hypothesis is given in Section 3.3, following a survey of some analyses of multiple levels of significant information in native American languages.

Peak
Pivotal Events
Backbone Events
Ordinary Events
Significant Background
Ordinary Background

Diagram 1. Levels of significant information that may be grammatically marked in narratives in different languages.

This theoretical assertion needs some explanation before empirical evidence is given. First, the multiple-levels hypothesis is a statement regarding the *conflation* (i.e., combination) of the significant levels of information found in human languages. Generally in a given language, several, but not all, of the levels given in Diagram 1 may be marked grammatically. Second, it is too early to know whether the levels given in Diagram 1 are the *only* significant levels which occur in narratives in the world's languages. Finally, we have deliberately not defined these levels in a rigorous way as it is our contention that they are established *emically* for each particular language and therefore may not correspond exactly to the comparable level in another language. That is, to some extent, each language defines its own levels, so that the levels in Diagram 1 are labels for roughly equivalent levels in languages.

3 Grammatical marking of levels of significant information in narrative

In this section we substantiate the multiple-levels hypothesis with empirical evidence from a number of different native American language families, including Otomanguean, Algonquian, and Macromayan. These languages demonstrate a variety of information structures, from simple three-level structures to more elaborate four and five-level structures. The concluding sub-section systematizes these structures.

3.1 Grammatical marking of levels other than peak

In Section 2 a simple bipartite structure of information was described, whereby information of primary relevance in a text is distinguished from information of secondary relevance. Generally in narratives, material of primary relevance includes events, while material of secondary relevance consists of background, elaboration, etc. This bipartite structure in narratives is possibly the most basic information structure manifested by languages. At any rate, that there are clear grammatical criteria for establishing this two-way division of relevant information already has been attested to in

a number of languages (e.g., see Hopper 1977 and Longacre 1976b and 1979). It remains to be seen just how widespread this bipartite structure of information actually is.

One way of talking about the bipartite structure is in terms of two basic levels. To these basic two levels may be added a third, also very basic, level: the level of peak, of which we delay a fuller discussion until Section 3.2. Like the other two levels, the level of peak is grammatically marked in a great many languages. These three levels together (for narrative, roughly background, ordinary events or backbone events, and peak) constitute the simplest information structure in narrative discourses of which we are aware. We term this the (BASIC) THREE-LEVEL STRUCTURE.

Lachixio Zapotec is an Otomanguan language which structures information in narratives in the simple three-level structure just described. The three levels of information distinguished by grammatical means in this language are background information, backbone information (including most events), and peak (which we ignore for the moment, this being the general topic of Section 3.2). Backbone information may be characterized grammatically by the occurrence of the completive aspect. That is, every clause (or sentence) which contains a verb (either dependent or independent) in the completive aspect gives information which forms a part of the backbone of the text. All such clauses (or sentences) taken together generally give a very plausible abstract or summary of the text of which they are a part. On the other hand, background information in Lachixio Zapotec narrative is defined in terms of verbal aspects *other than* the completive aspect, such as stative, habitual, potential, continuative, or unreal.

Cajonos Zapotec is a language in the same Zapotecan subgroup of the Otomanguan language family as Lachixio Zapotec. Like Lachixio Zapotec, Cajonos Zapotec grammatically distinguishes the three levels in the basic three-level structure: background, backbone, and peak; and in addition there is a level distinguished between backbone and peak, which is called *pivotal events*. Backbone and background in Cajonos Zapotec are distinguished similarly as in Lachixio Zapotec: backbone events are marked by the use of the completive aspect (COM) on verbs, and background information by the use of aspects other than the completive, such as the habitual (HAB), potential (POT), and stative (STA) aspects. The characteristic grammatical feature of pivotal events is the occurrence of the particle *na'a*⁶ after an independent verb.

Pivotal events are very crucial or significant events of a narrative. When the pivotal events of a Cajonos Zapotec narrative--those events marked with *na'a*--are collected together, they form a high-level summary or abstract of the plot of the story. Backbone events, while important in the plot progression, are nonetheless generally less significant than pivotal events. Most events that

move the plot forward are backbone events, and thus backbone events occur with greater frequency than pivotal events. When grouped together, the backbone events of a particular narrative form a much more detailed summary of that narrative than the summary obtained by grouping the pivotal events together. Background information is less significant than either pivotal events or backbone events in a narrative. It is essentially elaboration or extra information, such as descriptions of scene or characters, or minor events concurrent with major events. When grouped together, the background information in a narrative does *not* yield a satisfactory summary of that narrative.

Example 1 from the Cajonos Zapotec story "The Lion and the Fox" illustrates these three levels of significant information in narrative discourse (peak is excluded for the moment). In this tale, the fox has tricked the lion into sitting at the back of a cave to hold up the wall of the cave so it doesn't fall.

Example 1

1. Nach, per beza'a na'a bazjadab ga yoble la'
then but fox COM already gone where other as
 boxonj bana' bxonjibenna'.
COM had run animal COM it ran away
2. Na' bažimb to chua'a yech, di'i cho'o
and COM arrived ? mouth of hole that which is big
 naque chua'a yecha'.
STA is mouth hole
3. Na' jayache' beza'a mientrs llinna' na' na'a
there COM went sat fox while lion ?
 chib nade'e cože'eba'.
HAB is sitting STA holding back of it
4. Chizeb bachit cože'eba', cuich
HAB become desperate HAB already dead back of it no more
 yazuib.
POT will take it
5. Xochi, xochizi bla' cože'eba'.
carefully carefully COM let go back of it
6. Li bxi'teteb xt ca da'a cche'le jseb.
immediately COM jumped to like that down COM landed
7. Chaqulb baljazej yeja', per gaxa
HAB thinks STA already probably falls rock but where
 šej da'a la' di'i chiczena',
POT will go that because that which HAB is permanent

dil' chil' firmczena' chil' chehcze da'a.
that which HAB is that firm HAB sits strongly that

8. Na' bayechjeb na'a na' chuiaseben.
 and COM turned around and HAB looks at it

? = gloss uncertain

1. 'But then the fox had already gone somewhere else, as he had run away before, he ran away now. 2. And he arrived at the mouth of a hole, which was very large. 3. There the fox sat while the lion was sitting holding his back against it [the wall of the cave]. 4. His back had already become dead [fallen asleep], and he could take it no longer. 5. Carefully, carefully, he let his back go [off the wall]. 6. Immediately he jumped like that and landed. 7. He thought the rock probably already fell but where would the rock go since it is fixed and firm, it sits strongly. 8. Then he turned around (na'a) and looked at it.'

There is one pivotal event in this example: bayechjeb na'a 'he turned around na'a' (in line 8). This is a pivotal event because it is in the lion's turning around to see that the cave did not collapse that there is the realization that he was tricked again by the fox.

The backbone events of Example 1, marked by the use of the completive aspect, are as follows (from lines 1-3, 5, 6, and 8, in English): 'the fox had gone', 'he had run before', 'he ran away', 'he arrived at the mouth of the hole', 'the fox sat there', 'the lion let go of [the cave wall]', 'he jumped', 'he landed', and 'he turned around na'a'. These backbone events together give a summary of the significant action in Example 1. Notice that bayechjeb 'he turned around' is in the completive aspect and thus a backbone event. Further, due to the occurrence of na'a with this verb, it is highlighted as a backbone event of extra significance, namely a pivotal event.

Background information includes descriptions, reported thoughts and feelings of a participant, as well as some very minor actions. In Cajonos Zapotec narrative, background information is marked by aspects other than the completive. In this example, background predications are (in lines 2-4, 7, and 8): 'the mouth of the hole was very large', 'the lion was sitting holding his back against it [the wall of the cave]', '[the lion's] back had fallen asleep', 'he could take it no longer', 'he thought the rock already fell', 'where would the rock go since it is fixed and firm, it sits strongly', and '[the lion] looked at it [the cave]'. Notice that just the background information alone does *not* provide a satisfactory summary of the text.

In sum, Cajonos Zapotec manifests a four-level information structure in narratives, with these levels (from lowest to highest): background, backbone events, pivotal events, and peak. The four-

level information structure in Cajonos Zapotec might be regarded as one possible modification of the basic three-level structure, the modification consisting of an additional level.

Of course, there are numerous other possible four-level modifications of the basic three-level structure of information in discourse. Five-level variations are also possible, and in the remainder of this section we will discuss some of the ones we have found in languages.

The first five-level variation is similar to the four-level structure just described, with yet another level. Kickapoo, an Algonquian language, has this five-level information structure. In addition to peak, Kickapoo narrative has special marking of two different levels of events and two different levels of background. Each of these four levels is marked by use of a particular mode-tense combination.

First, a very brief description of Kickapoo modes and tenses is needed. There are a number of different modes in Kickapoo, but there are two which dominate in narrative: the independent indicative and the conjunct conjunctive.⁷ (We call these simply the independent and the conjunct here.) In particular, it is the aorist tenses of these modes which carry most of the information in most narratives. In the independent mode, there is just one aorist tense, called the first aorist. In the conjunct mode, however, there are three aorists, distinguished by formal differences, and called the first, second, and third aorists. It is the combination of mode and tense which is important in marking levels of significant information in Kickapoo narrative.

Ordinary events⁸ are indicated by using the mode-tense combination conjunct second aorist (CONJ 2nd). Most events are marked in this way. However, events that are of special significance to the plot of the story--pivotal events--are specially highlighted by use of a *doublet* construction, which is a sort of repetition device. A doublet in Kickapoo consists of two sentences in which (a) the second repeats, paraphrases, or elaborates on the first, and (b) different mode-tense combinations are used in the two sentences, the conjunct second aorist in one and the independent first aorist (IND 1st) in the other. An event reported by a doublet construction has special importance to the story. It may be an event that is especially exciting in itself or one that creates suspense or tension. Or it may be an event that will later prove to have an important impact on subsequent events.

We have just described the marking of two levels of events in Kickapoo. There exists a similar situation for background information, in which two levels of significance are also distinguished. Ordinary background information is carried by the independent first aorist mode-tense combination alone (not in doublet construction as for

pivotal events). This includes descriptions of setting or participants, as well as descriptions of emotional or mental states. It also includes topic-oriented material, such as introduction of a participant or prop.

By contrast, background information that is especially significant in some way to the narration may be marked by the use of the conjunct first aorist (CONJ 1st).⁹ Actually this level of significant information is a subtle level between ordinary background information and ordinary events. As such, it may be used either to promote background information to special significance or to demote ordinary events to less significance. Events that are downplayed by use of the conjunct first aorist are either very routine or (almost) predictable from context. Or they may be actions performed by a participant who is out of focus. In any case, the level marked by the conjunct first aorist functions to distinguish information that is of greater significance than ordinary background information, but of less significance than ordinary events.

Example 2 illustrates use of these mode-tense combinations to mark four different levels of information in Kickapoo narrative.

Example 2

1. Noohki eepoθeaaake anika isi kiaki.
again CONJ 1st we took off moving along still
2. Se nahi mani isi paskickaake eetoke
then there in this way CONJ 1st we went at the same time
eeneewaaci kehcayaapeani.
CONJ 2nd he saw him a big buck
3. Eehkipemwaaci.
CONJ 2nd he shot him
4. Neθenwi pemweewa se
three times IND 1st he shot him at that time
eeneθaaci.
CONJ 2nd he killed him
5. Pesinakeci trai clihi mesayaapea.
CONJ 1st we gutted & skinned him wow! ! a big buck
6. "Se kiihpenopena," iini eehici.
now IND future we will go home then CONJ 2nd he said
7. "Ena," iini eehinaki.
OK then CONJ 2nd I said to him
8. Eehawaatoaani eliki niina aaneta wiaaθi.
CONJ 2nd I hauled also me some meat
9. Wiina eliki eemeθoomaaci.
he also CONJ 2nd he carried (some) on his back

10. Ni na eenaatenakeci noohki kotakea.
 then that one CONJ 2nd we picked him up again the other one
11. Lini se nenesiikehcisinenepena
 and then IND 1st we were very tired emph(asis)
 penoocaio ni eenaacimenoaake
 IND 1st it's very far emph then CONJ 2nd we stopped to drink
 nahi nepihi, pileki.
 there water at a water tank

1. 'Again we took off and kept moving along. 2. Then there in this way we went and at the same time he saw a big buck. 3. He shot him. 4. He shot him three times when he killed him. 5. We gutted and skinned him, wow, a big buck! 6. "Now we will go home," then he said. 7. "OK," then I said to him. 8. I also carried some of the meat. 9. He also carried [some] on his back. 10. Then that one, we picked up that other one again. 11. And then we were very tired, it's very far, then we stopped to drink water there at a water tank.'

This example is one episode from a hunting text. It is action-packed. Thus, the conjunct second aorist, which marks the ordinary events, is dominant (lines 2 and 6-11): 'he saw a big buck', 'then he said', 'then I said to him', 'I carried meat', 'he carried meat', 'we picked up that other one', and 'we stopped to drink'. The point of greatest drama in the episode occurs in lines 3 and 4 when the deer is shot. This dramatic event is marked as a pivotal event by use of a doublet: note that 'shot' is in the conjunct second aorist in line 3, and in the independent first aorist in line 4. The effect of the repetition is to slow the camera down, so to speak, so that the shooting of the deer receives prominence.

Now we consider the less significant information in this example. In lines 1 and 2, the conjunct first aorist is used: 'we took off and kept moving along' and 'in this way we went'. Use of the conjunct first aorist treats this information as either very routine event (prior to the build-up of more exciting events), or as background information which is regarded as especially significant to what follows. Another occurrence of the conjunct first aorist is in line 5, reporting the skinning of the deer. Again this is either routine event (predictable from the fact that a deer was shot), or else significant background.

Ordinary background information occurs in line 11, marked by use of the independent first aorist. The clauses 'we were very tired' and 'it's very far' are descriptions of participants and location, respectively.

In sum, four levels of significant information in Kickapoo narrative are distinctively marked by various mode-tense combinations. A fifth level, peak, will be examined in Section 3.2.

Each level in the information structure of Kickapoo narrative is uniquely determined by mode-tense. There is no obvious way in which one level may be said to be derived from the immediately lower level. That is, although one might describe the Kickapoo information structure as one in which there are two levels of background and two levels of events, there is no obvious grammatical relationship between the two levels of background or between the two levels of events, at least not in the way that is true for the group of languages we consider next. In Totonac, Aguacatec, and Rabinah Achf (all Macromayan languages), there is an obvious grammatical relationship between the two levels of background and the two levels of events. Thus, these languages appear to exhibit a variation of a five-level structure different from that of Kickapoo. The information structure of narratives in these Macromayan languages will be described in turn.

The levels in the information structure of Totonac narrative, excluding peak for the present, are distinguished as follows¹⁰: ordinary background marked by any tense other than preterite; significant or crucial background marked by any tense other than preterite, *plus* the suffix -tza' (on the verb, or on an adjective or adverb); ordinary events marked by the preterite tense; and backbone events¹¹ marked by the preterite *plus* the word tuncan (usually immediately preceding the main verb). It is evident that significant background and backbone events are formed from ordinary background and ordinary events respectively, simply by the addition of -tza' in the one case and tuncan in the other. Thus, the relationship of significant background to ordinary background, and backbone events to ordinary events might be viewed in both cases as one of highlighting or giving special significance to information that would otherwise be on the next lower level.

Example 3 from the text "When Our God Walked on Earth" (given in full in Reid, Bishop, Button, and Longacre 1968:127-69)¹² will illustrate these levels in Totonac. This paragraph is from an episode in which the hero (the salesman) has been accused of killing his host's rooster, which was in fact killed by the host himself while the hero slept, and planted in the hero's bag in order to get him in trouble. This paragraph occurs immediately prior to the host's killing the rooster.

Example 3

1. Lā' como huan nac cā'iacchicni'
and since the in towns
i'xmāiacnūtīlā'huan i'xITstā't, lēj-tza'
IMPF he walked around offering his merchandise already very
i'xtlakua'n.
IMPF he was tired

2. Lā' como kōtanū-tza' i'xuanT't, u'tza'
and since already late IMPF it was for this reason
tēlTmaktachokolh huanmā' cā'iacchicni'.
PRET he stopped over at that town
3. Lā' huan marsiyero tamā'lh ihtata huan
and the salesman PRET lay down PRESENT to sleep the
nac tama lā' a'ntza' i'xchT'yāhuacanT't lakatin cariyon.
on bed and there PAPF had been tied a rooster
4. Lā' huan chl'xcu' i'xmaktaka'lh mā' palh
and the man (host) PAPR he was watching him if
T'ihatatamā'tza' xa'nca.
PAPR he was already sleeping well
5. Lā' como i'xtlakua'nT't, xla' tuncan ihtatalh.
and since PAPF he was tired he PRET slept

1. 'And since in the towns he walked around offering his merchandise, already very(-tza') tired he was. 2. And since it was already late(-tza'), for this reason he stopped over at that town. 3. And the salesman lay down to sleep on the bed, and there a rooster had been tied. 4. And the man (host) he was watching him [to see] if he was already sleeping well. 5. And since he was tired, he soon (tuncan) slept.'

Much of the paragraph is background information: 'offering his merchandise' in line 1, 'there a rooster had been tied' in 3, 'he was watching him [to see] if he was already sleeping well' in 4, and 'he was tired' in 5. Tenses or tense-and-aspects other than the preterite are used, i.e., imperfect (IMPF), past perfect (PAPF), and past progressive (PAPR). Two statements are marked as significant background by use of -tza' in addition to a background tense: 'already very-tza' tired he was' in line 1, and 'it was already late-tza' in line 2. These background statements are of special significance because it is the salesman's tiredness and the late hour that lead him to stop and sleep, which are the fateful circumstances for his being wronged. The narrator's use of -tza' apparently strikes a foreboding note.

There are just a few events in this paragraph: 'he stopped over at that town' and 'lay down' in lines 2 and 3. These are marked by the simple preterite tense (PRET). 'He tuncan slept' in line 5 is an event that is highlighted as significant (i.e., a backbone event) by the occurrence of tuncan with the preterite. It is this event which spells disaster for the salesman, since it is during his sleep that his host performs his traitorous deed.

Aguacatec is a language with an information structure strikingly similar in certain respects to the one just described for Totonac. In action-oriented narrative,¹³ ordinary events are characterized by

occurrence of the completed-definite aspect (or completed-indefinite in other sub-types of action narrative). Ordinary events with this aspect on the *independent* verb are of primary interest, while occurrence of the aspect on a *dependent* verb or the occurrence of a participle form signals events of secondary interest. Ordinary events of either primary or secondary interest may be highlighted as backbone events by addition of the suffix -tz¹⁴ on the last constituent of the nuclear clause.

Background information is carried by aspects other than the completed-definite (or completed-indefinite). Background material which is especially significant is signalled by the addition of the suffix -tz. Thus one suffix, -tz, is used to highlight both background information and events as especially significant.

In both Totonac and Aguacatec the paired relationship of two levels of background and the two levels of events is very evident since the higher level in each pair is simply a specially marked variety of the lower level. Rabinal Achf¹⁵ is another language that evidences this paired patterning, although in its grammatical encoding of the information structure, Rabinal Achf looks quite different from these other languages. Whereas in Totonac and Aguacatec various *morphological devices*--tense and/or aspect, a particular suffix or particle--indicate grammatical levels, in Rabinal Achf morphological devices are used only for the 'basic' level in each pair, i.e., for backbone and background: backbone is marked by the occurrence of completive aspect and background by the *absence* of completive, i.e., by the occurrence of other verbal aspects such as incompletive, stative, progressives, perfects, or no aspect at all (e.g., a non-verbal clause). The corresponding level of greater significance in each pair is formed by repetition or paraphrasing. That is, a pivotal event is indicated when a backbone event is repeated or paraphrased; and similarly, significant background is indicated when what otherwise would be ordinary background is repeated or paraphrased. Such repetition or paraphrasing is essentially *lexical* rather than morphological; the repeated element may even bear a different aspect or consist of a different grammatical structure. It is the first element which establishes the basic nature of the information (whether background or events) and the repeated element simply underscores or highlights the information.

Example 4 illustrates the levels of backbone events and pivotal events in Rabinal Achf.

Example 4

1. Y xcanaj ri ch'uti'n Jinta cachajiwre.
and COM she remain the little one without INC be cared for
2. Y xew c'o jun junab che.
and only exist one year to her

3. Lic tok'o'wach wa ralco ac'a!
very pitiful this her offspring baby
4. Xcanajic jintu uchu ukaw.
COM she remain without her mother her father
5. Y xopon jun ixok.
and COM she arrive one woman
6. Xuc'ama wa ralco ac'a.
COM her she took this her offspring baby

1. 'And the little one was left without anyone to care for her.
2. And she was only a year old. 3. Poor little baby! 4. She was left behind without mother or father. 5. And a woman arrived. 6. She took this baby.'

Here the backbone events marked by the use of the completive aspect (COM) are as follows: 'the little one was left without anyone to care for her' (line 1), 'she was left behind without mother or father' (4), 'a woman arrived' (5), and 'she took this baby' (6).

The pivotal event in Example 4 is marked by the repetition of a backbone event. The content of line 1, 'the baby was left without anyone to care for her', is paraphrased in line 4, 'she was left behind without mother or father'. The baby's being abandoned is thus highlighted as a pivotal event.

Example 5 illustrates the two types of background information in Rabinal Ach' narrative--background information and crucial background information.

Example 5

1. Y wa jun ixok rire llic cok'ic ma ri
and this one woman she very INC she cry because the
ralco uch'uti'n catajin unimaric y
her offspring her little one PROG she getting big and
jintu uk'u'.
not exist her clothes
2. E c'uwari'che rire ronoje k'ij llic cabisonic.
it is for this reason she every day very INC she be sad
3. Ronoje k'ij quic'owic llic jintu qui'cotemal
every sun INC it passes very not exist happiness
chupa ri ranima'.
inside the her heart
4. Lic cabisonic.
very INC she be sad

1. 'And this woman, she was crying a lot because her little child was growing and didn't have any clothes. 2. And it was for this reason that she was very sad every day. 3. Every day that passed she had no happiness in her heart. 4. She was very sad.'

Ordinary background information in this example, marked by the use of aspects other than the completive (INC=incompletive and PROG=progressive), includes the following: 'the woman was crying a lot', 'her little child was growing', 'she didn't have any clothes' (all from line 1), 'she was very sad' (lines 2 and 4), and 'she had no happiness in her heart' (line 3). The crucial background information, marked by the repetition of background information, is the fact that the woman is sad. Note that the content of line 2, 'she was very sad' is paraphrased and repeated in lines 3 and 4. This example and the previous one illustrate the use of repetition and paraphrase to mark levels of significant information in Rabinal Achf.

3.2 Grammatical marking of peak

In addition to the levels of significant information discussed thus far is the level of peak, the single most significant event or sequence of events in a narrative. The fact that peak often is marked by special grammatical devices was recognized several years ago by Longacre (1976a), but it was regarded as a rather unique phenomenon--a surface structure reflection of climax in the deep structure (plot). Peak was not connected with backbone and background, the two levels of significant information recognized at that time. However, it is our view that these are related in that they are all simply distinct levels in the structure of information in a narrative. Peak is the highest level of significant information in narrative, higher than pivotal events. Within a simple story (without embedded stories), there is normally only one peak, while there may be any number of crucial or pivotal events.

Longacre (1976a) suggests that for many languages, including English, there are a number of different devices--A BAG OF TRICKS--from which a writer may draw to mark peak in a narrative. Longacre's study of these devices in English is excellent. He groups these devices "under the headings rhetorical underlining, concentration of participants, heightened vividness, change of pace or of vantage point, and orientation" (p. 217). By *rhetorical underlining*, Longacre means that the narrator employs extra words (paraphrase, parallelism, tautologies) at peak so that the audience does not miss the important point. Another device at peak is to bring most of the participants on stage; there is a *concentration of participants* and a lot going on at once. *Heightened vividness* refers to shifts in tense, person, or other. For example, the story may be narrated in past tense and suddenly switch to present tense at the peak, causing the audience to feel as if they were actually witnessing the events being narrated.

Change of pace refers to a shift in the size of constructions or amount of connective material employed. The shift may be towards more crisp, fragmentary sentences at peak, or, alternatively towards long run-on types of sentences. There may be a *change of vantage point and/or orientation* at peak: through whose eyes does the audience view the story? These devices together offer a set of stylistic choices to the narrator for highlighting the most important part of his narrative.

Totonac is another language that uses various devices--a bag of tricks--for marking peak. Not all are necessarily used at the same time, and not all peaks are so well-marked. Nonetheless, the following frequently characterize peak in Totonac (from the study by R. Bishop elsewhere in this volume): wordiness, onomatopoeia, long and involved sentences, and embedding. Several of these fit under the more general categories suggested by Longacre.

Both English and Totonac are languages that employ a number of devices at peak--a bag of tricks--and many other languages do as well (see various studies in Longacre and Woods, 1976-1977).

However, we would like to suggest that some languages have a favorite or PREFERRED DEVICE for marking peak. Kickapoo is a language of this latter type.

In Kickapoo, peak is marked by a particular mode-tense combination, the independent first aorist. Recall our discussion above (Section 3.1) regarding Kickapoo modes and tenses. When the independent first aorist is used to highlight peak, it generally occurs as a *sequence* of sentences in the independent first aorist, since peak generally comprises a closely-knit sequence of events.

It is interesting that the independent first aorist, which generally is used simply for marking ordinary background information (see Section 3.1) may be used at a high level of significance as well. The independent first aorist together with the conjunct second aorist, in the doublet construction discussed above, marks high-level pivotal events. The independent first aorist occurring *alone* without the conjunct second aorist, may mark peak. This use of a device which generally marks low level of significance to also mark very high level of significance is not as rare as it might seem. This phenomenon has been observed in several languages of Mesoamerica as well.

Example 6, from a hunting text, illustrates use of the independent first aorist to mark peak. Immediately prior to this example, the hunters have used spotlights (on their heads) to spot a deer. They weren't able to shoot right away. One of them got closer to the deer, and then the sentences in the example follow.

Example 6

1. Se pi eehpemwaacio
then rep(ortative) CONJ 2nd he shot him emph(asis)
 tasaaθeθoeao pi.
IND 1st he has him in the spotlight emph rep
2. Clihi pi nekotahi meekweehi inenahea
! rep over there probably IND 1st he thus shoots him
 clihi pi aahkweeniani maainanekwa pi.
! rep IND 1st he is angry IND 1st he charges him rep
3. Seeski pi kocinakhonea
just rep IND 1st he tries to grab him
 eehpietaaskaanici.
CONJ 2nd he came lunging by
4. Se na pi anika pakiθeskaakwa.
then that one rep far IND 1st he throws him
 1. 'Then he did shoot him, he has him in the spotlight! 2. It seems he shoots him there, he [deer] is angry, he charges him!
 3. He [deer] tries to grab him as he came lunging by. 4. Now he tosses him quite a distance.'

Here, at the peak of the story, the deer is enraged and charges the hunter. These sentences are cast in the independent first aorist, which provide strong contrast to sentences preceding the example, which are in the conjunct second aorist, the normal mode-tense combination for ordinary events. The effect is similar to that of reporting a story in English in past tense and then switching to the present tense at peak. The change makes the reader feel as if he were viewing the events with his own eyes.¹⁶

Lachixio Zapotec also exhibits a marked preference for a single way of signalling peak.¹⁷ Typically peak sentences are extraordinarily long, with many clauses, in comparison with sentences found elsewhere in a story.¹⁸ The following example gives a few prepeak events to demonstrate typical non-peak sentence length. The peak of the story occurs in sentence 4, a very long sentence. (Abbreviations: COM=completive, STA=stative, HAB=habitual.)

Example 7

1. Tucu xébetse uzucu chu ru'u inziu churquie.
one possum COM sit side mouth trail this side
2. Tucu bicheé uzucu stucu chu ru'u inziu
one lion COM sit other-one side mouth trail
 chuquie.
that side

3. Chequie uriña tucu turu.
then COM arrive one bull
4. Chenu ia bi'ya u'na ca nzucu bicheé che
when no HAB see bull where STA sit lion then
 utetsa bicheé aña u'na chu ngwe' bicheé rene
COM jump lion neck bull so COM drink lion blood
 u'na chu nguti u'na chu uchuxi beí u'na nu
bull so COM die bull so COM skin they bull and
 chequie uiua bicheé tucu cuchu u'na uquie
then COM remove lion one leg bull COM raise
 dichi xébetse nu etia ullata nu xébetse
back possum and suddenly COM plaster with possum
 cuchu u'na.
leg bull

1. 'The possum sat down on one side of the trail. 2. The lion sat down on the other side. 3. Then the bull arrived. 4. When the bull didn't know where the lion was then the lion jumped on his neck, drank his blood, killed him, skinned him and then cut off a leg and put it on the possum's back and right away the leg plastered the possum to the ground.'

Thus, it seems clear that in some languages there is a single preferred way of grammatically highlighting the peak of a narrative, while in other languages there are various options for marking peak. All languages, to our knowledge, are of one or other of these types; that is, all languages possess some means for marking peak.

3.3 Systematization of the multiple-levels hypothesis

It would be well to summarize our discussion to this point. The essential purpose of this paper is to establish that there are multiple levels of information in discourse, any of which may be grammatically marked in particular languages. Thus far, we have focused on narrative discourse, marshalling evidence from three native American language families: Otomanguean (Lachixio Zapotec and Cajonos Zapotec), Algonquian (Kickapoo), and Macromayan (Totonac, Aguacatec, and Rabinal Achí). Conflating the systems of levels of information found in these languages, there appears to be grammatical evidence for the existence of the following levels in narrative discourses: background, significant background (or significant background/routine events), ordinary events, backbone events, pivotal events, and peak (compare with Diagram 1 in Section 2 above). The particular information structure of each language is summarized in Chart 1.

For all six languages it is evident that the minimum information structure consists of three levels: (1) ordinary background, (2) one

CHART 1

GRAMMATICALLY-DISTINGUISHED LEVELS OF INFORMATION
IN SIX NATIVE AMERICAN LANGUAGES

	LZ*	CZ	K	T	A	RA
Peak	✓	✓	✓	✓	✓	✓
Pivotal Events		✓	✓			✓
Backbone Events	✓	✓		✓	✓	✓
Ordinary Events			✓	✓	✓	
Signif Backgrd			✓	✓	✓	✓
Ordinary Backgrd	✓	✓	✓	✓	✓	✓

*LZ=Lachixio Zapotec, CZ=Cajonos Zapotec, K=Kickapoo, T=Totonac,
A=Aguacatec, RA=Rabinal Aché

of the event levels, either backbone events or ordinary events, and (3) peak. Thus as a minimum, there are low, medium, and high levels of information that are grammatically marked in these languages. This is what we earlier called the basic three-level structure.

Additional level(s) between two adjacent levels of the basic structure result in more complex four and five-level structures. When languages have such additional levels, we suggest that they are formed by dividing one of the basic levels (either background or events) into two levels: one, ordinary, and the other, more significant. Specifically, the division may result in two levels of background, ORDINARY AND SIGNIFICANT BACKGROUND, and/or two levels of events, ORDINARY AND SIGNIFICANT EVENTS. As evidence, note that none of the six languages grammatically distinguish all three event levels listed in Chart 1 (ordinary, backbone, and pivotal events), although several distinguish two of the three. This suggests that a threefold distinction of events is unnecessary. Indeed, it appears that each of the languages which distinguish two event levels essentially does so along a parameter of ordinary vs. significant information. Under this interpretation of the data in Chart 1, for example, the backbone and pivotal events in Cajonos Zapotec, as well as the ordinary and backbone events in Totonac and Aguacatec, would all be described as ordinary and significant events, respectively. By this, however, we are not equating pivotal events in Cajonos Zapotec, for example, with backbone events in Totonac and Aguacatec in an absolute sense, but merely suggesting that they are *comparable emic levels*. See Chart 2.

CHART 2

GRAMMATICALLY-DISTINGUISHED LEVELS OF INFORMATION IN
SIX NATIVE AMERICAN LANGUAGES: AN EMIC REINTERPRETATION

	LZ	CZ	K	T	A	RA
Peak	✓	✓	✓	✓	✓	✓
Signif Events		✓	✓	✓	✓	✓
Ordinary Events	✓	✓	✓	✓	✓	✓
Signif Backgrd			✓	✓	✓	✓
Ordinary Backgrd	✓	✓	✓	✓	✓	✓

Two further observations are worthy of mention. First, it is our suggestion that if a language distinguishes an additional level beyond the basic three, the preference appears to be for an additional level of events. Thus, in our data, if a language distinguishes two levels of background, it also distinguishes two levels of events, but the converse does not hold. Second, in some of the languages (Totonac, Aguacatec, Rabinal Achf), additional levels appear to be grammatically paired with levels in the basic structure, e.g., significant background paired with ordinary background, via shared grammatical features. In other languages, such a pairing relationship is not grammatically marked.

In the remainder of the paper we turn to assorted matters related to the theoretical perspective we have developed thus far. They are all matters which have been studied very little thus far.

4 Bag of tricks versus preferred device

In Section 3.2 we noted that some languages exhibit a marked preference for a single way of grammatically marking peak, while other languages opt for a variety of ways. This suggests an important question with respect to levels other than peak: Are there levels other than peak in languages that are marked *not* by a preferred device, but by one or other device selected from a bag of tricks available to the speaker? (By *preferred device*, we mean that the association of a *single* particular grammatical construction, tense, aspect, or other device with a given level of significant information in discourse is so frequent as to provide a reliable signal for that level of information. For example, the completive aspect is a preferred device for marking the level of backbone events in Lachixio Zapotec; see Section 3.1.)

We do not have an answer to this question, but simply pose the issue as one for further investigation. If it is found that levels other than peak commonly are marked by choosing from a set of devices, then presumably other levels of significant information might be established besides those established on the basis of the more readily-observed preferred devices. For example, instead of describing Lachixio Zapotec in terms of a three-level information structure as suggested in Section 3.1, it might be described as having four or five levels. Indeed, one of the three levels already established is a sort of bag of tricks--the level of background information, which is a sort of 'elsewhere' case, consisting of all clauses or sentences with verbal aspects other than the completive (backbone) aspect. Perhaps levels of significant background and/or significant events might be established in Lachixio Zapotec on the basis of grammatical marking with assorted (but specific and describable) devices. This is all merely speculation at this point; more data is needed. It is just as likely that these other levels do *not* exist.

The issue here is: To what extent may a collection of devices determine a level of significant information? Certainly one would not wish there to be endless proliferation of devices so that in the end innumerable levels of significant information may be established for every language. This is clearly an undesirable result, especially in view of limitations in humans on information processing and production. It must be remembered that the apparent psychological motivation for a narrator distinguishing levels of information in a story in the first place is to permit him to give prominence or focus to what he believes to be most important in the story, and to downplay material that is put in for color, detail, and continuity.

At the present time, it is only clear that languages do employ bags of tricks for peak (the most important event(s) in a narrative) and for background (a sort of elsewhere case). With regard to the levels between these that we have considered--significant background, ordinary events, and significant events--it is clear that one of these levels is established in a language on grammatical criteria when it is reliably marked by a single grammatical means. But it is not at all clear whether any of these levels may be adequately determined grammatically by a bag of tricks. It is certainly a problem of theoretical import.

5 Levels of significant information in non-narrative discourse

To our knowledge, the notion of multiple levels of significant information has been little examined in non-narrative discourses, at least with respect to their referential content.¹⁹ However, an important step in this direction is the study by Harry McArthur (elsewhere in this volume) on Aguacatec, a Mayan language of Guatemala. McArthur's primary concern is to distinguish, for different Aguacatec discourse types, secondary and background information from what he calls *mainline information* (a generic term suitable to non-narrative discourse types;

it is roughly equivalent perhaps to the level of ordinary events in narrative). As pointed out in Section 3.1, the mainline information in narratives (i.e., the ordinary events) is marked by the completed-definite verbal aspect in one type of narrative and by the completed-indefinite in another. Aspects other than these indicate background information.

In other discourse types, different aspects figure in marking the mainline information. The reader is referred to H. McArthur's paper for the precise analysis, but we summarize some of it here for the sake of illustration. Aguacatec procedural discourse is characterized by the incomplete-definite aspect for mainline information (that is, the steps of the procedure). Secondary and background information are reported with other aspects. On the other hand, the continuous or customary aspect on independent clauses is the marker of mainline information in expository discourse. Certain partition constructions and logical connectives also characterize this discourse type. H. McArthur distinguishes two types of hortatory discourse on the basis of how mainline information is marked in each: the hallmark of action-oriented hortatory discourse is the use of the imperative mood, while in polite-exhortation hortatory, surrogates for the imperative are employed, such as the injunctive. Essentially his study points to the conclusion that an aspect which characterizes mainline information in one discourse type merely gives background information in other types.

What is interesting in H. McArthur's analysis is that each discourse type may be distinguished on the basis of the characteristic aspect or mood used for its mainline information. Hence, aspect and mood may be used to typologize discourses. Consequently, we see that within a single language, the specific grammatical features characterizing the information structure may vary from discourse type to discourse type.

6 Concluding remarks

In Sections 1-3 we sketched a theoretical framework and presented the hypothesis of grammatically marked multiple levels of significant information with respect to narrative, substantiating the hypothesis with data from native American languages. In the remaining two sections (4 and 5), we considered some related matters: marking of levels of significant information by a specific, preferred device versus employing one of many devices chosen from a bag of tricks; and the extension of the multiple-levels hypothesis to non-narrative discourse. Issues raised in the last two sections point to areas for further research.

Notes

¹ This is an expanded version of an earlier paper entitled "Levels of Significant Information in Discourse" (same authors, 1979).

² In particular, the reader is referred to the articles by Ruth Bishop on Totonac; Larry Jones and Donald Nellis on Cajonos Zapotec; Linda Jones and Ned Coleman on Kickapoo; David Persons on Lachixio Zapotec; Harry McArthur on Aguacatec; and Lucille McArthur on Aguacatec. The examples used in this article were graciously supplied to us by these linguists and, for the most part, are *not* repetitions of examples published in the articles just cited. However, we refer the reader to these various articles for explanation of the values of the orthographical symbols used in our examples.

³ As with any metaphor, the bead metaphor has obvious deficiencies. For example, this metaphor should not be construed as making any statements regarding *ordering* of events, since we recognize that the order in which events happen may or may not be mirrored in the telling order. Furthermore, events may occur simultaneously as well as sequentially. Our intent in using the bead metaphor is only to prepare the way for our hypothesis that any author assigns differential importance to information in a narrative.

⁴ For a discussion of backreference, see the Longacre and Levinsohn paper, p. 109.

⁵ The levels of information themselves are regarded as referential material, and as such are independent, to a certain extent, of grammar. Thus, there may be levels of information that are distinguishable by referential (roughly, semantic and pragmatic) criteria only and not by grammatical criteria. However, in this paper we are interested in those levels which *are* distinguished on the basis of grammatical criteria, and in fact are interested only in such levels.

⁶ See the paper by Larry Jones and Donald Nellis elsewhere in this volume for a more detailed analysis of the function of the particle *na'a* in Cajonos Zapotec narrative discourse, including use of *na'a* with NPs.

⁷ Names for the modes and tenses are from Paul Voorhis 1974, but the analysis here is that of Linda Jones and Ned Coleman (see paper elsewhere in this volume).

⁸ Linda Jones and Ned Coleman use the term *eventline* for ordinary events in their analysis of Kickapoo elsewhere in this volume.

⁹ It has been observed that not all Kickapoo speakers use the conjunct first aorist with equal frequency. Thus, it appears that this level may not be distinguished, at least as fully, for all speakers of Kickapoo.

¹⁰ In the article by Ruth Bishop on which this description is based (article is found elsewhere in this volume), these four levels are called: *ordinary supportive material*, *crucial supportive material*, *mainline events* (plus a *suppressed mainline*), and *summary or backbone*.

¹¹ A problem in writing this paper is that we cannot be sure that all those using terms such as *backbone events* have used them in exactly the same way. We assume therefore that levels in the information structure of the languages discussed here are only roughly comparable. Despite these problems, we believe that our main point--that these languages have multiple levels of information that are grammatically marked--is sustained regardless of the specifics (i.e., specific levels) of a particular analysis.

¹² Labelled tenses, as given below, are not in the original published text; they were supplied by Ruth Bishop.

¹³ In the article by Harry McArthur on which this description is based (article found elsewhere in this volume), the four levels given here are termed: *background*, *crucial background*, *mainline events* (*primary* and *secondary*), and *backbone events*.

¹⁴ For a more detailed analysis of -tz in Aguacatec, see the article by Lucille McArthur elsewhere in this volume.

¹⁵ Data here on Rabinal Achf were graciously supplied to us by Carol Barrera from her unpublished materials.

¹⁶ Note also that a doublet construction marks the pivotal event of the shooting (lines 1 and 2), which directly leads to the peak action of the charging of the deer.

¹⁷ In the article on Lachixio Zapotec elsewhere in this volume, David Persons also mentions a switch in verbal aspects as an indicator of peak but comments that "this marking of peak [switch in aspects] is not as regular as long sentences".

¹⁸ Sentence units are established by a conjunction of grammatical and phonological criteria.

¹⁹ With regard to levels of significance in the *thematic* structure of discourses, the work by Linda Jones (1977) may be relevant.