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UNIVERSITY OF ALBERTA

THE FOREGROUND - BACKGROUND DISTINCTION:
AN INVESTIGATION OF TRANSITIVITY FACTORS
AND CLAUSE TYPE

BY



ANDREA KROSS

A thesis submitted to the Faculty of Graduate Studies and Research in partial
fulfillment of the requirements for the degree of

MASTER OF SCIENCE

in

Psycholinguistics

DEPARTMENT OF LINGUISTICS

EDMONTON, ALBERTA

Fall, 1993



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ISBN 0-315-88033-3

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NAME OF AUTHOR: Andrea Louise Kross

TITLE OF THESIS: The Foreground - Background Distinction: An Investigation of
Transitivity Factors and Clause Type

DEGREE: Master of Science

YEAR THIS DEGREE GRANTED: 1993

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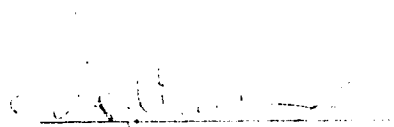
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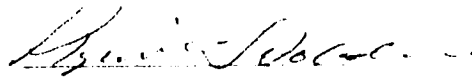
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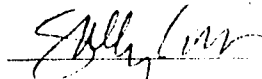
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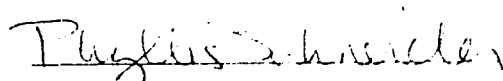
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Abstract

Four potential morphosyntactic devices for distinguishing foreground and background information were investigated: number of participants, affirmation, aspect, and clause type. Hopper and Thompson (1980) claim that foreground is coded with two or more participants (an agent and an object), affirmatives, and a completed action coding device, or with more of these features, while background is coded with one participant, negatives, and a continuing action coding device, or with fewer of the foreground features. Tomlin (1985) claims that main clauses code foreground information, while subordinate clauses code background information. These claims are investigated using operational definitions of the factors and twelve drawings depicting a variety of high transitive events (brief, completed actions), low transitive events (durative, continuous actions), and an intransitive event (which lacks an object).

In the first of three experiments, 24 subjects wrote two or three sentences describing each drawing, and then chose a member from each of eight pairs of sentences per drawing that best described the drawing. Foreground information for these two tasks was identified by 68 subjects (including those 24 subjects, the nine subjects from experiment two and 35 subjects from experiment three; this was the only task for experiment three) who identified the important event or thing in each picture; events that were identified by more than half of the subjects were considered foreground. In the second experiment, nine subjects told stories orally based upon the events depicted in the drawing; foreground information for this task was determined by four judges who independently read each story and identified the events that were essential to the story line (without looking at the pictures).

The results do not support any one factor as a coding device for foreground, but instead support Hopper and Thompson's prediction that foreground is coded with a cluster of high transitivity features. The results from the forced choice task did not support the predictions, but the description and storytelling tasks produced similar results, both supporting the claim that foreground is associated with more of the predicted foreground markers per clause and background is associated with fewer of the predicted foreground markers per clause.

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Chapter 1 Introduction

The distinction between foreground and background information in the analysis of narrative discourse remains a mystery, or at best, a half-solved puzzle. While there is agreement about the intuitive concepts represented by the terms foreground and background, the linguistic coding devices used to mark them remain elusive, and the methods of identifying foreground in narratives are diverse. It is generally agreed, however, that foreground information is the important, salient, central information that is essential to the narrative, while background information adds detail to the story but is not essential to the story line.

This thesis addresses these problems with the investigation of four potential coding devices using two methods of identifying foreground. Three of these factors, taken from Hopper and Thompson (1980), are related to the notion of transitivity and are binary in nature. According to Hopper and Thompson (1980), high transitivity features (e.g., two or more participants, affirmatives and a completed action coding device) tend to code foreground information, while low transitivity features (e.g., one participant, negatives and a continuing action coding device) code background information. They add that foreground is more closely associated with the combination of several high transitivity features than it is by the presence or absence of any one factor (Hopper & Thompson, 1980, pp. 283-284). The fourth factor to be examined in this study is clause type. Tomlin (1985) presented data that suggest that foreground is coded by main clauses, while background is coded by subordinate clauses. Later experimental studies (e.g., Prideaux & Stanford, 1990; Tjosvold, 1989) have not produced results that clearly support either claim, while the validity of Hopper and Thompson's transitivity hypothesis has been questioned on both theoretical and empirical grounds (Rice, 1987). Despite the lack of clear experimental validation of Hopper and Thompson (1980) and Tomlin (1985), they remain seminal to the investigation of the foreground - background distinction, and are still in need of empirical study.

Potential confounding factors from previous studies have been addressed in the present study. Foreground information is identified independently from the subjects' discourse through the use of a separate task and a control experiment, while event line foreground was verified by four judges working independently. In past experiments, the use of aspect may have been related to the degree of transitivity of the event shown on the film clip that subjects were asked to describe (cf. Prideaux & Stanford, 1990; Tjosvold, 1989). The nature of the event being described in the present study was controlled through the use of twelve drawings, five depicting brief (high) transitive actions (e.g., a woman dumping soup on a man's head), six depicting more durative (low) transitive actions (e.g., a woman hanging laundry), and one depicting an intransitive action (e.g., a man slipping on a banana peel). Finally, three separate tasks were performed using the same twelve drawings as stimuli: a forced choice task in which the experimenter varied the factors, a description task in which subjects wrote short descriptions, and a storytelling task in which subjects told stories orally based upon the drawings.

The thesis is organized as follows: Chapter Two presents a literature review of the foreground - background distinction, focusing on the various definitions of foreground and on the factors that will be examined in this study. Chapter Three presents the methods used for the three experiments, while Chapter Four presents the results of the experiments. Finally, Chapter Five discusses the results and offers some conclusions. The Appendices contain the drawings that were used as stimuli, the forced choice options, instructions for the three experiments, samples of descriptions and samples of stories.

Chapter 2 The Foreground - Background Distinction

2.0 Introduction

This chapter reviews the major research on foreground and background. It begins with a section defining foreground and background, where the notions sequentiality, importance, and figure and ground are discussed as potential means of distinguishing foreground from background. The following sections discuss the factors that have been proposed as markers of foreground or background. Section 2.2 looks at transitivity, as first proposed by Hopper and Thompson (1980), and then as refined by later researchers, along with experimental evidence concerning these transitivity factors. Section 2.3 reviews clause membership as an indicator of foreground or background, beginning with the traditional assumptions and ending with experimental evidence. Section 2.4 presents some alternative factors which may code foreground or background but which were not examined in the present study.

2.1 Defining foreground and background

It is always useful to define the terms one will use before launching into something more ambitious, but this is especially important with regard to defining "foreground" and "background" because they have been used in several different ways in the literature. Sequentiality, importance and figure and ground are examined in this section.

2.1.1 Sequentiality

One of the earliest studies of foreground was that of Labov and Waletzky (1967), who examined oral narratives. They restricted themselves to the structures that were ordered sequentially because "they recapitulate experience in the same order as the original events" (Labov & Waletzky, 1967, p. 21), and therefore form the narrative. Since the pioneering work of Labov and Waletzky (1967), event-line information has been of interest to those who study narratives (e.g., Cassell & McNeill, 1990). Many have adopted 'event-line' as the basis for the foreground-background distinction, defining foreground as the skeleton or backbone of the story (Hopper, 1979; Longacre, 1983), plot advancing (Bakker, 1991), causal (Fleischman, 1985), temporally, iconically ordered information, and defining background as information that is not temporally ordered, which can be moved to different parts of the narrative without changing the meaning of the story (Ehrlich, 1987; Reinhart, 1984; Hopper, 1979; Weber, 1983; Fleischman, 1985; Hopper & Thompson, 1980; Thompson, 1987; Wald, 1987). Reinhart (1984) notes that these definitions of foreground correlate "with the very strong gestalt principle of good continuation." (Reinhart, 1984, p. 803).

Chvany (1984) argues that "*grounding is signaled by the grammar even without sequentiality*. Sequential narrative merely provides the clearest examples. . . . sequentiality aids the perception of a foreground, but foregrounding does not imply sequentiality" (her emphasis; Chvany, 1984, p. 251). Essentially, Chvany is advocating using sequentiality to find markers of foreground, then using these markers to find foreground in non-sequential narratives (Chvany, 1984, p. 247) - a circular and dangerous practice if these markers are not independently verified experimentally, as they rarely are by text researchers. A clear example of this is the assertion, rarely tested (but see Tomlin, 1985), that subordinate clauses must contain background information exclusively (Labov & Waletzky, 1967; Reinhart, 1984; Chvany, 1984; and especially Wårvik, 1990). Some have noted this circularity (e.g., Tomlin, 1985; Givón, 1987; Cassell & McNeill, 1990; Hwang, 1990), which many subsequent experimental studies have tried to avoid.

There are other problems with defining foreground in terms of sequentiality. Often in narratives, information is repeated for effect. In these cases, only one presentation is considered foreground, while the other is treated as a background summary (Hopper, 1979), and the identification of each seems arbitrary at times¹. Givón (1987) notes that many types of discourse (such as academic lectures) are not temporally ordered in nature. A further complication arises when the narrator is taken into account. Reinhart (1984) suggests that in some cases "it is obviously only a matter of the narrator's choice which material of the represented world should be reported in the foreground and which in the background" (Reinhart, 1984, p. 785), especially since information is always filtered through the consciousness of the individual narrator, and is therefore interpreted uniquely (Fleischman, 1985, pp. 854, 860). These observations are supported by Kumpf who found that prosodic prominence may not coincide with events, and non-prominence may not coincide with non-events (Kumpf, 1987, pp. 189-190). Therefore, an objective, plot-line determination of foreground may miss essential events that the narrator has decided to present as background, and may not reflect the narrator's perception of the foreground.

2.1.2 Importance

Foreground has also been defined as the important, crucial events of a narrative, often events that have importance for humans (Fleischman, 1985). However, Fleischman cautions that "we must not assume cross-cultural unanimity on what is interesting and important, and therefore 'intrinsically' foregroundable" (Fleischman, 1985, p. 858). By extension, background is defined as less important information (Hopper & Polanyi, 1981, as quoted by Weber, 1983; Wallace, 1982). In many ways, this is an addendum to the sequentiality definition, since the events on the story-line will naturally tend to be more important than the events that are not on the time line. The importance definition includes things that are excluded by sequentiality, such as "direct speech. . . processes or states, which cannot be foregrounded by the sequentiality criterion, [but which] may be indispensable for the development of the plot." Bakker (1991, p. 242).

However, defining background as that which is less important does not mean that background can or should be ignored; rather, it supplies the context that gives meaning to the foreground (Wallace, 1982, p. 208). Reinhart agrees that "the background enables us to perceive or understand the foreground events. . . the foreground need not be more important than the background." (Reinhart, 1984, p. 789). Chvany (1984) claims that foreground and importance should be considered separate notions, so that the narrator is free to present information from different points of view by backgrounding important information. For example, in her analysis of Chekhov, Chvany found that the murder of a child is backgrounded grammatically to the tired nanny lying down, so that the events can be presented from the nanny's point of view (Chvany, 1984, p. 250).

2.1.3 Figure and ground

A third definition of foreground equates the Gestalt notion of figure and ground in visual perception to linguistic figures and grounds of narratives (Talmy,

¹ "To identify the temporally sequenced clauses, I simply tried to determine which predicates named a punctual event that followed the previous sequenced event and preceded the following sequenced event. . . . The major type of difficulty in applying the criterion just given is that there are predicates which appear superficially to be part of the temporal line of the narrative, but which in fact serve to summarize either the previous few temporally sequenced predicates or the following few temporally sequenced predicates." (Thompson, 1987, p. 442)

1983; Wallace, 1982; Weber, 1983; Reinhart, 1984), which can be explained as an analogy:

When we look at a picture, we never perceive all its details simultaneously. There are certain parts of the picture that we notice immediately, while the rest we do not. Always in human perception there are foreground and background, figure against ground, important and not-important, theme and not-theme (or background). (Jones, 1977, p. 3)

The division of the world into figure and ground is an involuntary process for humans (Reinhart, 1984; Jones, 1977), which makes this approach appealing, since it calls upon general cognitive principles rather than specialized linguistic rules. Essentially, the foreground is the figure, the salient part of the whole, but this salient part need not be the most important part (the figure is not necessarily more important than the ground), allowing the narrator room to make artistic and startling effects by making the less important parts salient, while ignoring the more humanly important parts (Reinhart, 1984; Fleischman, 1985; Chvany, 1984). Although Reinhart suggests that "a sequential plot line stands out against its background as figure against ground" (1982, as cited by Chvany, 1984, p. 247), adding that there may be layers of foreground and background, especially in complex literature, "just as a painting can show a figure resting on a figure resting on a figure" (Reinhart, 1984, p. 785), others propose that the figure (or foreground) is salient because in some way it is unexpected. Since the figure cannot be understood unless it is interpreted relative to its ground, the unexpectedness is relative to the context, rather than being intrinsic (Polanyi, 1985; Fleischman, 1985; Chvany, 1984, 1985; Jones, 1977; Reinhart, 1984; Weber, 1983; Longacre, 1985). Examples of unexpectedness might include a sudden change in the style or intonation of the narrative, or a shift from complex syntax to simpler syntax or vice versa. The fact that individuals perceive the same events differently (Fleischman, 1985) makes the task of distinguishing figure from ground difficult, because

[a]lthough an entity's selection as the figure within a scene is encouraged by certain objective properties (e.g. compactness; being in motion; contrast with surroundings), in the final analysis figure/ground alignment is not inherent in a situation but a matter of construal. (Langacker, 1991, p. 308)

The life experiences of the individual will therefore have an effect upon what that individual will find salient in any given situation.

2.1.4 Definitions - Conclusion

The three definitions of foreground (sequentiality, importance, and figure on a ground) approach the problem of how to identify foreground from different perspectives, but there is a great deal of overlap. The most objective definition, that of plot line, does not allow for the subjective nature of narratives. Until we have evidence of what kinds of structures are actually used to code foreground information, the most conservative working definition seems to be that of importance. We must discover what is important for a specific narrator, and how that narrator codes that information in the narrative. Once we understand this, then we can incorporate importance into sequential events to determine a more accurate (from the narrator's perspective) foreground.³

³ The above definitions have in part assumed that the notions foreground and background are binary and can be separated. However, this has been called into question, with many suggesting that the

2.2 Transitivity

Sections 2.2 and 2.3 examine some of the linguistic factors that have been considered in the search for markers of foreground. Since the present study involves only English data, the remainder of this literature review is restricted to English. In this section the claims of Hopper and Thompson (1980) are discussed, beginning with their transitivity hypothesis and followed by some refinements of transitivity based on recent work (Rice, 1987; Langacker, 1991). Their experimental evidence is examined.

2.2.1 Hopper and Thompson (1980)

Hopper and Thompson (1980) have presented a transitivity hypothesis, which, they claim, reveals the linguistic coding devices used most frequently for marking foreground and background information. Traditionally, transitivity refers to an activity that is transferred from an agent to a patient (Hopper & Thompson, 1980 p. 251) often in a dynamic interaction. By examining a wide range of cross-linguistic data, Hopper and Thompson established a list of ten binary transitivity factors which they organized according to high and low transitivity values as shown by Table 2.1, taken from Hopper and Thompson (1980, p. 252; A = agent, O = object). Although they suggest that the features in the high transitivity column mark foreground, and the features in the low transitivity column mark background, they also claim that grounding is inferred

from a CLUSTER OF PROPERTIES, no single one of which is exclusively characteristic of foregrounding. . . . From the performer's viewpoint, the decision to foreground a clause will be reflected in the decision to encode more (rather than fewer) Transitivity features in the clause. (Hopper and Thompson, 1980, p. 284)

This link between foreground and high transitivity lies in salience: foreground information is that which is more salient than background information, and the factors identified by Hopper and Thompson as highly transitive are also highly salient in discourse; both foreground and high transitivity tend to be effective events rather than states. Therefore, it is reasonable to predict that foreground may be marked by these high transitive features.

Table 2.1 Hopper and Thompson's (1980) Transitivity Features

Factor	High Transitivity (Foreground)	Low Transitivity (Background)
Participants	2 or more, A & O	one
Kinesis	action	non-action
Aspect	telic	atelic
Punctuality	punctual	non-punctual
Volitionality	volitional	non-volitional
Affirmation	affirmative	negative
Mode	realis	irrealis
Agency	A high in potency	A low in potency
Affectedness of O	O totally affected	O not affected
Individuation of O	O highly individuated	O non-individuated

phenomenon should be thought of as a continuum, perhaps with foreground and background at either end of the continuum (Givón, 1987; Cassell & McNeill, 1990; Wårvik, 1990; Fleischman, 1985; Hopper & Thompson, 1980).

Table 2.2 Text Analysis (From Hopper & Thompson, 1980)

Factor	Foreground	Background
Participants (>2)	76%	18%
Kinesis	88%	49%
Aspect (telic)	88%	27%
Punctuality	55%	10%
Volitionality	76%	36%
Affirmation (affirmative)	100%	92%
Mode	100%	66%
Agency	–	–
O-Affectedness	39%	12%
O-Individuation	–	–
Average for all features	78%	39%

Only three of the ten factors proposed by Hopper and Thompson are examined in the present study: number of participants, aspect, and affirmation. These factors were chosen over the other factors for several reasons. Hopper and Thompson (1980) analyzed three texts, and calculated the percentages of high transitivity features (the second column in Table 2.1 above) in foreground and background clauses, which are summarized in Table 2.2 (from Hopper & Thompson, 1980, p. 288)⁴. They defined foreground as "the backbone or skeleton of the text, forming its basic structure. . . . foregrounded clauses . . . are ordered in a temporal sequence" (Hopper & Thompson, 1980, p. 281). The two factors that show the greatest difference in occurrence of high transitivity in foreground and background clauses are number of participants (two or more participants occurred in 76% of the foreground clauses and in 18% of the background clauses, a difference of 58%) and aspect (telic aspect occurred in 88% of foreground clauses and in 27% of background clauses, a difference of 61%). Therefore, it seemed reasonable that of all ten factors, these two were most likely to distinguish foreground and background information. Affirmation was chosen because it varied the least in occurrence in foreground and background clauses (affirmatives occurred in 100% of foreground clauses and 92% of background clauses, a difference of 8%), and so was least likely to code foreground exclusively, while at the same time the percentages suggest that all negatives occur in background clauses which leads one to think that, contrary to the initial conclusion, it could be one of the most accurate indicators of background information (i.e., if there is a negative, the clause in which it appears contains background rather than foreground information). Finally, the assessment of these factors can be done more objectively than the assessment of the other factors (Prideaux & Stanford, 1990, p. 3) since they can be operationally defined relatively easily without compromising the original intent of the factor. Similarly, these factors are the easiest for the narrator to manipulate, allowing him to present an event as foreground or as background. The experimental evidence discussed below will therefore tend to focus on these three factors.

The correlation of high transitivity with foregrounding, and low transitivity with backgrounding has been recently supported theoretically (e.g., Reinhart, 1984; Chvany, 1985). For example, punctual, telic, perfect verbs temporally conform to the Gestalt principles of proximity and closure (Chvany, 1984; Reinhart, 1984). The notion of foregrounding as a cluster of properties has also been adapted by others (e.g., Fleischman, 1985; Wallace, 1982; Chvany, 1984; Wårvik, 1990). Fleischman

⁴Cassell and McNeill (1990) question the claims of Hopper and Thompson (1980), suggesting that since a large proportion of background clauses contained high transitivity features, Hopper and Thompson have not shown that transitivity distinguishes foreground from background in English (Cassell & McNeill, 1990, p. 58).

(1985) in particular notes that foreground and background may be marked by a variety of factors which may interact with each other in different ways (pp. 861-862). Thus, there would not be a single reliable factor that would mark foreground or background, but rather a set of factors which may change in different grammatical or semantic situations.

2.2.2 New views of transitivity

The feature-based notion of transitivity as proposed by Hopper and Thompson (1980) has been questioned by some linguists, in particular by Rice (1987, 1988) and Langacker (1991), who argue that the transitivity of a clause depends on the meaning of the clause or sentence as a whole, as well as the speaker's perspective, attitude and evaluation with respect to the event being described. In assessing the behavior of the clause, they refer to a prototypical transitive clause, which Langacker associates with a set of qualities:

(1) it has two participants expressed by overt nominals that function as subject and object; (2) it describes an event (as opposed to a static situation); (3) the event is energetic, relatively brief, and has a well-defined endpoint; (4) the subject and object represent discrete, highly individuated physical entities; (5) these entities already exist when the event occurs (i.e. they are not products of the event); (6) the subject and object are fully distinct and participate in a strongly asymmetrical relationship; (7) the subject's participation is volitional, while that of the object is non-volitional; (8) the subject is the source of the energy, and the object is its target; (9) the object is totally affected by the action. This is not a random list. As pointed out by Rice, all these factors can be identified as facets of the canonical event model -- it is this model that ties them together and provides a coherent basis for the prototypical notion of transitivity. (Langacker, 1991, p. 302)

Rice (1987) analyzed hundreds of clauses, including some containing verbs that sometimes behave transitively and sometimes intransitively. Using passivizability as a diagnostic of transitivity, Rice demonstrates that Hopper and Thompson's transitivity factors do not correlate with passivizability: some clauses that are highly transitive according to Hopper and Thompson's factors cannot be passivized, while some clauses that are low in transitivity according to their factors make perfectly good passives (Rice, 1987, pp. 156, 162). In some cases, for example, negativity (a low transitive factor according to Hopper & Thompson) improves the acceptability of the passive. Instead, passivizability seems to be more closely associated with the distance of the clause from the prototypical transitive clause - the further it is assessed from the prototype, the less likely it is to form an acceptable passive in a neutral context (Rice, 1987, pp. 156-157). Therefore the factors proposed by Hopper and Thompson (1980) may not be accurate indicators of transitivity since they do not necessarily integrate into a conceptual gestalt.

Rice suggests that the phenomenon of transitivity should be considered continuous along with such conceptual notions as proximity, motion, direction, and level of dependence and differentiation of participants, among others (Rice, 1987, p. 145). She suggests that what is needed is a "more fine-grained analysis of transitive clauses as approximations to a prototypical action-effect scheme." (Rice, 1987, p. 37). In addition, the transitivity factors should be considered as aspects of the event itself and of the speaker's interpretation of the event rather than of the verb or other morphosyntactic properties of the clause (Rice, 1987, pp. 78, 156).

Delancey (1987) looked for a semantic explanation, following Lakoff's (1977) prototype approach, for the "transitivity phenomenon" described by Hopper and Thompson. He suggests that a direct causal relationship between the transitivity

factors and foreground is not supported by their data, and instead argues for a different explanation of their findings: instead of directly marking foreground, the high transitivity factors "code aspects of a coherent semantic prototype" (Delancey, 1987, p. 55). This transitive prototype is "more likely to be of interest, and thus inherently more likely to constitute foregrounded information" (Delancey, 1987, p. 55). The transitive event prototype contains a human actor causing some kinetic event which has an effect upon a static object (Delancey, 1987, pp. 58-61; cf. Rice, 1987). While this is interesting, "it remains to be shown how [the semantic prototype hypothesis] can account for the correlation between transitivity and foregrounding in discourse." (Delancey, 1987, p. 65). He concludes by noting that "kinetic events, involving changes of place or condition, are perceptually and cognitively highly salient," so these events will tend to be considered foreground by the speaker who will code them as such and by the listener who will use the coding to recreate the events in his mind (Delancey, 1987, pp. 65-66).

Still other researchers have offered alternatives or extensions to Hopper and Thompson's list of factors that distinguish high transitivity from low transitivity or foreground from background. Wårvik (1990) expands on Hopper and Thompson's list to include as foreground markers main clauses, figures, given participants, referential participants, and events that propel the story line as well as those that are unexpected (p. 533). She adds that some of these factors are more important than others. Background information, contends Hopper (1979) in a precursor to Hopper and Thompson (1980), is equivalent to commentary and therefore focuses on old information, most often something other than the verb and its complements, such as "the subject, an instrumental adverb, the tense of the verb, or even the direct object alone." (Hopper, 1979, p. 220). Reinhart (1984) created a list of content criteria for foreground and background, which includes temporal continuity, punctuality, completeness, modality, causality, and culture dependent criteria (pp. 801-802). Chvany (1984, p. 255; 1985, p. 14) offers a Saliency Hierarchy, which contains most of Hopper and Thompson's factors as well as main clause-subordinate clause, but these factors are each scaled so that each clause can be scored. A low score indicates background, while a high score indicates foreground (Chvany, 1984, p. 256). Using data from "The Three Bears" to test her Saliency Hierarchy, Chvany found that foreground clauses tended to have higher saliency scores, while background clauses tended to have lower saliency scores (Chvany, 1984, p. 260). She advocates a weaker claim than Hopper and Thompson's: "Nonetheless, the Transitivity scale remains a valuable contribution when reinterpreted as a weaker claim about a statistical norm against which . . . counterexamples . . . are typologically exceptional." (Chvany, 1984, p. 253; see also Hopper & Thompson, 1980, p. 284).

Wallace (1982) lumped together hierarchies presented by Comrie, Givón, Hopper and Thompson, Reid, Silverstein and Timberlake to form a table distinguishing more salient from less salient, including such factors as human, perfective, transitive, main clause and foreground under more salient, and nonhuman, non-perfective, intransitive, subordinate clauses, and background under less salient, then suggests that these factors are merely specific examples of figure and ground. Transitive constructions, he argues, are like figures (they are bounded in time) while intransitive constructions are like grounds (they are stative, continuous, unbounded in time) (Wallace, 1982, pp. 214-215). Finally, Weber (1983) notes that these hierarchies can be useful in locating foreground: "In theory, the number of hierarchies is open and can be increased indefinitely. A clause which tops all the hierarchies would be the prototype of a foregrounded clause." (Weber, 1983, p. 5). Weber offers "one comprehensive definition of foregrounding: foregrounded material must top one or more of the hierarchies; the more hierarchies it tops, the more foregrounded it is." (Weber, 1983, p. 9).

Hopper and Thompson's (1980) proposals have played a central and continuing role in research on transitivity and foregrounding. While they have been subjected to extensive analysis, refinements, and revisions, the proposals remain at the heart of research in this area. One important fact that emerges from the various theoretical critiques discussed above is that all the transitivity features are not equal, and various combinations of them (or other things entirely - such as speaker construal) tend to be what may signal foreground or background information. Accordingly, the present research has focused on those three which appear to be the most discriminating of the set. It is these, plus clause membership, which serve as the central focus of the research.

2.2.3 Testing transitivity claims experimentally

Certain aspects of the transitivity hypothesis have been tested experimentally (e.g., Prideaux & Stanford, 1990; Tjosvold, 1989), but the results have not always supported Hopper and Thompson's factors as markers of foreground. Prideaux and Stanford (1990), in an experiment where subjects watched a short film clip then later gave oral narrative descriptions of what they had seen, found that foreground material (identified as the events that were mentioned by 75% of the subjects) was correlated with two or more participants and overt aspect marking (progressive), but not with tense. The use of progressives with foreground information was probably a function of the task and the oral narrative style used by the speakers. Since Hopper and Thompson (1980) predict that telic aspect is more likely to be associated with foregrounding than atelic aspect, the only significant factor in Prideaux and Stanford's (1990) study that supports Hopper and Thompson's (1980) hypothesis is number of participants. Tjosvold, in a similar experiment where subjects watched a short clip of a film twice and later wrote descriptions of what they had seen, found that "Foreground verbs were more often in the present tense than background verbs. Background verbs took the progressive aspect, used copula verbs and the irrealis mode more, and occurred in dependent clauses more than foregrounded verbs" (Tjosvold, 1989, p. 60). Foreground information was identified as clauses containing verbs that describe visual movement, since visual movement was assumed to be the salient information in the film clip; therefore, foreground was potentially unique for each subject. Of Tjosvold's findings, the results for aspect and mode support the transitivity hypothesis, contrary (in the case of aspect) to Prideaux and Stanford (1990). This could be due to the different methods used, the different events shown in the two films, or different operational methods of determining the foreground. Overall, experimental work has supported Hopper and Thompson's (1980) hypothesis for the factors number of participants and mode, but the results are unclear for aspect.

Number of participants tops Hopper and Thompson's (1980) list of transitivity parameters. They claim that "each component of Transitivity involves a different facet of the effectiveness or intensity with which the action is transferred from one participant to another. . . . No transfer at all can take place unless at least two participants are involved" (Hopper & Thompson, 1980, p. 252). However, a clause with two or more participants is not necessarily more transitive than a clause with only one: Hopper and Thompson argue that "*Susan left*" has more high transitivity features than "*Jerry likes beer*," since the former is a punctual, volitional action with telic aspect, while the latter is not (1980, p. 254). The relationship between number of participants and the foreground-background distinction, they explain, lies in the tendency for actions, usually passed from one participant to another, to occur in the foreground, with states describing scenes and detail, and therefore having only one participant, predominating background information (p. 284). As noted above, Prideaux and Stanford (1990, p. 8) found that "foreground events tend to have more participants in the host clause than do background events.

This is an especially surprising result when it is realized that only two characters participate in the scene."

Negativity is considered a potential background marker by Hopper and Thompson (1980), but this may not be the case. At first glance, it makes sense that something that has not happened should not be important or on the time line: it is a non-event. However, Fleischman (1985, pp. 858-859) reminds us that there are cases in which a negative could be considered an event: in particular, cases where not doing something is unexpected; that is, the positive version is expected, and the fact that it was not done is an event. Hwang (1990) agrees, suggesting that the hearer has a certain set of expectations built up from the narrative, and the speaker uses negatives to address these expectations, which "may be generic, due to a culturally shared norm, or specific to a given textual situation." (p. 83). Whether this qualifies negatives to be considered foreground is another question: if important events can be reported in the background, perhaps negatives are one of many stylistic background effects that are available to the speaker. In addition, negatives may cause the real events to stand out more, thereby functioning as background information (Wallace, 1982).

Progressives have been proposed as background markers (Hopper & Thompson, 1980; Longacre, 1983) because they usually describe durative events or states. While examining literary narratives, Ehrlich (1987, p. 374) found that progressives and in particular past progressives "represent foreground information from a character's point of view," but adds that when a text has many points of view, progressives can function as markers of foreground and background, "depending on the point of view from which the linguistic material is presented" and therefore upon the local context. Similarly, Hwang (1990) notes that progressives may contain information that is important and "crucial in the progression of the narrative; it may be in the progressive only because it is simultaneous with another event which is marked to be foreground" (p. 78). Hwang also reports that Miehle (1978), who analyzed tense and aspect in Arthur Hailey's novel *The Final Analysis*, found that past progressives were used in some cases as transitions between thought and dialogue (1990, p. 79).

We see how crucial definitions of foreground and background become when investigating the factors that might mark them. Hwang (1990), citing Thompson (1987), notes that high transitivity

tends to correlate with the time line events more than with the important events, and that correlation is not perfect in most discourses. Some morphosyntactic features that are low on the transitivity scale (dynamicity) are found to be used to report eventline, sometimes pivotal, information. (Hwang, 1990, p. 85).

Hwang suggests that these unexpected, off-norm codes may be done deliberately for higher contrast, or to suggest simultaneity of action (1990, pp. 85-86). Since so many factors must be taken into consideration, "even when we recognize transitivity as a continuum, it is not clear at what point in that continuum we have foreground information." (Hwang, 1990, p. 88).

2.2.4 Transitivity - Conclusion

Of the ten transitivity factors suggested by Hopper and Thompson (1980), three seem to be both the most likely to distinguish foreground/background and the easiest to analyze objectively: number of participants, aspect and affirmation. Experimental studies have not always shown a correlation between these factors and foreground, especially in the case of aspect, where each study uses a different type of event as stimuli. Perhaps these factors, despite the impressive results obtained by

Hopper and Thompson, do not really reflect transitive events, as Rice (1987) avers, in which case they may not be valid markers of the foreground - background distinction.

2.3 Clause type

This section will examine the claims and the research that has been done with respect to clause type (main clause or subordinate clause) functioning as a foreground or background marker. First, the assumptions are examined, and then experimental research are discussed.

2.3.1 Assumptions regarding clause type

Labov and Waletzky (1967) initiated the view that subordinate clauses code background information when they distinguished clauses that were temporally and iconically ordered (narrative clauses) from those that were not temporally ordered (non-narrative clauses). Since this was later taken by some as the basis for the foreground-background distinction (see 2.1), the extension that subordinate clauses must contain background information soon followed. The argument was that subordinate clauses can be moved to nearly any part of the narrative without changing the semantic interpretation of the narrative, therefore they could not be considered temporally ordered (i.e., they could not be foreground) (Labov & Waletzky, 1967; Thompson, 1987). Researchers examining text studies accepted this assertion as a definition of foreground and enthusiastically applied it to their work (e.g., Jones, 1977; Wårvik, 1990; Chvany, 1984; Reinhart, 1984), using subordination to locate background information, and apparently unconcerned about the circularity of the definition. For example, although Reinhart (1984) looks at temporally sequenced events, she discounts the possibility that foreground events may occur in a subordinate clause⁵ (p. 798). It should be noted that although subordinate clauses are taken to code background information, main clauses do not always code foreground: they may also code background (Wårvik, 1990).

The experimental work of Townsend and Bever (1977) has been quoted as support for the claim that main clauses are more salient (therefore more likely to be foreground) than subordinate clauses.⁶ Their experiments and results are based upon the assumption that main clauses, like figures, are perceived and understood quickly, while subordinate clauses, like grounds, are processed more slowly. In two experiments, subjects were presented with sentences containing a main and subordinate clause and were then presented with a probe word, and the subjects were asked to respond as to whether that word was in the sentence or not. The sentences were presented in two orders, main-subordinate and subordinate-main, and the probe word varied from being in the main or subordinate clause. It was assumed that the slower processing of subordinate clauses indicated that the words of the subordinate clause were still in short term memory, while the more quickly processed main clauses had been converted to semantic memory and the individual words were no longer in short term memory. Therefore, they expected that probes from subordinate clauses should be located more rapidly, because comparisons could be made in short term memory, while probes from main clauses should have longer response times because such a comparison was impossible since none of the words were in short term memory. In addition, they predicted that main-subordinate sentences should be

⁵ "So given only content and ordering criteria this should have been considered a foreground clause. But the reason it functions as background here is that it is marked syntactically as subordinate. This marking reflects a free choice of the narrator. He could just as well present this event with a narrative clause. . . ." (Reinhart, 1984, p. 798)

⁶ e.g., Wallace (1982) states "Townsend and Bever, as well as Talmy, have drawn an explicit parallel between main clauses as figures and subordinate clauses as grounds." (p. 215)

processed faster than subordinate-main sentences, since in the first case the main clause is quickly translated into semantic memory, freeing space in short term memory for the second clause, while in the second case, the subordinate clause must be kept in short term memory while the second clause is being processed.

While their results support their predictions, this fails to support their claim relating clause type to figure and ground. All they have shown is that the nature of subordinate clauses is such that they must be interpreted with respect to the main clause, but this does not mean that subordinate clauses do not contain important information. In addition, Townsend and Bever have not demonstrated that the main clause contains important information, as some have claimed when citing them, so it does not follow that "These experiments show that the more important information or an initial main clause is interpreted more readily than the less important information of an initial subordinate clause" (Townsend & Bever, 1977, p. 1 (from the abstract)). In other words, they have not demonstrated that important information occurs in main clauses, and unimportant information in subordinate clauses; this was assumed at the outset.

As Givón (1987, p. 185; his emphasis) asserts, "We have taken for granted for too long now that there must be a strong correlation between *main-finite clause* syntax and the foregrounding function in discourse." In place of assumptions, let us now turn to empirical studies.

2.3.2 Experimental evidence of clause type and foregrounding

Tomlin (1985) collected four types of narratives from subjects who described a short film clip of a cartoon: on-line oral descriptions, oral delayed narratives, written delayed descriptions, and edited written descriptions. The last three types were produced after the subjects had viewed the entire film clip (p. 98). The narratives were analyzed using events identified by abrupt shifts in the camera angle or other abrupt visual changes as the foreground, which coincided with the events described by the subjects (p. 92). In his analysis,

Dependent clauses include all participial and infinitive clauses, whether embedded or not; those finite clauses which are embedded as sentential complements or introduced by subordinating conjunctions such as *while* and *although*; all relative clauses, both restrictive and non-restrictive; and all adverbial clauses. Dependent clauses do not include clauses conjoined by coordinating conjunctions like *and* or *but*; nor do they include clauses with non-finite verbs preceded and followed by utterance boundaries. All clauses not identified as being dependent were counted as independent. (Tomlin, 1985, p. 94)

The frequency of dependent clauses increased with the amount of planning allowed: oral on-line narratives contained the least number of dependent clauses, and written edited narratives contained the most. He found that "About 80% of all dependent clauses co-occur with background propositions, and they do so irrespective of the particular discourse-production condition. The remaining 20% constitute exceptions, including embedded complements, experimental 'noise', and genuine counter-examples, most of which can be accounted for" (Tomlin, 1985, p. 101) and concluded that "Dependent clauses do code background information; independent clauses do code pivotal or foreground information." (1985, p. 118).

As discussed above, Tjosvold's (1989) results indicated that there was a correlation between background and dependent clauses. Prideaux and Stanford (1990, p. 8), on the other hand, found that both foreground and background "tend to be found in main clauses. . . . the data do not support clause membership as a coding device for foreground versus background events. . . . In both cases, main clause

membership dominates." In addition, when information was coded in relative clauses attached to independent noun phrases, it tended to be new and crucial information, but when attached to dependent noun phrases, relative clauses tend to contain given information (Prideaux, personal communication).

Erbaugh (1987) analyzed oral narratives of a cartoon film clip produced by native and non-native speakers of English, and found that the most important information, which she calls pivotal and which was often found in main clauses, occurred with the greatest amount of pausing and speech errors, while background and editorial comments, often found in relative clauses, were produced with the least amount of pauses and errors for both types of subjects. As she notes, this is contrary to what would be expected given that foreground information tends to occur in main clauses with regular word order and background information tends to occur in subordinate clauses with unusual or archaic word order (Erbaugh, 1987, p. 112). She suggests that the explanation lies in the probability that more planning and effort is used to try to relay the vital pieces of information, resulting in more pauses, leaving fewer resources available to monitor potential speech errors. If in this process subjects expend their resources, then there will be less background elaboration or fewer meta comments on the task; that is, resources are first allotted to the task of conveying pivotal information, then foreground information (successive events in the narrative), then background information (elaborations on the pivot or foreground), and lastly other information (editorial or evaluative comments) (Erbaugh, 1987, pp. 112, 114).

Bever and Townsend (1979) present experiments in which subjects were presented with interrupted sentences, and were asked to indicate whether a verb-object phrase was consistent with the meaning of the interrupted sentence. The sentences were interrupted before the last word of the first or second clause. Response times were faster when main clauses were interrupted. In the second experiment, subjects heard the same stimuli but were asked to determine if a probe word had occurred in the interrupted sentence. The results seemed to depend on the subordinating conjunction that was used, with the more causal ones (such as 'if' and 'since') being processed (translated into meaning and eliminated from short term memory) as quickly as the main clauses, and less causal ones (such as 'though') being held in literal form in short term memory longer. This shows an interesting correlation to the foreground definitions above, where foreground is considered causal (Fleischman, 1985); the grouping of main clauses and causal subordinate clauses on the one hand and non-causal subordinate clauses on the other seems to correlate to the foreground-background distinction, where the important, foreground information is processed quickly, but the non-essential, background information is processed more slowly.

Perhaps an occupational hazard of working with text studies is that one is always looking at written data, and does not consider oral narratives. Mithun (1984) has found that oral narratives contain less subordination than written narratives do, and Fleischman (1985) suggests that while foreground may be located in main clauses and background in subordinate clauses for written narratives, these correlations may not apply to oral narratives. These observations are in agreement with Prideaux (1989; Prideaux *et al.*, 1980), who found that processing constraints (such as syntactic complexity, main-subordinate, order of mention and given-new (Prideaux, 1989, p. 32)) seem to apply to oral-like narratives more often than to less oral-like written narratives.

There is some controversy about the role of subordinate clauses in discourse. Chafe (1984) proposes that preposed free adverbial clauses contain information that orients the listener temporally or causally with respect to the following main clause. Hwang (1990) offers the following functions for adverbial clauses:

- (a) Initial adverbial clauses primarily serve a cohesive and orienting function, by carrying known or script-predictable information or resuming the eventline after background information. They may report information on the time line, but the 'importance' of the information is relatively low.
- (b) Final (postposed) adverbial clauses may also carry information on the time line, but when they do the information is 'important' in terms of the overall plot structure. They may have a multiple function, e.g. an additional temporal relation in the local context and a turning point or peak in the global context. In this case the independent clause preceding the adverbial clause usually reports setting, background, or successive routine events. (Hwang, 1990, p. 73)

Bakker (1991), focusing in particular on adverbial clauses, argues that they provide a ground in which the main clause, or figure, can be understood, but that each subclause must be examined to see what it does apart from potentially marking foreground or background. Citing Chafe (1984), he suggests that an initial adverbial clause acts as a guide to the following main clause, and may contain foreground markers, so to simply dismiss these subclauses as background may be missing part of the foreground picture. On the other hand, Jones (1977) considers subordinate clauses to be background, and she argues that the presence of the subordinate clause emphasizes the main clause, in effect highlighting it (p. 178). To support her position, she offers the following example (Jones, 1977, pp. 178-179), in which the focus is the information in the main clause:

- (1a) The woman who used to be fat and slovenly now looks like a model.
- (1b) The woman who now looks like a model used to be fat and slovenly.
- (2) In fact, she just landed a modeling job.

When (2) is added to (1a), the topic modeling is continued. When (2) is added to (1b), it is incongruous because the topic of (1b) is her former appearance.

Thompson (1987), defining foreground as temporally sequenced, but not discounting subordinate clauses as potentially temporally sequenced, analyzed *Nim* by Herbert Terrace, a written report of the progress made in the attempt to teach the chimpanzee Nim Chimpsky sign language. Thompson was particularly interested in discovering what other roles subordination may play other than marking background, which she predicted would be the case for the majority, but not all, of subordinate clauses (Thompson, 1987, p. 445). Thompson found that 89% of the subordinate clauses in Terrace's narrative are not temporally sequenced (1987, p. 445), supporting her hypothesis. Other discourse roles played by temporally sequenced subordinate clauses that were posited by Thompson (1987) include marking simultaneity (pp. 446-447), relating a following clause to the temporal sequence (p. 447), and acting as a bridge between a digression and the temporal line when returning to continue the story by relating the following event to the temporal line (p. 448). In allowing subordinate clauses to be on the time line, and hence to be foreground, Thompson is able to recognize marked forms that are effective because of their unexpectedness (i.e., foreground marked by subordinate clauses is the unexpected case) (1987, p. 448), which also allows for stylistic variation among narrators.

2.3.3 Clause Type - Conclusion

As with the transitivity factors, the experimental results for the correlation between clause type and foreground information are unclear. This is partly due to the assumption (introduced by Labov & Waletzky, 1967 and falsely supported by Bever & Townsend, 1977) that subordinate clauses must contain background information exclusively. When tested experimentally, some studies, such as Tomlin (1985), find

that subordinate clauses code background, while others, such as Prideaux and Stanford (1990), find that main clauses dominate for both foreground and background information: this may be due to different types of texts and different criteria for clause membership, or to different methods of calculating statistical significance. Tomlin (1985) looked at the distribution of all dependent clauses, while Prideaux and Stanford (1990) looked at the types of clauses that occurred with background information: the point of view is different, so it is difficult to compare the results of the two studies. Here again, the general results are inconclusive.

2.4 Additional factors

Apart from transitivity and clause membership, several other factors have been suggested that may be related to the foreground-background distinction. Potential factors include word order (e.g. topicalizations or left dislocations; Longacre, 1983; Jones, 1977; Keenan, 1985); example conjunctions (Jones, 1977, p. 169); assertion and presupposition (Talmy as cited in Weber, 1983); physical gestures that accompany oral narratives (Cassell & McNeill, 1990); prosodic prominence of oral narratives (Kumpf, 1987); or simply unexpected tone or syntax (Polanyi, 1985). In a unique approach, Wårvik (1990) suggests that English is a background marking language rather than a foreground marking language. She comes to this conclusion through the study of Old English, which apparently had a foreground marker *þa*. She notes that Modern English does not have a corresponding foreground marker to the Old English *þa*, and suggests that in Modern English, a kind of fuzzy background marking is favored over foreground marking (Wårvik, 1990, pp. 534, 537). In contrast to this is the fact that the psychological reality of the concept of background has been put into doubt by some recent studies which show a stronger correlation between main clauses and foreground than between subordinate clauses and background (Fleischman, 1985, p. 875). Finally, Labov and Waletzky (1967) and Polanyi (1985) emphasize that a narrative should have a purpose, an evaluation, which is not on the event line but which justifies why the story is being told, and it is possible that this is the part of the narrative that the narrator wants to make sure the listener pays attention to. After all, it may be the most important part.

2.5 Real world applications

How is transitivity related to real-world narratives and the on-line decisions that speakers make, and why should transitivity be related to foregrounding? A transitive event consists, in part, of a process or action and an endpoint, or a state, that is a result of the process. There are other facets of transitivity (e.g., transfer) that may not be at all relevant. When there is more than one transitive event, there are many states that are causally and sequentially related. It is these sequentially related states, which are the endpoints of transitive events, that form the narrative and in particular the important, essential events which we call foreground. This is why a factor such as aspect is related to foreground: a coding device such as perfective aspect tends to code a completed action which may or may not be effective, and which appears in a narrative as the endpoint of an action. Intransitive events and transitive events in progress are not causally or sequentially related (the action must be complete before it can cause the next action, so the action is not important until it is completed) so they tend to form the background.

Taken from another perspective, foreground events are the salient events in a narrative, and transitive events tend to be more salient in nature than intransitive events, since they typically involve a dynamic action that has an effect on someone or something. This is where the factor number of participants is important. The effect of a completed action is most salient when two participants are involved, one that causes the action and one that is affected by it. Narrators may choose to explicitly

mention the second participant to emphasize the fact that this person or thing was significantly affected by the action. Therefore, salient foreground events will likely contain two participants. Similarly, these salient, transitive events are more likely to be presented as affirmative than as negative, since actions that did occur are more salient than actions that did not occur.

In the real, on-line construction of narratives, speakers make many choices, consciously or unconsciously. The foreground of the narrative, that is, the important, sequential, causal events of the narrative, is predicted to consist of transitive events, each viewed from its endpoint so that they follow one another causally and sequentially. During the production of a narrative, a speaker might tend to use morphosyntactic devices that reflect this: two participants, where one is affected by the action of the other; a coding device such as simple past tense or perfect which present the event from its endpoint; and affirmatives, which refer to actions that actually occurred.

2.6 Conclusion

This chapter has considered the various ways that foreground information has been defined and identified in the literature. All of the definitions have problems; what emerges is that in order for valid comparisons to be drawn, the approach used by the researcher must be made clear. Previous studies on each of the four factors analyzed in this study have given inconsistent results. However, Hopper and Thompson's (1980) proposal that their transitivity factors are related to foreground remains central to the issue of the foreground - background distinction, and needs to be empirically assessed using operational definitions of the factors that they identified. The following chapter describes the experiments that were performed in this study, and presents the methods that were used to separate the foreground from the background.

Chapter 3 Method

3.0 Introduction

This chapter describes the three experiments that constitute the core of this study. The first section is an overview of the study, and the next three sections describe each of the three experiments in detail. The last two sections explain how foreground and background were identified from the data and how the analyses were done. The results are presented in the following chapter.

3.1 The study

Three separate experiments were performed using the same stimuli of thirteen drawings taken from children's story books: five depicting high transitivity events (completed, punctual actions (Hopper & Thompson, 1980)), six depicting low transitivity events (durative, continuous actions (Hopper & Thompson, 1980)), one depicting an intransitive event, and one distracter picture showing a potential action (see Appendix A for copies of these drawings). The distracter picture was shown first and functioned as a practice run, followed by twelve stimuli pictures which were randomly ordered. This randomly assigned presentation order was constant for all subjects and through all three experiments. The data from the first distracter picture was ignored in the analyses of all three experiments.

3.1.1 The stimuli

Since earlier work may have been affected by the types of events used as stimuli, the present study attempted to address this by controlling the event types. Pictures were used rather than film clips since it was felt that pictures would cause the subjects to focus on the particular event with more consistency than if they were viewing a film clip with perhaps many events occurring simultaneously. The drawings that were used as the stimuli were chosen following Hopper and Thompson's (1980) discussion of high and low transitivity. Drawings chosen to represent high transitivity were those whose salient event involved an agent and a patient where the patient, usually animate, was affected by a brief, punctual, purposeful act carried out by the agent. Drawings chosen to represent low transitivity were those with salient events involving an agent whose action toward the patient, which was most often inanimate, was continuous and durative. When the salient event could be described in a clause containing an object, it was considered a transitive event. When the salient event could not be described in a clause containing an object, it was considered an intransitive event.

3.2 Experiment 1 - Forced Choice and Description tasks

Method. Subjects were asked to do three tasks. First, they identified the "most important or salient event or thing in the picture" in as few words as possible; second, they wrote two or more sentences describing the picture; and third, they read several pairs of sentences and, for each pair, chose the sentence that best described the picture. The sentence pairs contained foreground events described using the predicted foreground markers, paired with foreground events described using predicted background markers; as well, background events were described using predicted background markers, paired with background events described with predicted foreground markers. There were eight pairs for each picture, in the scheme presented in Table 3.1 (where the factor with the * is the predicted factor for the type of event described). The presentation order for the pair members (the 'a' or 'b' choice for each pair) was assigned such that there was an equal number of 'a's and 'b's for each picture type (i.e., high transitive event or low transitive event). For example, in the first sentence pair ((1) above), the sentence in which the foreground event was in the

main clause was presented as 'a' for six pictures, and as 'b' for six pictures. (See Appendix B for these sentence pairs.) Subjects did not report any difficulty with these tasks and all were able to complete the experiment in less than an hour.

Table 3.1 Forced Choice Sentence Pairs

Sentence Pair	Event
(1) Main - Subordinate the main clause appeared before the subordinate clause in both sentences	one member of the pair had the foreground event in the main clause and the background event in the subordinate clause*, while the other member of the pair had the foreground event in the subordinate clause and the background event in the main clause
(2) Subordinate - Main the subordinate clause appeared before the main clause in both sentences	one member of the pair had the foreground event in the main clause and the background event in the subordinate clause*, while the other member of the pair had the foreground event in the subordinate clause and the background event in the main clause
(3) Affirmative* - negative	foreground event:
(4) Affirmative - negative*	background event
(5) 2+ participants* - 1 participant	foreground event
(6) 2+ participants - 1 participant*	background event
(7) perfect aspect* - progressive aspect	foreground event
(8) perfect aspect - progressive aspect*	background event

Subjects for the first experiment were volunteers from introductory level linguistics classes, as well as some non-linguists. These 24 subjects were all native speakers of English; they ranged in age from 18 to 52, with the majority below 25; there were 6 males and 18 females; and the majority of subjects had taken two or fewer linguistics courses, and had taken three or fewer years of university.

3.3 Experiment 2 - Stories

Method. Subjects were asked to tell stories orally about the characters and events shown in each of the thirteen pictures. When they had done this, they were asked to identify the main or important event or thing in each picture using as few words as possible. The oral stories were recorded on a small portable Realistic tape recorder (Model # CTR-85, Cat. No. 14-1056). The experimenter was present during the story-telling, except when the subject was clearly uncomfortable and intimidated by her presence. In these cases (two males), the subject was left alone in a quiet room with the tape recorder. The task was not difficult; subjects were able to finish both tasks in about forty minutes. The tapes were then transcribed directly into a computer file.

Subjects for the second experiment were volunteers from second and third year linguistics courses, honors linguistics students, and linguistics professors. There were nine subjects: six females and three males. They were all native English speakers who ranged in age from 21 to 45. The majority of the students were in their fourth or fifth year of university and had taken eight or more linguistics courses.

3.4 Experiment 3 - Foreground control

Method. The third experiment was designed to establish independent judgments of the foreground. As before, subjects were asked to identify the main or important event or thing in each picture in as few words as possible. Transparencies of the pictures were shown to the students via an overhead projector, and students wrote their responses on the form which appears in Appendix C. The entire experiment was completed in fifteen minutes.

Subjects for this last experiment were students in an introductory Linguistics class who participated during class time. There were 28 females and seven males, for a total of 35 subjects who ranged in age from 18 to over 50, with the majority under 30. Most had only taken one linguistics course (that spring session course), but had taken three or more years of university. All but two were native speakers of English; these two non-native speakers were included since their data was not different from the data of the native speakers.

3.5 Determining Foreground and Background

Foreground information was operationally defined as the events mentioned by at least 65% of the 68 subjects from all three experiments in their task of identifying the most important event shown in the picture. This criterion is more fully discussed in section 4.1. Background information was therefore operationally defined as anything that was not foreground. In the rare cases where the subject's identification of the foreground differed from the majority, the foreground for that subject included the majority decision of the foreground, as well as the subject's unusual decision of the foreground.

The stories were analyzed using event line as a definition of foreground; this event line always included what the subjects had identified as important, and was determined as the main, essential events in each story, which were independently identified by four judges (two linguistics graduate students and two non-linguists). The judges identified these events based only upon each narrative; that is, they did not base their identification of foreground upon the events shown in the drawings. Judges were told to identify the main, essential events for each story, and although the judges complained that the task was difficult, claiming that everything was important to the story, they were able to perform the task. When all four judges agreed on a foreground event, it was usually the same event that had been identified as the important event by the 68 subjects. When two or more judges agreed on the events, they were treated as foreground, since one judge was unavailable for the last two pictures and another was minimalistic in his identification of important events.

Each judge was given a copy of the all the subjects' stories, and were told read through each narrative and then identify the main, essential, important events in each story, repeating this process for each narrative. Three of the judges underlined the portions of the stories that they identified as foreground, and one summarized the foreground briefly on a separate piece of paper. The judges' foregrounds were then combined on one copy.

3.6 Analysis

The descriptions and stories produced by the subjects were divided into clauses which were categorized as foreground or background information, as identified through the methods outlined above, and the analyses were performed on each clause. The four factors examined in the present study are, once again, clause type, number of participants, aspect, and affirmation. For the purposes of this study, conservative operational definitions were formed for each factor, so that additional instances of a given factor which were excluded will tend to strengthen the results. Since the focus of this study is on the ways in which narrators can code events as either foreground or background, the intrinsic nature of the event itself was not considered in the analysis; the only exception was when the "event" was a state. This has the greatest impact upon the working definitions of aspect, which will be called completed action coding devices rather than telic aspect, and continuing action coding devices instead of atelic aspect; the true nature of telicity is discussed in Chapter Five. Completed action coding devices were operationally defined as perfects, passives, and simple past tense since these specify an endpoint; continuing action coding devices were operationally defined as progressives and present tense as well as the durative

use of the verbs *be* and *had*, as in *she was frightened* and *the frog had a very long tongue* since these do not specify an endpoint (Hopper & Thompson, 1980, p. 285). When the event did not suggest an endpoint but was described in a clause containing completed action aspect as defined above, such as *she wore a dress*, it was coded as continuing action rather than completed action.

Number of participants was determined in accordance with Hopper and Thompson (1980): a clause was coded as having two participants if it had an agent and a direct object, and one participant if it had one or neither of these. When the subject and object referred to the same person (e.g., *The woman appears to be a maid*), only one participant was counted. When there were two or more subjects (*Harry and Henrietta Hippo are . . .*) or two or more objects (*The boy prepared cereal and milk*), it was arbitrarily decided to count these as one participant (although the second example has two participants, *the boy* and *cereal and milk*; the point is that *cereal and milk* are counted as one participant). When the missing participant could be added without changing the grammaticality, as in *he poured a drink, ø/he handed it to the hostess, and ø/he proposed a toast*, the missing participant was counted as if it were present (Hopper & Thompson, 1980, p. 284). Negatives were operationally defined as clauses that include any form of *never*, *not* or *no*, excluding lexical negatives such as *un-*, an arbitrary decision that forces the negation to occur at the clausal level.

In the description and storytelling tasks, the analysis was restricted to tensed clauses that could be clearly categorized as a completed action or a continuing action as operationally defined above. Clauses containing *-ing* forms such as *the man eating is holding a spoon*, and *by -ing* forms such as *the woman retaliated by dumping the bowl of soup* were excluded since as truncated versions of clauses they are not fully tensed, as were infinitival clauses, modals and complex structures such as *he had been fishing* which include both a completed action coding device (perfect) and a continuing action coding device (progressive). Otherwise, dependent clauses were identified in accordance with Tomlin (1985): this includes clauses that were introduced by *who*, *which*, *that*, *what*, *when*, *while*, *because*, *although*, *even though*, *since*, *like*, *if*, *how*, *where*, *why*, or by nothing, as in *they thought they liked each other*. Finally, the number of predicted foreground markers that were used for each clause were noted, as advocated by Hopper and Thompson (1980).

Generally, subjects did not have any difficulty in performing the tasks they were given. In the first experiment, three subjects had to leave to attend a class so they took the booklet home and turned it in the following day. The results are presented in the following chapter.

Chapter 4 Results

4.0 Introduction

This chapter is organized by experiment and by task. All three experiments included the task of identifying the important event or thing in each picture: the results for this task were pooled and are given in 4.1. This is followed by the results for the forced choice task of Experiment One (4.2), and the results from the production tasks (written descriptions of Experiment One and oral stories of Experiment Two) (4.3).

4.1 Identification of foreground

Subjects in all three experiments were asked to identify the most important event or thing in each picture. The results for all three experiments are given in Table 4.1 below. Only events or things that were identified by more than 50% of the subjects (an arbitrary but useful criterion) appear in Table 4.1.

Table 4.1 Foreground from Experiments 1, 2, and 3^a

Picture	Event or thing	Number (n = 68)	%	Chi Square (df = 1)
soup	dumping soup	36	53%	13.235 ***
	soup/bowl on head	13	19%	
	total	49	72%	
kick hippos	kicking/punting	48	71%	11.529 ***
	push	33	49%	
	falling/overboard	17	25%	
total	50	74%	15.059***	
frog	catching/eating fly/bcc/insect	42	62%	3.765*
	lunch/dinner time	6	9%	
	total	48	71%	
octopus	catching (octopus)	42	62%	3.765*
	octopus (on the line)	12	18%	
	total	54	79%	
cereal	bringing/serving/carrying/taking/breakfast	34	50%	21.235***
	in bed	19	28%	
	helping/caring/nursing	19	28%	
total	53	78%	21.235***	
laundry	hanging laundry	51	75%	17.000***
alligator	feeding alligator/crocodile	53	78%	21.235***
caveman	painting/drawing	51	75%	17.000***
sled	pulling sled	42	62%	3.765*
	walking	4	6%	
	total	46	68%	
reading	boy reads	61	90%	42.882***
banana	slipping/falling	50	74%	15.059 ***
	banana (peels)	47	69%	

^a For Table 4.1 and all subsequent tables, the levels of significance are coded as follows:

- *** $p < .001$
- ** $p < .01$
- * $p < .05$
- ns $p > .05$ (not significant)

When an event and a thing refer to the same event (e.g., *dumping soup* and *the soup on his head*) both are included in the table, if they add up to more than 50%. As Table 4.1 shows, the identification of the foreground was statistically significant for each

picture, with more than 60% agreement for most pictures. In some cases, it was necessary to group together different words, but this was only done when the meanings were essentially the same, as for example *kicking* and *punting*. These resulting events were taken as the operationally defined foreground in the analyses of the forced choice and description tasks.

Event lines, as determined by four independent judges, were used to determine the foreground operationally for the story task. When two or more judges chose the same event, it was considered foreground; otherwise, it was analyzed as background. When all four judges agreed, the events were usually the same as the events that had been identified as the foreground for the description task discussed above. Of the foreground events, only 23% were identified by all four judges, but of the background events, all four judges ignored 74% (that is, did not include these events as main events).

4.2 Forced Choice Task of Experiment 1

In the forced choice task, subjects chose between an event described with high or low transitivity, or between the event described in a main clause or in a subordinate clause. For the sentence pairs comparing number of participants¹, subjects chose sentences containing two participants (an agent and an object) for both foreground and background events. Similarly, affirmative sentences were chosen over negative sentences describing both foreground and background events for the majority of the drawings, with only two (*hippos* and *laundry*) supporting the prediction that affirmatives should be preferred for foreground events, and negatives preferred for background events ($X^2 = 29.333$, $p < .001$, $df = 3$, $N = 24$ for *hippos*, and $X^2 = 50.333$, $p < .001$, $df = 3$, $N = 24$ for *laundry*). The results for aspect support the prediction that a completed action coding device (perfect aspect) should be preferred for foreground, and a continuing action coding device (progressive aspect) for background, for only two drawings, *kick* and *frog*, both depicting high transitive events ($X^2 = 29.333$, $p < .001$, $df = 3$, $N = 24$ for *kick*, and $X^2 = 50.333$, $p < .001$, $df = 3$, $N = 24$ for *frog*). Otherwise, progressives tended to be preferred for both foreground and background. Finally, there was no support for the prediction that main clauses should be preferred for foreground and subordinate clauses preferred for background; strangely, subjects preferred subordinate clauses for both foreground and background events for the majority of the drawings.

The forced choice task does not appear to be an effective method of testing the predictions, as the sentences are too easily confounded by outside factors (see Chapter 5), or, if these can be eliminated, the sentences sound contrived. The results from the forced choice task do not support any of the hypotheses for transitivity factors or clause type, which may be an artifact of the unnatural task subjects were asked to perform. The following section presents the results from the more natural production tasks.

4.3 Production Tasks of Experiments 1 and 2

The results from the description and storytelling tasks will be examined together for easy comparison. Only tensed clauses were coded for the factors under investigation, and these clauses were coded as either containing the foreground marker or the background marker of each factor. For each subject, the proportions of times the predicted foreground marker occurred in the foreground and in the background were calculated, and means of these proportions were used for the paired *t*-tests. Positive values indicate that there were more of the predicted foreground

¹ Only two pictures were accompanied by sentence pairs containing a two participant choice, agent and object. These two are *cereal* and *reading*.

factor in the foreground than in the background (since the background means were subtracted from the foreground means, i.e., mean F - mean B), while negative values indicate that there were more of the predicted foreground markers in the background than in the foreground. The transitivity factors taken from Hopper and Thompson (1980) are presented first, followed by the clause type data.

Table 4.2 Transitivity Factors in the Description Task

Event	Picture	Number of Participants		Aspect		Affirmation	
		Mean F - B (2 part.)	Paired <i>t</i> value (2 tail)	Mean F - B (compl. action)	Paired <i>t</i> value (2 tail)	Mean F - B (affirm.)	Paired <i>t</i> value (2 tail)
high T	soup	.589	6.444***	.136	1.265 ns	.085	1.688 ns
	kick	.461	5.455***	-.132	-2.016 ns	.022	1.458 ns
	hippos	.808	11.547***	.265	1.575 ns	.074	1.379 ns
	frog	.636	5.646***	.572	5.496***	.061	1.283 ns
	octopus	.750	13.236***	.638	6.637***	.019	1.395 ns
low T	cereal	.587	7.813***	.173	1.640 ns	.037	1.780 ns
	laundry	.825	15.366***	-.058	-1.788 ns	.035	1.820 ns
	alligator	.617	9.070***	-.092	-2.601*	.078	2.256*
	caveman	.625	5.495***	-.095	-1.451 ns	.027	1.332 ns
	sled	.707	8.503***	-.125	-2.127*	.000	----- ns
reading	.178	1.084 ns	-.054	-1.315 ns	.074	1.768 ns	
inT	banana	-.411	-5.474***	.494	5.206***	.000	----- ns

Table 4.3 Transitivity Factors in the Storytelling Task

Event	Picture	Number of Participants		Aspect		Affirmation	
		Mean F - B (2 part.)	Paired <i>t</i> value (2 tail)	Mean F - B (compl. action)	Paired <i>t</i> value (2 tail)	Mean F - B (affirm.)	Paired <i>t</i> value (2 tail)
high T	soup	.297	2.295 ns	.336	2.097 ns	.070	1.562 ns
	kick	.363	2.210 ns	.391	3.593**	.128	2.998*
	hippos	.226	3.337*	.236	2.316*	.109	3.937**
	frog	.225	3.444**	.346	4.496**	.085	2.183 ns
	octopus	.042	.585 ns	.306	4.324**	.142	4.358**
low T	cereal	.105	1.282 ns	.169	1.732 ns	.037	1.884 ns
	laundry	.228	1.309 ns	.124	.973 ns	.099	1.726 ns
	alligator	.264	2.565*	.285	2.065 ns	.125	3.588**
	caveman	.144	1.161 ns	.242	3.095*	.046	1.519 ns
	sled	.320	4.231**	.318	2.172 ns	.053	1.863 ns
reading	.237	2.688*	.304	4.178**	-.001	-.019 ns	
inT	banana	.086	.723 ns	.337	3.057*	.038	1.337 ns

Tables 4.2 and 4.3 suggest that when considered alone, none of the three factors (number of participants, aspect, or affirmation) are reliable for distinguishing foreground from background. One possible exception is number of participants, which is significant in the description task shown in Table 4.2 for all pictures except *reading*, where the main event (*the boy is reading (a book)*) can be transitive or intransitive, and *banana*, the intransitive picture. However, number of participants was not equally significant in the storytelling task, as can be seen from Table 4.3. The results for aspect were significant for five of the pictures in the description task, although for two of these five, there were more completed action coding devices in background than in foreground, while in the storytelling task, completed action coding devices occurred in foreground information more often than in background information at significant levels for seven of the pictures. Of the three factors, the

affirmation factor was statistically significant least often, but when the distribution of negatives is considered, 100% occurred in background in the description task data, and 92% of the 127 negatives occurred in the background in the story task data.

The fourth factor, clause type, was examined from two perspectives. First, as with the transitivity factors above, means of the proportions of times main clauses were used in foreground and background clauses by each subject were used for the *t*-tests. These results appear in Table 4.4. Again, clause type does not seem to be a reliable coding device for foreground information, as the results were more often insignificant than significant for both descriptions and stories. However, when the distribution of subordinate clauses was calculated, subordinate clauses were found to occur with background information rather than with foreground information at significant levels ($t = -10.45$, two tail $p < .001$ for descriptions, with $df = 23$, foreground mean = 1.167 with the standard deviation = 1.129 and background mean = 8.083 with the standard deviation = 3.741; and $t = -4.526$, two tail $p < .002$ for stories, with $df = 8$, foreground mean = 8.889 with the standard deviation = 4.428 and background mean = 39.333 with the standard deviation = 23.367). There were 28 subordinate clauses in the foreground from the description data, where 43% were temporal clauses, 39% were relative clauses, and 14% were causal; and 80 from the story data, where 25% were temporal clauses, 35% were relative clauses, and 8% were causal: the remaining dependent clauses included *if*, *where*, *all*, *like*, *what* and the complement *that*, which together made up 4% of the description subordinate clauses in foreground, and 33% of the story subordinate clauses in foreground.

Table 4.4 Clause Type

Event	Picture	Descriptions		Stories	
		Mean F - B (main)	Paired <i>t</i> value (2 tail)	Mean F - B (main)	Paired <i>t</i> value (2 tail)
high T	soup	.22	2.387*	.076	.673 ns
	kick	.17	2.453*	.156	1.912 ns
	hippos	.053	.814 ns	.013	.108 ns
	frog	.023	.301 ns	.214	2.760*
	octopus	-.128	-1.155 ns	.154	2.501*
low T	cereal	.333	4.634***	.178	2.916*
	laundry	.008	.060 ns	.277	2.111 ns
	alligator	.146	3.756**	.080	.560 ns
	caveman	.054	.776 ns	.109	1.643 ns
	sled	.134	1.715 ns	.210	2.633*
	reading	.026	.194 ns	.357	3.289*
inT	banana	-.105	-1.057 ns	.150	1.312 ns

Since Hopper and Thompson claim that clusters of high transitivity features are most important in distinguishing foreground from background in English, the number of foreground markers (two participants, completed action, main clauses and affirmation) used per clause was averaged per subject and means of these means were calculated for each drawing, with *t*-tests performed on these last means. Although clause type was not part of Hopper and Thompson's (1980) proposal, it was included in later hierarchies (e.g., Wårvik, 1990; Chvany, 1984, 1985; Wallace, 1982) and so was included here.

The data in Table 4.5 clearly support Hopper and Thompson's claim: foreground information occurs with more of the predicted foreground markers than background does. When the relatively weak affirmation factor is eliminated (see Table 4.6), the results are still statistically significant for both the descriptions and the stories. The only non-significant data are from the intransitive events in the

description task, *banana* and *reading* (which can be intransitive), and *laundry* in the storytelling task when affirmation is excluded (see Table 4.6). Since the majority of the factors are related to transitivity, it should not be surprising that intransitive events in the description task should produce insignificant results. In the storytelling task, there were more foreground events than there were in the description task, including some that were transitive, so the data are significant for the stories based upon *banana* and *reading*.

Table 4.5 Number of Predicted Foreground Markers

Event	Picture	Descriptions		Stories	
		Mean F - B (2, T, M, A)	Paired <i>t</i> value (2 tail)	Mean F - B (2, T, M, A)	Paired <i>t</i> value (2 tail)
high T	soup	1.029	4.782***	.779	3.720**
	kick	.532	3.992***	1.038	3.750**
	hippos	1.140	7.935***	.585	3.726**
	frog	1.292	6.116***	.871	6.720***
	octopus	1.278	8.906***	.644	3.299*
low T	cereal	1.179	6.618***	.489	2.481*
	laundry	.809	5.506***	.713	2.383*
	alligator	.748	8.563***	.755	4.105**
	caveman	.611	3.440**	.541	3.289*
	sled	.716	5.037***	.901	4.328**
	reading	.224	.962 ns	.897	9.879***
inT	banana	-.021	-.140 ns	.612	2.852*

Table 4.6 Number of Predicted Foreground Markers, excluding affirmation

Event	Picture	Descriptions		Stories	
		Mean F - B (2, T, M)	Paired <i>t</i> value (2 tail)	Mean F - B (2, T, M)	Paired <i>t</i> value (2 tail)
high T	soup	.992	4.668***	.709	3.623**
	kick	.510	3.936**	.897	3.107*
	hippos	1.067	7.730***	.476	3.428**
	frog	1.231	5.921***	.786	7.383***
	octopus	1.260	8.344***	.530	3.024*
low T	cereal	1.141	6.688***	.452	2.370*
	laundry	.774	5.265***	.616	2.039 ns
	alligator	.671	8.073***	.630	3.958**
	caveman	.584	3.415**	.495	3.051*
	sled	.716	5.037***	.838	4.174**
	reading	.150	.645 ns	.898	10.580***
inT	banana	-.037	-.245 ns	.574	2.451*

4.4 Conclusion

The results from the forced choice task did not support the predictions that foreground markers should be preferred for foreground, and background markers should be preferred for background. The results from the description and storytelling tasks also did not support any of the factors, when considered alone, as a coding device for distinguishing foreground from background. However, foreground does seem to be correlated to a greater number of predicted foreground markers used per clause, with background tending to occur with fewer of these predicted foreground markers per clause. This latter finding supports Hopper and Thompson's (1980) claim that clusters of high transitivity features are more important in the foreground -

background distinction than the presence or absence of any one factor. These results are discussed in the following chapter.

Chapter 5 Discussion and Conclusion

5.1 Effectiveness of the tasks

Two of the three tasks used in this study were effective in eliciting natural data. The forced choice task, however, was not a useful method since it yielded data that were quite different from that produced by the descriptions and storytelling tasks, or indeed from the data discussed in the literature (e.g., Prideaux & Stanford, 1990; Tomlin, 1985) especially for the clause type factor. Aside from the definitional problem with number of participants and the confounding factors (such as different lexical items, different events, or a difference of more than one factor between the members of a pair) mentioned above, there may be several reasons for this. Perhaps in providing the sentences I created a new foreground for the subjects, causing them to focus on the background even presented in the sentence as if it were foreground, and therefore to treat background as foreground. Alternatively, the sentence pairs may compare more than just the factors that were identified; for example, word frequency may have had an effect. The sentence pairs may have formed a mini-narrative in which processing constraints such as given-new came into play. In the clause type factor, for example, where subordinate clauses were preferred, the given-new constraint (Prideaux, 1989) may have caused subjects to prefer the sentence with the foreground information in the subordinate clause because the foreground information was given information for the second pair of sentences. For these subordinate clause - main clause ordered sentences, the subordinate clauses began "who is. . . ." Subjects may have interpreted the *who is* clause as a means of identifying the central character, in which case putting the foreground information in the subordinate clause identifies the person unambiguously. Thus, *The woman who has caught an octopus is wearing boots* was preferred over *The woman who is wearing boots has caught an octopus*. Finally, the task may have been simply too unnatural; certainly some of the stimuli sentences sound very contrived, which probably caused subjects to choose the more natural sounding option, in spite of the foreground/background issues. The choice may have been further limited by the still pictures, in which the action is frozen in time; this will be discussed at length in section 5.5.

The description and storytelling tasks, on the other hand, produced similar results and allow for the comparison of two methods of identifying foreground, namely, foreground defined by important information and event line. The description data lend themselves very nicely to the importance method, while the story data are best analyzed with an event line determination of foreground. Since much of the literature involves event line as defining the foreground, it is not surprising that the story results are more similar to the results discussed in the literature and were also slightly better at supporting the predictions than the description data. This should not suggest that only event line should be used as an operational definition of foreground; on the contrary, both methods should be used since not all of discourse is composed of narratives (Givón, 1987), and ideally they should be used in consultation with the narrator.

The results from the description task were limited, however, by the small number of sentences subjects were asked to produce. In many cases, only one clause per subject was classified as foreground. Perhaps if subjects were asked to write a full paragraph or two, and were allowed to describe the foreground event in several clauses, the results may have been closer to the storytelling results. The data would have been more natural, approximating the everyday occurrence of telling others what the speaker had observed that day.

Although the description and storytelling tasks were better at eliciting data than the forced choice task, there are still some limitations and problems. These problems are discussed in section 5.5, along with some suggestions for improvement.

5.2 Transitivity factors

The results from all three tasks indicate that no single factor stands out as a clear coding device for the foreground - background distinction. Affirmation in particular can probably be eliminated, since both foreground and background were coded with affirmatives significantly more often than with negatives. In the storytelling task, negatives occurred in both foreground and background, contrary to the data from Hopper and Thompson (1980). In short, the affirmation factor seems to be completely unrelated to the foreground - background distinction. This should not be surprising; as discussed above, when an expected thing does not happen, the negative occurrence is as much of an event as an affirmative event would be, and should therefore be considered foreground (Fleischman, 1985); and Rice (1987) found that negatives sometimes improve passivizability, thereby behaving more like a high transitive feature than like a low.

The two remaining transitivity factors, number of participants and aspect, seem to work in tandem: on average, foreground is marked with either or both high transitivity features (two or more participants and/or a completed action coding device) more often than background is. This is, however, a statistical trend rather than a reliable marker (as Chvany, 1984 also found): if a clause contains two participants and uses a completed action coding device, it is more likely to be foreground than background information, but it could be background information. Therefore, it would be impossible to use these criteria to identify foreground in discourse. The effectiveness of this pair of factors as markers of foreground is, obviously, limited to transitive events, since intransitive events (such as *banana*) will only contain one participant in the clause describing it.

This finding may reflect the on-line choices made by speakers as they produce narratives. If the events that form the foreground are transitive in nature, which is likely since transitive events, when viewed from their endpoints, follow one another sequentially and causally to form the essential storyline, then speakers will tend to use the morphosyntactic devices that reflect this. Aspectual and tense coding devices such as simple past tense, perfect and passive voice suggest that the action is completed, while progressives and simple present tense suggest that the action is still in progress. The effect of the action on some person or object is made salient by explicit mention of this person or object. The fact that number of participants and aspectual coding devices must be considered together supports the view that foreground tends to consist of transitive events presented as completed actions that had an effect on a second participant.

However, there are problems with the coding of both number of participants and aspect. Both were operationally defined syntactically, with little or no attention paid to the semantic meaning of the clause. For example, a clause was coded as having two participants if it contained a subject and an object, but it was coded as having only one participant if it lacked an overt object, even when one may have been implied, such as in *He is reading*. Moreover, if an object followed a preposition, it was not interpreted as a direct object even though, in many cases in English, a V-P-NP sequence constitutes a transitive phrasal verb, as in *He [slipped on] the banana peel* (cf. Rice, to appear; Rice, 1987). A less strict operational definition for two participants, for example, allowing objects of phrasal verbs to be counted as well, may have given stronger results.

The terms "telic" and "atelic" were replaced by "completed action coding device" and "continuing action coding device" since the definitions of telic and atelic

implied by the examples given in Hopper and Thompson (1980) do not conform to any standard notion of telicity for English. In fact, telic and atelic are semantic aspectual categories, while perfective and progressive mark inflectional aspectual categories. In the present study, "telic" was taken to mean a completed action; however, a telic event is one that is effective, and is capable of reaching a conclusion, not just one that is over and done with. As Comrie (1976, pp. 44-45) explains,

The telic nature of a situation can often be tested in the following way: if a sentence referring to this situation in a form with imperfective meaning (such as the English Progressive) implies the sentence referring to the same situation in a form with perfect meaning (such as the English Perfect), then the situation is atelic; otherwise it is telic. Thus from *John is singing* one can deduce *John has sung*, but from *John is making a chair* one cannot deduce *John has made a chair*. Thus a telic situation is one that involves a process that leads up to a well-defined terminal point, beyond which the process cannot continue.

Therefore, the relationship between telic and perfect aspect, and between atelic and progressive aspect, is very tenuous, at least in English. Even more tenuous is the relation between tense and these semantic aspectual categories. An event described with a present progressive, such as *She is catching a fish*, can be more effective, and therefore more telic, than an event described with a past perfect, such as *She had fished for hours (with no luck)*, since this latter event is not effective. In addition, the use of the perfect can carry more meaning than simply a completed action: it can imply that it is an action that occurred prior to another action, but it is not specified in time (Holden, personal communication). Intuitively, then, the perfect should code background information. Once again, the semantic nature of the event (i.e., its effectiveness) should be considered during the coding process, and if it is, the results may reveal a stronger correlation between telic aspect and foreground.

Although the present study found a correlation between foreground and the combination of two or more participants and a completed action coding device, there were some problems with the way these factors were coded in the analysis of the data. However, the strict operational definitions used for this study gave conservative results; with broader definitions which include reference to the semantic nature of the overall clause, the results might have been stronger.

5.3 Clause type

Except for the forced choice task (discussed in 5.1), the results for clause type indicate that main clauses were used significantly more often than subordinate clauses for both foreground and background, agreeing with Prideaux and Stanford (1990). However, when the distribution of subordinate clauses is analyzed, subordinate clauses were found to occur with background information significantly more often than with foreground information, agreeing with Tomlin (1985). This conflict coincides with Thompson's finding (cited in Fleischman, 1985) of a stronger correlation between main clauses and foreground than between subordinate clauses and background, which Fleischman suggested might be evidence that background may not be psychologically real; that is, only foreground has psychological reality, with background existing only as not-foreground (p.875). Perhaps the conclusion should be that foreground is not marked by a single factor in English, since the results of the present study indicate that main clauses are correlated to foreground and background with essentially equal strength, but when all four factors (including the transitivity factors) are considered together, foreground and background seem to be coded differently.

Clearly, however, subordinate clauses should not automatically be assumed to contain background information. Although some may argue that the narrator has the choice of what information he wants to foreground and what information he wants to background, and by using subordinate clauses he is presenting the information as background, this should not be taken as a fact until it is proven by studies such as the present one, in which the foreground is identified by the narrator. When the narrator reads through the discourse that he has produced, and identifies the important, essential pieces of information, and each one occurs in a main clause, then the assumption that subordinate clauses contain only background information is justified. Until that time, it is more reasonable to suppose that if important information occurs in a subordinate clause, the unexpectedness of this occurrence highlights the information as foreground.

5.4 Implications for narrators

How do the findings of this study change our understanding about the choices narrators make in producing discourse? Transitivity does seem to be related to foreground events, as the cluster results of Tables 4.5 and 4.6 suggest, but do narrators choose to use two participants over one, or completed action coding devices over continuing action coding devices, or is this an accident? In order to answer this question conclusively, alternative methods would need to be used, such as presenting subjects with events that could clearly be described with one participant or two, or ask subjects to describe the events as completed or on-going. However, with the large number of coding devices available to speakers to indicate many discourse functions, it is not likely that this correlation is accidental. If foreground clauses are transitive in nature, as they are likely to be since transitive clauses can follow one another sequentially and causally while intransitive clauses cannot, then it is not an accident if the morphosyntactic devices used by the speaker reflect the transitive nature of the clause. However, given the potential task effect in the use of telic/atelic aspect as operationally defined in this study, further work needs to be done to investigate the relationship between the factors that are important in identifying a prototypical transitive event, and the events that are foreground. This indicates that the hypothesis presented by Hopper and Thompson (1980) was too narrow: to fully understand the relationship between transitivity and foreground, a more global and semantic view of transitivity, such as that presented by Rice (1987) and Langacker (1991), should be used.

5.5 Limitations of the study

There were many factors that may have limited or affected the results of the present study. A major limitation was the overly narrow (and overtly morphosyntactic) view of the factors examined. The operational definitions of number of participants and aspect could have been relaxed, so that clauses containing a phrasal verb with a direct object could be coded as having two participants, and so the coding of aspect would take into account the inherent aspect of the verb as well as extra-inflectional factors. These definitional expansions would have come closer to the prototypical transitive event as described by Rice (1987) and Langacker (1991) and would probably have revealed a stronger correlation between transitivity and foregrounding.

Other coding decisions, such as the decision to consider only tensed clauses when coding the four factors, also limited the results. The elimination of *-ing* clauses (e.g., *After preparing dinner for her husband, . . .*) probably weakened the results, since these clauses often coded background information that contained one participant (since the agent is missing) in a dependent clause. Similarly, the coding of the data assumed that the foreground - background distinction is binary in nature, but in reality it is probably more like a continuum (as is everything else in language). As a result of

this assumption, information was classified as background when perhaps it should have been somewhere in between foreground and background. This could have been avoided by asking the subjects to assess their own narratives and stories, identifying the most important, essential events, the less essential but still important events, and the unimportant events. In addition, a gradation of the foreground - background continuum could have been approximated from the number of subjects/judges who chose certain events as compared to other events.

The judges' decisions of what should be considered foreground in the stories may have been influenced by the instructions they were given. Judges were told to identify the important, essential events in the story. However, one judge was very minimalistic in his choices of foreground, so foreground was determined as those events identified by two or more of the four judges (since there were only three judges for two of the pictures). This might have been avoided with clearer instructions, or by explaining the notion of foreground more explicitly. The small numbers of subjects and judges are an additional limitation. Ideally, there should have been an equal number of subjects in the description and storytelling tasks, which would have allowed more valid comparisons to be drawn. Similarly, with a greater number of judges to determine the foreground story line in the storytelling task, a higher proportion of agreement among judges could have been used as the criteria for identifying foreground. Thus, increasing the number of subjects and judges would have resulted in stronger conclusions.

A further limitation arises from the relatively informal register used by subjects in both the description and storytelling tasks. Although the descriptions were written by the subjects, they contain many structures that seem to be more typical of oral discourse, such as *There is a woman who. . .*. The stories were oral, but also tend to be informal, possibly because subjects were asked to pretend they were telling the story to a friend or a child. The results from these two experiments might have been biased toward certain factors because of the informal language used by the subjects. For example, progressives may have been used more often than they would have been if subjects had adopted a more formal register. With richer stimuli, perhaps as discussed below, a formal register may have been elicited by asking subjects to write a short essay based on the stimulus materials. The formal and informal registers could then be compared, preferably using the same subjects for both tasks.

The choice of stimuli material was problematic. Although an attempt was made to classify the events depicted in each drawing as high transitive or low transitive, this attempt was based on Hopper and Thompson's (1980) punctuality and kinesis factors rather than on a more global or extra-linguistic basis such as the prototypical transitive event as described by Rice (1987) and Langacker (1991). The results of the present study indicate that high transitive events tend to be coded with the high transitive factors in the foreground more than the low transitive events, but this effect would probably have been stronger if the pictures had been labeled more accurately. The fact that the stimuli were static pictures showing actions in various, inconsistent stages of completion probably had an effect on the descriptions and stories that the subjects produced. The immediacy of the action, especially those actions that were not shown as completed, may have created a bias for subjects to produce more progressives than they would have done if the actions in the stimuli were all shown from the beginning, through its progression, to an endpoint. This probably had the biggest impact on the aspect factor, since progressive aspect is more appropriate than perfect aspect for the pictures that show actions in progress, while perfect aspect may be more natural for the pictures that show completed actions. Alternatively, subjects may have been predisposed to use the present tense for those actions that are not shown as completed, and past tense for those actions which are completed in the pictures.

The storytelling task was made difficult by the presence of only one main event per picture, so there was a great deal of embellishment needed to create a story, and, not surprisingly, a great deal of diversity in the stories that were produced. The problem may have been avoided with the use of two or more pictures for each event depicting scenes before the action, during the action and after the action, and by using stimuli that contain a series of events. This type of stimuli could then be used to test the suggestion that sequentially related events will tend to be presented from their endpoints rather than in progress. Alternatively, if the stimuli show the same set of events from three or four different perspectives, direct comparisons could be made between one perspective when it is the focus or foreground, and the same perspective when it is the background or not the focus. The ideal stimuli materials are probably film clips, using many events presented one at a time, so that the event type (high in transitivity or low in transitivity) can be included in the analysis.

5.6 Conclusion and Future Research

Hopper and Thompson's (1980) proposal that foreground occurs with a cluster of foreground markers rather than by a single factor was supported by this study. Although individual factors do not code foreground or background exclusively or reliably, groups of factors may indicate which clauses have a higher probability of being foreground. Perhaps the number of factors involved in this index could be increased by investigating other factors, such as those discussed by Rice (1987), Chvany (1984, 1985), Wårvik (1990), Wallace (1982) and Weber (1983). However, potential coding factors must be manipulatable by narrators, that is, they should be continuous in nature such that a given event can be coded as either foreground or background, independent from the intrinsic nature of the event. Since a statistical probability cannot be used to identify foreground with absolute certainty, foreground must be identified independently from this cluster of factors.

Given the varied nature of the factors that, as a cluster, are correlated to foreground information, it is possible that the same result could have been found with nearly any other grouping of morphosyntactic factors, and if foreground is marked by unexpectedness as suggested by Polanyi (1985), among others, these same results should not be shocking. The major problem in English, and indeed in all languages, is that each factor has more than one function, and it is difficult to tease out the various functions to find the factors that might be related uniquely to foregrounding, for example. Not only does each factor have a variety of functions, but each function can be accomplished by a variety of factors. The finding that foreground is correlated to a cluster of factors is therefore somewhat problematic, since it is difficult to determine which members of the cluster are essential, and which are not, but it is probably the most that can be hoped for.

Before abandoning the search for coding devices, however, there are some potential markers that should be investigated. One possibility is that background may be marked rather than foreground in English, as Wårvik (1990) suggests. The four judges who identified the essential events of the stories agreed more often on what to ignore (i.e., on what was background) than they did on what to choose as the foreground, a surprising result which questions the validity of foreground, but one which was probably caused by the low number of judges and the greater number of background clauses than foreground clauses. The results for clause type and affirmation suggest that subordinate clauses and negatives occur most often with background information, although background information occurs most often with main clauses and affirmatives. Perhaps we should look for clusters of factors that would mark background information, including negatives and subordinate clauses, rather than or in addition to clusters of factors that mark foreground information, such as those mentioned above.

Alternatively, a promising factor is the notion of unexpectedness relative to the context, where the unexpected is the foreground and the context is the background (Polanyi, 1985; Hwang, 1990; Fleischman, 1985; Jones, 1977). The unexpected could include a sudden change in the syntax used in a narrative, the intonation pattern of oral discourse, use of unusual or infrequent lexical items, or even events that are unexpected because of the trend of the discourse or because of a cultural norm. Although unexpectedness appears to be very complex, and indeed it would be difficult to analyze, from the listener's perspective it may be the simplest and most effective method of following the important events in discourse.

References

- Andrews, Jan. (1973). *Fresh Fish . . . and Chips*. Illustrated by Linda Donnelly. Toronto: Canadian Women's Educational Press.
- Bakker, Egbert J. (1991). Foregrounding and indirect discourse: Temporal subclauses in a Herodotean short story. *Journal of Pragmatics*, 16, 225-247.
- Bever, Thomas G. & Townsend, David J. (1979). Perceptual mechanisms and formal properties of main and subordinate clauses. In W. Cooper, W. Walker & E.C.T. Walker (Eds.), *Sentence processing: Psycholinguistic studies presented to Merrill Garrett*. (pp. 159-226). Hillsdale: Lawrence Erlbaum.
- Browne, Anthony. (1982). *Bear goes to town*. New York: Doubleday.
- Cassell, Justine & McNeill, David. (1990). Gesture and Ground. *Proceedings of the Sixteenth Annual Meeting of the Berkeley Linguistics Society, February 16-19, 1990: General Session and Parasession on the Legacy of Grice. Vol. 16*, 57-68.
- Chafe, Wallace. (1980). The deployment of consciousness in the production of a narrative. In Wallace Chafe (Ed.), *The Pear Stories* (pp. 9-50). Norwood, NJ: Ablex.
- Chafe, Wallace. (1984). How people use adverbial clauses. *Proceedings of the tenth annual meeting of the Berkeley Linguistics Society* (pp. 437-449). Berkeley: Berkeley Linguistics Society.
- Chafe, Wallace. (1987). Cognitive constraints on information flow. In Russell S. Tomlin (Ed.), *Coherence and Grounding in Discourse* (pp. 21-51). Philadelphia: John Benjamins.
- Chvany, Catherine V. (1984). Backgrounded perfectives and plot line imperfectives: Toward a theory of grounding in text. In Michael S. Flier & Alan Timberlake (Eds.), *The scope of Slavic aspect*. (pp. 247-273). Columbus, Ohio: Slavica.
- Chvany, Catherine V. (1985). Foregrounding, 'transitivity', saliency (in sequential and non-sequential prose). *Essays in Poetics*, 10, (2), 1-27.
- Comrie, Bernard. (1976). *Aspect: An introduction to the study of verbal aspect and related problems*. Cambridge: Cambridge UP.

- Delancey, Scott. (1982). Aspect, transitivity and viewpoint. In Paul J. Hopper (Ed.), *Tense-Aspect: Between semantics & pragmatics* (pp. 167-183). Philadelphia: John Benjamins.
- Delancey, Scott. (1987). Transitivity in grammar and cognition. In Russell S. Tomlin (Ed.), *Coherence and grounding in discourse* (pp. 53-68). Philadelphia: John Benjamins.
- Ehrlich, Susan. (1987). Aspect, foregrounding and point of view. *Text*, 7 (4), 363-376.
- Erbaugh, Mary S. (1987). A uniform pause and error strategy for native and non-native speakers. In Russell S. Tomlin (Ed.), *Coherence and grounding in discourse* (pp. 109-130). Philadelphia: John Benjamins.
- Ferguson, George A. & Takane, Yoshio. (1989). *Statistical Analysis in Psychology and Education* (6th ed.). New York: McGraw-Hill Book Company.
- Fleischman, Suzanne. (1985). Discourse functions of tense-aspect oppositions in narrative: toward a theory of grounding. *Linguistics*, 23, 851-882.
- Fox, Barbara A. & Thompson, Sandra A. (1990). A discourse explanation of the grammar of relative clauses in English conversation. *Language*, 66, 2, 297-316.
- Givón, Talmy. (1987). Beyond foreground and background. In Russell S. Tomlin (Ed.), *Coherence and grounding in discourse* (pp. 175-188). Philadelphia: John Benjamins.
- Glenberg, Arthur, Meyer, Marion & Lindem, Karen. (1987). Mental models contribute to foregrounding during text comprehension. *Journal of Memory and Language*, 26, 69-83.
- Gülich, Elisabeth & Quasthoff, Uta M. (1985). Narrative Analysis. In Teun A. van Dijk (Ed.), *Handbook of Discourse Analysis, Volume 2: Dimensions of Discourse* (pp. 169-197). London: Academic Press.
- Hoff, Syd. (1959). *Julius*. New York: Harper & Row.
- Hoff, Syd. (1962). *Stanley*. New York: Harper & Row.

- Hopper, Paul J. (1979). Aspect and foregrounding in discourse. In Talmy Givón (Ed.), *Syntax and semantics, Volume 12: Discourse and Syntax* (pp. 213-241). New York: Academic Press.
- Hopper, Paul J. & Thompson, Sandra A. (1980). Transitivity in grammar and discourse. *Language*, 56 (2), 251-299.
- Hwang, Shin Ja Joo. (1990). Foreground information in narrative. *Southwest Journal of Linguistics*, 9 (2), 63-90.
- Johnston Hamm, Diane. (1987). *Grandma Drives a Motor Bed*. Illustrated by Charles Robinson. Niles, Ill.: Albert Whitman & Company.
- Jones, Linda Kay. (1977). *Theme in English Expository Discourse*. Lake Bluff, Ill: Jupiter Press.
- Kaufer, David S. & Neuwirth, Christine M. (1982). Foregrounding norms and ironic communication. *Quarterly Journal of Speech*, 68, 28-36.
- Keenan, Edward L. (1985). Passive in the world's languages. In Timothy Shopen (Ed.), *Language typology and syntactic description, Volume 1: Clause structure* (pp. 243-281). New York: Cambridge UP.
- Kumpf, Lorraine E. (1987). The use of pitch phenomena in the structuring of stories. In Russell S. Tomlin (Ed.), *Coherence and grounding in discourse* (pp. 189-216). Philadelphia: John Benjamins.
- Labov, William & Waletzky, Joshua. (1967). Narrative analysis: Oral versions of personal experience. In June Helm (Ed.), *Essays on the Verbal and Visual Arts: Proceedings of the 1966 Annual Spring Meeting of the American Ethnological Society* (pp. 12-44). Seattle: U of Washington P.
- Langacker, Ronald W. (1991). Transitivity and grammatical relations. In Ronald W. Langacker, *Foundations of Cognitive Grammar, Volume 2: Descriptive Applications* (pp. 282-329). Stanford, CA: Stanford UP.
- Lasker, Joe. (1977). *Lentil Soup*. Illustrated by Joe Lasker. Chicago: Albert Whitman & Company.
- Longacre, Robert E. (1983). Vertical threads of cohesion in discourse. In Fritz Neubauer (Ed.), *Coherence in Natural-Language Texts* (pp. 99-113). Hamburg: Buske.

- Longacre, Robert E. (1985). Discourse peak as zone of turbulence. In Jessica R. Wirth (Ed.), *Beyond the sentence: Discourse and sentential form* (pp. 81-98). Ann Arbor: Karoma.
- Mayer, Mercer. (1968). *If I had . . .*. New York: The Dial Press.
- Mayer, Mercer. (1969). *I am a hunter*. New York: The Dial Press.
- Mayer, Mercer. (1970). *A special trick*. New York: Dial Press.
- Mayer, Mercer. (1973). *Frog on his own*. New York: The Dial Press.
- Mayer, Mercer. (1976). *Hiccup*. New York: The Dial Press.
- Mithun, Marianne. (1984). How to avoid subordination. *Proceedings of the tenth annual meeting of the Berkeley Linguistics Society* (pp. 493-509). Berkeley: Berkeley Linguistics Society.
- Polanyi, Livia. (1985). Conversational storytelling. In Teun A. van Dijk (Ed.), *Handbook of Discourse Analysis, Volume 3: Discourse and Dialogue* (pp. 183-201). London: Academic.
- Prideaux, Gary D. (1989). Text data as evidence for language processing principles: The grammar of ordered events. *Language Sciences*, 11 (1), 27-42.
- Prideaux, Gary D. & Stanford, Lois M. (1990). Foregrounding and transitivity in oral and written narratives. Paper presented at the Canadian Linguistics Association Annual Meeting, Victoria, BC, May 1990.
- Prideaux, Gary D., Hogan, John T. & Lynkowsky, Patricia E. (1980). Perceptual strategies and the comprehension of relative clauses. Paper presented at the Alberta Conference on Language, Banff, Alberta, November 1979.
- Reinhart, Tanya. (1984). Principles of gestalt perception in the temporal organization of narrative texts. *Linguistics*, 22, 779-809.
- Rice, Sally Ann. (1987). Towards a cognitive model of transitivity. (Doctoral dissertation, University of California, San Diego, 1987). *Dissertations Abstracts International*, 49, 1789A.

- Rice, Sally. (1988). Unlikely lexical entries. *BLS 14*, 202-212.
- Rice, Sally. (to appear). The so-called pseudo-passive revisited (by a Cognitive Linguist). *Studi Italiani di Linguistica Teorica e Applicata*.
- Talmy, Leonard. (1983). How language structures space. In Herbert Pick & Linda Acredolo (Eds.), *Spatial orientation: Theory, research, and application* (pp. 225-282). New York: Plenum.
- Thompson, Sandra A. (1987). "Subordination" and narrative event structure. In Russell S. Tomlin (Ed.), *Coherence and grounding in discourse* (pp. 435-454). Philadelphia: John Benjamins.
- Thompson, Sandra A. & Longacre, Robert E. (1985). Adverbial clauses. In Timothy Shopen (Ed.), *Language typology and syntactic description, Volume II: Complex constructions* (pp. 171-234). New York: Cambridge UP.
- Tjosvold, Karen. (1989). *A Perceptual Approach to the Identification of Foreground Information in Narrative Discourse*. Unpublished master's thesis, University of Alberta, Edmonton, Alberta.
- Tomlin, Russell S. (1985). Foreground-background information and the syntax of subordination. *Text*, 5 (1-2), 85-122.
- Tomlin, Russell S. (1987). Linguistic reflections on cognitive events. In Russell S. Tomlin (Ed.), *Coherence and grounding in discourse* (pp. 455-479). Philadelphia: John Benjamins.
- Townsend, David J. & Bever, Thomas G. (1977). *Main and subordinate clauses: A study in figure and ground*. Mimeo. Bloomington: Indiana University Linguistics Club.
- Wald, Benji. (1987). Cross-clause relations and temporal sequence in narrative and beyond. In Russell S. Tomlin (Ed.), *Coherence and grounding in discourse* (pp. 481-512). Philadelphia: John Benjamins.
- Wallace, Stephen. (1982). Figure and ground: The interrelationships of linguistic categories. In Paul J. Hopper (Ed.), *Tense-Aspect: Between semantics & pragmatics* (pp. 201-223). Philadelphia: John Benjamins.
- Walsh, Jill Paton. (1981). *Babylon*. Pictures by Jennifer Northway. London: Andre Deutsch.

- Wårvik, Brita. (1990). On the history of grounding markers in English narrative: Style or typology? In Henning Andersen & Konrad Koerner (Eds.), *Historical Linguistics 1987: Papers from the 8th International Conference on Historical Linguistics* (pp. 531-542). Philadelphia: John Benjamins.
- Weber, Jean Jacques. (1983). The foreground-background distinction: a survey of its definitions and applications. *Language and Literature*, 8 (1-3), 1-16.
- Welkowitz, Joan, Ewen, Robert B. & Cohen, Jacob. (1991). *Introductory Statistics for the Behavioral Sciences* (4th ed.). San Deigo: Harcourt Brace Jovanovich.
- Winer, B. J. (1971). *Statistical Principles in Experimental Design* (2nd ed.). New York: McGraw-Hill Book Company.
- Zion, Gene. (1955). *The summer snowman*. Pictures by Margaret Bloy Graham. New York: Harper & Row.

The material from Appendix A, pages 40 - 46, has been removed because of copyright restrictions. Appendix A contained the drawings that were used for the three experiments: the sources are noted below.

Appendix A - Drawings

Distracter (from Mayer, 1969): a boy about to chop off the head of a snake/garden hose

High Transitivity Events

Soup (from Lasker, 1977): a woman dumping a bowl of soup over a person's head

Kick (from Hoff, 1959): a boy kicking a coconut

Hippo (from Mayer, 1976): a male hippo pushing a female hippo out of a rowboat

Frog (from Mayer, 1973): a frog catching a fly

Octopus (from Andrews, 1973): a woman catching an octopus on a fishing line

Low Transitivity Events

Cereal (from Johnston Hamm, 1987): a boy carrying two bowls of cereal

Laundry (from Walsh, 1981): a woman hanging laundry on a clothesline

Alligator (from Mayer, 1968): a boy holding a fish for an alligator to eat

Caveman (from Hoff, 1962): a caveman painting an antelope on a cave wall

Sled (from Zion, 1955): a boy pulling a sled

Reading (from Mayer, 1970): a boy reading a book

Intransitive Event

Banana (from Browne, 1982): three men slipping on banana peels

Appendix B - Forced Choice Stimuli

Instructions:

In this booklet you will find several pictures and sentence pairs. For each picture, you are asked to carry out three tasks.

First, below each picture, identify the most important or salient event or thing in the picture. **PLEASE DO THIS FIRST TASK BEFORE YOU LOOK AT THE SENTENCES ON THE FOLLOWING PAGE.** In describing the pictures, focus on the scene depicted in the picture rather than technical aspects of the drawings.

Second, write two or more sentences describing the events portrayed in the picture.

Third, turn the page. There you will find a list of sentence pairs. For each pair, choose the sentence that best describes the events in the picture and circle the appropriate letter (a or b). Assume that all the sentences are true, and feel free to refer back to the picture at any time. This is not a test of your syntactic knowledge, so please do not base your decision on which sentence is more grammatical. Instead, I am interested in which structures are the best descriptions of the pictures. There are no right or wrong answers.

Your responses will be anonymous. You are free to leave at any time if you no longer wish to participate in this experiment.

Before you begin, please answer the following:

Is English your first language?_____.

Are you male or female? (circle)

How old are you?_____.

How many years have you spent at university? (circle)

0 1 2 3 4 5 6 7 8 other_____.

How many Linguistic courses have you taken,
including this term?_____.

Distracter

1. a. The boy is holding the snake away while he takes aim.
b. The boy is taking aim while he holds the snake away.
2. a. The boy who will kill the snake is holding an axe.
b. The boy who is holding an axe will kill the snake.
3. a. The boy is defending himself.
b. The boy is defending himself with an axe.
4. a. The snake is vicious.
b. The snake has sharp teeth and a forked tongue.
5. a. The boy is very brave.
b. The boy is not afraid.
6. a. The snake is not really a snake.
b. The snake is really a garden hose.
7. a. The snake is attacking the boy.
b. The snake has attacked the boy.
8. a. The hose has been connected to the faucet.
b. The hose is connected to the faucet.

Soup

1. a. The man holds his spoon while he is assaulted by a soup bowl.
b. The man is assaulted by a soup bowl while he holds his spoon.
2. a. The woman who has dumped soup on the man's head is wearing an apron.
b. The woman who is wearing an apron has dumped soup on the man's head.
3. a. The soup is spilling over the man's head and sweater.
b. The soup is spilling everywhere.
4. a. The spoon in the hand of the man may catch some soup.
b. The spoon may soon be filled.
5. a. The woman dumped the soup deliberately.
b. The woman did not dump the soup accidentally.
6. a. The napkin on the table is not messy.
b. The napkin on the table is still clean.
7. a. The soup is spilling all over the man.
b. The soup has spilled all over the man.
8. a. The man has held on to the spoon.
b. The man is holding on to the spoon.

Kick

1. a. The boy kicked the ball after putting down his rifle.
b. The boy put down his rifle before kicking the ball.
2. a. The boy who kicked the ball is wearing a hat.
b. The boy who is wearing a hat kicked the ball.
3. a. The ball was kicked.
b. The ball was kicked into the bushes by the boy.
4. a. The boy is dressed for warm weather.
b. The boy is dressed in shorts and a shirt.
5. a. The ball is going up.
b. The ball is not going down.
6. a. The boy's hair is short.
b. The boy's hair is not long.
7. a. The boy has kicked the ball.
b. The boy is kicking the ball.
8. a. The boy is wearing knee-high socks.
b. The boy has put on knee-high socks.

Hippos

1. a. The male hippo put down the oar before he pushed the female hippo.
b. The male hippo pushed the female hippo after he put down the oar.
2. a. The hippo who is wearing a tie is pushing his friend out of the boat.
b. The hippo who is pushing his friend out of the boat is wearing a tie.
3. a. The female hippo is being pushed backwards.
b. The female hippo is being pushed out of the boat and into the water by the male hippo.
4. a. The female hippo is dressed.
b. The female hippo is dressed in a skirt and a bonnet.
5. a. The male hippo is not helping his friend stay in the boat.
b. The male hippo is pushing his friend out of the boat.
6. a. The male hippo is not wearing any clothes from his waist down.
b. The male hippo is naked from his waist down.
7. a. The female hippo has lost her balance.
b. The female hippo is losing her balance.
8. a. The boat has made ripples in the water.
b. The boat is making ripples in the water.

Frog

1. a. The frog was sitting as it caught a fly.
b. The frog caught a fly as it was sitting.
2. a. The frog that has a long tongue caught a fly.
b. The frog that caught a fly has a long tongue.
3. a. The fly is trapped.
b. The fly is trapped by the frog's tongue.
4. a. The large flower is tall.
b. The large flower is taller than the frog and the other flowers.
5. a. The fly cannot escape.
b. The fly is trapped.
6. a. The frog kept his eyes on the fly.
b. The frog did not take his eyes off the fly.
7. a. The frog is catching a fly.
b. The frog has caught a fly.
8. a. The frog is watching the fly.
b. The frog has watched the fly.

Octopus

1. a. An octopus is pulled from the ocean as seagulls fly out of the way.
b. Seagulls fly out of the way as an octopus is pulled from the ocean.
2. a. The woman who is wearing boots has caught an octopus.
b. The woman who has caught an octopus is wearing boots.
3. a. The octopus is tangled in the woman's fishing line.
b. The octopus is tangled.
4. a. The can full of worms was knocked over by the cat.
b. The can was knocked over.
5. a. The octopus is trapped by the fishing line.
b. The octopus cannot escape from the fishing line.
6. a. The can of worms will soon be empty.
b. The can of worms will not be full much longer.
7. a. The woman is catching an octopus.
b. The woman has caught an octopus.
8. a. The can of worms is tipping over.
b. The can of worms has tipped over.

Cereal

1. a. The boy carries some cereal while Grandma waits.
b. Grandma waits while the boy carries some cereal.
2. a. The boy who is wearing a striped shirt is carrying two bowls.
b. The boy who is carrying two bowls is wearing a striped shirt.
3. a. The cereal is being carried to the woman in the bed by the boy.
b. The cereal is being carried.
4. a. The boy has spilt cereal and milk on the counter.
b. The counter is a mess.
5. a. The boy is trying not to spill the bowls of cereal.
b. The boy is trying to carry the bowls of cereal carefully.
6. a. The kitchen drawer was left open.
b. The kitchen drawer was not shut.
7. a. The boy has made breakfast.
b. The boy is bringing breakfast.
8. a. The milk has run across the counter.
b. The milk is running across the counter.

Laundry

1. a. The woman hangs her laundry while the cat sits.
b. The cat sits while the woman hangs her laundry.
2. a. The woman who is hanging her washing is wearing a dress.
b. The woman who is wearing a dress is hanging her washing.
3. a. The washing is being hung.
b. The washing is being hung on the line with clothes pins.
4. a. The coat hanger was thrown down beside the basket of washed laundry.
b. The coat hanger was thrown down.
5. a. The laundry will soon be dry.
b. The laundry will not be wet for long.
6. a. The cat seems to tolerate the wind.
b. The cat does not seem to be bothered by the wind.
7. a. The laundry has been hung on the line.
b. The laundry is hanging on the line.
8. a. The sheet is billowing in the wind.
b. The sheet has billowed in the wind.

Alligator

- The boy leans forward as he offers the alligator a fish.
 - The boy offers the alligator a fish as he leans forward.
- The boy who is not wearing shoes is feeding the alligator.
 - The boy who is feeding the alligator is not wearing shoes.
- The alligator is eating the fish offered by the boy.
 - The alligator is eating.
- There are lots of fish.
 - There are lots of fish in the bucket for the alligator.
- The boy is calm as he holds the fish.
 - The boy is not nervous as he holds the fish.
- The fish in the bucket are not alive.
 - The fish in the bucket are dead.
- The boy is offering the alligator a fish.
 - The boy has offered the alligator a fish.
- The boy has knelt on the ground.
 - The boy is kneeling on the ground.

Caveman

- The caveman closes his eyes while he paints.
 - The caveman paints while he closes his eyes.
- The man who is painting an antelope is wearing a spotted fur.
 - The man who is wearing a spotted fur is painting an antelope.
- An antelope is being painted.
 - An antelope is being painted by a caveman with a brush.
- Some flowers are growing outside.
 - Some flowers are growing outside the cave entrance near the painted antelope.
- The painting is not abstract art.
 - The painting is realistic art.
- Each flower stem does not have more than one leaf.
 - Each flower stem only has one leaf.
- The caveman is painting an antelope.
 - The caveman has painted an antelope.
- The flowers are growing by the cave entrance.
 - The flowers have grown by the cave entrance.

Sled

1. a. The moon shines while the boy pulls the sled.
b. The boy pulls the sled while the moon shines.
2. a. The sled that is being pulled has left a trail in the snow.
b. The sled that has left a trail in the snow is being pulled.
3. a. The snowman is being moved on the sled by the boy.
b. The snowman is being moved.
4. a. The moon is lighting the way for the boy and his snowman on the sled.
b. The moon is lighting the way.
5. a. The snowman is not very big.
b. The snowman is pretty small.
6. a. It is not daytime.
b. It is nighttime.
7. a. The boy is pulling the sled.
b. The boy has pulled the sled.
8. a. Snow has fallen on the trees.
b. Snow is falling on the trees.

Reading

1. a. The boy reads while the candle burns.
b. The candle burns while the boy reads.
2. a. The boy who is chewing his finger is reading.
b. The boy who is reading is chewing his finger.
3. a. The boy is reading.
b. The boy is reading a book in bed.
4. a. The candle is dripping.
b. The candle is dripping wax onto the candle holder.
5. a. The boy is reading quietly.
b. The boy is not reading out loud.
6. a. The shutter is closed.
b. The shutter is not open.
7. a. The boy has read part of the book.
b. The boy is reading part of the book.
8. a. The hat is hanging on the bedpost.
b. The hat has been hung on the bedpost.

Banana

1. a. The men fell before they noticed the banana peels.
b. The men noticed the banana peels after they fell.
2. a. The men who slipped have grips on their shoes.
b. The men who have grips on their shoes slipped.
3. a. One of the men has fallen onto the sidewalk.
b. One of the men has fallen.
4. a. The man's head is now free from his glasses, toupee and hat.
b. The man's head is now bare.
5. a. The men did not want to fall.
b. The men wanted to stay on their feet.
6. a. The man in the air has not patched his pants.
b. The man in the air needs to patch his pants.
7. a. A man has fallen.
b. A man is falling.
8. a. The man's toupee has left his head.
b. The man's toupee is leaving his head.

Appendix C - Instructions for Experiments 1, 2, and 3

Instructions for Experiment 1

(see Appendix B for instructions for the forced choice task)

PLEASE DO NOT TURN THE PAGE UNTIL YOU HAVE COMPLETED TASKS ONE AND TWO BELOW:

1. Identify the most important thing or event in the picture. Use as few words as possible.

2. Write two or more sentences describing the events shown in the picture above:

Instructions for Experiment 2

For each of the following pictures, imagine that you are telling a story to a friend or small child. Examine the picture, then tell a story based upon the events and characters shown in the picture. Your responses will remain anonymous, and you are free to quit the experiment at any time.

Before you begin, please answer the following:

Is English your first language? _____.

Sex (circle): Male / Female

Age: _____

How many years have you spent at university, including this year? _____ (circle)

0 1 2 3 4 5 6 7 8 other _____.

How many Linguistic courses have you taken,
including this term? _____.

Instructions for Experiment 3

Identify the most important event or thing in each picture. Use as few words as possible.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

Appendix D - Samples of Descriptions¹

SOUP

S1: A upset lady (with backwards elbows) dumps soup on the head of a youth. This male youth (8-12) is stuned and non-expectant of this attack/retaliation.

S2: A woman has turned a bowl of soup upside down over a man's head. She is grinding the bowl into his head with her hands.

S3: Possibly brother and sister were having an argument. He really irritated his sister and she got angry, got up and put his food on her brothers head.

S4: The lady with big bonnet and apron has cooked a bowl of soup. As the man was about to eat, the lady dumped the soup on his head.

S5: A woman is pouring soup over the head of another person, her husband perhaps? Perhaps he has aggravated her.

S6: The motherly figure has become fed up and decides to take revenge. She does this by dumping the meal, soup, on her sons or husbands head.

S7: After preparing dinner for her husband, the frusterated wife dumps the meal over his head. She is sick and tired of his expectations and critical comments.

S8: A maid or waitress in a tavern of a past century has slammed a bowl of gruel onto a patron about to eat a spoonful. The patron has insulted the maid. He is seated at a table by himself. There is a knife, napkin & a platter of some unidentifiable substance.

S9: The woman has thrown a bowl of soup onto the man's head. The man was ready to eat the soup before this happened.

S10: The woman, who appears to be a maid or a waitress, has poured the contents of the bowl over the other person's head. The other person seems to have been taken by surprise in that they're holding their spoon in front of them.

S11: A woman, who is possibly a maid, is very angry with this man. She dumps his dish of soup right on top of his head in anger. The man is so astonished, all he can do is sit dumbfounded.

S12: The angry woman is dumping soup on the mans head. The angry woman is retaleating at the man during lunch.

S13: There is a woman who is dumping a bowl of food onto a man's head. The man, who is holding a spoon, was presumably eating the food. The woman did not like this, and punished him for eating.

S14: A farmer's wife has just dumped a bowl of food on her husband who probably did not appreciate her cooking. The husband is surprised by his wife's action because he is holding his spoon.

¹ Spellings preferred by subjects are preserved.

S15: A lady is dumping a bowl of soup on somebody's head. The person doesn't appear to be excited or upset in any way or form.

S16: Angry woman of last sentence pushing bowl of something liquid over person's. Person seems to be smaller - could be a teenager.

S17: The man was in the middle of eating the soup when the woman became angry about something. She takes the bowl of soup and dumps it over his head.

S18: The woman is dumping soup (or some other foodstuff eaten with a spoon) over the head of a man sitting down to a meal. The identities and expressions of the characters are hidden. The scene is sparse and suggests a former time (historic).

S19: A woman who, by her clothing, appears to be a maid, is dumping a large bowl of soup over an individual's head. The person appears to be a man or a boy by the way he is dressed.

S20: There is a person (assuming that it is a male because of the style of dress) who is sitting at a table for a meal. The server or waitress is dumping a bowl of soup on the man's head. The man's spoon is halfway elevated to his mouth, so I assume that he was in the process of eating.

S21: Probably in response to a rude comment, the woman has dumped the other person's bowl of food onto his or her head. Since the spoon is being held in mid-air, it appears to have been a sudden reaction. The posture of the woman indicates that she is upset, even though her facial expression is not seen.

S22: The person eating the soup is also having it dumped over his head by the cook. The person eating is still holding a spoon, so the reaction was immediate. The cook is not only pouring the soup, but forcing the bowl onto the shape of his skull and thus dominates.

S23: A woman, probably annoyed by her husband's comments about her cooking, dumps his bowl of soup on his head. The man sits frozen in his seat, his spoon in his hand. He is too surprised to move.

S24: A woman spills a bowl of soup onto a man's head (probably her husband). The man continues to hold his spoon as the woman continues to force the bowl onto his head. The woman is dressed up like a maid. There is some meat and a knife also on the table.

laundry

S1: A young girl with her kitten are hanging clothes to dry on a clothes line. Even in the city like she is it is windy.

S2: On a windy day, a girl must go into the backyard to hang sheets out to dry. Her cat is close by, watching.

S3: In the big city it is a cool windy day. A perfect day for drying the laundry. Sally's cat, Tom waits at her feet as Sally hangs her laundry onto the clothes line.

- S4: The cat looks on as her master is hanging up the laundry. The laundry line is situated on the top balcony of a high building.
- S5: A woman is hanging up laundry to dry on her backyard clothesline, while her cat looks on.
- S6: Laundry day was a part of her everyday life. Luckily, it was not so dreary because her tag a long cat would always be there.
- S7: There is a young girl living in a poor area. She works very hard, and right now is hanging laundry to dry. Her loneliness is filled by her friend the cat.
- S8: A young girl wearing slippers & a skirt is pinning up clothes to dry on a windy day as her cat looks on. Her hair is shoulder-length & blowing in the wind. She still has more laundry to do. The houses in the background are old, brick condos.
- S9: A girl in a dress goes out to hang the wash. A cat has followed her. It is a windy day.
- S10: A woman wearing a dress is hanging laundry on the outside line. A cat is sitting near her. It is a little bit windy and her hair, her dress and the laundry are blowing in the wind.
- S11: The woman is standing in the wind hanging up the wash at the clothesline. Her cat sits near her feet watching things blowing. Everything is blowing in the wind, including her hair and dress.
- S12: The young girl is hanging out washing to dry in the backyard. The young girl, who lives in a poor neighborhood is hanging out washing to dry in her backyard on a windy day, while the cat watches.
- S13: There is a girl who is pinning her laundry to the line. She is with her cat. It is also possible that she is removing the laundry from the line.
- S14: A young girl is hanging the laundry on a clothesline that is on the rooftop of a building in a city. There is a cat sitting beside her. The clothesline is short and there is no room for the rest of the cloths that are in the basket.
- S15: A young girl and her cat are outside the house while she takes down the laundry. It is windy outside. There's not much space between buildings. Everybody hangs their laundry outside to dry.
- S16: A woman is hanging out her wash to dry. It is a windy as some items on the line are blowing. She still has many items more to hang as her laundry basket is overflowing.
- S17: The woman is hanging laundry on the line to dry. It is windy out. A cat sits contentedly at her feet. There won't be enough room on the line for all the laundry.
- S18: A woman is hanging laundry to dry in the sun and wind in a backyard in the city. She is accompanied by a cat. So far she has hung sheets or towels.

S19: A girl wearing a dress & slippers is hanging laundry on the clothes line to dry. The basket of laundry is on the ground to her left, while a cat sits at her right. The narrow brick & stone houses built right next to each other are an old, European style.

S20: The girl is hanging some laundry out to dry. The weather looks a bit windy. A cat joins her outside. The neighborhood looks a little run-down, a lower socioeconomic class neighborhood.

S21: On a windy day, a girl is hanging laundry on a line to dry. Buildings surround her. A cat huddles at her feet. There is a basket full of laundry close by. A hanger is on the ground near her heels.

S22: The woman is hanging laundry on a backyard line on a windy day. The neighbourhood is a developed one. A cat accompanies her, likely her pet, as it seems to wear a collar. One garment on a hanger is laying on the ground behind her.

S23: A girl, accompanied by her cat, is pinning sheets to the clothes-line to let them dry. There is still a lot of laundry in the basket. One small towel has been dropped and is lying on the ground.

S24: A young woman is putting laundry up on an outdoor clothes line. A cat sits next to the woman. The location is in an older urban area and it is windy.

banana

S1: Three men (officers) wearing similar hats have slipped on banana peels. One has gum on his rear left pocket, one has lost his toupee and glasses and the last is out of sight.

S2: Each of the 3 men tripped on a banana peel on the sidewalk. Their hats and one man's toupee and glasses have gone flying.

S3: Three men were walking to work, but walking fairly briskly. They were engulfed in a light discussion and without noticing where they were walking they slipped on the banana peels.

S4: When one policeman tripped on a banana, he flew into the other policemen. The impact of the crash caused everybody's toupees and hats to fly off.

S5: Due to the awkward placement of several banana peels, three men have inadvertently slipped on said peels, risking great personal injury.

S6: When not paying close attention, slipping on a banana peel can be quite dangerous. This is proved by the picture, three men were not being careful and look at them now.

S7: 3 business men were walking down the street. Each of them have slipped on forgotten banana peels and are falling quite hard.

S8: This picture shows the actions of a man as he slips on a banana peel. He is wearing a service hat and gloves. His hat, toupee & glasses fall off as he goes flying out of the frame. He looks to be in a lot of pain.

S9: Three men have been walking beside a brick wall, and all three slip on a banana peel. One man loses his hat, while another loses his hat, toupee, and glasses.

S10: Three people have slipped on banana peels and are falling down. One has lost his hat, another has lost his hat, toupee and glasses. The latter looks like he's hurt himself and the former looks like he will be hurt soon.

S11: The man is in the process of tripping on the banana peel that in all probability, he did not see. He takes a great fall, crashing to the ground. His hat is sent flying, as well as his toupée and glasses. His black coat is sure to get dirty.

S12: Three businessmen have slipped on banana peels. Three businessmen have comically fallen, with one man losing his toupee, after slipping on banana peels.

S13: Three men have slipped on three separate banana peels at exactly the same time. Comedy is derived from this unlikely coincidence, plus the fact that one man has lost his hair during his fall.

S14: There are three men who have just slipped on bannana peels. One man has lost his toupee, hat and glasses, another man has lost his hat. Only the feet and legs of the third man is visible. They were walking along the sidewalk and not watching what was in front of them.

S15: Three chauffeurs have slipped on banana peels and all of them are falling. The one closest to the ground has fallen so hard that his glasses, hat and toupée have fallen off.

S16: Three men are falling in various directions because they have slipped on 4 bannas peels. There is a wall behind them which gives the impression they are falling on the sidewalk.

S17: Three men have slipped on three different banana peels. One man loses his hat, another man loses his hat, toupée and glasses as he hits the ground.

S18: Various stages of slipping or falling -- caused by a banana peel are depicted. The man wears glasses, a toupee, an overcoat, gloves and a hat. His outfit resembles that of a chauffeur or doorman. The background is a brick wall.

S19: Each of 3 men has slipped on a banana peel and is falling. One man is losing his hat, while another is losing his hat, toupé and glasses. 2 of the men were flipped quite highly into the air.

S20: There are some men who are slipping on banana peels and falling down. The impact of the fall is so strong that one man's hat, toupee, and glasses have moved. The men are policemen, and they must have been chasing somebody to be running so quickly not to notice the banana peels.

S21: In haste, three officers have slipped on banana peels and are taking hard falls. One man's hat, toupee and glasses are flying off his head. He grimaces as he hits the cement. The other men are still in mid air.

S22: Three men have slipped on banana peels on a side walk near a building. They are falling (or have fallen) hard. The men were wearing uniform hats and workboots.

S23: Three men were have slipped on banana peals, with rather painful results. Two men have been completely swept off their feet and are still up in the air. The other has landed heavily and has lost his glasses, toupee, and hat as a result.

S24: A man who slipped on a banana peel has wiped out two other men in the process of falling down. Two of the men are wearing hats and coats. One of the men is loosing his glasses and toupe as he falls.

Appendix E - Samples of Stories

SOUP

S1: Everyone always used to think that Holly Hobby was just the sweetest little girl in the world, but what ever happened to her when she grew up? She married a an old farmer, and she was a farm wife for the rest of her life. But all she ever got from him was nagging, nagging, nagging and all she ever did was cook the same meals, uh pea soup and ham, every single day. And one day she'd had enough of this. She picked up the bowl of soup, and threw it over top of his head, and said, "There, I hope you like it."

S2: The little girl has been a pain in the neck. She's been bothering her mother all morning. She's been bitchy and uncontrollable. Finally in a rage her mother takes the bowl of porridge and throws it on the hea- throws it over the head of the girl, in anger.

S3: Once upon a time there was a little peasant boy named Hans. He would always eat his dinner, some bread, butter, something very simple, porridge, in the house where he lived with his parents. However, Hans was a very bad boy, and he would often complain, just about everything, the bread was too dry, the butter was rancid, nothing was interesting for Hans. So, one day his mother became very fed up with his type of attitude, so she said, "Well! If you won't eat my porridge, why wouldn't you wear it?" Now he Hans had never seen his mother be so angry, but after she did this, he ceased to complain.

S4: Picture 2 shows a serving wench, serving a customer in a restaurant or her lord at his supper table or whatever it might be um in a way that he might not appreciate because she's sloshing a bowl of porridge or split pea soup or whatever it is over his head and there is a plate of tongue or something equally disgusting on the table which gets my attention. That's all I have to say about 2.

S5: There was a young couple who were just married and his wife had baked and made supper all day, hoping to prepare a wonderful meal for her husband and he came home and started to eat supper, and he said, "This doesn't taste like Mother's soup." So she picked it up and dumped it over his head.

S6: Picture number two reminds me of Jack Spratt and his wife doesn't look happy. Well, Jack is eating his soup, and I suppose it's a plate of meat beside the soup, and here he is eating his soup, and he said something to his wife, and his wife picked up the bowl of soup and dumped it over his head. Now, what could Jack have said that would make his wife so annoyed at him? Well, I don't know. We'll let you decide that. If I think of something later, I'll mention it.

S7: This is a situation where a a couple has um sat down to dinner where the where the um the male uh participant has uh said something snide about the preparation of the meal or the way it tastes or something prompting his wife to um uh upset the bowl of porridge or gruel or whatever it is over his head.

S8: So little Sally was always complaining about her mother's bad cooking. "Mom, why don't you learn to cook? What's for lunch?" And the mother said, "Well, it's your favorite, beef tongue." "Oh, not beef tongue again! I hate beef tongue. Anything else?" "Well, just this cold potato soup." "Oh, I hate cold potato soup!"

Why can't you learn to cook, like Dad?" So the mother picked up the bowl of cold potato soup and smashed it on Sally's head.

S9: Once upon a time there was a little boy who always complained about the food that his mother served him. One day after she had cooked long and hard he started complaining about the soup. "There's not enough meat in it. There's no crackers." and a couple of times his mother told him just to be happy that he had any soup at all and to eat it. um she was getting very frustrated with the little boy and finally called out to his big sister to take care of him while she went and fetched water. The big sister very quickly got annoyed with the little boy's groaning about the soup, because she had also helped make it so finally just as the boy had figured out that he had annoyed his sister enough and was about to take his first mouthful of soup, she grabbed the bowl and dumped it upside down on his head.

laundry

S1: Megan was an 11 year old girl who lived in the suburbs of New York City. And every Saturday morning she got up early to do the wash. She made a clothes line out of two poles and a piece of string, hung it out in her back yard and she- so that she could [tie it on?] her bedding on the lawns to make it smell like it was from the country. And every day her cat Felix sat with her, and one day, Felix climbed the pole, and [laughs] ended up snagging and ripping all of her towels and sheets, because he slid down all of them. That was really gay.

S2: It was a windy day in Ireland, and Shauna had to do the laundry, much to her sup- to her surprise because she had already promised to go out with her boyfriend that day. But her mother, being sick with cancer, had decided that she had she her daughter had better do the laundry because her carcinomas were s- very sore that day. Shauna brought the cat out to hang the laundry out on the clothesline, but the wind was so hard sh- she couldn't she couldn't hang the clothes up very easily. She had to stand head first into the wind and to hang the laundry up. She was also very depressed because she couldn't see her boyfriend.

S3: Once upon a time there was a girl named Leah and she lived in the old walled city in Pakistan. Her parents would never let her out of the house, because they were afraid some man may look at her, or that she might get into trouble. Leah was very lonely, her only companion was a cat, and she did housework all the day long, because that's what women were supposed to do in those days, in that city. One thing that gave Leah release was to go out on the balcony and hang up the laundry. She could look all around her, at the other balconies in the walled city and sometimes in the spring she would see people flying kites. This gave her a great sense of release, freedom, and happiness, and she didn't have to wear her veil and bourka like she did when she went to the market. One day Leah saw something new, on another balcony. There, on a cot lay a young boy, and he looked to be about her age. Of course she thought he was sleeping and wondered where he came from. But soon, as she kept watching, day after day she realised that the young boy was ill, probably his mother had him out on the cot so he could get some fresh air. The boy used to watch Leah, and eventually she began to smile at him, and he would smile back. Soon, she came to really become attached to this boy, though she had never met him. One day, he threw a note on to her balcony, wrapped around a rock. She read it. He said, "I'm very fond of you." From that time on, every day, a note would come as Leah hung up the laundry. Eventually, she didn't see the boy anymore. There was no inkling that this would happen from his letters and she became very worried. Was his illness so bad that he had died? But that day, the doorbell rang. Of course Leah

wasn't allowed to go to the door because of her strict upbringing. However, she heard the voices. There was a young man asking his father, "Could I have your daughter's hand in marriage? Here are my qualifications for this duty." Her father, she could hear him reading the papers, saying, "Hm, education, looks, family, etc.," and he said, "Alright." Then he went up to Leah and said, "Leah, I have given you away in marriage." Of course he thought she would be very upset, because sometimes women didn't want to have arranged marriages, but she knew, and she was very happy. The first time she met her husband, she said, "Now I know why you suddenly disappeared that day. You had come to take my hand in marriage."

S4: The little match girl or her English counterpart has gone out into the backyard in a lower class London berg to hang the wash. It's windy and she has to stand leaning into the wind, and her cat is standing beside her, looking rather unconcerned about the whole thing, but she isn't paying any attention to the cat, she's just doing what needs to be done in good English fashion. That's the [moral?] of the story.

S5: Martha lived in a tenement on the poor side of town and there was no dryer in their building and she didn't have money to go to the laundromat so she set up a line in the back yard between two poles that the kids used to play badminton on, and hung the laundry there. It looks like a cold windy day, so her hands will be cold, and there isn't enough room to hang up all the laundry so she only hangs up a little bit at a time, dries it then hangs up the rest later.

S6: This girl has just finished her laundry, and she picks up her laundry basket and walks outside and proceeds to hang her clothing on the line. Well, the cat decides to follow her out, and watch what she's doing. so the cat is sitting right at her feet while she hangs up all the laundry. It's a fairly windy day so it won't take long for the laundry to dry. It looks like somewhere in London where the houses are very close together, in the or in Europe anyway. Houses are very close together and there's a fence between her house and the next.

S7: Picture number 6 is a uh Victorian sort of setting where a young woman is out hanging her clothes in uh the back of a crowded sort of tenement housing unit ah with her sort of trusty cat at her feet, observing the whole situation and there's a fairly brisk breeze blowing so the clothes should dry rather quickly, I would think.

S8: While hanging laundry one day Mary was thinking as the sheets were billowing in the wind, "How wonderful it would be to be sailing far away from here, far from my little rooftop garden, just sailing away in a little sailboat, me and my cat."

S9: Kathy had just finished doing the wash and setting it down while she started to do something else when she turned to look back at her wash basket, she thought she'd seen something moving out of the corner of her eye. Sure enough, the cat who'd just come in because it had been raining had walked all over the clean clothes. "Damn!" she said. She shoed out the cat and put the clothes back into the washer. After the second washing, she didn't wait for the cat to jump into the basket, she went outside right away. The storm had abated but it was still quite windy, which was fine for her to put up the clothes on the line to dry. The cat managed to s- to sit beside her and not get into the basket partially because of the stern look on her face.

banana

S1: There was a bank robbery on 5th and 6th Avenue, and uh the bank manager pushed the emergency button to get the police there in a hurry. The police came, and

shouted, "Come out with your hands up!" and the burglar didn't know what to do, so he ran out the back door, the police and the bank manager chased after him, but luckily, they were almost going to catch him but luckily the bank robber had some bananas in his pocket, so he started pulling them out and eating them as fast as he could, throwing the banana peels behind him, which caused the police officers and the bank manager to slip on them and fall, allowing the burglar to escape without being caught.

S2: Walking - a tramp was walking down the street one day, and found some old bananas, ate the rest of it and threw the banana away, on to the sidewalk. A little later, some very rich people were walking by, a man, a man with his chauffeur and his valet. The three men slipped on the bananas, and the chauffeur lost his hat and his toupee and his glasses, while the valet lost his glasses but also fell flat on his ass. The poor rich man fell so hard that he flew out of the picture.

S3: You always think that you look nice and nothing can hurt you, but this isn't always true. For example, one day I saw three impeccably dressed gentlemen, they had on everything, right in place, nice suit, nice hat, glasses, handkerchief, and they looked oh so very proper, just walking down that street. But you know what else I saw? There were three banana skins on the street, and as these three, very well-dressed gentlemen walked by, what do you know, they were on the ground, all of their beautiful clothing was in disarray, which just goes to show, everyone can be brought down by a banana peel.

S4: Picture 5 is a slapstick comedy in which um it's hard to tell for sure, exactly what happened, but, three chaps were walking along, they look to be police, and one, two or all three of them have slipped on banana peels of which there are three in the picture, and one has gone flying right out of the picture, the other has just flown straight up in the air, and the third has hit the ground rather hard, losing his glasses, his hat and his toupee.

S5: There was a burglar who had robbed a bank and it just so happened that the police were coming by as he was leaving the bank and they started to chase him to get the money back. But he happened to have some banana peels in his pocket for just such an occurrence so he threw them on the ground and the policemen fell down as they were trying to catch him and he got away.

S6: Oh dear! We have three gentlemen, and three banana peels. And all three gentlemen have slipped on the three banana peels. un. Someone left banana peels all over the sidewalk, and these three gentlemen, with hats on, they look like oh security patrols or something of that nature, and they're running after some burglars, and they slip all over the banana peels, just like in a very slapstick comedy, and they're falling all over the place, and hats come off, and toupees come off, and glasses come off and it's all very humorous. Ha ha ha. Right.

S7: Picture number 5 is a three stooges kind of scenario where a couple police officers chasing a suspect a criminal have um slipped on the banana peels he's thrown behind over his shoulders to um keep them from catching up with him, the officers are all flying all over the place as they've slid along street on the on the banana peels.

S8: One day Boris, the great gorilla, escaped from the zoo. They looked for him all over the place, everyone was notified, the police, bus drivers, school children, everyone was on the lookout for Boris. The only clue, of course, was the trail of banana skins.

S9: Jimmy was the town mischief maker. He especially loved wandering down by the railway station and watching people hurrying for their trains. He especially enjoyed watching people drop their luggage and have all the contents spill out onto the sidewalk, people bang into each other or miss their trains completely by not being able to run fast enough to jump on. So one day he decided, after a long boring stretch when nothing like that had happened, that he would cause a little action and take matters into his own hands. So, right before the morning rush hour, he planted some banana peels on the station uh the station walkway where people would be sure to step on them as they hurried towards their train in the morning rush hour. He hid after he had placed them on the ground s- where he could watch what happened to people who who managed to step on them. And sure enough when the first morning rush came, he got his victims. One man went flying completely out of his range of vision. Another one, Mr. Johnson from just up the street, slipped and fell onto his face, his glasses fell off, and Johnny realized for the first time that he wore a toupee. The third person who hit the h the third peel um did a sort of backwards summersault, his hat flew off and Johnny giggled with amusement when he realized the man had a hole in his trousers.