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FIGURE AND GROUND: THE INTERRELATIONSHIPS OF LINGUISTIC CATEGORIES

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0. Introduction. This paper addresses three points of the traditional way of viewing linguistic categories, with particular reference to categories of verbs. [1] One, linguists have worked with the notion that the usual categories of the verb, viz. tense, aspect, mode, voice, and transitivity, are clearly defined logical divisions suitable for analyzing the grammar of any language whatever. The very title of this symposium suggests that "tense" and "aspect," while perhaps closely related enough and sufficiently compatible to share the same conferential stage, are areas of discussion isolable from one another and from other areas. Two, many analyses of the meaning of verbal categories take the clause, or at most the sentence, as the operative domain of the relevant category. That linguistic categories contribute significantly to the structure of an extrasentential text, indeed, that one does not truly understand the meaning of a linguistic category until one comprehends its function in a text, are suggestions that mainstream twentieth-century linguistics has all but ignored. Three, discussions of the semantics of linguistic categories, whether for a specific language or for language in general, typically amount to "extracting" the distinctive semantic features of grammatical sets, positing *Grund-* or *Gesamtbedeutungen,* making lists of the uses of e.g. the optative mode or the ablative case, or doing whatever one's favorite analytical trick is, for the most part without attempting to achieve some broader perspective on how the posited semantic contents or contrasts fit into an overall view of human behavior and cognition. In the following sections I aim to show that these three points, which I view as shortcomings of usual linguistic approaches, are not unrelated. I suggest that the distinction made in perceptual psychology between figure and ground provides an interesting and useful parallel which may help to elucidate the meanings of linguistic categories and their interrelationships.

1. Verbal categories. Modern linguistic analysis of the semantics of verbal categories appears to owe much to the classical Indo-European languages which once served as crucial descriptive models. Thus Lyons (1977) has chapters, or sections of chapters, on "tense," "aspect," "mood and illocutionary force," and "modality." Numerous other works focus on one or another of these categories: e.g. Bull, Comrie (1976), Friedrich, Forsyth, and so on. So in spite of repeated attempts to break away from the classical exemplars, the trivium of tense, mode, and aspect, based of course on the actual inflectional categories of older Indo-European languages, persists as a fundamental conceptual schema. Lyons (682) aptly sums up the feelings of most of us when he says: "A fairly clear distinction can be drawn in the metalanguage of general linguistic theory between 'tense,' 'mood' [= my 'mode'], and 'aspect'." The problems with the classical trinity, as I shall detail in this section, are two. One, it is an arbitrary division of verbal semantics into compartments which are not quite as easily separable as one is led to believe. Time, aspectuality, and modality — the semantic fields to which the formal categories of tense, aspect, and mode are supposed to refer — are almost inextricably scrambled together. Two, and perhaps even more significant, the tense-mode-aspect trivium has important relationships not only with other verbal categories such as voice and transitivity, but extends even further to such nonverbal categories as person, number, and definiteness.

1.1. Time and modality. As Lyons (814ff.) points out, these two semantic domains show considerable overlap, especially with regard to future time: the future is not nearly as certain as the past or present. The future of Latin verbs like *faciam* 'I will do' goes back to an Indo-European subjunctive, for example (L. Palmer 271). The English "future" auxiliary *will* in earlier times expressed not so much futurity as desire or intention. The French "future" indicates not only futurity but also inference: *il sera malade* 'he will be sick' or 'he is probably sick'. But "present" and "past" tenses are by no means free from meanings traditionally classified as modal. Note the pervasive existence of the "historical present" — the "present" tense used to narrate past events — in languages such as Greek, Latin, English, French, Georgian, and Bulgarian (Comrie 1976: 73-8; Bennett 169; Goodwin 269). The effect of such usage is supposedly to make the narrative more "lively" or "vivid" (but see Wolfson). Observe further the polite or indirect use of the "past" tense in English and French (Leech 11; Waugh 1975: 463-5) where one might expect the "present," especially with regard to cognition and emotion. In English, for example, to say "Did you want me?" with reference to a present desire is more tentative and thus more polite than to say abruptly "Do you want me?". Compare also in this regard the wide spread modern western Indo-European tendency to use the conditional (etymologically a past tense) for present politeness: *I would like...*, French *je voudrais...*, German *ich hätte gerne...*, Spanish *querría...*, Dutch *ik zou graag...*, and so forth.

The fundamental question therefore is: If "present" and "past" tense do not necessarily refer to present and past time, if the "present" can refer to the past and the "past" to the present, how are we justified in talking about tense and time with regard to these categories? At least to me it would seem that when authors talk about the "imaginative use of the tenses" (Babbitt 264) or the "illusion of presentness" (Comrie 1976:74), they are no longer talking about time but something else. No reasonable person would deny that time is an important semantic property of the categories of tense. The moot point is whether or not it is a focal, central, nuclear property. One might in fact argue that the distinction between "present" and "past" "tense" in the languages mentioned is not so much temporal as it is modal: immediate-direct-certain "present" mode versus remote-indirect-hesitant "past" mode. I am by no means the only person to propose this: see, for example, Joos (120-6), Langacker (1978 and this volume), and Waugh (1975:444). Lyons (809-23) has a lengthy discussion of tense as modality, including many references to both the linguistic and philosophical literature. In fact, one wonders whether a language exists in which "tense" refers only to time.

1.2. Aspectuality and modality. While the formal category usually called tense in a given language often has a straightforward deictic temporal reference (alongside the more problematical meanings usually labeled as modal), the category of aspect has presented a more challenging field of analysis. For even though one can discern certain focal semantic contrasts at work, such as punctual vs. durative, completed vs. incompleted, total vs. partial, semelfactive vs. iterative, currently relevant vs. currently irrelevant, and the like, many difficulties intrude. Not the least problem is the oft-noted intersection of aspect and the semantic type of the verb: an English actional verb like *eat*, for example, can readily occur in the "progressive" aspect, while a stative verb like *own* can not. The complex interrelationships of aspect and tense have received extensive attention in the literature (e.g. Comrie 1976:66-84; Kury+owicz 1964:90-135) and need no further elaboration here.

What I would like to discuss, however, are certain neglected interrelationships between aspectuality and modality, in particular a recurrent tenden-

cy to associate imperfective (incompletive, durative) aspectuality with non-eventive modalities. [2] In classical Greek, for example, some grammarians (e.g. Schwyzer 275-80) distinguish a "potential" use of the "imperfect" (past imperfective). This seems to occur only with negation, so that the combination of the negative and the imperfective can express inability. To use the "aorist" (past perfective) with a negative simply denies the fact. The same phenomenon occurs in Jakarta Malay (Wallace), where the verb with the prefix *ŋ-*, often indicating general, routine, habitual activity, a sort of imperfective, can occur with negation to indicate inability; the unmarked verb, a sort of perfective, with negation again just denies the fact. Note also Forsyth's (109-12) remarks on Russian in this regard: (1) The negated perfective can denote the nonachievement of a result; the negated imperfective, unwillingness, refusal, or inability to perform an action. (2) The common use of a negated imperfective verb to deny an affirmative perfective verb connotes a "general feeling of dissociation from the concrete reality of an action performed and completed" and a movement away from "the realm of precision and concrete reality into that of vagueness and unreality." In fact, Forsyth (349) finds "very widespread use of the imperfective with negation." For similar affinities in French and Homeric Greek, see Reid and Diver (58-9). For a final example, we note the tentative use of the "progressive" aspect in English with verbs of cognition: "I'm hoping you'll come" is less certain than "I hope you'll come." Leech (24-5) suggests that the element of temporariness associated with the "progressive" is here extended to the notion of lack of commitment or certainty. But what are commitment and certainty if not modalities?

One might also include here the uses of imperfective forms in numerous languages to indicate attempt (the "conative imperfect" of grammarians of Latin and Greek). This phenomenon occurs in Greek (Babbitt 266-7), Latin (Bennett 169), Russian (Forsyth 71-3), and Jakarta Malay (Wallace). I have seen no discussion in the literature as to whether attempt is an aspectual or modal notion. On the one hand, one might treat it as a derivative of the incompleted, durative character of the imperfective aspect. On the other hand, one might just as well treat it as a sort of non-eventive modality, along with desire, intent, possibility, hesitance, and the like. In the latter case, here again we have a tie between imperfectivity and non-eventiveness. [3]

1.3. Aspectuality and nouns. Not only are there significant relationships between aspectuality and modality, but we also find important correlations between aspectuality and categories of nouns associated with verbs in

clauses. For classical Greek, for example, Schwyzer (278-9) notes that in Hippocrates' account of deaths in an epidemic, the "aorist" (past perfective) of the verb *(apo)thnḗiskō* 'I die' occurs when specific individuals are referred to: thus 'he died' or 'she died' is *apéthane* (3 sg. aorist), and 'they died', referring to named individuals, is *apéthanon* (3 pl. aorist). The "imperfect," on the other hand, occurs when an indefinite multitude is mentioned: *éthnēiskon* 'they died'. Reid's data on the use of the *passé simple* (past punctual-perfective) versus the *imparfait* (past durative-imperfective) in French narrative discourse are especially interesting here. He finds, for instance, a decided statistical preference for the *passé simple* with the following types of sentential subjects: first-person, singular, proper, or those designating main characters. We can not escape the conclusion that the perfective, at least in these languages, connotes greater specificity, selection, and attention, while the imperfective is hazier, vaguer, more in the background, and less salient.

Closely related to the above is the association of aspectuality and transitivity. For Russian, Forsyth (91) observes that a potentially transitive verb, when used in the past perfective, requires an object expressed or implied. The imperfective form of a verb comes under no such restriction. Wallace has found a similar phenomenon in Jakarta Malay. Although this sort of correlation has to my knowledge not been investigated in a wide range of languages, I would not be surprised if further research determined similar intersections of aspectuality and transitivity. In particular, the more specific nature of the perfective seems to demand that the action of the verb be elaborated by the inclusion (or implication) of a goal which specifies the domain of application of the action, while the less specific imperfective does not require — but certainly allows — such modification.

1.4. Aspect, voice, and modality: a note. Several writers, reviewing data on verbal morphology and syntax in a variety of diverse languages, have noted recurrent interrelationships among these three usually separated categories (Comrie MSa; DeLancey (this volume); Wallace). In Jakarta Malay, for instance, as described by Wallace, a transitive verb marked with a certain prefix normally occurs in the active construction; often has overtones of non-eventive modality, such as potentiality and doubt; and refers to generic, habitual, routine activities, being thus a sort of imperfective. An unmarked transitive verb, on the other hand, may occur in either active or passive constructions; often connotes an eventive modality, such as factuality and certainty; and typically designates specific, actual, definite, bounded acts, being thus a

sort of perfective. Comrie, DeLancey, and Wallace have sugested that this particular line-up — active, imperfective, and non-eventive on the one hand, passive, perfective, and eventive on the other hand — is based on the particular viewpoint or orientation in the usual transitive clause of actor acting on a goal. When one takes the actor's viewpoint or orientation, one "sees" primarily the inception and continuation of the action (imperfective), possibly the intent or other internal executive capacity of the actor (non-eventive), and the actor as the dominant participant in the scene (active voice). When one takes the viewpoint or orientation of the goal, one "sees" primarily the termination of the action or its relevance to the current state of the goal (perfective or perfect aspectuality), the actual realization of the action as it affects some entity (eventive modality), and the goal as the dominant participant in the scene (passive voice).

It would be bold indeed to claim that this sort of schema is a universal, or even near-universal, source of semantic relationships for the morphology and syntax of verbs and of nouns associated with them. It is difficult to see, for instance, what major application it might have to English or many other Indo-European languages. On the other hand, even these languages show some tendency for perfect (if not perfective) aspectuality to go together with passive voice.[4] Consider, for example, the "past participles" of the familiar western Indo-European languages, which serve to indicate resultant state (*the broken window*), "perfect" aspect (*Susie has broken the window*), and passive voice (*the window was broken by Susie*). With the discovery of Hittite, the reconstruction of verbal morphology for Proto-Indo-European was rendered somewhat uncertain, since a set of suffixes which indicates perfect (resultant state) aspect in Greek and Sanskrit was found to be apparently cognate with a set of suffixes in Hittite which indicates the preterite medio-passive of certain verbs (the "second conjugation;" see Kuryłowicz 1932 and 1964, Stang 1932, Watkins 66-8). One wonders whether the Proto-Indo-European situation resembled modern Irish, about which Comrie (MSa:13) states: "Only in the passive is there an explicit perfect; only in the perfect is there an explicit passive. It is therefore essentially arbitrary whether one calls it 'passive' or 'perfect' or both simultaneously."

In any case, if the contrast between active, imperfective, and non-eventive on the one hand and passive, perfective-perfect, and eventive on the other hand is as widespread as the writers mentioned above suggest, then some explanation is necessary, just as some explanation is necessary if we find numerous and widespread languages in which [k] is palatalized to [č] before front

vowels, even though such palatalization may well be absent in equally numerous and widespread languages. As in phonology, we are here dealing with tendencies. And although the schema involving "viewpoint" or "orientation" may be more appropriate to some languages than to others, I claim that it contributes to an understanding of the matters discussed above in section 1.2, especially the association of imperfective aspectuality and non-eventive modality, and in section 1.3, in particular the relationship between imperfective and intransitive constructions.

1.5. Review. In concluding this section, I would like to reiterate the claim stated at the beginning of the section: the traditional conceptualization of verbal semantics into the categories of tense, mode, aspect, voice, and transitivity fails to capture certain recurrent and apparently widespread interrelationships among the semantic domains to which these categories refer: time, aspectuality, modality, and noun-verb relations. The facts are such that we must agree with Lyons (690) when he says: "... at this point there is not, and cannot be, in universal grammar any sharp distinction between tense and aspect, on the one hand, or between tense and modality, on the other." Additional support for this point of view comes from Waugh (1979:229), who, reviewing the semantics of verbal morphology in French, asserts: "All of the four tenses studied [present, imperfect, future, and conditional] have uses which fall in the domain of tense (temporal uses), of aspect (shape of the event), and of mood (subjective evaluation of the speaker): there is no difference between tense/aspect/mood — it is all one category." And we need to extend these statements by highlighting the pair aspectuality and modality, not to mention the role of verbal categories in noun-verb relations. Finally, we have seen a schema for relating aspectuality, modality, voice, and transitivity into a unified system based on the viewpoint or orientation of the transitive situation. For another perspective on verbal categories, nominal categories, and their interrelationships, we now look at linguistic structure beyond the sentence.

2. Linguistic categories in discourse. The second point of this paper will be to address the broader issue of how verbal categories fit into extended discourse. For a fundamental task of linguistics must be to understand and organize the facts of the totality of linguistic behavior: not just isolated sentences, but whole discourses. I shall emphasize in this section that verbal categories are important components in the structure of discourses, and indeed, that one does not truly understand "the meaning" of a verbal category in a particular

language unless one understands its place in discourse. I will also point out related characteristics of nominal categories.

2.1. Foreground and background. In analyzing the structure of discourse, many analysts (e.g. Grimes 33-100; Hopper and Thompson; Jones and Jones; Longacre and Levinsohn) make a fundamental division of the sort of information conveyed by a discourse into two kinds: foreground and background.[5] Included in the foreground, for instance, are the more important events of a narrative, the more important steps of a procedure, the central points of an exposition, the main characters or entities involved in an episode. The background includes events of lesser importance, subsidiary procedures, secondary points, descriptions, elaborations, digressions, and minor characters or things. This is not to say that background is unessential: merely to say *Veni, vidi, vici* 'I came, I saw, I conquered' means little unless it is embedded in a context which provides the relevant background. It is to say rather that people, when producing or comprehending linguistic discourse, lend more importance to some information than to other information.[6] In the following sections we will then see evidence of how linguistic categories function with regard to the distinction between foreground and background.[7]

2.2. Aspect in discourse. Grammarians of Latin and Greek, who have produced some of the most detailed grammars in existence, have been long aware, especially with regard to narrative discourse, of the role of aspectual contrasts in providing different sorts of information in extended texts. They point out, for example, that the Latin "perfect" and Greek "aorist" provide the basic narration, that is, the presentation of the central sequential events, whereas the "imperfect" in these languages is the verb form of description, the depiction of attendant circumstances (Bennett 169-70; Goodwin 268-72; Moore 74; Schwyzer 277). More recent analyses of aspect in other languages make similar judgments about the function of the contrast of perfective vs. imperfective in narrative discourse. Consider, for example, what Forsyth (9-10) says about verbs in a Russian text: "Each perfective verb denotes an action which is a new event, bringing about, or at least marking the transition to, a new state of affairs, and thus carrying the narrative forward. The imperfective verbs, on the other hand, do not present dynamic changes, but rather facts relating to the background..." Completely complementary to this analysis is that of Diver for Homeric Greek and Reid for French.

For an example from a non-Indo-European language, we note Jones and Jones's discussion of aspect in Zapotec (Mexico). In the Cajonos variety of this language, the verb is inflected for four aspects (or mode-aspects): "completive" (past time, perfective), "habitual" (general, customary, on-going, imperfective), "potential" (ability, future time), and "stative" (non-actional states). In analyzing a narrative text from this language, Jones and Jones find that the completive aspect marks events which are "important in the plot progression," those which constitute the "backbone events" of the narrative. The other aspects, however, serve to give "background information": "less significant events," "elaboration or extra information, such as descriptions of scene or characters, or minor events concurrent with major events."

The general conclusion, discussed in some detail by Hopper (1979), is the following: If a language has a contrast between a perfective (completive, nondurative, punctual) aspect and other aspects, then part of the meaning of the perfective aspect, at least in narration, is to specify major, sequential, foregrounded events, while part of the meaning of the contrasting non-perfective aspects, particularly an imperfective, is to give supportive background information.

2.3. Mode in discourse. If we assume that the distinction between foreground and background is a useful one, then it is not difficult to see that modality plays a role here as well. At least under normal circumstances, one would expect people to be more interested in what is factual or real. What someone asserts as actually happening or having happened is likely to be closer to the center of attention — the foreground — than what did not happen, or might happen, or could happen, or should happen, or perhaps happened, or what someone wants to happen. Grimes (65), who refers to such latter situations in (narrative) discourse as "collateral information," explains their function as follows: "Collateral information, simply stated, relates non-events to events. By providing a range of non-events that might take place, it heightens the significance of the real events." Note that a major domain for the occurrence of non-eventive modes such as subjunctives and optatives is subordinate clauses, which typically contain, according to Townsend and Bever (1-5), "less important information," "background information," or the "context or setting" for the more important information provided by main clauses. Correlating aspectuality and modality with the distinction between foreground and background, we can therefore understand more clearly the tendency for non-perfective aspectuality and non-eventive modality to go together: they both serve to provide background information in discourse.

2.4. Tense in discourse. The situation with regard to the category of "tense" is more complex, since the shifting deictic nature of temporal refer-

ence is involved. In an language such as English, the usual way of referring to the present is with the "present tense" (or "immediate" tense-mode), and the usual way of referring to the past is with the "past tense" (or "remote" tense-mode). When a speaker uses the "present" to refer to the past, this has, according to many analysts (e.g. Leech 6-8; F. Palmer 44), the effect of making an account more "vivid": or, we might say, of bringing it into the immediate foreground. Contrariwise, using the "past" to refer to the present has the effect of downplaying the certainty, immediacy, or reality of the assertion, that is, backgrounding it (cf. the "polite past" and conditional in section 1.1 above).

One wonders how widespread such nontemporal uses of "tenses" are in the languages of the world. In English, at any rate, their use would appear to be quite restricted. Not every speaker of English routinely uses the "historical present," nor does everyone routinely use the "polite past" (although polite conditionals such as *I would like...* are quite common). So rather than being general foregrounding and backgrounding devices, they would seem to be rather special stylistic effects that some speakers are more prone to use than others. For languages which have an explicit "future tense," we might further hypothesize that verbal form also characteristically belongs to the background, since it functions to give predictions, intentions, and desires rather than the narration of actual events.

2.5. Voice in discourse. The situation of voice in discourse is more complex still, since languages differ considerably as to how they organize noun-verb relations. One sort of organization is common among western Indo-European languages, both modern and ancient. In these languages, the preferred, normal, neutral transitive clause takes the actor (agent or experiencer) as subject. In other words, these languages, such as English, German, Dutch, French, Greek, and Latin, are actor-oriented (cf. section 1.4). As numerous statistical studies (Gonda 347-8; Jespersen 168; Svartvik 141) have shown, passive constructions in these languages are less frequent than actives, and indeed in most genres of discourse passives tend to occur only when the actor is not mentioned. Hopper and Thompson (99) also point out that passive constructions tend to occur in backgrounded portions of texts: in three English texts which they studied, 12% of backgrounded clauses were passive, but only 4% of foregrounded clauses were passive. Assuming that animate entities are more likely to be in the foreground of a text than inanimate ones (see below), and that eventive modality is more salient and thus part of the foreground as well, we find, as Hopper and Thompson point out, a further

tie in English between active as foreground, passive as background: Svartvik's (49-50) statistics from a number of English texts show that 27% of active clauses have inanimate subjects, while 81% of passive clauses have inanimate subjects, and further, that passives are 30% more frequent with modal auxiliaries (especially *can, could,* and *may*) than without.

In some Austronesian languages, however, the situation is quite different. The Philippine language Tagalog, for instance, has a morphological category of the verb called "voice" (Bloomfield 153-5) or "focus" (Schachter and Otanes 283ff).[8] The "active" or "actor-focus" occurs when the subject of the sentence is the actor (agent or experiencer) and predominantly when the goal is indefinite. The "passive" voices or "non-actor-focuses" occur when some entity other than the actor is the subject, especially when this other entity is definite. As students of Tagalog and other Philippine languages have long known (e.g. Bloomfield 153-5), "passive" or "non-actor-focus" constructions in these languages are greatly preferred over "active" or "actor-focus" constructions, due especially to the function of the "voice" or "focus" system in indicating definiteness or indefiniteness of a goal. Because of a greater salience of definite entities in discourse, the Tagalog "passives" or "non-actor-focuses" tend to occur in foregrounded portions of Tagalog texts, while the "active" or "actor-focus" tends to occur in the background (Hopper and Thompson 86-93). In contrast to English, then, Tagalog is more goal-oriented. We can only conclude that there is no simple widespread relationship between voice and discourse strucure as there apparently is for tense, mode, and aspect. In short, languages differ in this respect.

2.6. The salience of linguistic categories. The matter of voice, which essentially concerns noun-verb relations, brings us beyond a discussion of verbal categories to a discussion of the categories of nominal expressions associated with verbs (cf. section 1.3 above). Categories to be considered are those such as person, number, animacy, humanness, definiteness, and the like. A number of investigators both of intrasentential syntax and of extrasentential discourse have stated that the divisions of these categories can be ranked according to which division is somehow more prominent or important with regard to certain properties of syntax or discourse. From Comrie's (MSb) "animacy hierarchy," Givón's (152) "topicality hierarchy," Hopper and Thompson's "transitivity hierarchy," Reid's distinction of "focus," Silverstein's "agency hierarchy," and Timberlake's "individuation hierarchy," we can put together a table (Table 1, part A) whereby these nominal categories are separated into what I shall call more salient and less salient subcategories.

The importance of what I am calling the division into more and less salient in synchronic and diachronic syntax is included in the papers just cited. For instance, these differences in salience determine, in numerous languages, features of noun-verb agreement, the marking of subjects and objects, potentialities of noun phrases' being agents, subjects, or topics, and certain types of morphological and syntactic change. As we might expect, this division has a major place in discourse study as well. Hopper and Thompson, for instance, point out that the categories under the "more salient" column tend to be in foregrounded portions of discourse, while categories under the "less salient" column tend to be in the background. Reid, using the terms "high focus" (= more salient) and "low focus" (= less salient), suggests for nominal categories in French discourse essentially the same division.

TABLE 1

SALIENCE IN LINGUISTIC CATEGORIES

	MORE SALIENT	LESS SALIENT
A.	human	nonhuman
	animate	inanimate
	proper	common
	singular	nonsingular
	concrete	abstract
	definite	indefinite
	referential	nonreferential
	count	mass
	nonthird person	third person
B.	perfective	nonperfective
	present-immediate	nonpresent-remote
	eventive	noneventive
C.	transitive	intransitive
	actional verb	stative verb
	deliberate action	accidental action
D.	main clause	subordinate clause
	foreground	background

The point that I have made in the above sections about the role of verbal categories in discourse, complementary to the analysis of Hopper and Thompson and to that of Reid, is that verbal categories can also be ranked according to salience, namely, as given in Table 1, part B. Hopper and Thompson further claim that certain other properties of verbs can be ranked according to high versus low "transitivity." Translating their labeling into mine of more versus less salient, we have further the distinctions in Table 1, part C. We can also add to this list the fact that, as Townsend and Bever have determined experimentally, main clauses are more salient than subordinate clauses. Finally, almost by definition, foreground in discourse is more salient than background (Table 1, part D). In the following section I will propose an explanation of why Table 1 is as it is.

3. Figure and ground. Let assume that the particular line-up of linguistic categories into "more salient" and "less salient" as outlined in the previous section is valid for a wide variety of languages, not only within the bounds of the sentence, but also in extended discourse. The authors cited above suggest a number of answers as to the source of this organization, including the following: (1) People are more interested in other human beings (or at least in animate entities); (2) People tend to place themselves at the center of attention; (3) Individuated — especially concrete, definite, singular, countable — entities are more apt to attract interest than their opposites; (4) The real, the certain, the positive, the immediate, the bounded, the completed, and the dynamic are more effective in moving a discourse forward, to constitute the foregrounded portion of a text, than their respective contrasting properties, which form the supportive background. The point of this section is not to deny the usefulness of these explanations. What I would rather like to suggest is that these explanations are perhaps not general enough, but may be specific cases of the innate, universal perceptual distinction between figure and ground.

The analytical distinction between figure and ground goes back to the Gestalt psychologists of the early twentieth century and has continued to receive considerable attention in psychological theory. For a concise explanation of what is involved in separating figure from ground, I cite the following paragraph from a popular modern introductory psychology textbook (Krech, Crutchfield, and Livson 264):

> As we look at the parts of any differentiated field, we notice that almost invariably one part (the *figure*) stands out distinctively from the rest (the *ground*). Figure-ground differentiation is the simplest and most primitive form of perceptual organization. It seems to be present at the very beginnings of visual

perception. Newborn infants can follow an object (figure) with their eyes as it moves across a homogeneous ground.

But what determines which part of a configuration will "stand out distinctively," or, in other words, be the most salient? From a number of works which deal with this matter (Krech, Crutchfield, and Livson 264; Rock 253-63; Solley and Murphy 262-87; Zusne 113-24), we can make a table (Table 2) of properties likely to characterize figures and grounds. Note that the contrasts are relative and applied by the cited authors to visual perception. [9]

We are of course making an analytical synaesthetic jump by applying the figure-ground distinction to nonvisual linguistic phenomena. [10] It would be strange, however, if this distinction, which Solley and Murphy (285) call "extremely fundamental to all perception," had no relevance to how human beings use language to communicate experience. The hypothesis which I would in fact like to present is that linguistic categories of the sort mentioned above function to differentiate linguistic figure from linguistic ground: the speaker uses such categories to structure an utterance (of one or more sentences) into more or less salient portions, and the listener uses such categories as clues to interpreting the speaker's verbal picture.

TABLE 2

CHARACTERISTICS OF FIGURES AND GROUNDS

FIGURE	GROUND
thing-like, solid, discrete	unformed, diffuse, shapeless, continuous, unbroken
well-defined, tightly organized	less definite, unstructured, loosely organized
contoured, surrounded, bounded, enclosed	boundless
localized	unlocalized
with distinguishable parts	without distinguishable parts
small	large
near	far
above, in front	below, behind
more impressive color	less impressive color
greater contrast	lesser contrast
stable	unstable
symmetric	irregular
"meaningful," familiar	"meaningless," unfamiliar

As a first example, consider the domain of aspectuality, in particular the distinction between perfective and imperfective. In terms of figure and ground, the principles of the Gestalt psychologists would predict that the bounded, punctiliar perfective is more figure-like and the unbounded, linear imperfective more ground-like. The greater salience of the perfective figure in discourse as opposed to the lesser salience of the imperfective ground naturally follows from the perceptual principles involved. In similar fashion, the figure-ground distinction suggests that "present" tense, referring as it does to more immediate events, is more figure-like than the more remote "past" or projected "future" tenses, and further that eventive modality — reality, actuality, certainty — is more figure-like than the diffuse, boundless, unlocalized non-eventive modality of hypotheticality, negation, potentiality, and doubt. Likewise, transitive and actional constructions are figures with regard to intransitive and stative ones: a transitive situation is, so to speak, bounded by including the domain to which the action applies, while the intransitive has no such specified limit; a state is, in contrast to an action, typically boundless, continuous, and undifferentiated.

With regard to nominal categories, the figure-ground distinction is particularly clear. No justification seems necessary to assert that entities referred to by singular, concrete, definite, referential, or count noun phrases would tend to be perceived as figures against a ground of entities designated by nonsingular, abstract, indefinite, nonreferential, or mass noun phrases. The principle of "individuation" invoked by Timberlake and by Hopper and Thompson — called "individualization" by Reid — is in fact a prominent feature of perceptual figures (cf. Miller and Johnson-Laird 39). And since we as human beings are more apt to be interested in our conspecific creatures, or at least in animate entities which resemble us or are important to us in various ways, then human or animate entities, as more "meaningful" or "familiar," are more likely to be figures than nonhuman or inanimate entities. Further, the characteristic properties of figure and ground suggest that speaker and addressee will be figures against a ground of other entities not directly involved in basic face-to-face conversation. We note here the remark of MacWhinney (154) as he discusses perceptual factors which influence choice of "starting points" for sentences: "It may be that humans perceive themselves as figures with the external world as ground." Going beyond nouns and verbs, Townsend and Bever, as well as Talmy, have drawn an explicit parallel between main clauses as figures and subordinate clauses as grounds. And beyond the boundaries of the sentence, the figure-ground distinction, essentially equivalent as far as I can

tell to the distinction between foreground and background, has received application to the study of discourse from Longacre (1968:30-222) and from Jones (3). [11]

The evidence and interpretive hypotheses from a number of diverse sources are mutually reinforcing and mutually complementary.

1. Verbal categories blend and associate, and indeed they tend to blend and associate in certain ways rather than in others (e.g. imperfective aspectuality and non-eventive modality).

2. Verbal categories and nominal categories are apt to correlate in specific ways (e.g. "individuated" entities with perfective, "non-individuated" entities with imperfective).

3. Verbal categories, as well as nominal categories, play important roles in foregrounding and backgrounding information in discourse (e.g. perfective foreground, imperfective background).

4. A fundamental organizing principle behind this apparent diversity of facts is the figure-ground distinction. Human perceivers do not lend equal weight to all incoming sensations, but notice some as more salient figures which "stand out distinctively" in front of a less salient ground. Linguistic categories such as aspect, mode, person, definiteness, and animacy, along with broader divisions of clause, sentence, and discourse, have as at least one of their functions the sorting of information conveyed by linguistic means into greater and lesser degrees of salience, in other words, figuring and grounding. By a simple principle of association, figures tend to go with figures and grounds with grounds, resulting in the overlappings and relationships summarized in points one through three above.

Language is of course not so straightforward that the figure-ground difference will explain everything perfectly. For one thing, the figure-ground distinction is not a simple one, but rather what philosophers of science call a "cluster concept": a notion with a number of defining factors, no one of which necessarily predominates in any given situation, and some of which may upon occasion conflict. Consequently, one should not expect simple all-or-none compartmentalization, but prepare to weigh numerous contributing influences. [12] Many scholars have pointed out relationships, for example, between past tense and perfective aspect: a less salient, ground-like category with a more salient, figure-like category, contrary to the sort of association one might expect from reading the above exposition. Such a relationship doubtless arises from a particular discourse genre, namely past narration, when perfective verbs specify central sequential events. The deictic nature of tense,

along with the different logical and epistemic statuses of the past, present, and future times, together with the incompatibility of certain tenses and aspects (cf. Comrie 1976:66-86), render the relations between tense and aspect especially complex, to the point that any application of figure and ground as an explanatory tool may not here be useful.

Second, the figure-ground distinction is only one principle of perceptual organization. Other major principles include the grouping of sensations together according to perceived similarity, the satiation and shift of attention, the perception of movement, space, and depth, and the phenomenon of "object constancy." Indeed, the Gestalt theory of perception is only one of a number of apparently competing, but perhaps actually complementary, approaches to perception in current psychology. One particularly problematic area is the fact that Gestalt theory makes strong claims about universal innate perceptual mechanisms, while acquired individual, social, and cultural dispositions clearly play a role in determining, among other things, perceived figures and grounds. The implications of such factors for the organization of language are profound, as in, for example, the difference in viewpoint or orientation discussed in sections 1.4 and 2.5 above. We note further the lack of any universal ranking between first- and second-person pronouns (Comrie MSb; Silverstein), and the existence of languages in which non-singular number ranks above the singular in grammatical salience (Silverstein). Clearly other factors are involved here besides the notions of "individuation" or "boundedness" which count so importantly in the figure-ground distinction, e.g. factors such as markedness, perhaps sociocultural motives for exalting or humbling speaker or addressee, and a possible way of viewing a plurality as somehow weightier than an individual. As with tense, the deictic, indexical nature of the category of person, especially as this intersects with the category of number, does not admit of simple universal schematization (cf. Silverstein: 165-6, note 9). Languages can and do differ from one another in their grammatical organizations, just as individuals differ from one another in the cognitive strategies that they employ to solve problems and as groups of individuals differ in their cognitive styles.

What, then, is the usefulness of viewing grammatical organization in terms of the figure-ground distinction, if it does not always predict the facts of individual languages correctly? Above all, generality is a highly valued property of scientific explanations, hypotheses, and theories, even though the most general statement sometimes fails to be the most accurate. Now if a certain principle explains, at least partially, certain phenomena in two different

domains of inquiry — e.g. visual perception and grammatical organization — then it should be more esteemed than a principle which applies only to one domain. With certain exceptions, the figure-ground principle appears to underlie many of the "hierarchies" which have been proposed to explain the nature of linguistic categories in grammar and discourse: e.g. Comrie's "animacy hierarchy," Givón's "topicality hierarchy," Hopper and Thompson's "transitivity hierarchy," Silverstein's "agency hierarchy," and Timberlake's "individuation hierarchy." The ranking of human over nonhuman, count over mass, animate over inanimate, perfective over imperfective, and so on which these hierarchies include follows quite well from the criteria which perceptual psychologists have claimed to be important in separating visual figure from ground. The figure-ground distinction, then, appears to be a very broad sort of contrast which applies across traditionally separated areas of human cognition and human behavior. It would be foolish, however, to reduce all of linguistic structure to this contrast, just as it would be overly simplistic to reduce all of visual perception to it. The goal of this paper is therefore not to promote the figure-ground distinction as *the* principle of grammatical organization, but to call attention to it as *a* principle which may work alongside others (and which may conflict with others) in determining why human languages are as they are. The point is not to close doors, but to open doors in the continuing search to explain the nature of language.

NOTES

1) The present work is an abbreviated and revised version of a paper circulated to participants of the tense-aspect symposium in April, 1979. I am grateful to the following participants of the symposium for their incisive and perceptive comments: Lloyd Anderson, Wallace Chafe, Bernard Comrie, Talmy Givón, Dan Slobin, and Sandra Thompson. Other useful criticisms have come from Robert Longacre, Larry and Linda Jones, Charles Hockett, and Linda Waugh. Travel funds to allow me to attend the symposium were kindly arranged by William Baker (Vice-President for Academic Affairs) and Bob Perkins (Dean of the Graduate School) of the University of Texas at Arlington, where I was teaching when I wrote this article.

2) I use "eventive modality" to refer to what is asserted as actually happening or having happened (positive, certain assertion of an actual event), "non-eventive modality" to refer to the opposite (negative, potential, possible, hypothetical, contrafactual, dubious action). This contrast seems to be equivalent to that of "realis" and "irrealis" which is common in the current literature.

3) In a number of languages of eastern Europe and western Asia, there is a close formal similarity, if not sometimes identity, between perfect aspect and "inferential mode" (Comrie 1976:108-10; see Slobin (this volume) for an extended example from Turkish). The notion of "current relevance" inherent in the perfect aspect apparently can involve a great amount of subjective judgment on the part of the speaker, leading to its extension in a number of semantic directions (cf. Slobin, and Li and Thompson, both in this volume). Many of these directions do indicate non-eventive modalities (e.g. inference), but the role of the perfect in verbal systems is so special and so complex that I will exclude it from systematic treatment here.

4) The perfect and perfective at least share the semantic feature of completion, which appears to be most important here.

5) In actual fact, Grimes's (51-70) use of the term "background" is more restricted than that of the other authors. For Grimes, "background" is only one sort of non-primary information in discourse, the others being "setting," "evaluations," and "collateral." I am here using the term "background" to subsume all of these four sorts. Longacre and Levinsohn, and Longacre (1979, MS), distinguish "backbone" (= my "foreground") from "backgound."

6) The distinction between foreground and background is not necessarily binary. Some authors (e.g. Jones and Jones) find different levels of foreground and background. Cf. Diver's four degrees of "relevance" in discourse. Without denying the usefulness of such gradient categorization, I will for the sake of simplicity use only the basic two-way division.

7) I include here primarily the use of linguistic categories in narrative discourse. For some indication of the complex intersection of linguistic categories and discourse genre, see Longacre (1979, MS).

8) Bloomfield does not actually use the term "voice," but by using the terms "active" and "passive" strongly implies a voice-like contrast.

9) For a convenient bibliography of psychological work on figure-ground perception, see Zusne (412-6).

10) But note that other terminology for discussing certain features of linguistic structure stems from visual analogies: "point of view" (e.g. in a novel), "focus" (used in a number of different ways in linguistics), not to mention the term "aspect." Cf. also the term "viewpoint" in DeLancey (this volume).

11) For other parallels between the figure-ground distinction and linguistic structure, see: Carroll, Hockett, MacWhinney. Correlations of figure-ground with markedness (differing from the view expressed in this paper, and perhaps deserving further exploration): Greenberg (60-1), Waugh (MS), van Schooneveld.

12) "Cluster concept" in the philosophy of science: Achinstein (1-66), Suppe (73ff.). For a recent application to linguistics of the notion of "cluster concept," see Keenan (312).

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