

THE SEMIOTICS OF A. J. GREIMAS: AN INTRODUCTION

MARVIN KATILIUS-BOYDSTUN
College of St. Francis

Algirdas Julius (or Julien) Greimas was born in Tula, Russia, on March 9, 1917, of Lithuanian parents.¹ He graduated from Rygiškių Jono gimnazija in Marijampolė, Lithuania in 1934, studied law at Kaunas University, and completed his undergraduate studies in France, graduating from Grenoble University in 1939. He began graduate studies in France, but returned in 1940 to Lithuania, where he taught, worked as an editor, and wrote literary-critical articles and more broadly based cultural criticism (which he continued to write for émigré periodicals in the 1940s and 50s). His most recent work in Lithuanian includes two books on mythology, *Apie Dievus ir žmones* (On Gods and Men), published in 1979, and *Tautos atminties paieškos* (In Search of National Memory), soon to be published. After emigrating from Lithuania in 1944, Greimas studied at the Sorbonne, receiving his doctorate in 1949. His thesis was on the vocabulary of fashion (a topic later popularized by Roland Barthes). As a graduate student, Greimas specialized in lexicography, and his work has continued to exhibit scrupulous concern for taxonomies of exact, interrelated definitions.

The beginning of a long and distinguished academic career began in Alexandria, Egypt, where Greimas accepted a position as docent in 1950, teaching French. At Alexandria, he met Roland Barthes, whom he introduced to the linguistic methodology of Roman Jakobson. Barthes recognized the possibilities for the study of signification in human behavior inherent in such a linguistics, and soon became the champion of structuralism, the linguistically based study and critique of culture that dominated the French intellectual scene in the 1950s and 60s. Greimas became professor of language and French grammar at the University of Ankara, moved to the University of Istanbul, then to the University of Poitiers, and in 1965, succeeded Barthes as Director of Studies in the Social Sciences at l'Ecole Pratique des Hautes Etudes, Paris, a position he has held for nearly 25 years. Since the late 1960s, he has been the central figure in the Paris School of Semiotics, a group of scholars working under his guidance through the 1970's and 80s.²

Greimas's seminal work is *Semantique structurale* (1966), which has been translated into English as *Structural Semantics* (1983). His work has developed considerably since 1966, but all its essential features had been at least adumbrated by then. The central tenets of his theory and methods have been presented in two "analytical dictionaries" written in collaboration with J. Courtes, the first of which has been translated into English as *Semiotics and Language* (1982).

Other important books as yet untranslated into English include the essay collections, *Du sens* (1970) and *Du sens II* (1983), and an exhaustive application of semiotic method to a literary text, *Maupassant* (1976). Essays from both *Du sens* volumes and elsewhere have been translated and collected as *On Meaning* (1987).³

Greimas's theory is so carefully articulated and so complex that any attempt to summarize it oversimplifies to an even greater extent than introductions usually do. However, it is possible to sketch an outline of what commentators agree are the salient features of his achievement.⁴ It can be said that there are three major aspects of Greimasian semiotics and that these correspond roughly to phases of Greimas's career. The first aspect is primarily theoretical, a working out of Saussurean linguistics, especially as developed by Roman Jakobson and Louis Hjelmslev, to establish basic semantic principles. The most notable accomplishment of this effort is the "elementary structure of signification," or as it is now more commonly known, the "semiotic square." The first phase begins around 1950 and extends into the late 1960s. Overlapping the first, the second phase could be said to last from the early 1960s through the mid 70s. The main focus here is "narrative grammar," an attempt to develop a syntactic analysis of discourse. "Modalization," the concern of a third phase encompassing the 1970s and early 80s, is a transformational process linking more abstract, deep structures with perceptible surface structures of language or other systems of meaning. Greimas's career is not over, but it could perhaps be said that he has entered a phase of consolidation in the 1980s, represented by the summarizing work of the analytical dictionaries.

Before considering Greimas's work directly, it will be useful to glance at its background. Semiotics as practiced by Greimas and his associates grew out of French structural-ism, in its attempt to realize Ferdinand de Saussure's science of "semiology," projected early in this century:

A science that studies the life of signs within society is conceivable; it would be a part of social psychology and consequently of general psychology; I shall call it *semiology* (from Greek, *semeion* "sign"). Semiology would show what constitutes signs, what laws govern them.⁵

(Until the 1970s the term "semiology" was used in France, but now "semiotics," the American usage, is preferred on both sides of the Atlantic.) French structuralism and Greimasian semiotics are grounded in three fundamental linguistic principles—*sytnchrony*, *difference*, and structural levels—proposed by Saussure, developed by other linguists, and applied notably in anthropology by Claude Levi-Strauss, in history by Michel Foucault, in psychoanalysis by Jacques Lacan, and in literary/cultural essays by Roland Barthes.

The first Saussurean principle establishes an analytical rather than a developmental approach, by distinguishing *diachrony*, historical development, from *synchrony*, the system of relations that exists by itself at any given moment. Saussure's analogy (which is not perfectly applicable to language but which perfectly illustrates the distinction) is to a chess game, describable in terms of any one of a sequence of positions as if frozen in time (synchrony) or as the sequence of positions that produce the positions (diachrony). The great achievement of nineteenth-century philology was diachronic, the discovery of language families, reconstruction of Indo-European roots, etc. But there are important aspects of language that history can't explain; the nature of meaning, for instance, eludes etymology, which only pushes a mystery deeper into the past. After Saussure, linguistic studies became synchronic, essentially relational and subject to logical analysis of current data.

*Difference*⁶ the second fundamental Saussurean principle, is the determinant of meaning in a synchronic analysis. In linguistics as Saussure conceived it, the meaning of the word cat has nothing to do with any bewhiskered, meowing quadruped but is precisely determined by its differences from other combinations of sound in English. The sound (*ket*) is absolutely unique (leaving aside functionally irrelevant differences in pronunciation by individual speakers), distinguishable, for instance, from *bat*, *cot*, *Kate*, *cats*, etc. Of course there is such a thing as a referential relation between cat and a certain species of domestic felines, but understanding that relation is not the business of linguistics, which can analyze cat on the basis of its linguistic properties alone, whether the word refers to a pet, a jazz musician, or nothing at all. Greimas's semiotic analysis, as we will see, can tell us more about the meaning of *cat*, but still from a purely linguistic perspective.

The greatest successes of Saussurean linguistics were achieved in phonology before 1940. Roman Jakobson and his associates related sound and meaning in language by a methodology that became the favored model for structuralist analysis. Applying the principle of difference, they discovered that any language has only a limited number of minimal meaningful sounds (or more strictly speaking, a limited number of minimal meaningful sound ranges) corresponding, roughly, to its written alphabet if it has one. A speaker emits a stream of sound, punctuated here and there by pauses of varying lengths, undergoing changes in pitch and loudness, and exhibiting other measurable changes. By observing communication (operationally de-fined as two or more speakers' exchanges of and reactions to such streams of sound) it is possible to isolate units of meaning and to reduce those units to a fairly small inventory, the perceptible building blocks of meaning in a language.

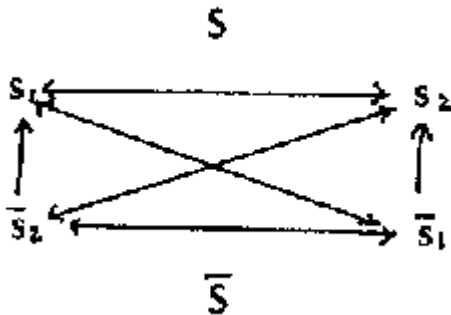
Each unit, called a *phoneme*, is a "bundle" of *distinctive features*, which serve to distinguish phonemes from one another. The distinctive feature "voiced," for instance, distinguishes the phoneme (b) from the phoneme (p), which has the distinctive feature "unvoiced." Other differences, always conceived as binary oppositions, reveal other distinctive features. A phoneme will have as many distinctive features in its bundle as there are applicable binary oppositions, and its definition will consist of a list of its distinctive features. Thus, the principle of difference leads to a principle of *binarity*, successfully applied in phonology and with considerable power, although with less empirical rigor, in other fields. For instance, Levi-Strauss has analyzed "mythemes," Foucault has his "epistemes," and Greimas marshalls a host of "-emes," including "sememes," "classemes" and "semes."

The third fundamental principle of Saussurean linguistics is that of *level/s*. The facts of language observable in communication logically presuppose the capability of producing those facts. Therefore, a hidden system of grammar, *langue*, must underlie the production and reception of spoken language, *parole*. The same distinction is at the heart of Noam Chomsky's "generative grammar" in linguistic "competence" as opposed to "performance." Competence inheres in a grammar that enables transformations of a more basic "deep structure" into a "surface structure" (composed of phonemes) constituting the speaker's performance, actual use of the language to communicate (or perhaps to think or engage in speech acts).

Greimas enters the picture as an important structuralist in 1956 with the publication of an article titled "L'actualité du saussurisme," which proposes the essential theoretical basis of all his subsequent work: The linguistic perspective of Saussure uncovers fundamental structures of meaning underlying human cognition and behavior. The discovery, description, and elaboration of these structures can ground the "human sciences" (including both what we call the "humanities" and what we call the "social sciences") on a logically impeccable and empirically verifiable basis, virtually equivalent to the physical sciences. Greimas took upon himself the supremely ambitious project of investigating the

general conditions governing signification in human thought and activity, in the hope of establishing the foundations of a comprehensive science of man.

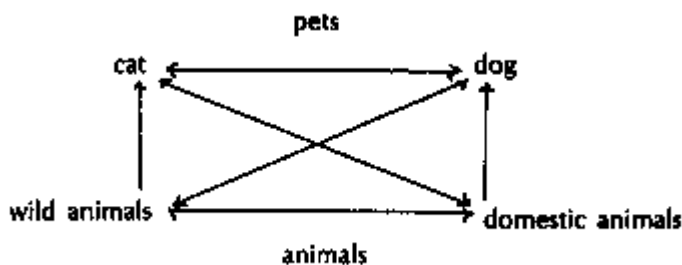
At the heart of Greimas's theory is the principle of difference as deployed in the phonological model. Since the significance of any element in a system depends upon its differences from other elements in the system, there cannot be a uniquely meaningful element. The minimum signifying unit would itself have to be a structure, like the phoneme, with a bundle of (at least two) elements. The "elementary structure of signification" meets this absolutely minimal condition in the opposition of "semic units" (analogous to phonemes) which are bundles of "semes" (analogous to distinctive features).⁷ Two semes (s_1 and s_2) exist as "contraries." They are conjoined, in a semic unit (S), since they are meaningful only in relation to each other, and disjoined, since they are opposed to one another. Their opposition, however, does not exhaust possible significations, since each seme may be logically contradicted (s_1 by \bar{s}_1 , and s_2 by \bar{s}_2). The semic unit (\bar{S}) of the contradictories ($\bar{s}_1 + \bar{s}_2$), furthermore, provides the necessary difference to establish the meaningfulness of S . The structure can be represented as a diagram, the "semiotic square":



Each horizontal "axis" ($S = s_1 + s_2$) and ($\bar{S} = \bar{s}_1 + \bar{s}_2$) constitutes a contrary relation. Each transverse "schema" ($s_1 + \bar{s}_1$ and $s_2 + \bar{s}_2$) constitutes a contradictory relation. And each vertical "deixis" ($s_1 + \bar{s}_2$ and $s_2 + \bar{s}_1$) constitutes a relation of simple implication whereby \bar{s}_2 implies s_1 and \bar{s}_1 implies s_2 but not the reverse. Furthermore, there is a part-to-whole relation between S and \bar{S} , since \bar{S} is always more general than S . S is the "neutral axis," and \bar{S} is the "complex axis;" s_1 is the "positive term," s_2 the "negative term," \bar{s}_1 (both s_1 and s_2) the "complex term," and \bar{s}_2 (neither s_1 nor s_2) the "neutral term."

The square is a map of logical possibilities. As such, it can be used as a heuristic device, and in fact, attempting to fill it in stimulates the imagination. The puzzle pieces, especially the neutral term, seldom fall conveniently into place. The following construction of a square, then, should be seen as a tentative attempt to show how the structure works rather than as a definitive illustration. Playing with the possibilities of the square is authorized, since the theory of the square allows us to see all thinking as a game, with the logical relations as the rules and concepts current in a given language and culture as the pieces.

'Now, if we think of cat (s_1) as a pet (S), then an appropriate contrary would be dog (s_2).⁸ The contradictory of a pet cat could be a domestic animal (\bar{s}_1) that "earns its living" rather than merely living as a companion to its master, a category that would include both cats and dogs, let's say as mousers and herders. The contrary to domestic animals, excluding both pet cats and pet dogs, could be wild animals (\bar{s}_2), a class that includes canines and felines, as well as feral cats and dogs, rendering the implicatory relation valid without including either s_1 or s_2 .⁹ Domestic animals and wild animals belong to the class of animals (\bar{S}), which of course includes pets.



Another way to approach this not-so-simple elementary structure involves locating its level of generality. It is first of all a structure of "immanence" rather than "manifestation," which means that its terms can be understood as prior to, rather than perceptible in, meaningful phenomena (words, images, etc.). At the deepest level of immanence the elementary structure

consists of empty relations. When the relations are filled with objects at the level of manifestation (the level of cat) the relations are implicit rather than merely possible. Thus, the terms of the square can be understood as categories or classes (indeed as "classemes") that exist as necessary conditions for the appearance of their members, "sememes" at the surface level.

At this point it may help to introduce another Saussurean concept, the *sign*. Any meaningful phenomenon (word, photograph, gesture, etc.) is a *signifier* that refers to a *signified*. The sign is the relation between signifier, which is always manifest, and signified, which is always immanent. Cat is a signifier in English that refers to a concept as its signified (Let's say "pet feline") existing in the minds of English speakers. It does not refer to actual cats, as all objects outside of language, like the Kantian thing-in-itself outside the categories, are beyond the reach of language. Whatever is outside a system, in relation to the system, might as well not exist at all. This may be hard to accept at first because we tend to assume an automatic understanding of cat in relation to cats. Instead, Greimas insists, our understanding depends on a network of invisible relation-ships. The semiotic square organizes the possibilities of conceptualizing signifiers, which govern the possibilities of understanding signifiers as they appear in actual communication.

The semiotic square is the essential "paradigmatic" form of Greimasian semiotics, the "form of the content" (a form which is a content) or constitutive structure. A complete semiotics requires both such a paradigmatic axis, which provides a "horizontal" organization of units that move from level to level (deep to surface, immanence to manifestation, etc.) and a "syntagmatic" axis, which organizes units "vertically" at any level. Paradigmatic units are like family members, the elements of sets (nouns, place names, baseball teams, etc.); syntagms are integrated units made by stringing together paradigmatic units (sentences, itineraries, playing schedules, etc.). The syntagmatic aspect of linguistics is syntax, sentence structure, which is observable in communication and therefore well under-stood. But meaning, clearly, is expressed in forms of language longer than the sentence, in *discourse* (messages, stories, etc.).

Any syntagmatic aspect of semiotics has to account for discourse and be compatible with sentence structure. Greimas meets this double requirement by proposing a deep structure underlying both sentences and discourse, the fundamental units of which are *actants*, *functions*, and *qualifications*, corresponding to subjects and predicates in the sentence and to fictional characters and their actions in narrative discourse or thematic subjects and their elaborations in expository discourse.

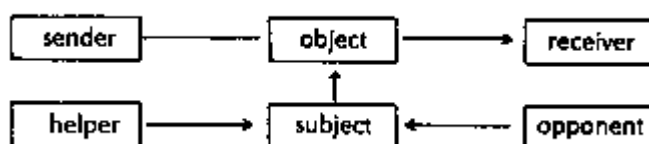
Greimas derives his *narrative grammar* from an analysis of fairy tales done in the 1920s by V.I. Propp, and from Levi-Strauss's commentary on Propp. Propp discovered that all Russian "wondertales" contain the same basic characters and plot. He isolated minimal units, "actants," roles performed by characters and "functions," types of incidents that reappear in an unvarying order.¹⁰ In different tales, for instance, a personification of frost, a goblin, and a bear might all function in the same way to advance the plot, let's say by testing the courage and ingenuity of the hero. Each testing character, then, performs an actantial role, and the testing itself is a function of the plot. Propp found seven actants and thirty-one functions. Levi-Strauss saw that Propp had performed the basic structuralist analysis having discovered minimal units of signification that fit into a definite order; his essay simplified Propp's analysis by applying the principle of binarity.

Step by step, we define a "universe of the tale," analyzable in pairs of oppositions interlocked within each character who—far from constituting a single entity—forms a bundle of distinctive features like the phoneme in Roman Jakobson's theory.¹¹

By performing a reduction of Levi-Strauss's reduction of Propp's actants and functions, Greimas derives a still further simplified and more generalizable model of narrative structure.

In Greimas's scheme, the basic plot includes twenty functions, most of which are in binary opposition, that tell the story of a quest, which begins with an alienation (caused either by a lack or by an act of villainy), proceeds through a series of tests, and ends with a reintegration. A hero, in the actantial role of subject, accepts a contract that wins him a helper in a struggle against an opponent. The struggle is resolved in the attainment of an object, allowing the hero to fulfill a second actantial role, that of receiver. By succeeding in the tests that provide the events of the plot, the hero remedies the lack which precipitated the quest, defeats a villain, and wins a princess bride. Labelling the structural units with letters (A for "contract," C for "communication," F for "contest," etc.), the story can be expressed in what appears to be a mathematical formula ($\bar{p}AC\bar{C}_1\bar{C}_2pA_1\bar{p}_1[A_2+F_2+nonC_2] \dots$ etc.).¹²

Graphically, the "actantial mythical model" takes on a more generalized form and appears as a sort of flow chart.



There are two simultaneous movements in this model, indicating that discourse works in two ways, both modifying and communicating the subject. Greimas identifies the object as knowledge, and the upper level of the diagram is structurally

equivalent to the basic communication situation (sender:message:receiver). The two movements, then, are communication and modification. The story is told, and things change within it. If we generalize "subject" from an actantial role in narrative to an actantial role in more abstract discourse, the model can describe another kind of "story," the way a speaker (or a writer) develops meaning by elaborating upon his or her theme-at the same time as he or she communicates it to an audience. Functions are a property of narrative, which is a "dynamic" form of discourse—things "happen" in it, as if within real time. Forms of discourse that describe phenomena or processes rather than narrating them are "static." In static discourse, predicates are not functions, but *qualifications*, predicated as equivalent to subjects and modified by elaboration rather than narration. In relation to sentences, functions are the objects of transitive verbs, and qualifications are the complements of linking verbs.

Greimas's account of narrative grammar is so abstract that he tends to scare off some readers and annoy others—including influential commentators. Perhaps his narrative grammar can provide a semiotic account of discourse, but the gap between theory and actual discourses has yet to be convincingly bridged.¹³ All of Greimas's work is at a very high level of generality, and it seems to get more and more abstract—and difficult—the further you get along into it. The semiotic square, for all its complexity, is a clearly defined, complete structure. The narrative grammar can be expressed in formulas and charts, but it is less precisely delineated than the square, and the third salient aspect of Greimasian semiotics, the process of *modalization*, is even less definitely developed. Greimasian semiotics is provisionally a science, but like Einstein's physics, it also has a philosophical quality and appeal. It begins with general principles and deduces consequences, in the manner of Einstein's "thought experiments" or Kant's "transcendental deduction of the categories." It is especially interesting, I think, to follow this deductive theme in Greimas's account of modalization, a process which mirrors his method.

Using language is both an active and a passive process. We are controlled by language in the sense that we can't create totally new meanings. Anything we say, even though our sentences may never have been put together in quite that way before, can be supposed to move through us rather than originate in us, since we are merely "switching on" a mechanism that existed long before we were born, passed-down and built-in, like the genes that gave us our eye color, height, and singing voice. However, to use language is to perform an action, something new and of our own free will, and with consequences that range from the trivial ("I'll have chocolate") to the very important ("I do"). Whereas the semiotic square and narrative grammar are focused primarily on language as *utterance*, in his theory of modalization, Greimas turns to the language act, or *enunciation*, attempting to outline the means by which semiotic possibilities are transformed into real words with real consequences.

For Greimas, the transformations that derive a surface structure from a deep structure proceed from highly general, relatively simple, paradigmatic discrete structures to more specific, relatively complex, syntagmatic integrated structures. Greimas gives an analogy to explain how manifested syntagms are generated.

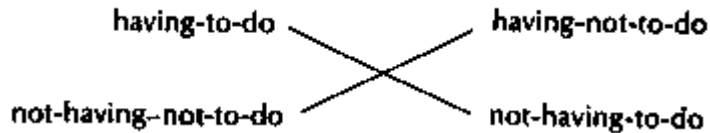
Take a trivial example—you have just seen a movie and you are asked to describe it. In answer to such a question some very simple ideas, which serve as a scheme, will come into your mind, organizing your memorized knowledge; only then will you articulate your memories in sequences and utterances. That is exactly the way I see the generation of discourse.¹⁴

The more complex utterances are activations of the potentialities that inhere in the deep structures, beginning with the semiotic square. The generative trajectory of enunciation, proceeding from *classemes* to *sememes* is analogous to the game "Boticelli." One player chooses the name of a famous person, which the others try to guess by asking yes-no questions that establish general categories within which the person may belong ("dead," "lived before 1600," "artist," "European," etc.). A skillful questioner (who must be answered with a yes to continue) gradually narrows contexts by working more information into the questions. The more and more specific categories leading toward and culminating in the name of the famous person are made possible by the existence of the more general categories that precede them in the process.

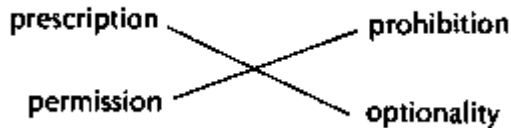
In general, then, modalization follows a trajectory from general to specific. Along the way, transformations shuttle meanings toward manifestation, a feature of Greimas's system that invites comparison to Chomsky's. Greimas uses the terms "competence" and "performance" from Chomsky's grammar, but his model is quite different from Chomsky's. The transformational grammar that developed from Chomsky's work is based on the positing of logical rules for series of operations (negation, question formation, etc.) upon fundamental linguistic elements borrowed from traditional grammar ("noun phrase," "verb phrase," "verbal," etc.). The application of rules to the elements should (if the system were perfect—which it is not) generate all the possible sentences in a given language. Greimas's system is more "pure," relying for its rules on a linguistic principle rather than a logico-mathematical one. Modality is the linguistic equivalent of "influence on" or "modification of," the effect one linguistic element has on another. (For example, modal auxiliaries such as *to do* or *to have* affect the main verbs in sentences such as "She does go there" or "We had run out of time.") Modalization is the process of transforming deep structures in such a way that functions and qualifications, operating as "modalities," produce changes in actants, which surface as subjects whose status, thus, presupposes the logical priority of their predicates. In other words, what is said originates in what can be said, "being-able-to," for instance, necessarily preceding "doing."

Greimas tentatively posits four modalities that operate in Indo-European languages: "wanting," "having-to," "being-able-to," and "knowing." He speculates that such modalities may correspond to semantic categories of the highest generality (similar perhaps to Chomsky's "linguistic universals," or Kant's categories). They are realized according to the possibilities

inherent in the semiotic square, which produces a bewilderingly complex but rigorously logical array of "modal structures." For instance, the application of the modality "having-to" to action in general, "doing," yields "having-to-do," generating the square below.



More specifically, or in terms of actual social forms:



"Having-to-do" can also be applied to "being," as can each of the other modalities, producing extensive inventories of cognitive and social forms.

Finally, then, Greimas's contribution to our understanding of human nature is within the Kantian tradition of establishing a *priori* conditions of possibility for our cognition of the universe and our consequent ability to function in it. He gives us an account of the semiotic constraints whose interaction regulate our patterns of thought, communication, and action. His work has linked thought to the operations of language, and he has helped us to see that mind is the source of action.

1. Most of the biographical information here comes from Jean-Claude Coquet, "Elements de Bio-Bibliographie," *Recueil d'hommages pour Algirdas Julien Greimas*, eds. Herman Parret and Hans-George Ruprecht, 2 vols., n.p.: John Benjamins, 1985: 1: lii-lxxxv, and includes some data from "Greimas, Algirdas Julius," *Lietuvių Enciklopedija*, eds. Antanas Bendorius, et. al., 36 vols., Boston: Lietuvių Enciklopedijos Leidykla, 1956: 7; 475.
2. See Jean Claude Coquet, ed., *Semiotique: L'Ecole de Paris*, Paris: Hachette, 1982.
3. Greimas and J. Courtès, *Semiotics and Language: An Analytical Dictionary*, trans. Larry Crist, et. al., Bloomington: Indiana UP, 1982 has a bibliography of Greimas's writing from 1956 to 1981, as well as relevant works by other authors; Coquet's "Elements de Bio-Bibliographie" is an extensively annotated bibliography that cover the period from 1943 to 1984. Three important essays by Greimas, in English, have appeared in American journals. Together they provide a good introduction to Greimas and correspond, roughly, to the three salient aspects of his work that I will sketch in my essay. The essays are: with F. Rastier, "The Interaction of Semiotic Constraints," *Yale French Studies* 41 (1968): 86-105; "Narrative Grammar: Units and Levels," trans. P. Bodroek, *Modern Language Note* 86 (1971): 793-807; and with J. Courtès, "The Cognitive Dimension of Narrative Discourse," trans. M. Rengstorf, *New Literary History* 7 (1976): 433-4747.
4. Probably the best recent commentary in English has been done by Ronald Schleifer, most accesibly in his introduction to *Structural Semantics*, trans. Danielle McDowell, et. al., Lincoln: U. of Nebraska P, 1983: x1-1vi; and A. J. Greimas and the Nature of Meaning: *Linguistics, Semiotics, and Discourse Theory*, Lincoln: U of Nebraska P, 1987. Other important, though somewhat dated, commentary on Greimas may be found in Jonathan Culler, *Structuralist Poetics*, Ithaca, N.Y.: Cornell UP, 1975; Terence Hawkes, *Structuralism and Semiotics*, Los Angeles: U of California P, 1977; Frederic Jameson, *The Prison-House of Language*, Princeton: Princeton UP, 1972; and Robert Scholes, *Structuralism in Literature: An Introduction*, New Haven: Yale UP, 1974.
5. Ferdinand de Saussure, *Course in General Linguistics*, eds. Charles Bally and Albert Sechehage, trans. Wade Baskin, New York: McGraw-Hill, 1966: 16.
6. *Difference* is a French word, though spelled exactly the same as its English cognate. The differential or "Diacritical" principle can be represented as well in English as in French, and I will use the English word, "difference," in this essay.
7. The best way to present the elementary structure (or the semiotic square) is all at once, but the best way to understand it is a little at a time. Since the square is complete, thoroughly determined structure, it can be described in a paragraph or two, but since its parts are complex logical interrelationships, most of us have difficulty grasping it immediately. That would be something like learning to juggle simply by throwing four balls up in the air and—voilà—juggling. I have begun my account of the square with a bald, abstract description, which I realize is less than considerate of the reader, but I have tried to make the juggling a little easier by elaborating on the relationships in the text and in a lengthy note. I believe the semiotic square is Greimas's most important achievement, perhaps as near as we can come to the deep, semantic equivalent of the phoneme, and thus worth the effort it takes to understand how it works. The elementary structure is introduced in *Structural Semantics* (18-31), and "The Interaction of Semiotic Constraints" is a thorough exposition of the structure in its form as the square.
8. At the deepest level, semes are "indefinable minimal elements," but at intermediate and surface levels, the terms of the

square are filled in.

9. Each delxis is a continuum, which is easy enough to see in the complex term, but not so easy to see in the neutral term. Greimas gives the following example to help elucidate. The neutral term can be clearly understood in relation to a positive "large" and a negative "small." As "average," the neutral term is neither large nor small, though the existence of an "average" implies both "large" and "small," and can be seen as a continuum, since there is no clear-cut dividing line between either "average" and "large" or "average" and "small." (The neutral term thus implies both positive and negative terms by virtue of its continuity with them, but it is only necessary to refer to its implication of the positive term, since its mutual contradiction with the negative term already serves as necessary implication—the same reasoning also applies to the complex term.) Greimas mentions only these three terms, but the complex term on the complete square could be "extreme" with S as "size," and S as "dimension." Now it is easy to see that "domestic animals" is a continuum that implies dogs and cats, especially since the complex term necessarily contains both. The continuity can be imagined as consisting in the affection owners might have for working animals, which gives them partial status as pets, and in the work done by pets as mousers or watchdogs, giving them partial status as working animals, making it impossible to draw the line with preceision between pets and working animals. The neutral term, as usual, is harder to imagine, and I have to stretch matters to make it work the way it is supposed to. We can say that "wild animals" include both felines and canines, though pet cats and dogs are prohibited, and we could also include teral cats and dogs. So, if there are wild felines and canines, there must be at least the possibility of tame felines and canines, which would include cats and dogs, and if there are feral cats and dogs these must have been pets at one time. There is a continuum in the sense that "tame" and "wild" are relative terms with no clear-cut dividing line between them, and who can say when a runaway pet is no longer a pet?

10. *Morphology of the Folktale*, ed. Louis A. Wagner, trans. Laurence Scott, 2nd ed. Austin: U of Texas P, 1986.

11. "Structure and Form: Reflections on a Work by Vladimir Propp," trans. Monique Layton, in Propp, *Theory and History of Folklore*, ed. Anatoly Liberman, Minneapolis: U of Minnesota P, 1984: 182.

12. See Schleifer's introduction to *Structural Semantics* for an argument that Greimas rhetorically adopts the "axiology" of physical science, the terminology and procedures of which lend credence to his project.

13. Perhaps Jonathan Culler, in *Structuralist Poetics*, has been Greimas's most severe American critic. Culler assumes that Greimas derives his narrative grammar from an analysis of surface units of signification, "lexical items," and makes the following assessment.

The suggestion that his theory provides a determinate procedure for the description of meaning cannot be substantiated without precise examples or descriptive procedures and formalization of the rules of analysis. No one would expect Greimas, in the present state of knowledge, to have reached that stage, and he clearly has not done so; but the ways in which he fails cast doubt on the viability of the project itself; it may be impossible, in principle as well as in practice, to construct a model which would derive the meaning of a text or a set of texts from the meaning of lexical items. (85)

Ronald Schliefer defends Greimas against Culler in his introduction to *Structural Semantics* by showing that Culler has mistaken Greimas's intention, assuming that Greimas was undertaking a logico-mathematical demonstration rather than an analysis of cultural and cognitive constraints on possible meanings, which could never be "substantiated" in the ways Culler describes (xi).

14. *Discussing Language*, ed. Herman Parrett, The Hague: Mouton, 1974: 56.