

Automobile Semantics

Author(s): Mark Aronoff

Source: *Linguistic Inquiry*, Vol. 12, No. 3 (Summer, 1981), pp. 329-347

Published by: The MIT Press

Stable URL: <https://www.jstor.org/stable/4178227>

Accessed: 07-02-2019 22:49 UTC

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



JSTOR

The MIT Press is collaborating with JSTOR to digitize, preserve and extend access to *Linguistic Inquiry*

Aesthetic or other universalism, so far as it was consistently carried out, had thus an obvious affinity for a kind of primitivism—inasmuch as anything which was not within the reach of the earliest men, or at least of the earliest practitioners of a given art, plainly was not common to the race. By a similar logic the deists were obliged to declare their creed “as old as the creation.”

A. O. Lovejoy

Chevrolet Monte Carlo and Malibu
Pontiac Grand Prix and Le Mans
Oldsmobile Cutlass Supreme and Cutlass Salon
Buick Regal and Century

These great GM car names offer a new dimension in value.

New car names crop up all the time. And quite often they disappear just as fast.

But when General Motors began redesigning the great cars you see listed here, we knew we had a tradition to uphold.

To provide as much value as we could while still delivering the excitement and styling these names are famous for . . .

So, look. If you want value in your car, you owe it to yourself to test drive some of the most popular names in automotive history.

GM advertisement (1978)

Saussure's theory of value rests on the insight that linguistic units cannot be defined independently, but must rather be treated within a system “où tout se tient”, where everything holds together. The greatest impact of this insight has been in phonology, wherein the basic units, whether they be phonemes or features, are defined in terms of opposition or distinctiveness. At the underlying or phonemic level, it is only the distinctive units which count. In semantics, the theory of value is best represented by the various versions of semantic field theory, which are based on the notion that the senses of related words can be treated as covering distinct areas of a conceptual field. The sense of each word is not independent, but depends on the rest of the words in the field. A word will lose or gain territory through time, but this will always be reflected in the other words in the field.

Recent thought on the meanings of words has shied away from field theory and from related opposition-based theories, such as the semantic marker theory of Katz and Fodor (1963), because they seem to presuppose that the meanings of words are clear things. By contrast, linguistic research is concerned now with accounting for the observation that people do not really know exactly what a word means. Thus we have fuzzy se-

Thanks to P. A. and France for their continuing faith in the value of this article, and to N. G. for the Alfa and the rollerskates which made it possible.

mantics, which attempts (Lakoff (1972)) to account for the observation that people are less secure about calling a penguin a bird than they are about so categorizing a robin. Others (Berlin and Kay (1969), Labov (1978)) have adopted the notion of a prototype to explain the differences between central and peripheral instances of the same thing. Rosch (1973) has even provided good experimental evidence to support the psychological validity of prototype semantics for such things as color. Miller and Johnson-Laird (1976) have suggested that we view lexical semantics as lay theory, a view which allows a person to be mistaken or unsure about the concepts on which semantics rests, while both Putnam (1975) and Kripke (1972) have appealed to nature (in the guise of natural kinds) as a way out of some of our difficulties.

The goal of this article is integrative. On the one hand, as a simple study in lexical semantics, it seeks to demonstrate the validity of the theory of semantic oppositions by showing that the senses of a number of words in one particular domain can be understood only in relation to one another. On the other hand, it will show that these senses are elusive; they change so rapidly and imperceptibly that one person's idea of what a given word signifies may be markedly different from another person's. These changes, though, no matter how rapid, are very regular, and operate totally within the predetermined system of oppositions. Thus, even when we do not know what a word means, we can still discuss its sense in a systematic fashion, precisely because it is not the senses of words which are secure, but rather the conceptual frame within which the senses are arranged. Finally, I will elucidate the relationship between sense and reference in lexical semantics, by showing that the conceptual framework within which the senses of the words under discussion can be understood is far from directly related to their referential properties.

1. Senses for Car Names

The semantic field which forms my example is distinctly mundane, that of the American automobile. I call the field *automobile semantics*. I will restrict it to the names of automobiles and will include no discussion of parts, which form a separate domain. The main object of my study is the meanings of these names. A typical question of automobile semantics is thus, What is the meaning of the word *Chevrolet*? or, equivalently, What is a Chevrolet?¹

The system which I will outline is not a novel one, but is well known to most people who have any familiarity with the marketing classification of American cars. Nor is the knowledge of this system always tacit or unconscious. On the contrary, it is quite generally used in advertising at all levels, and assumed to be part of general American automobile culture. My goal, however, is not to enlighten the automotive industry, but rather to use this well-known classification to elucidate questions of language.

¹ *Meaning* for me is a broad term, including at least sense, reference, connotation, and level of usage. This article does not presuppose a position on the question of whether any of these is more purely linguistic than the others.

Before going on to semantics, I must give some syntactic information. First and most important, car names are not proper names, but rather common nouns. This can easily be shown by the fact that they readily allow determiners and adjectives:

- (1) a blue Chevrolet
two big Cadillacs

In addition, they exhibit the characteristically English peculiarity (Levi (1978)) of appearing as attributives:

- (2) a pink Cadillac coupe
a Chevrolet Impala sedan

This attributive construction is generally used to restrict the modified noun as to subtype, or kind, as the examples below demonstrate:

- (3) city streets
Memphis blues
Chippendale chair
cobalt blue

Of course, cars can have proper names; there are many people who give their cars names. In my household, one car is named Scarface, the other Young Red. But examples like these only serve to underscore the fact that, though some car names may be etymologically derived from proper names, none are proper names synchronically. This means that—unlike proper names, whose semantics is relatively simple, consisting only of reference, and having no sense—car names, like all common nouns, must be possessed of both sense and reference.² To ask what a Chevrolet is is like asking what a table is.

It is clear from examples (2) and (3) that car names classify cars. The name specifies one or more of the following categories: *year*, *make*, *line*, *model*, and *body type*. When designating a car fully, all of these categories are specified in the order given:

- (4) 1972 Chevrolet Chevelle Malibu sedan
year make line model body type

Less specific designations can be made by using fewer than all five categories, again in the fixed order:

- (5) Chevrolet sedan
Chevrolet Malibu
1972 Chevelle

² It has been suggested to me that car names and other brand names, though they may function syntactically like common nouns, are still names semantically, having no sense. One might call this class *common names*. This claim may be valid for such brands as *Maytag* or *Kenmore*, which I discuss below. These denote nothing but the fact that they are marketed by a particular company and thus carry the reputation of that company. It is not valid, however, for American cars, because of the classification system for cars that I will describe below.

As far as I can tell, all categories are optional, and the only restriction is that the year cannot stand alone:

(6) Q: What kind of car do you drive?

A: A Chevrolet; a Chevelle; a Malibu; a sedan; ??a 1972

This restriction is pragmatic; it can be traced to the fact that simply giving the model year of the car is not informative enough. We can therefore give the following phrase structure rule for American car names:

(7) car name \rightarrow (year) (make) (line) (model) (body type)³

There is another category which is not represented in the name, but which is important semantically: *manufacturer*.

I will now discuss each category. The first and simplest category is that of *manufacturer*. Each car can be categorized according to its manufacturer, the major American ones being General Motors, Ford, and Chrysler. The name of the manufacturer may carry connotations, such as Chrysler's reputation for advanced engineering, but it does not have any systematic semantic properties beyond the purely referential one of naming a particular manufacturing company.⁴

Make is more complex than *manufacturer*. Each of the above three companies can be divided into divisions, which stem for the most part from the companies which merged to form the present ones. Originally, each division manufactured a particular car, so that *make* could be defined in the same way as *manufacturer*.⁵ This is no longer true, and the significance of the various makes is now much more complex. We will return to these complexities later. For the moment, the equation of *make* with *division* will suffice. This equation, I should note, is a common one. Most people think that if a car is called

³ There are various ways of treating the null expansion.

⁴ It is perhaps for this reason that the name of the manufacturer does not appear as part of the name of the car, as it does with most foreign cars (e.g. a Renault, a Volvo, a Fiat, a BMW). One cannot call a car made by GM a *GM*, nor could one speak of a *Ford Lincoln*. *Ford* and *Chrysler* do appear as car names, but each is a particular make manufactured by the respective company.

⁵ The similarity between the concepts of *make* and *manufacturer* is reflected syntactically. The manufacturer is generally called by its proper name.

- (i) $\left\{ \begin{array}{l} \text{GM} \\ \text{Ford} \\ \text{Chrysler} \end{array} \right\}$ is putting out a new model.

Though the make is generally a count noun, it can also be used as a proper name:

- (ii) $\left\{ \begin{array}{l} \text{Pontiac} \\ \text{Dodge} \\ \text{Lincoln} \end{array} \right\}$ is putting out a new model.

This is not true of *kind* or *model*:

- (iii) * $\left\{ \begin{array}{l} \text{Chevelle} \\ \text{Le Mans} \\ \text{Horizon} \end{array} \right\}$ is putting out a new model.

The reason for this pattern is the notion that each division is a separate entity, like the manufacturer, which markets automobiles.

an *Oldsmobile*, then it must be made by the Oldsmobile division of General Motors. The makes of American cars which we will be concerned with are as follows:

- (8) General Motors: Chevrolet, Pontiac, Oldsmobile, Buick, Cadillac
 Ford: Ford, Mercury, Lincoln
 Chrysler: Plymouth, Dodge, Chrysler

Makes are ranked according to price category. There are three such categories: *lower-priced*, *mid-priced*, and *luxury*. Thus, of the Ford makes, Ford is lower-priced, Mercury is mid-priced, and Lincoln is luxury. Among GM makes, Chevrolet is lower-priced, while Pontiac, Buick, and Oldsmobile are mid-priced, though Pontiac is ranked somewhat lower, with Oldsmobile and Buick equal;⁶ Cadillac is luxury.

It is important to note two things in regard to price category. First, it is a comparative scale or ranking, not an absolute one: the fact that Chevrolet is lower-priced does not mean that all Chevrolets will be less expensive than all Pontiacs; it means rather that a given Chevrolet will be less expensive than a comparably equipped Pontiac, and so on up the line. An expensive Chevrolet can easily be more expensive than an inexpensive Oldsmobile. It follows that the price ranking is related to prestige. One reason why a person buys a Pontiac rather than a similarly equipped Chevrolet is that the Pontiac carries more prestige. The higher the category, the greater the prestige. Rank is systematic, while prestige is a connotative value, dependent on a combination of rank and other less systematic factors. I therefore assume that prestige is determined by rank, rather than vice versa.

One of the results of the existence of ranks is that makes can be compared, regardless of manufacturer. Chevrolet and Ford are thus equivalent, as are Cadillac and Lincoln. Mercury is higher than Chevrolet, etc. The ranks form a value system, and each make can be placed within this system.⁷

⁶ At the low end, equivalent Oldsmobiles tend to be more expensive than equivalent Buicks, while the opposite is true at the high end. I have simplified matters by balancing the two ends and assuming that the makes are equal, even though they can usually be ranked in a given instance. Nothing of substance hinges on this balance.

⁷ The importance of rank in the significance of a make cannot be underestimated. Two phenomena of recent years show this clearly. The first example is that of the Oldsmobile with the Chevrolet engine. Several years ago, it was discovered that some full-size Oldsmobiles were being sold with Chevrolet engines, without the customer's knowledge. The Chevy and Olds engines were approximately the same, the only major difference being the make. Many of the people who had bought these "hybrids" were furious. There were numerous court cases against GM for the deception, and the affair was finally settled with GM paying millions of dollars in compensation. All along, GM expressed puzzlement, for the interchange of components among different makes is standard practice and is becoming more and more widespread. There was no qualitative difference between the two engines, they said. But the customers and the courts would not buy this. After all, those of us who watched TV in the fifties knew all about being behind the wheel of a Rocket Oldsmobile with its famed Rocket V-8 engine. Chevrolet is OK, but a Chevy is not an Olds, nor is its engine. Since the incident, GM has explicitly indicated in its advertising that a car of a given make may, in some instances, be equipped with an engine manufactured by another division. The example demonstrates quite clearly that the public has certain ideas about what constitutes an Oldsmobile; a Chevrolet engine does not, because of its lower rank. No one but GM would object to an Olds with a Cadillac engine.

The second phenomenon is much more pervasive. In recent years it has become common for a manufacturer to market one basic automobile design under different names. Sometimes the differently named cars

I will now show that the terms *line* and *model* also form value systems similar to the one constructed for *make*. The term *line* designates a car of a particular size marketed under a given make. The lines are conventionally categorized as *full-size*, *mid-size*, *compact*, and *subcompact*, and the categories are based on comparative weight and wheelbase.⁸ The Chevrolet makes in 1972, for example, consisted of the lines shown in table 1. Lines can be ranked in the same way as the makes: subcompact, compact, mid-size, and full-size, in ascending order. Prestige correlates directly with rank, as in the case of the categorization of makes. A Chevelle is more prestigious than a comparable Nova, and so on. As with price category, the size category allows for comparison across makes. A Vega is equivalent to a Pinto, and so on.⁹

The next term is *model*. Each line of car is produced in different models, with different standard and available equipment and accessories. There are usually three models of each line: *economy*, *standard*, and *deluxe*. The 1962 full-size Chevrolet, for example, consisted of the economy *Biscayne*, the standard *Bel Air*, and the deluxe *Impala*. Three is an average; the 1978 full-size Chevrolet had only two models, standard and deluxe, and the 1958 had four, the fourth being the special superdeluxe *Bel Air Impala*.

are identical in all but name, as with the *Plymouth Horizon* and the *Dodge Omni*; sometimes there are differences in trim, as with the *Chevy Vega* and *Pontiac Astre*; and sometimes there are differences in sheet metal and standard equipment. In fact, the practice has become so prevalent that very few designs are now marketed under only one name, and the practice has become common in Europe as well. Often, the different names under which a given design is marketed will be of different rank—Chevrolet and Pontiac, for example. Two essentially identical cars will then be sold at different prices, the more expensive one being of higher rank. This phenomenon is well exemplified in the following table of equivalent GM cars.

Table 1

1974 GM compact 2-door
hatchback coupes with 250
CID/6 cyl. engine

<i>Car</i>	<i>Price</i>
Chevrolet Nova	\$2798
Pontiac Ventura	\$2873
Buick Apollo	\$3024
Oldsmobile Omega	\$3031

Similar tables can be constructed for other designs and years; price and rank will always be closely correlated. The only explanation for the success of this practice is that customers are sensitive to the rank of a particular make. They are willing to pay more in order to have a higher-ranking car, even though they could have essentially the same car for less money with a different name.

The point of these two examples, that of the miscegenated Oldsmobile and that of the equivalent models, is to demonstrate that the perceived rank of a particular make of car is important to car buyers.

⁸ These particular categories are even sanctioned by the Environmental Protection Agency of the United States Government, which uses them in its calculations of efficiency.

⁹ The rank of a line, though it is usually based on size, can also become conventionalized. For example, the 1978 GM compacts were actually larger than the 1978 GM mid-size cars in external dimensions and in weight, because the latter had been down-sized earlier. This discrepancy caused some consternation among buyers at first, and sales of the new mid-size cars lagged for a time, since one could buy a larger compact for less money. The problem did not last long though, for the public was soon convinced both that the mid-size cars were bigger inside and that they represented the way of the future.

Table 1

<i>Size</i>	<i>Line Name</i>	<i>Wheelbase</i>	<i>Weight of base 2-door coupe</i>
subcompact	Vega	97"	2160 lb.
compact	Nova	111"	2950 lb.
mid-size	Chevelle	112" or 116"	3170 lb.
full-size	Chevrolet	122"	3864 lb.

That the ranking of models forms a value system is self-evident. It is also clear that the ranking is correlated with price and prestige and that it is independent of make and line.

We now have three independent value systems according to which automobiles can be ranked, each of which goes from low to high. These are values for the categories of *make* (price category), *line*, and *model*. If we consider each ranking or value system as one dimension, we can construct a graph into which most American automobiles can be fit. Such a graph is given in figure 1. The value of any given car can be determined by its distance from the origin. Equivalent cars will occupy the same place on the graph. The difference in value of any two is the distance between them.

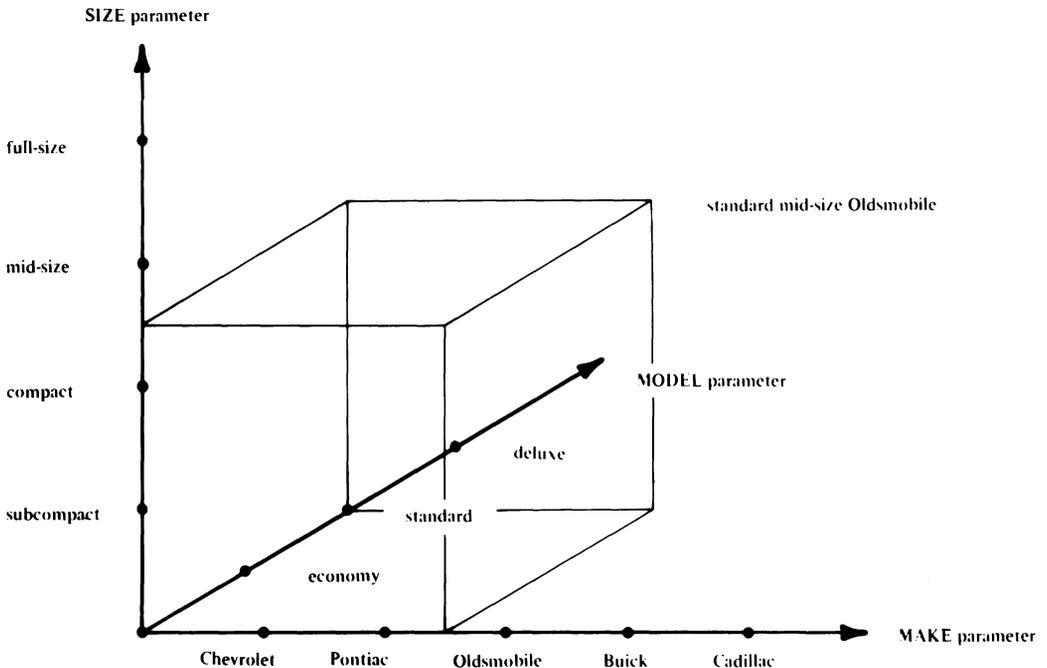


Figure 1

I have still not discussed the categories of *body type* and *year*, and some readers may anticipate a similar ranking within these categories, culminating in the construction of a five-dimensional space. These latter two categories, however, are fundamentally different from the first three. In the case of body type, the category is not evaluative, but descriptive. This is clearly true in the case of body types such as *sedan*, *coupe*, *convertible*, *hardtop*, *station wagon*, etc. We can describe what each one is, and the relationship between a sedan and a convertible is not a relative one. Nor is it possible to construct a one-dimensional evaluative scale for body types.¹⁰

The category of year can easily be converted into a linear scale, but unlike make, line, and model, it is not basically evaluative. *Deluxe* and *standard* are defined purely in terms of one another, whereas 1962 ranks higher than 1957 on the year scale because it follows it in time, a dimension which is external to the world of automobiles. Year is, however, a very important category, and we will return to it shortly.

The graph of figure 1 resembles closely the sort of diagrams one sees in discussions of semantic fields or componential analysis. The field is novel, however, in that it is purely relative. It seeks to represent the abstract value of types of automobiles in relation to each other. The scales of evaluation can be distinguished from one another, but the points on the scale have no external reference. It follows that knowing what a particular term in the field means is simply knowing what its place is.¹¹

2. Other Semantic Properties

Given that we have successfully depicted the senses of car names in figure 1, why is it that these senses are so sparse? Doesn't the name of a car mean more than this relativistic position in a field?

The answer to this question is yes; the rank of a car is not all there is to the meaning of its name. For one thing, a car name is a brand name, and brand names have interesting properties of their own. Syntactically, all brand names pattern like car makes, being either proper or common nouns, or occurring in attributive position:

- (9) Maytag makes good washers. (proper noun)
 We've always had Maytags. (common noun)
 Maytag washers last. (attributive)

The semantics of brand names seems simple: the brand name refers to the manufacturer.

¹⁰ Certain body types are restricted to certain models (for example, convertibles are of high rank), but the body types themselves cannot easily be ranked. For example, is a station wagon higher or lower than a sedan?

¹¹ Interestingly, this same sort of field cannot be constructed for European or Japanese cars, because there exists no comparable classification system. Some makes are more prestigious than others, and a given manufacturer may market different lines and models, but the value system is not conventionalized as the one for American cars is (at least it is not conventionalized for Americans; there may exist comparable systems for Europeans and Japanese). Though it may be possible to compare two cars, the comparison is a pragmatic one, not semantic. It is also reasonably possible that the present crisis in the American automobile industry will so radically alter the structure of the field that it will engender an entirely new value system for future American cars. This is an intriguing possibility.

An x (where x is a brand name) is therefore a y manufactured by x , where y ranges over the set of types of things manufactured by x . A *Maytag* is thus a washing machine or dryer manufactured by *Maytag*.

But there is more to this account. Consider the brand name *Kitchenaid*. Under this name are sold dishwashers, food mixers, garbage disposals, and trash compactors manufactured by *Hobart*. *Hobart* manufactures many other products, but reserves the name *Kitchenaid* for its household machines. *Kitchenaid* is thus not the name of the manufacturer, but a brand name used by the manufacturer. Another case is that of store brand names such as *Kenmore*. This brand is used on appliances sold by *Sears*. These appliances are manufactured by independent companies and are often identical in all but name to other brands. A *Kenmore* is therefore an appliance which is sold by *Sears* under the name *Kenmore*. A similar situation can hold for cars. Consider the *Opel*, whose most recent incarnation is sold by *Buick* dealers and manufactured by *Isuzu*. Yet it is called an *Opel*.

The answer seems to lie in the etymology of the word *brand*. A brand, in one sense of the word, is a mark of a particular pattern burned into something to mark ownership. The brand is conventionally associated with the owner of the branded object. Brand names are similarly conventional, and their purpose is to associate a product with a particular firm. Because the association between a brand and what it labels is so conventional, brands are liable to be abused. They are therefore legally protected as trademarks. (*Trademark* is defined in Webster's Third as 'a name or symbol used by a maker or seller to identify distinctively his products.')

Legally, a brand (name) can be legitimately applied to an object only by the company or person entitled to apply the brand. Conversely, the owner of the brand can legitimately apply it to anything he/she/it markets and, by doing so, identifies him/her/itself as the source of the object. The owner of a brand can thus be quite free with it, though no one else may use the brand, for that would constitute counterfeiting. An *Opel* can be sold by *Buick* and manufactured by *Isuzu* because *GM* owns all these brands. Similarly, *Kenmore* is owned by *Sears*, *Kitchenaid* by *Hobart*, *Ann Page* by *A & P*, etc.

Because a brand name is the property of an individual, that individual is free to label anything (which the individual is legally permitted to label) by that brand name. A *Chevrolet* is thus anything which *GM* chooses to call by the name *Chevrolet*. We must conclude that the fact that car names are brand names adds little to their meaning. What it does do, however, is allow the automobile manufacturers a certain liberty with the names, since they own them. We will see later how this liberty is taken.

One might ask whether kinds of cars have essential properties. Is there something about a *Cadillac Coupe de Ville*, for instance, without which it could not be called a *Cadillac Coupe de Ville*? The answer to this is no. One major reason for this lack of essential properties is a peculiarity of the American auto industry which was touched upon briefly above, the yearly model change. The practice of replacing all models yearly was popularized by A. P. Sloan (Sloan (1963)). It is simple, involving the annual replacement of all models by new models, usually bearing the same name, but differing

somewhat in essentials. Sometimes the changes from one year to the next are merely cosmetic, but sometimes they are radical, as, for example, between the 1976 and 1977 full-size GM cars. For our purposes, the most important aspect of the yearly change is not the change, but the continuity: though the 1957 and 1958 *Chevrolet Bel Air* are very different looking cars, there is a sense in which they are the same car, only different versions of that car. What unites them is the fact that they have the same name and occupy the same spot in the field. In this respect they resemble the 5:38 train. This continuity in name and discontinuity in appearance make it very difficult for there to be any properties which one might select as being essential to any one kind of car.¹² The only property which is constant, besides the name, is the position which the car occupies in the field. That is why position in the field is so important in the semantics of automobiles.¹³

¹² Aware of this problem of discontinuity, the manufacturer will attempt to promote continuity by preserving certain small design features of a particular kind of car. The simplest of such features is the insignia. Curiously, few cars possess such insignia. There is the famous Rolls-Royce flying maiden, and the Mercedes-Benz emblem, but among American cars only the Cadillac V and Crest has any real significance. Not quite an insignia but similar are the three or four portholes on the front fenders of Buicks (the number depends on the rank of the model), which have been around on and off for a long time, though becoming more and more stylized. Another way of promoting continuity is to preserve a certain "look". Sometimes this will be done with an entire body style. Thus, the *Continental Mark* series of Lincolns has gone through four style changes since its reintroduction in 1956, but the particular "look" set by the 1956 model has persisted through the changes. At the opposite end of the spectrum, one aspect of a car can be selected. There are the Cadillac fins, which have persisted in one form or another from the early fifties to the present. Ford for a number of years had large round taillights. The full-size Chevrolet, since 1958, has had a string of small taillights, two or three on each side (depending on the rank of the model). Not all cars have persistent features of this type. Chrysler Corporation cars, for example, have fluctuated quite radically in design. There can also be aberrant years. The 1960 Ford was radically different in look from the 1959. This disturbed buyers enough that a more Ford-like design was (re)introduced in 1961. Changes in full-size Fords have been very gradual since then. These attempts to emphasize continuity in the face of yearly style changes are all quite conscious, and all reflect the semantic peculiarity of car names.

¹³ The principle of continuity—keeping the same name for the same place in the field, regardless of essential changes in the car that bears the name—is so strong that it is sometimes followed with disastrous results for the manufacturer. I am thinking in particular of cases where a certain model has developed a bad reputation for one reason or another. When this model is replaced by another which occupies the same spot, if the second model is given the same name as the first, then the bad reputation of the first may accrue to the second. Consider the *Corvair*. The original Corvair, introduced in 1960, had severe problems with its suspension and was unsafe at any speed (Nader (1965)). The car was completely redesigned in 1965, retaining only the engine and its location in the rear. The safety of this second Corvair has never been impugned, and it is generally acknowledged to have been one of the best designed American cars of this quarter century. However, it could not bear the stigma of its name and died quietly in 1969. Nor do many ostensibly well-informed people realize even now that there were two Corvairs. Consider the following extract from an article by Peter Schuyten in the *New York Times* (Nov. 9, 1979, p. D1):

Introduced in 1960, the Corvair, with its rear-mounted engine, was said at the time to be highly innovative for an American automobile. Production was halted, however, ten years later following a series of fatal and near-fatal accidents believed to stem from engineering deficiencies in the car's rear suspension.

Mr. Schuyten apparently believes that the 1960 Corvair (the car with engineering deficiencies) and the one whose production was halted in 1969 were one and the same car. This is true in name only.

GM management learned their lesson. Their next compact failure was the *Vega*, introduced in 1971, whose original four-cylinder engine was plagued with troubles because of its design. In 1973, GM attached the name *Monza* to a sport coupe built on the Vega chassis. In 1978, the Vega name and the original sedan model were discontinued, but the small station wagon which had been sold up to then as a Vega, and which resembled the Vega sedan very closely, continued to be sold except for one important change. It was now a Monza. This tale is just the opposite of that of the Corvair, but proves the same point with regard to names and roses.

It is important to note that though car names may be peculiar, they are not aberrant. The same problem of recognizing distinct instances of a given individual or type across time or events is one of the most persistent mysteries of philosophy and psychology. What makes car names peculiar is the institutionalization of the very factors which cause the greatest difficulty.

I set out at the beginning of this section to establish whether there wasn't more to automobile semantics than mere position in a field. I first looked at brand names in general and discovered very little in the way of meaning, finding instead that brand names are words which are owned by individuals. I then looked for essential properties of cars, properties which would always obtain for a particular type of car. I could not find such properties, and linked their absence to the practice of changing models yearly, a practice which makes it difficult to recognize instances of a given kind of car across years, except by the fact that they have the same name and the same position in the field. Finally, I noted that manufacturers are aware of this difficulty and sometimes attempt to remedy it by preserving continuity of style between adjacent model years.

This very awareness and the attempts to impose essential or characteristic properties on a kind of car demonstrate dramatically my main point, that the systematic sense of any car name consists of the position which that car occupies in a semantic space relative to other kinds of cars.¹⁴

¹⁴ At this point, one might object that the field which has been described, though it may be valid, is irrelevant to linguistic semantics in the narrow denotational or conceptual sense, and that it is instead either a description of the real world or purely connotational. This is a difficult objection to counter. For one thing, I know of no infallible way to decide exactly what falls within the narrow domain of conceptual semantics. But this caveat aside, I still think that we can respond to the argument by showing that whatever the field is, it belongs neither to the real world nor to connotation, and that it has properties which are usually reserved for conceptual systems.

It is quite clear that the classification which I have described is conventionally discrete. For example, there is no reason why there should be four sizes of cars: full-size, mid-size, compact, and subcompact. There are in the real world cars of varying sizes running from small to large, but in that same world there are no discrete categories along this scale. Such a categorization depends on words having arbitrary senses.

From this we may conclude that the classification system which I have described is linguistic, and not part of the real world. If it is linguistic, then it can be either conceptual, connotative, or stylistic. Connotative meaning is closely tied to individual experience. One might argue that prestige is purely connotative, that a Mercedes is prestigious because of what we know about the Mercedes from experience and not because of some conceptual properties of the word *Mercedes*. This may be true of Mercedes, and to some extent it is true of such top-of-the-line American cars as Cadillac, but it cannot be true of Chevrolet and Pontiac. One may be more prestigious than the other, but that difference has nothing to do with experience. It is rather due to the fact that one is designated as being higher in value than the other, and this designation is conventional, not due to any physical properties of the cars. The connotation of prestige in this case follows from the linguistic categorization rather than vice versa.

There are other aspects of connotation which make it unlikely that we are dealing with a connotative system. Connotations are vague and do not form tight systems; they are usually unstable; they vary from speaker to speaker within a community. None of these is true of the classification of American automobiles.

As for stylistic meaning, I cannot see how it is relevant to the matter at hand, unless we turn to such words as *Caddy*, *Chevy*, *Merc*, and *Gemmy*.

Thus, if only by elimination, we can conclude that we are dealing with a conceptual system. But surely we have stronger indications that this is the case, for I have shown that the meanings of car names can be described in terms of a small set of arbitrary discrete features, and such a description of meaning is the hallmark of a conceptual semantic system. I do not claim that this description exhausts all the meaning of a given car name. I purposely exclude connotation and extension, both of which are at least as important as sense in the entire semantics of automobiles. The purpose of this long excursus has been only to show that such an exclusion is possible and not to deny the importance of these other aspects of meaning.

3. Semantic Change

I will now turn to the second part of my task, a discussion of the elusiveness of the senses of car names. It is commonly said that the meanings of words are elusive, and many serious thinkers have objected to even attempting a systematic discussion of the meanings of words on the simple grounds that they are ineffable. But the elusiveness that I will describe is not so romantic as this. I will demonstrate first that the senses of car names change, and that this change is very quick, so quick that people cannot catch up with it and thus lag behind. Second, I will show that this change is of a very particular sort that can easily be understood within the semantic field which I have discussed in sections 1 and 2. Finally, I will discuss the relation between this type of semantic change and the semantic theory of Putnam (1975).

By way of setting the stage, let me first engage in a little naïve psychology, concerning how the semantic field which I have discussed is used by speakers of English who are knowledgeable about American cars. Let us assume that these speakers, using their knowledge of the field and additional information which is provided to them by the industry through advertising, construct hypotheses about the senses of particular brands of cars. For a given brand, this hypothesis consists of a place in the field. The speaker may have other ideas about the car, but these are either dependent on its position or are not systematic.

Thus, the speaker places a particular car name in the semantic field by using information provided by the manufacturer. Remember, however, that car names are proprietary brand names. The owner of the name has the right to apply it to whatever type of vehicle that individual wishes to apply it to. Thus, the owner of the name has the right to determine its place in the field. In short, there are two ways of determining the position of a given car in the field, each corresponding to one sense of *determine*. The first way is discovery: the speaker constructs a concept based on the information acquired through experience, which is what most of us do for most words (see Miller and Johnson-Laird (1976)). The second way, which stems from the fact that car names are trademarks, is by simple stipulation. The owner of the trademark, by right of ownership, may apply the name as he/she/it will. This duality clearly allows for some discrepancy between the two groups, manufacturers and customers. The former may simply change the sense of a car name, so that the hypothesis of the latter is no longer true. This is precisely what happens in the case of model names within a given line, as I will now demonstrate.

It is possible to determine to a reasonable degree of certainty the rank which a manufacturer assigns to a given model name in a given year by examining the variety of body types and options available under that name. Any change in these factors signals a change in ranking. Close investigation of industry figures on body types and options reveals that manufacturers systematically change the position of model names by a process of downgrading or devaluation. A name which in a given year refers to a model of a particular rank will, in a later year, be applied to a model of the next rank down.

The change is usually effected by introducing a new model name ranked above the previous year's highest ranking model name, so that there will be no change in the relative positions of the existing names. The new name is almost always attached to a special model, outside the system, available only in a limited number of prestigious body types, such as convertible or sport coupe. Some time thereafter, often the next year, we find that the new model name has expanded its domain: it is now available in a wider range of body types. Concurrently, the former bottommost name has disappeared. In fact, by body type and option criteria, all names have simply dropped one rank, allowing the new name, previously outside the system, to enter it at the top. If this pattern repeats itself over an extended period, rather extensive changes can take place.

Consider the data in table 2. In 1957, Chevrolet's top model was the *Bel Air*, available as a two- or four-door sedan, two- or four-door hardtop, two- or four-door station wagon,

Table 2

Chevrolet models and body types, 1957-1959

1957	<i>One-Fifty</i>	<i>Two-Ten</i>	<i>Bel Air</i>
	Utility Sedan	2-door Sedan	2-door Sedan
	2-door Sedan	Delray Coupe	4-door Sedan
	4-door Sedan	4-door Sedan	Sport Coupe
	2-door Wagon	Sport Coupe	Sport Sedan
		Sport Sedan	Convertible
		2-door Wagon	2-door Wagon
4-door Wagon		4-door Wagon	
	4-door Wagon (9p)		
1958	<i>Delray</i>	<i>Biscayne</i>	<i>Bel Air</i>
	Utility Sedan	2-door Sedan	2-door Sedan
	2-door Sedan	4-door Sedan	4-door Sedan
	4-door Sedan	4-door Wagon	Sport Coupe
	2-door Wagon	4-door Wagon (9p)	Sport Sedan
	4-door Wagon		Hardtop Impala
		Impala Convertible	
		4-door Wagon	
1959	<i>Biscayne</i>	<i>Bel Air</i>	<i>Impala</i>
	2-door Sedan	2-door Sedan	4-door Sedan
	4-door Sedan	4-door Sedan	2-door Hardtop
	2-door Wagon	4-door Wagon	4-door Hardtop
	4-door Wagon	4-door Wagon (9p)	Convertible
		4-door Wagon	

and convertible. In 1958, the *Bel Air Impala* was introduced, and was available only as a two-door hardtop and a convertible, both more expensive and better equipped than the corresponding Bel Air (the 1958 Impala had three taillights on each side as opposed to two on all other Chevrolets). The range of Bel Air body types for 1958 was essentially the same as for 1957. Turning to 1959, we find that Impala is now available as a two-door or four-door hardtop, a four-door sedan, a convertible, and a station wagon. The range of Bel Air contracts so that it is available only as a sedan or a station wagon (the range of body types in which the *Biscayne* was previously available). Concurrently, the lowest-ranking *Delray* disappears, so that the *Biscayne*, previously the middle-ranked model, is now at the bottom. This is a paradigm case of devaluation: between 1957 and 1959 all Chevrolet model names have dropped one rank, and this is accomplished by the introduction of a new model name at the top.

As a more systematic demonstration of the devaluation of car names, I offer the following cases. In tables 3 and 4 are given the names and ranks of all full-size Chevrolet

Table 3

Full-size Chevrolet models from 1953 to 1978

Year	Rank:	1	2	3	4	5
1953		Special 1500	Deluxe 2100	Bel Air 2400		
1954		Special 1500	Deluxe 2100	Bel Air 2400		
1955		One-Fifty	Two-Ten	Bel Air		
1956		One-Fifty	Two-Ten	Bel Air		
1957		One-Fifty	Two-Ten	Bel Air		
1958		Delray	Biscayne	Bel Air	Bel Air Impala	
1959		Biscayne	Bel Air	Impala		
1960		Biscayne	Bel Air	Impala		
1961		Biscayne	Bel Air	Impala		
1962		Biscayne	Bel Air	Impala		
1963		Biscayne	Bel Air	Impala		
1964		Biscayne	Bel Air	Impala	Impala Sport	
1965		Biscayne	Bel Air	Impala	Impala S.S.	
1966		Biscayne	Bel Air	Impala	Impala S.S.	Caprice
1967		Biscayne	Bel Air	Impala	Impala S.S.	Caprice
1968		Biscayne	Bel Air	Impala	Caprice	
1969		Biscayne	Bel Air	Impala	Caprice	
1970		Biscayne	Bel Air	Impala	Caprice	
1971		Biscayne	Bel Air	Impala	Caprice	
1972		Biscayne	Bel Air	Impala	Caprice	
1973		Bel Air	Impala	Caprice		
1974		Bel Air	Impala	Caprice		
1975		Bel Air	Impala	Caprice		
1976			Impala	Caprice		
1977			Impala	Caprice Classic		
1978			Impala	Caprice Classic		

Table 4

Full-size Ford models from 1953 to 1978

Year	Rank:	1	2	3	4	5
1953		Mainline	Customline	Crestline		
1954		Mainline	Customline	Crestline		
1955		Mainline	Customline	Fairlane		
1956		Mainline	Customline	Fairlane		
1957		Custom	Custom 300	Fairlane	Fairlane 500	
1958		Custom	Fairlane	Fairlane 500		
1959		Custom 300	Fairlane	Fairlane 500	Galaxie	
1960		Custom 300	Fairlane	Fairlane 500	Galaxie	
1961		Fairlane	Fairlane 500	Galaxie		
1962		–	Galaxie	Galaxie 500	Galaxie 500XL	
1963		–	Galaxie	Galaxie 500	Galaxie 500XL	
1964		Custom	Custom 500	Galaxie 500	Galaxie 500XL	
1965		Custom	Custom 500	Galaxie 500	Galaxie 500XL	Galaxie 500LTD
1966		Custom	Custom 500	Galaxie 500	Galaxie 500XL	LTD
1967		Custom	Custom 500	Galaxie 500	XL	LTD
1968		Custom	Custom 500	Galaxie 500	XL	LTD
1969		Custom	Custom 500	Galaxie 500	XL	LTD
1970		Custom	Custom 500	Galaxie 500	XL	LTD
1971		Custom	Custom 500	Galaxie 500	LTD	LTD Brougham*
1972		Custom	Custom 500	Galaxie 500	LTD	LTD Brougham
1973		Custom 500	Galaxie 500	LTD	LTD Brougham	
1974		Custom 500	Galaxie 500	LTD	LTD Brougham	
1975			LTD	LTD Brougham	LTD Landau	
1976			LTD	LTD Brougham	LTD Landau	
1977			LTD	LTD Landau		
1978			LTD	LTD Landau		

* LTD Brougham was introduced in 1970 as a special superdeluxe model, Rank 6.

and Ford models from 1953 to 1978.¹⁵ I have chosen these two makes because they have been the most popular over this extended period. I have chosen the period because it spans the greatest flourishing of American automobile culture before its recent disintegration in the face of economic constraints.

The two types of car are meant to be representative in their naming practices. They are certainly the most conservative; a perusal of similar tables for other makes and sizes would reveal much more change. These other changes, though, are not always so sys-

¹⁵ The rankings are based on price, but they are not purely comparative. The first three ranks are also correlated with certain body types. Rank 1 is reserved for models which are available only as basic sedans, and is the *economy* rank. Rank 3 is *deluxe*, in which is found the widest variety of body types: sedan, two- and four-door hardtop, and convertible. Rank 2 is more variable. It does not contain a convertible, and it may or may not contain hardtops. I have designated this rank *standard*. Rankings above 3 are more fluid, containing as they do special and superdeluxe models, available only in limited body types. *Ford Galaxie 500 XL*, for example, was available only as a two-door hardtop or as a convertible, being a special "sport" model. What I have done for ranks 4 and above is simply to rank models by price.

tematic, arising in many cases from attempts at gaining a more prominent place in the market.

The interpretation of the tables is quite straightforward. I have hypothesized that the sense of a given car name tends to be devalued over time. This shows in the charts as a diagonal path from upper right to lower left. A given name, if it shifts, will always shift in this direction. The Chevrolet table is paradigmatic in this respect. The only movement is in this direction. *Bel Air* is the name with the greatest longevity (23 years), and it moves all the way from 3 to 1 and out in that period. The Ford chart is no less consistent, but there are more names to follow, and the movement is faster. Good examples are *Fairlane* (1955–61), *Galaxie* (1959–63), and *LTD* (1965–present).

We can make some other general observations about the tables. For one, the rankings can be viewed as stacks with open ends and limited but variable capacity. Items can be inserted only at the top of the stack, as in a calculator's memory. The insertion of an item at the top of the stack will push down all the items already in the stack and push the bottom one out if the capacity of the stack is not increased. If the rank of a model is its position in the stack, then the insertion of a model at the top of the stack will lower the position of those already present, which is what we observe to happen. This stack model can also be used to express the fact that a given name, in changing, never drops more than one rank at a time: a name does not shift in a single change from 3 to 1, for example. One of the results of this gradualness in change is the enhancement of the illusion of continuity. Because shifts in ranking are never radical, they do not call attention to themselves and cause us to revise our hypotheses. If an Impala shifted two ranks in the course of one model change, we might become wary.

Downgrading is stipulative. It proceeds from the manufacturer. What about the customers, whose concept is rooted in experience? Quite clearly, their view cannot change so quickly, for a number of reasons. First, there is continuity, the fact that the name remains relatively stable despite yearly changes in the car to which it is attached. From 1959 to 1972, for example, the ranks of Chevrolet models did not change very much at all. Thus, customers do not expect changes in rank to occur. Second, though the introduction of a new model name at the top is heavily advertised, downgrading is not advertised at all; customers expect the rank of a model not to change, and they are not informed when it does change. The combination of strategies makes it unlikely that customers will notice these downgradings very readily. Furthermore, the individual changes, when they do take place, are small and systematic. This also renders them less noticeable. This is not to say that customers will never notice such changes at all, but only that their conceptions are likely to change much more slowly than the manufacturers' stipulations do. This is of course to the manufacturers' benefit.

4. Discussion

The phenomenon of downgrading is linguistically interesting for several reasons. First of all, the entire process is made possible in great part because of the arbitrariness of

the linguistic sign. If manufacturers did not name their models but only described them, then there would be nothing to downgrade.

Second, though downgrading may be a conscious marketing strategy, it involves a very common type of semantic change, which is variously called *pejoration*, *devaluation*, or *depreciation* in the handbooks on semantic change. It is the historical process whereby the value of a word declines; it is often deplored by prescriptivists and academics, but it persists despite their best efforts. Again we see that the marketing strategy is designed to take advantage of basic properties of human language.

It also elucidates these properties. In particular, by trying to integrate automobile semantics into recent theories of lexical semantics, we can refine them. For instance, Putnam (1975) has proposed a *division of linguistic labor*. He hypothesizes (p. 228) that

Every linguistic community . . . possesses at least some terms whose associated “criteria” are known only to a subset of the speakers who acquire the term, and whose use by the other speakers depends upon a structured cooperation between them and the speakers in the relevant subsets.

A good example of this division is the distinction between two terms for kinds of trees, such as *elm* and *beech*. A speaker may use the two terms, knowing only that they designate different kinds of trees. This speaker may not know what the actual differences are between the kinds, or even how to recognize either species, but may rather depend on there being someone in the community who does know these differences. This division into classes of speakers, one class knowing the meaning of a word, and the other class depending on the first, is the division of linguistic labor. Putnam’s purpose in proposing such a division as a general principle is to allow speakers to use words without having to know their exact meanings. He also draws a deeper philosophical implication from the division, but this need not concern us here.

Something like Putnam’s principle must be true, for, as Nunberg (1978a) so amply demonstrates, people depend on other people to specify the meanings of words, and these dependencies can become very complex. But Putnam’s principle, though socio-linguistic in intent, is sociologically naïve. He speaks of “structured cooperation”, but people do not always cooperate. The experts whose role it is to know the meanings of certain words may deceive us. Indeed, one of the greatest advantages of the sort of practice that Putnam and Nunberg both describe is that it permits deception. Experts may only claim to know; or, as I have shown in the case of cars, they may change the meaning without telling us that they have done so.

In the same work, Putnam defends a view of semantics according to which the properties indicated by the semantic markers or “stereotype” of a word (what I call the *sense* of a word) do not provide necessary and sufficient conditions for membership in the class to which the word refers; the properties or sense are only “associated with the word” (1975, 205). This position differs from the more traditional intensional one, wherein the sense or intension of a word determines its reference or extension. It also differs from the purely extensional view, in that it gives senses a legitimate place in the

semantics of natural language. On Putnam's view, both sense and reference are basic semantic notions, each with its own role to play in the meanings of words.

A good deal of the difficulty which many people have had with Putnam's position can be traced to the words which he uses as examples. These are "natural kind" terms, such as *tiger* and *aluminum*, which have the special characteristic of referring to a class of entities which is defined by nature, rather than by humans. Putnam concentrates on these terms because of their import to scientific discourse, which is the sort of language he is most concerned with as a philosopher. However, with natural kind terms the information given by the sense is usually sufficient to identify the reference (even though it may not be necessary), making it difficult to understand the general utility of the separation of sense and reference which Putnam advocates. For those of us whose concern is more with everyday than with scientific discourse, car names make a better example of the distinction which Putnam is driving at. For any given car name, the extension or reference is the set of actual cars to which the manufacturer has quite literally attached the name. The sense of the car name, by contrast, is the point in the conventional value system to which the name has been attached by the manufacturer. The two are independent, as I have demonstrated: on the one hand, the extension is augmented with every yearly model change, but this addition has no necessary effect on the sense; on the other hand, the sense may change when a particular model change is accompanied by downgrading. The two changes are on different planes, as Putnam's distinction allows.

Putnam does not claim that all words are like natural kind terms semantically, and he does discuss other kinds of words briefly (p. 152). Further work within Putnam's framework has since been done from a more narrowly linguistic point of view by Dahlgren (1978), who shows how social class terms differ semantically from natural kinds. There is also the extensive work by Nunberg (1978a; 1978b; 1979) within a related though distinct theory which treats a variety of word types and ranges as far as idioms and slang, revealing the peculiarities of each sort. As for car names, they differ from natural kind terms in at least the following respects. First, though the reference in both cases is fixed by something other than the sense, in the one case it is fixed by nature, in the other by stipulation. Furthermore, because the extensions of car names are stipulated, the stipulator may add to the extension, and does. Second, cars are cultural objects and change fairly rapidly, while natural kinds are not determined by culture and presumably have essential properties (cf. Putnam's discussion of the meaning of *water* and his claim that "water is H₂O in all worlds" (p. 231)). With cultural concepts, there is a closer tie between sense and reference than there is for natural kinds, and the nature of the tie is different. For example, Cadillacs are luxury cars. This is in part a referential fact which we could discover if we knew nothing about the sense of the term *Cadillac*. But why are there no economy model Cadillacs, with rubber floor mats and manual transmissions? Because of the sense of the word. Thus, the sense of *Cadillac* influences the nature of Cadillacs in a way that is impossible with tigers. The same is probably true of art.

References

- Berlin, B. and P. Kay (1969) *Basic Color Terms: Their Universality and Evolution*, University of California Press, Berkeley and Los Angeles, California.
- Dahlgren, K. (1978) "The Nature of Linguistic Stereotypes," in *Papers from the Parasession on the Lexicon*, Chicago Linguistic Society, University of Chicago, Chicago, Illinois.
- Katz, J. and J. Fodor (1963) "The Structure of a Semantic Theory," in J. Fodor and J. Katz, eds., *The Structure of Language*, Prentice-Hall, Englewood Cliffs, New Jersey.
- Kripke, S. (1972) "Naming and Necessity," in D. Davidson and G. Harman, eds., *Semantics of Natural Language*, Reidel, Dordrecht.
- Labov, W. (1978) "Denotational Structure," in *Papers from the Parasession on the Lexicon*, Chicago Linguistic Society, University of Chicago, Chicago, Illinois.
- Lakoff, G. (1972) "Hedges: A Study of Meaning Criteria and the Logic of Fuzzy Concepts," in P. Peranteau, J. Levi, and G. Phares, eds., *Papers from the Eighth Regional Meeting of the Chicago Linguistic Society*, University of Chicago, Chicago, Illinois.
- Levi, J. (1978) *The Syntax and Semantics of Complex Nominals*, Academic Press, New York.
- Miller, G. and P. Johnson-Laird (1976) *Language and Perception*, The Belknap Press of Harvard University Press, Cambridge, Massachusetts.
- Nader, R. (1965) *Unsafe at any Speed: The Designed-in Dangers of the American Automobile*, Grossman, New York.
- Nunberg, G. (1978a) *The Pragmatics of Reference*, Doctoral dissertation, City University of New York. Distributed by the Indiana University Linguistics Club, Bloomington, Indiana.
- Nunberg, G. (1978b) "Slang, Use Conditions, and *l'arbitraire du signe*," in *Papers from the Parasession on the Lexicon*, Chicago Linguistic Society, University of Chicago, Chicago, Illinois.
- Nunberg, G. (1979) "The Non-Uniqueness of Semantic Solutions: Polysemy," *Linguistics and Philosophy* 3, 143–184.
- Putnam, H. (1975) *Mind, Language, and Reality: Philosophical Papers*, volume 2, Cambridge University Press, Cambridge.
- Rosch, E. (1973) "On the Internal Structure of Perceptual and Semantic Categories," in T. Moore, ed., *Cognitive Development and the Acquisition of Language*, Academic Press, New York.
- Sloan, A. P. (1963) *My Years with General Motors*, Doubleday, Garden City.

Program in Linguistics
SUNY at Stony Brook
Stony Brook, New York 11794