Semiotics and marketing New directions in industrial design applications

Odile SOLOMON *

A flexible discipline with a wide range of applications, the scope of the semiological analysis is here discussed first as a 'global' tool to assist in marketing communication decision, product choice decision, or in communication strategy planning, whether industrial, advertising or media. The aspect of intercultural marketing communication is also briefly examined. One application of this discipline discussed in detail is that of industrial design. Particular examples taken from the field of car design illustrate how the semiotician can use models derived from *Gestalt* psychology, linguistics and semantics to analyse car body shapes, chiefly in terms of legibility and expressivity. This research can be undertaken during product development, during test marketing or at any other phase of the product's existence.

1. Introduction

In the sphere of marketing communication, one aspect of semiotics seems to be more surrounded by mystique than any other: precisely how is the discipline exercised, or rather, what are the conditions under which it is exercised? It is little understood how the semiotician (or the semiologist) can presume to analyse, decode and interpret absolutely any message, in any medium, without the slightest recourse to any evaluation by the public for whom the message is intended. On the basis of what guarantees, and using what procedures, is the semiotician able to pronounce his verdict? For he reaches it 'in chambers', after having conducted his own independent investigation. These characteristics mark the major difference between a semiological analysis and any other method of testing.

Most semioticians consider themselves to be specialised in the research or application of one or two *particular* semiotics (e.g., the semiotics of photography, comic books, the cinema, kinesics and proxemics, stage gesture, etcetera). The semiotician who makes his living as a consultant in publicity, marketing or communication, however, may be called on to study extreme varied matter. The object of analysis may be a logotype, packaging, an advertisement, a poster, a complete product advertising campaign or the entire body of a corporate communication campaign; it may be the semiological message of a television commercial or that of an entire radio or T.V. programme; it may be a designer object (such as jewellery, clothing, or cars); it may be space (a working space such as a sales, service or promotional area, or an entire urban topology); it may be the symbolism of a nation's flag and its federal emblems, or the corporate image of a group or multinational.

In short, a consultant semiotician working regularly with businesses and agencies in the domain of information, marketing communication and publicity is obliged to apply his discipline to every field of strategic, operational, cultural or social marketing. This includes everything from market research, through product design and corporate, brand and product advertising to media planning.

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2. 'Semiotics' versus 'semiology'

Given such varied practices, quibbles over words may appear to over-complicate the issue. Nonetheless, in the course of his ongoing efforts to validate his field and his methods, the semiotician, in France at least, must still start out by redefining and making clear not so much what he understands by the difference between 'semiotics' and 'semiology', but rather whether he feels he would prefer to be thought of as a 'semiotician' or a 'semiologist'.

The term 'semiotics', at least in its international dimension, seems to have largely overtaken that of 'semiology', which is fairly deeply rooted in France (Eco (1976: 30) reviews the 'preferences' of notable writers). The adoption of the double terminology does not signify that the two words apply to separate disciplines. 'Semiology' is all too easily thought of as being the general theory of all specialised 'semiotics'; terms such as 'socio-semiotics' or 'psycho-semiotics' have even come into use.

'Semiotics' and 'semiology' may continue to be used interchangeably, but 'semiotics' has Anglo-Saxon connotations, which 'semiology' has not. Modern semiotics has two traditions: an Anglo-Saxon one going back to Peirce (1931–1958), and a European one going back to Saussure (1916). The respective points of departure for their thought came from two very different schools. Peirce's 'semiotics' is, in fact, another term for 'logic' but given a wider scope. It was as an axiomatician that he first asserted the necessity for having a science dealing with meaning. Peirce's 'semiotics' is logical and categorical and is entirely in the Anglo-Saxon logical positivist tradition. Compared with this, it is difficult to situate Saussure's 'semiology', which is linguistic and inductive and stems from the structural linguistic tradition upon which cultural anthropology, the social sciences and ultimately psychoanalysis came to be built.

As this paper is intended for an international readership, I prefer to employ the terms 'semiotics' and 'semiotician'. But it should be understood that the term 'semiotics' here contains both of its currently accepted meanings, that of a discipline which seeks to define the conditions for the production of meaning, and that of 'semiology', which essentially defines a system of meaning from the point of view of its social role, or, in Saussure's famous formulation: 'a science that studies the life of signs within society' (Saussure (1916: 33, 1966: 16)).

The consultant semiotician himself may well be perplexed when faced with the task of trying to define his discipline from a wealth of practical experience. He may, however, endorse the most widely held view of semiotics, as developed by Eco (1972, 1976): the science which studies all systems of meaning and of communication through which culture is created.

From the very nature of its flexibility, it follows that semiotics is, as it were, a science permanently under construction. This explains the characteristic 'reserve' of some of its greatest exponents, such as Barthes, who, in his inaugural lecture delivered on appointment to the Chair of Literary Semiology at the Collège de France, stated that he had 'few claims to be able to represent semiology, so much [had he] been prone to shifting [his] definition of it almost each time it seemed to be definitively constituted' (Barthes (1978)). The same flexibility also gives rise to the 'rashness' of some of its practitioners, who are perfectly willing to tackle any cultural manifestation whatsoever, not just texts, but also non-linguistic objects (e.g., gestures, spaces and images), on condition that these can be considered as generative of meaning.

Given the perspective of semiotics and the plurality of its application, it is clear that it is established – and flourishes – at the cross-

roads of other sciences, and calls for an intellectual curiosity of a fundamentally interdisciplinary nature.

As we have seen, semiotics can draw upon either linguistics or logic for its sources, and these sciences have correspondingly accorded it a scientific status. However, here we are principally dealing with *meaning*, which, beyond the mere communication or reproduction of reality, is above all the means by which reality is not only constructed, but also *represented*. Consequently, semiotics must also embrace other branches of science which are seeking to describe the mechanisms both of perception and of representation. They are also concerned with understanding how the mind seeks to represent reality to itself. This may be according to fundamental patterns, to types of logic or to forms of interaction the mind has with its environment, depending on the nature of the science: biology, cybernetics and onics; psychology and psychoanalysis; ethnology, anthropology and sociology; epistemology and philosophy; semio-physics (in work by Thom (1980)); cultural and literature history. In turn, semiotics is able to export its own universalities to other sciences.

Such an enumeration is possible because, clearly, over the last fifty years we have witnessed a radical change in the scientific paradigm, a change in the very object of science. No self-respecting 'science' or discipline can any longer claim to *explain* the universe all by itself: at the most, it can hope to *explicit* it.

3. The basic methods of applied semiological analysis

We can now turn to the practical specificities of making use of semiological analysis in order to verify and/or evaluate the message emitted *about* or *by* a product or a brand as opposed to using any other testing method currently in use in advertising or marketing.

Firstly, before going on to any other technical consideration involving the practice of decoding different messages or media, it seems essential to define clearly the *possible object* of the analysis and of the discourse of the semiotician. We are here talking about essentially *social* or *cultural objects* produced to convey meaning (cf. Baudrillard (1968, 1970)). Put another way, their *meaning* – even if symbolic – *pre-exists their form*, and their construction and development are based upon a prior *intent to communicate*, whether explicit or not. Such *objects* are opposed to entirely artistic objects where *form* exists prior to meaning (or meanings). In this case the intention is not just the creation of meaning, which can never be reduced to a single discourse: it 'outstrips' the created form. Dealing, then, not with 'artistic creation' but with 'social production', the semiotician operates in the field of *langue*, not *parole* (Saussure (1916: 30)), that is to say he treats objects as an abstract system or a social institution, as codes and conventions.

Secondly, the idea of a method of testing which has no recourse to the judgement or opinion of the receivers of a message formulated specifically for them is based on the axiom that *the structure of a message does not have to be conscious in order for it to operate*, i.e., perception of a message is not contingent on the receiver's awareness or how it functions. The semiotician will compare the message emitted by the object with the copy strategy of the marketer. Having brought out discrepancies between them, he then suggests modifications to the message to bring it into line with an explicit copy strategy. Alternatively, the intention of the copy strategy may have remained 'latent' or been poorly formulated: the semiotician's task is then to assist in its reformulation.

The semiotician explains how communication is structured within the message. He may evaluate the gap between the message's intended meaning and its actual realisation by

explaining not only what is said and 'how' it is said, but also what is *not* said, what is said *in other ways*, what is said *on top*, what is *poorly* said compared with what was *intended* to be said, and this is with reference to the *sender* (e.g., the creative director). With reference to the *receiver*, the targeted public, he explicits the different modes of implication (through enticement, persuasion and/or seduction) and forms hypotheses as to how the message is received. While 'qualitative' or 'quantitative' analysis of the classic variety can measure or evaluate the reactions of the receiver *vis-à-vis* the message, semiological analysis can bring out the reasons for these reactions.

This is why information agencies, press and broadcasting authorities and design authorities are calling upon semioticians more and more frequently, as are advertisers and advertising agencies throughout the research, development and launch phases of a campaign or of a product. The semiotician may be asked to work either on the product itself, as an object of industrial design, or on advertising media, logotypes, packaging, point-of-sale material, etcetera.

4. The semiological test and the advertising campaign

4.1. Prior to production

In the case of the positioning or re-positioning of a product, or of the launch of a new product, the semiotician may analyse the various manifestations of the competition (print advertisement, posters, T.V., cinema and radio commercials, point-of-sale advertising, etcetera) and also the various media in which they appear (at least as much from the point of view of the 'graphic' or audio-visual message as from that of content). He may intervene in order to clarify the positioning of the respective competing products or brands, identify vacant or under-exploited marketing areas, and define the specificity of each of the products concerned in terms of image and marketing communication. He can collaborate with creative staff and marketers to conceive the marketing communication strategy, to elaborate the schedule evaluation chart, and to develop the copy platform.

4.2. During production

In the execution phase, while the form of expression of the marketing communication takes shape and awaits ultimate refinement, the semiological analysis has a wider scope, for the media and the images now refer to a symbolism of ever-increasing complexity, and the role of the analysis is threefold, to assist in the processes: (a) of selection, by determining the most persuasive creative proposition, (b) of choice confirmation, according to the same structural criteria on which the analysis is based, and (c) above all, of recommendation. At this point, the semiotician is not content with merely giving an analytical report, but he tries to put forward a package of recommendations in order to optimise the advertising message and maximise its relevance.

4.3. After production

When the advertising messages are before the public via their different media, the semiotician may make an ongoing assessment, over a given number of advertisements, of the *life* of a product, and of its ensuing transformation, decline and obsolescence, or of its mythical or symbolic destiny. His analysis of the advertising communication associated with the product operates as much on a formal level of representation (i.e., its grammar and rhetoric) as on the level of its content (e.g., its semantics, and the value system or ideology it conveys).

5. Recent applications of semiotics in international marketing communication

One particular recent development in applied semiotics, that of the semiotician's role in export marketing communication, merits a brief parenthesis here. An international marketing campaign, especially seen from the point of view of advertising, must always be conceived as a *cultural* marketing campaign. The underlying logic of the systems of course and representation of each of the cultures involved in the international exchange must be identified and understood. It is hazardous to seek refuge in a priori ideas of 'invariables', 'constants' and 'the universality of human nature' when dealing with any foreign culture. Hall (1976) has been one of the major pioneers and precursors in the field of 'interculturality'.

Semiotics is a research procedure which can be particularly productive prior to the concept strategy phase of export marketing communication. In the context of an ad hoc communication survey, for example, the semiotician can establish a diagnosis of the exporting company's culture through its own communication, both internal and external. He will discern its values, rites and myths, uncover its rules and codes, discover its levels of organisation and intelligibility, and reveal its symbols and federative emblems.

Alternatively, a semiological comparison can identify the advertising and publicity documents of the competition throughout all of its media, and where possible, the negotiating practices and methods used by the competition within the same market sector, in order to bring out the comparative logic behind the success or failure in promoting a product or an image in the countries targeted.

In the context of a more global survey, the semiotician may carry out a comparative semiological analysis of the major systems of representation of the international marketplace (advertising, media) in different countries, by market sector (food and agriculture, tourism, etcetera). It should be possible to envisage the creation of a reservoir of symbolic and stylistic basic data accessible to all international advertisers.

6. The discourse of industrial design

The remainder of this paper will deal exclusively with one domain of the application of semiotics which has received relatively little attention (but see Quarante (1984)), that of industrial design, with particular reference to the shapes and forms conceived for car design. This is an opportunity to set out the basis for a preliminary investigation of this field, one of great concern to marketers during the product design phase.

In an age of technological mutation such as ours, where new technologies (computer aided design, finite element analysis, meshing, robots capable of pattern recognition, and more) are revolutionising the processes by which objects are designed, it has become even more urgent to ascertain precisely which are the concepts underlying the design-creation of objects. In terms of car design, the first job of the semiotician is to state what may seem to be the obvious.

The 'car' is an object whose *value* is quite as much cultural as it is utilitarian. It is 'worth' less in terms of its utilitarian function than in terms of the heavy symbolic investment which it represents. The motor industry's perennial problem is that models must be constantly 'restyled' according to market forces. In view of this, it is clear to what extent everything which conveys 'fashion' in a vehicle must obey varying criteria of 'ostentation', 'expressiveness' and 'novelty', none of which is necessarily compatible with 'functionality'. It is now recognised how imperative it is to come to terms with the psycho-socio-semiotic reality within which the vehicle exists.

The plastic discourse of car shapes and

forms is intrinsically linked to the interplay of three distinct types of discourse: not only that of 'forms', but also those of 'materials', which sustain and display form, and of 'colours' (or 'tones'), which can enhance – or devalue – form.

The greatly extended range of available materials, a particularly marked phenomenon in recent car design, may well totally transform both manufacturing techniques and the design of car shapes. The 'material' ingredient must be specifically analysed by semioticians, as it has considerable influence on the sensorial-aesthetic characteristics of the finished product and on the user's comfort. By the same token, semioticians should conduct systematised studies of the utilisation of *colour* in the car (both interior and exterior). Each colour modifies, transforms and '*informs*' the shape of the vehicle in a specific way. To give an example, pale blue is known to 'lighten' shapes: optically, blue tends to have a 'dematerialising' effect on shape, and metallic luminosity 'lengthens' lines. On the level of the user, colour produces effects of a physiological, psychological and sociological nature, which have behavioural repercussions, and colours are known to be an essential factor of social communication (Baudrillard (1968: 37–44), Déribéré (1968, 1969)).

The semiotician must therefore make wide use of research into the symbolism of colours, their uses, how they are perceived and what effects they have, and he must apply the findings scientifically. The analysis of the plastic discourse of a car obviously cannot be undertaken *in abstracto*, based solely upon the designs conceived by the mechanical engineer and the designer. It requires an analysis *in vivo* of the shape of the car itself (whether of a full-scale model, a prototype, or the finished car).

If, for reasons of clarity, we restrict ourselves here to the interplay of the 'shapes' of the car, it becomes clear that the overall shape of the finished vehicle is the basis of plastic visual communication, even if the design styler is completely unconscious of what is being communicating through the finished form. It is nonetheless generally designed with a *communicative intention*. Each 'shape' thus conceived embodies a specific message, a *plastic space-time* of meaning, which, outside of its functional value, displays secondary symbolic values which directly address the affect or the unconscious.

Each vehicle is the outcome of a series of specific 'choices', for instance that of a formal basic *vocabulary*. A structural linguistic analogy may be carried further, however. We can identify choice of *morphemes* (lines, planes, angles, polygons, etcetera); choice of *syntax* (the formal logic and ordering of morphemes, the complex interplay of relationships existing between the units making up the plastic vocabulary of the vehicle); choice of *semantics* (determined by the set of relations between morphemes and their relative *values*) and choice of *rhetoric* (the expressive arrangement – imitative, whimsical, symbolic or functional – of forms and their organisation).

The linguist Jakobson (1960) isolated six *language functions*' which he identified as being present in all discourse. Two 'functions' of the 'car message' are perhaps of particular interest to the semiotician in this evaluation of the vehicle during the product test of a car: the *phatic* and *poetic* functions.

7. The 'phatic' function and legibility

The *phatic* function is that which allows both physical and psychological contact with the receiver to be established, maintained or broken. Put another way, the plastic message of a car must above all have as its primary function that of being 'perceived' and 'memorised'. In the field of car design, the semiotician first homes on the characteristics of *legibility*, of *recognition* and of *memorisation* of the forms and shapes emitted by the vehicle.

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Here, his analysis is based upon the 'laws' and 'rules' of perception, upon the concept of the 'predominant shape' [1] and upon considerations of 'structuring' and of 'rhythm' in the formal design of the vehicle. The elements of legibility discussed in the following paragraphs are resumed in table 1, to which the reader should refer.

[1] The French term '*forme prégnante*' is rendered as 'predominant shape' throughout. Neither 'pregnant' nor the German term '*prägnant*' (at the origin of this usage in Gestalt theory) is employed in this paper, for fear of confusion owing to the figurative sense, 'full of meaning'. Solomon defines her use of the term below: see also Arnheim (1969: 183–184) and Quarante (1984: 157–159). The etymological and terminological problem has been highlighted by Paul Guillaume (Lalande (1926: 814)).

7.1. Predominant shape

In terms of perception and *legibility* of a shape, the eye is first drawn to visual stereotypes. According to *Gestalt* theory, a shape may be termed 'predominant' (i.e., it is a perceptual configuration which imposes itself powerfully upon the mind of the perceiver) when it requires a *minimum of cognitive efforts* on the part of the perceiver. The perceptual nature of a visual model is determined by at least three principal characteristics of shapes: *balance, consistency* and *simplicity*.

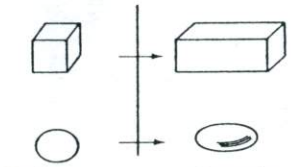
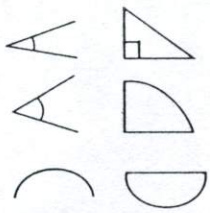
A 'predominant' shape is also 'stable', a form which is structurally stable being a form which is physically predominant. (See the contrast between '*prégnance physique*' and '*prégnance biologique*' in Thom (1980).)

Table 1
Legibility.

1.0 Recognition of the PREDOMINANT SHAPE (i.e., the simplest, the most consistent, requiring the least cognitive effort) has the value of a SIGNAL.

PREDOMINANT SHAPES are therefore immediately identifiable and memorable

2.0 Overriding pattern of perceptual organisation

2.1	2.2
REFERENCE to a GLOBAL predominant shape	REFERENCE to a predominant shape as DETAIL
[3 Dimensions]	[2 Dimensions]
Process of Grouping	Process of Subdivision
EXAMPLES:	EXAMPLES:
	
Static shapes / Dynamic shapes	
MATRIX (generative) SHAPES	NARRATIVE SHAPES

The notion of predominant shape has various implications for the 'legibility' of the shape of a car. It can be posited that two processes obey the rule of *simplicity* and lead to 'good' *recognition* and thus *memorisation* of the shape of a car: the *Gestalt* principles of *grouping* and *subdivision* (Arnheim (1966: 92–94, 1969: 55–66)).

7.2. *Grouping*

Grouping involves the combination of different parts, i.e., details, which are 'neutralised' to form a whole.

7.2.1. Levelling is the process by which the detail is abandoned in favour of the unified whole. Grouping operates in function of the relationships of *similarity* and *analogy* of shapes (and also of other 'elements', such as materials and colours). The combination of the parts in a grouping tends to simplify the general structure to the point that the shape perceived is virtually reduced to its *stylised* form, which is to say to 'its basic organisational accidents, which only appear yet more striking' (Thom (1980: 265)).

7.2.2. The different rules of grouping are all applications of Wertheimer's unique rule of *similarity*, as cited by Arnheim (1966: 96), according to which: 'Elements resembling each other in any perceptual aspect tend to be grouped together'. In Arnheim's own words (loc. cit.), 'The relative degree of similarity among parts helps to determine the degree of their perceptual connectedness'. The notion of *similarity* can, of course, be applied to *any* perceptual factor (spatial arrangement, form, size, orientation, direction, texture, colour, etcetera).

An example of the principle of similarity is seen in the prototype Citroen, the Eco 2000 (fig. 1). It is the continuity of the outline which displays a powerful factor of similarity. The principle of similarity can hold no matter what the actual *shape* of the vehicle. For example, the Austin Mini (fig. 2) and the

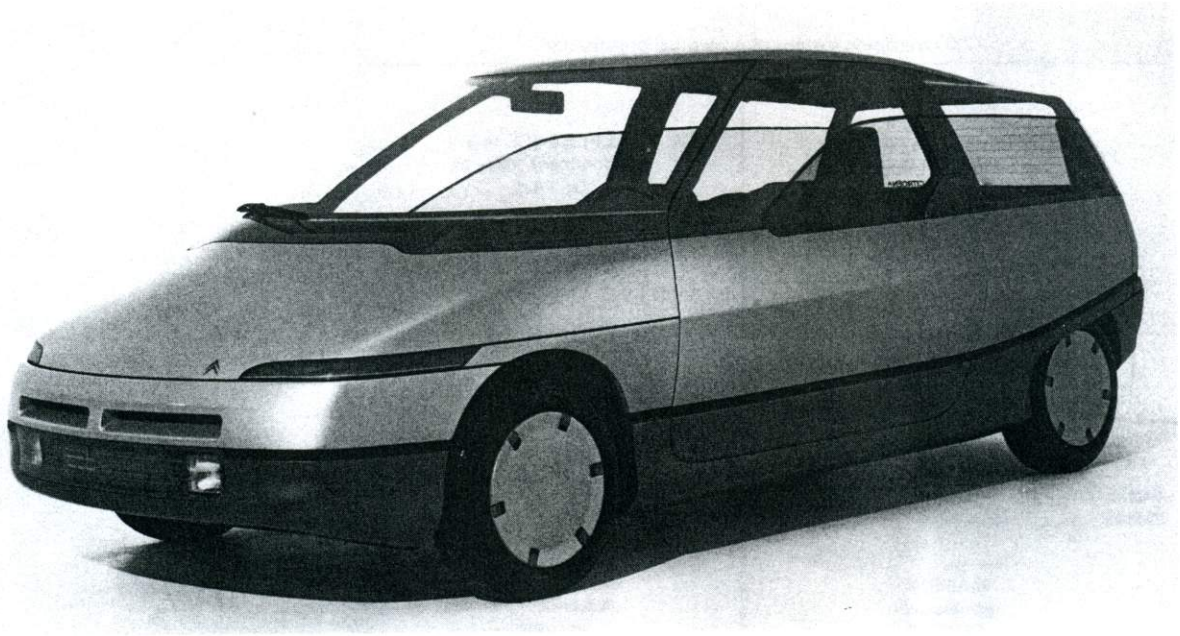


Fig. 1. Citroen Eco 2000.

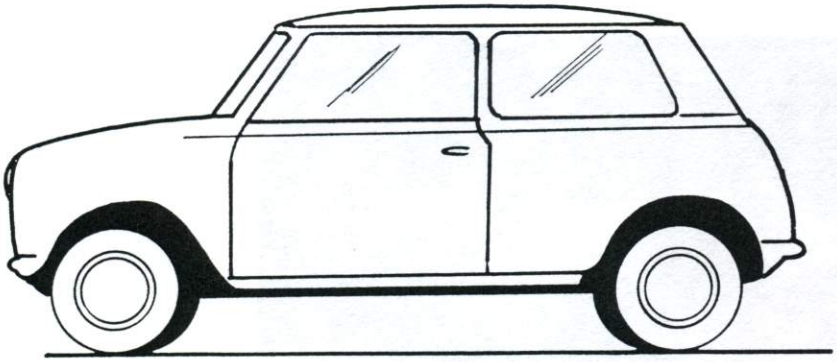


Fig. 2. Austin Mini.

Volkswagen 'Beetle' (fig. 3) are both read according to the same relationship of *formal analogy* whereby the shape of the body of the vehicle is repeated in the shape of the front of the vehicle. The 'predominant' reference shape is 'cubic' in the Mini and 'ovoid' in the VW.

7.3. Subdivision

In grouping, it is the process of levelling which is present. In subdivision, the process of *accentuation* reinforces detail, which tends to 'break away' from the whole.

7.3.1. Accentuation can apply when the detail is seen as being relatively simple and consistent in itself. This is generally the case with outstanding geometrical shapes which determine the mnemic image of the overall representation. Put another way, this particular figure serves as a point of departure for the recognition and memorisation of the global shape of the vehicle, and it is this shape which will impart 'character' to the vehicle.

There are various processes of accentuation. Projecting elements appear to be more prominent. The front wing of the Volkswagen Golf (fig. 4), for example, displays an acute angle at the point where the bonnet meets the front panel. This feature is even more striking in the TVR280i (fig. 5), where the bonnet falls away at a steep angle. Alternatively with the process of accentuation, curves can seem to be more curvilinear, as in the Porsche 928S (fig. 6). This example also illustrates how front and rear orientations can be rendered highly contrasting.

The importance given to the formal inten-

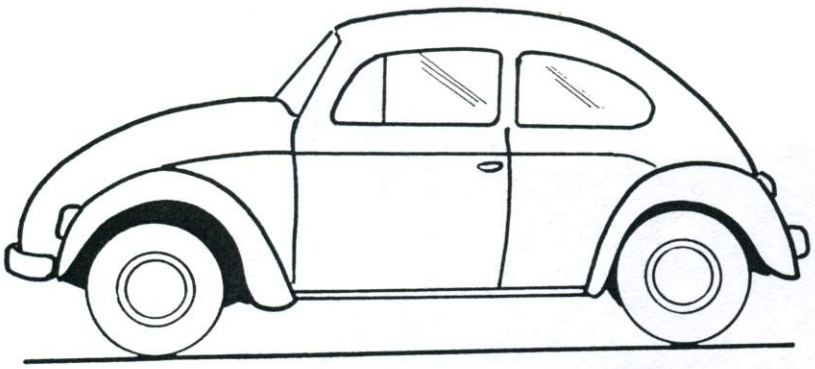


Fig. 3. Volkswagen Beetle.

Fig. 4. Volkswagen Golf.

tional organisation governing the 'reading' of any vehicle or the bias of a specific formal mode organising all of the vehicle's space is exemplified by the Citroen CX (fig. 7). The ogive shape [2] of the CX, seen in profile, is visually a very strong shape which becomes the overriding organisation pattern of the

[2] In French, the word '*ogive*' can denote both the pointed arch shape found in Gothic architecture and the warhead or missile. The term is used by Solomon as a description purely of shape, and the second definition should therefore not be allowed to impart a connotation of extreme dynamic speed. For this reason alone, neither 'bullet-shaped' nor 'missile-shaped' has been used here, even if they might have more immediacy for the reader than 'ogive', whose currency in English is almost uniquely architectural.

Fig. 5. TVR 280i.

Fig. 6. Porsche 928S.

vehicle. On a practical level, however, the overall shape of this ogive is visually truncated both by the central reinforced line of the protection band, and by the fact that the longitudinal axis of the ogive is too stretched-out for the eye to perceive it except at very long range. Indeed, at a 'normal' distance from the vehicle, only the trunk of the front ogive can be clearly perceived, and the 'predominant' shape of the CX which is the most 'memorable' is actually the concave trapezoid shape which totally defines the space of the rear window.

7.3.2. Details also tend to detach themselves from the whole when they express a sufficient *structural opposition* in relation to their context. From this it follows that a 'detail' which should be perceived as being hierarchically 'secondary' as compared to the overall shape may in fact be the first to be perceived, owing to the *predominance* of its form.

8. The 'poetic' function and expressivity

We now turn to Jakobson's 'poetic' function in terms of the *plastic* message which

Fig. 7. Citroen CX.

designates the aesthetic pleasure induced by the way in which the message has been structured, by the 'art' of the design styler. Having decoded the different lines of the overall logical structure of perception of the vehicle, the semiotician can then go on to identify and label the *expressive* qualities derived from it. To find his plastic semantic 'markers', he draws upon what he can elicit from the syntactical configuration of descriptive or imperative values of shapes, and above all from those interrelationships of meaning already recognised by aesthetics research. These are geometric conceptual forms embodied in natural or artificial objects, which, far beyond conventional symbolism, refer to obvious psychological correspondences, and even determine behaviour.

8.1. *Expressivity*

We have already seen that industrially produced objects are not restricted to their utilitarian functions, but develop a semantic 'overload' (e.g., message of tangible space-time, message of 'connotations' of transmitted shapes, etcetera). Therefore we must take into consideration the notions of dynamic structure, rhythm, tension, intensity and modular structure which determine the space-time perception of the realised shape. A detailed study of this is not within the scope of the present paper, however.

8.2. *Order and disorder in the syntax of car shapes*

The information derived from configurations of car shapes differs in two ways: in function of *polysemy* (i.e., the contrasting variety of 'vocabulary items') and, more crucially, in function of opposing syntactic *morphology*. Here, syntactic organisation is seen to involve varying degrees of 'order' and 'disorder' in car shapes. Table 2 summarises the points developed in the following paragraphs.

Table 2
Expressivity.

Identification Recognition of syntax					
1. Logic of ORDER		VS.	2. Logic of DISORDER		
Geometric Rational Regular			Stylisation Idealisation of the *conceptual* shape (symmetry, perfection)	vs.	Caricature Character- isation of the *historical* shape
An assembly through juxtaposition 'Rhetoric' 'Semantic'	Conformity Form equals Function		Metaphor 'Archetypal symbolic' value Timeless	vs.	Metonomy 'Narrative mimetic' value Incorporated in socially & historically defined Space-time
Descriptive value of shape			*Imperative* value of shape		

8.2.1. Configurations which meet the need for a stable, ordered syntax involve proportion, consistency, harmony, symmetry and rational order (i.e., conceptual order). The resulting message is subordinated to the imperative of 'physical predominance', further developed according to the processes of *simplification* and *idealisation*.

Characteristics of simplification are rational geometric shapes, the simplest and most consistent axial organisation, and assembly. This governs an *intellectual* and *rational* arrangement of form.

Characteristics of idealisation are the *conceptual* form, the *pure* 'archetypal' form, perfection and abstraction, and purity and fluid-

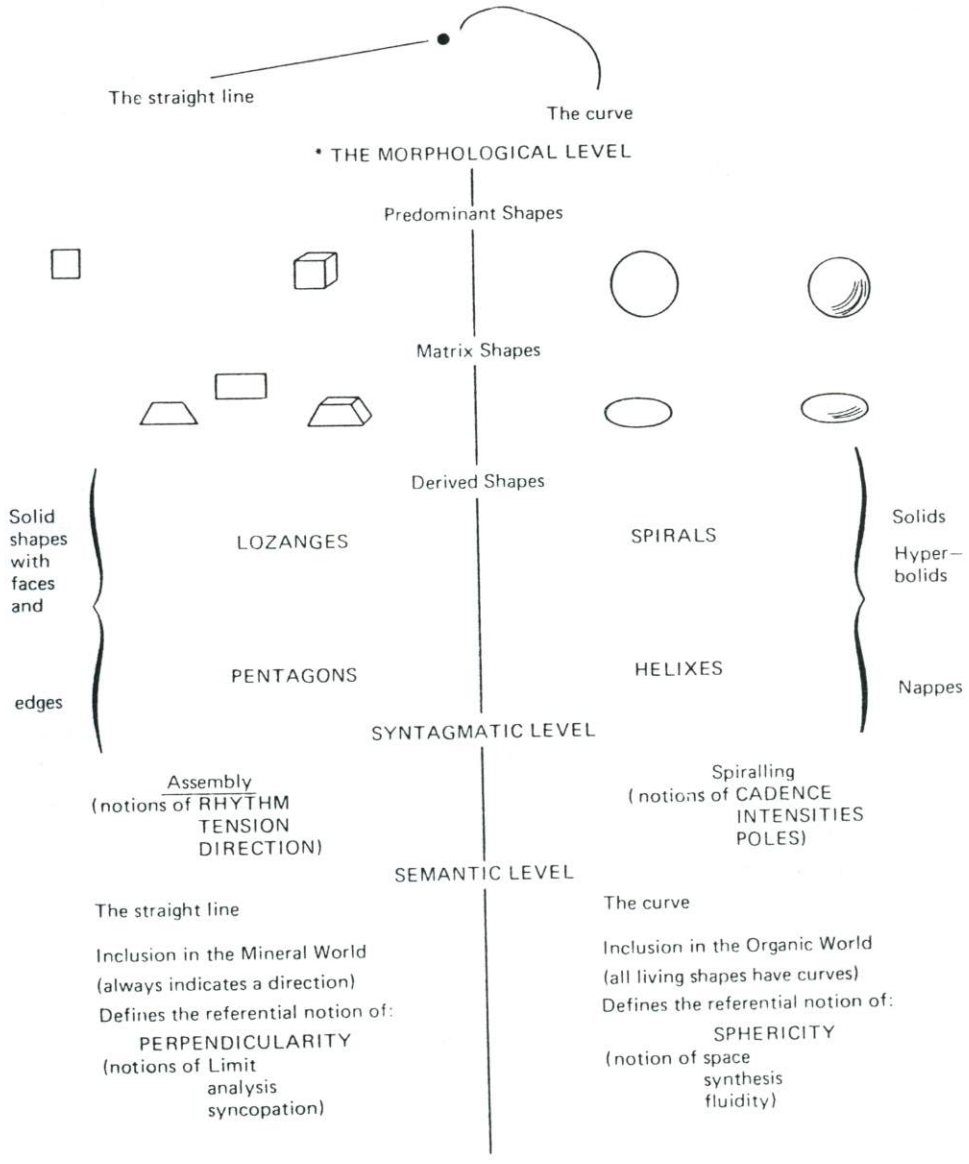


Fig. 8. Elements of formal platic discourse.

ity of line. Here, the arrangement of the 'sublime' shape is *symbolic*. The form thus conceived can either be an *anti-time* struggle or be *timeless*, and is made to represent a superior, impersonal, cosmic order.

8.2.2. When the syntax of a configuration is disrupted to emphasise the expressive figuration of an isolated detail extracted from the whole, even one defying all 'good' internal organisation, the form thus conceived becomes, on the contrary, incorporated *in* time, i.e., in socio-historic *narrativity*. The chosen form plays on resemblance and mimesis, and makes narration possible. The appeal is to the affect, to the emotions, to the senses. The form emitted is morphologically *unstable*.

8.2.3. To draw an analogy between the formal plastic discourse of the car and the 'morphology' of natural language, it may be said that as in natural language, the *rules of syntax* have their origin in a need for a 'physical predominance' (of consistency, stability), whereas their disruption, for example in poetry, conveys the pre-eminence of the emotive or expressive tension of individual *parole* over the order of *langue* (both archetypal and collective).

8.3. Descriptive and imperative values of shapes

Examining now what has previously been discussed according to rhetorical rather than syntactical order, it may be stated that a form becomes increasingly *expressive*, the further it is from its *descriptive* value (*ordered* syntax, where the form is equivalent to the function). Put another way, the descriptive value of a form is equivalent to the 'degree zero' of its expressivity.

In the order of expressivity, shape has an *imperative* value, that is to say it strongly solicits the receiver and evokes in him particular types of affect.

8.3.1. Metaphor is the rhetorical figure which establishes a relationship of substitution through the similarity between elements of two different objects. It may be said to govern the *symbolic* and *archetypal* arrangement of form (substitutive transfer of a manifest *plastic* order for another 'latent' or 'transcendent' metaphysical order, crystallization of the shape in a timeless frame).

8.3.2. Metonymy, another figure which is basic to the internal functioning of natural languages, involves an attributive shift of meaning. It governs the *narrative* arrangement of form, either through global mimetic analogy or because figurative *detail* stands for the whole (and imparts to it its 'character').

9. Elements of formal plastic semantics

Geometric shapes constitute the common ground for different plastic vocabularies, and their symbolic meaning is a good deal more than just a convention: it refers to undeniable psychological correspondences. Furthermore, these determine psychological relationships and behaviour.

While the scope of this paper unfortunately does not allow for an exhaustive enumeration of everything which appears to be operative in the symbolic and psychological meaning of conceptual geometrical forms, fig. 8 (on page 213) will be of interest to the reader as a representation of the 'grammar' of formal plastic discourse. Starting at the 'phonological' level, it illustrates the 'morphemic', 'syntagmatic' and 'semantic' structures of plastic discourse.

10. Conclusion

Continued research in the field gives the semiotician a facility for identifying specific stylistic elements in different car models. His

task is to attempt to understand how the plastic message developed for each car 'appeals to' the receiver, and to isolate what image of the car itself (or of its manufacturer) it may induce or connote.

This means that the product manager who makes the test model choice decision can be supplied with a corpus of material and sensorial break-downs of the reactions of product-users as expressed in depth interviews, discussions and questionnaries conducted elsewhere, according to normal qualitative or quantitative test procedures.

It further means that the design styler can be furnished with a corpus of recommendations of concrete and detailed modifications to make the plasticity of his design, which allow him to optimise the expressive and visual 'output' of his car, and take into account *both* the copy strategy *and* the expectations of the receiver.

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