

Designing communication objects

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To design, as they say, is to modify the world, to act upon reality in order to transform it. It is to introduce into the complexity of the real something that enriches it in the manner desired. Designers are not satisfied with the world as it is, with what they have inherited from their ancestors or from tradition. They want a new world; they seek to create a new world. They work so that the world is changed, transformed and 'improved'.

But in what direction? How can a 'better' world be attained? Reflection on design has abandoned the idea that its purpose is simply to make objects more *functional*, and therefore the world more 'practical', easier to use in order to achieve certain goals. Likewise abandoned has been the idea that the purpose of design is only to make objects more *beautiful*, and therefore the world more pleasant to live in. Contrarily, it is usually stressed that design has "the task of enhancing the function of an object through its form" (De Fusco 2004, 197). From Bruno Munari (1971) to the contemporary designers interviewed by Harvey Molotch (2003, 53-90), it is widely believed that the fundamental concern of the designer should be with both form and function, finding an aesthetic solution for a functional problem.

Yet not all the designers are satisfied with this conception of their work. Here I cannot go into the reasons why. But a clear symptom of this dissatisfaction is the fact that many designers have felt it necessary to develop new concepts with which to describe the activity of designing. Drawing on the fashionable terminology, much use is made today of the term 'communication': at bottom, designers are communications workers, in the sense that their principal task is to ensure that the object is able to communicate as much as possible by itself, i.e. through its form, its own function.

But can we be satisfied with this conception of design? I do not think so, and consequently intend to show two things in this paper. Firstly, I shall argue that design has to do with communication in a different and more sophisticated sense. Since the advent of industrial society, design has been a prime protagonist of interpersonal communication processes. Secondly,

and principally, I shall argue that if we are to understand the fundamental role performed by design in interpersonal communicative processes, we must discard the ingenuous view of communication as the 'transmission', or also the 'sharing', of information – a view closely connected with the natural attitude – and adopt a more inferential conception of the type developed by pragmatics but reinterpreted in phenomenological terms.

Creating and communicating

In what sense, therefore, is a designer a communicator?

The commonplace view is that designers belong within the category of so-called 'creatives': those in society who innovate the culture by *inventing* new forms, or by assembling existing forms and materials in innovative ways, thereby developing new styles and new tastes. It is usually recognized that such creativeness does not merely decorate or reshape objects, but seeks to give them the form best suited to their function. 'Designing' thus signifies giving the object a form that does not hinder, but instead helps, performance of the task assigned to it: *form follows function*. Contrary to this opinion (sometimes put forward even in the specialist literature), a large body of opinion maintains that the designer's fundamental task is to create, not only forms compatible with the object's functions but also, and above all, forms that *communicate* those functions to the consumer. The most successful design is therefore the one that replaces the instructions booklet. It is not necessary to read the instructions because the object speaks for itself: its form tells us how to use it, and for what purpose. This is design centred not on the object and its technology but on the human being who uses it.

The best-known reference for this current of thought is Donald Norman's successful *The Psychology of Everyday Things* (1988). The book is entirely founded on the idea that many of dysfunctions of everyday life are due to bad design: that is, design which does not embody in the object the instructions for its use. Norman writes, for example (1988, 2): "Well-designed objects are easy to interpret and understand. They contain visible clues to their operation. Poorly designed objects can be difficult and frustrating to use. They provide no clues – or sometimes false clues. They trap the user and thwart the normal process of interpretation and understanding." The task of the good designer is therefore to design the object in such a form that it contains all and only the *clues* required by the

user to understand it naturally; or in other words, to understand its use and operation without having to conduct tests or read the instructions. This idea has numerous corollaries. One of them, for example, is the principle that the number of controls on a technological object should correspond to the number of its functions, so that all its possible functions are visible and therefore perceived by the user (Norman 1988, 22).

Another well-known manifestation of this current of thought is the notion of 'usability', which since its theorization by Jakob Nielsen (1993) has become a watchword in the design of websites and computer programs. Since usability consists in the degree of facility and satisfaction, i.e. naturalness, with which the interaction between the human being and the technological device takes place, also in this case the good designer designs the device so that it directly communicates its functions, and how these can be activated and regulated, to the user (see also Visciola 2000). This is especially the case when a device, for example a computer, comprises an interface which interrupts the naturalness of the body's interaction with the surrounding world.

The distinctive feature of this conception of design is that it restricts communication to the relationship between the user and the object, as if other people did not exist. This is a somewhat solipsistic conception, and it has not been substantially changed or attenuated in the most recent developments of Norman's thought. He has become aware that the subject's interaction with an artefact is mediated not only by perception, but also by emotion (see Norman 2004). But this still does not enable him to escape the narrow field of the user's relationship with the object. Here, communication takes place solely between the instrument and its master.

My intention is not to claim that this conception of the role of design in the contemporary world is wrong in itself. But it leaves me unconvinced, for it is excessively unilateral, almost claustrophobic in its view of the object and its user. Thus lost is the social setting which the interaction unfolds between the person and things. To prevent such a loss, it is necessary, I believe, to interpret the designer's activity in light of the wide variety of forms of communication in which it is involved. One of these forms, which in other respects is very important, I shall not discuss here. I refer to the way in which every object, because it incorporates traces of the uses to which it has been put in the past, exhibits its biography in public, and therefore 'speaks of itself' through its simple presence in the world (see Appadurai

1986). Objects are not made of inanimate matter so that, once they leave the hands of their designers or producers, they present themselves to their users always with the same look. As they traverse the world, they interact with their array of users and accumulate traces of these interactions. Thus objects, in analogy with human beings, little by little construct individual biographies which live an imprint on the interactions of those objects with the human world. In short, the design of an object is never, nor could be, confined to the designer's hands alone. Awareness of the social life of things is important to counteract a certain delusion of omnipotence from which designers sometimes suffer. This, however, is not the issue addressed by this paper.

The other form of communication which should be borne in mind, and on which I shall now concentrate, is person-to-person communication, that is, between two or more subjects endowed with consciousness and ability to produce meanings. This is the fundamental form of communication – communication in the strict sense.

What, one might ask, have objects got to do with interpersonal communication? Of course they have to do with it because they are means of mediated communication, and are therefore *media*. But the point is that not only the media as traditionally understood (television, the computer) are means of communication. Instead, all three-dimensional objects are by their very nature active instruments of communication, and in particular of non-verbal communication.

I shall seek to clarify the deep-lying meaning of this obvious statement, which is laden with consequences. That objects are, in the broad sense, instruments of non-verbal communication pertains to their very nature as artefacts or natural products, and to our ability to infer effects from causal relations. An object is therefore always the sign of its creator, and it is often a means to communicate – usually indexically but also symbolically – individual or social characteristics of its possessors. The crown denotes the king, the oriental carpet testifies to the merchant's opulence and travels, the parasol indicates that its owner is a female. But with the advent of modern society a new phenomenon has shed different light on the social role performed by objects.

Put very briefly, social stratification has lost its ability to organize and to order the daily lives of people, and to confer distinct identities upon them. During the twentieth century, the constant increase in the flexibility of the

social structure, and therefore in social mobility, generated widespread uncertainty about the positions of others. Urbanization, and population growth in general, even in rural villages, meant that people much more frequently encountered strangers in their everyday lives (the postman, the shop assistant, the passer-by) whose behaviour was in principle unpredictable. Such uncertainty required new and more agile means with which to identify people, and instruments with which to facilitate the typification process on which social relations are based. These served not only to identify and typify the Other but also to construct the Self, the personal social identity. Objects have thus become, besides other non-verbal signs (like posture, body language, accent etc.), fundamental tools of communication, in that they signal much more rapidly and reliably than words the status and other important features of people (Leonini 1984). I am referring, obviously, to clothes, but also to accessories, vehicles, home furnishings, and in general all objects of daily use.

Whereas people would once slake their thirst by drinking from just one receptacle – a wooden bowl or a glass according to social status – today they use a half dozen: a water glass, a wine glass, a beer mug, a tea cup and a coffee cup, a cup for breakfast, a flute for sparkling wine, a tumbler for whisky. This is not explained by functional distinctions alone (after all, drinking tea is no different from drinking water – unless one wants to crook one's little finger while sipping graciously), nor by the average growth of the population's wealth and its capacity for consumption. Laying the table with one glass per person or with two, pouring brandy into a snifter or into a jam jar, is to communicate to others (actually or potentially present) information about oneself: one's identity, style, tastes, and position in the world.

The system of industrial production has responded by multiplying the types of objects available to the consumer to satisfy a particular need: glasses both large and small, beakers and goblets, round, oval, square, hexagonal glasses, ones made of glass, plastic, and so on. With the advent of modern urban society, consumers have increasing need to communicate their identities rapidly and overtly, and therefore to surround themselves with things able to communicate what there is no time or occasion to communicate verbally. Modern urban society requires a system of signs sufficiently diversified so that it can act in the stead of the language used in interpersonal communication. Industrial production, with its proliferation of models, series and variants, responds exactly to this social need – an aspect

that seems to have escaped Baudrillard's (1968) notice. Contrary to the objects that populated the everyday world of pre-modern societies, those of today are parts of a system of highly complex interpersonal communication through which roles, positions, hierarchies, forms, and frames of interaction are negotiated and defined, but also such personal characteristics as credibility, professional ability, types of habitus (likes and dislikes), as well as forms of shared culture like daily rituals or symbolic universes. All the three-dimensional objects in our world that are in some way used by human beings inevitably act as media of social communication.

I now return to the role of the designer to explain the relevance of all this to his/her activity. The objects of industrial production, and therefore the design objects which constitute a subset of them, are distinct from pre-industrial objects not only, and perhaps not even primarily, because they are mass-produced but also because they are intended to meet a new type of need – one that is no longer merely material (slaking one's thirst), but also immaterial (slaking one's thirst in a specific way which communicates a particular social type). If this is true, then also the social role which designers perform with their profession has changed as well. Designers are no longer confronted with the somewhat banal task of rendering the object's use 'natural' for the user. They are also faced with task of *making the object useful as an instrument of social communication*. Here 'useful' means usable in the various situations of everyday life, and therefore malleable, interpretable, and able to convey the meanings desired by the consumer. Designing consists among other things, and in many cases does so principally, in the inventing of new ways for human beings to communicate. Designing makes the world 'better' because it equips people with new tools to communicate with others, in a world where communication has become the individual's main source of identity, satisfaction, and self-realization.

On the sense of communicating

I now turn to my second topic. As said at the outset, I believe that the particular role performed by product design in interpersonal communication can be adequately explained if we discard the naive view of communication as the 'transmitting', or the 'sharing', of ideas among people and adopt a model better able to take account of the multiplicity and variety of forms of human communication.

What, then, does 'communicating' actually mean? In this case, too, one must deal with a 'scientific commonsense' which is difficult to dispel. Frequently used to describe communication is the image of a message sent by an addresser and received by an addressee. This model is based on the commonplace examples of the letter, the sound that travels along a telephone line, the datum that transits from computer to computer. When describing this model, reference is very often made to Jakobson's (1960) well-known scheme: the addresser reaches the addressee with a message sent through a channel and, thanks to its conformity with the rules of a code, transmits a certain content (context). Despite its undisputed completeness, Jakobson's scheme pertains to the 'hydraulic model' of communication first formulated by Shannon and Weaver (1949).

This is a very natural view of communication, but precisely for this reason it is also very ingenuous. I certainly do not intend to dispute the explanatory usefulness of Jakobson's scheme and the theory underpinning it. But it clearly embraces the natural conception of communication. It envisages a content that passes from the addresser to the addressee, without considering the problematic nature of this 'passage'. How does an idea, an item of information, an image pass from one mind to another? What real channel is opened between two communicating subjects? The ingenuousness of the natural attitude consists, in this case, in a failure to address these questions, which instead concern a fundamental issue: the data of consciousness are given to each single mind in its singularity and cannot be somehow 'transferred' to another mind; nor can they be 'shared' among two or more minds (see also Sperber and Wilson 1986, 1). What is given to me 'in flesh and blood' can only be 'presentified' by those to whom I speak. There may be an analogy between their presentification and my givenness, but there is never identity. All the more so because the others have a standpoint in the world different from mine (but for many other reasons as well). Edmund Husserl's phenomenology highlighted this aspect. Although it was not concerned with the issue of communication, it showed that it is not possible, in principle, to access the consciousness of others, and that only on this basis is it possible correctly to address the question of how, in fact, each subject is able to deal with others – to the point of producing the astonishing event that is the construction of a shared vision of the surrounding world (see Husserl 1963).

In the past forty years, there has gained ground in semiotics and linguistics a conception of communication which, though not originating from phenomenology, furnishes a useful conceptual tool for my purposes here. This is a conception of communication able to give better account than others of the role performed by 'functional' objects, by things, in communication among human beings. This concerns, as said, the inferential model of communication, and in particular the developments brought to it by relevance theory (Grice 1989, Lewis 1969, Sperber and Wilson 1986). I shall now give a very brief description of this theory, also drawing on basic notions of phenomenology.

Firstly, one should bear in mind the distinction between communication and signification. By 'signification' I mean an *act performed by a subject*, and in particular the action of attributing a certain meaning to a fact of experience. This too is a notion of phenomenological origin, which was introduced into semiotics thanks to Greimas. Consider the classic example of smoke as a signal of fire. This is not an act of communication in Grice's sense. But neither is it a case of causal interaction with the surrounding world. It is not the smoke that physically forces us out of the burning house. The smoke is relevant only as vehicle of a content which is something else: that is, in semiotic terms, the smoke is a sign. Whereas when we burn ourselves on a flame we immediately withdraw our hand, even before we exactly understand what has happened, the smoke does not force us out of the house until we have understood it as a vehicle of meanings, as a meaningful event. In mainstream semiotics, reference is made in this regard to an act of signification: that is, an act of perceiving or constructing a meaning. Signification occurs whenever a material event is perceived *by someone* as meaningful.

There are two theses implicit here.

The first is that this act or process of signification (*Sinngebung*) is an act of the experiencing consciousness. From this point of view, meaning – understood not in a linguistic sense, but in a sociological and pragmatic one – is *not* a property of the object, of the material sign, but a property of the experience that one has of it. The meaning is the product of the signification process performed by the recipient of a sign or a text. Even Grice's "utterer's meaning" (1993, 131) is to be interpreted as the meaning of the particular recipient of a sign that is the speaker. This is a point which, as far as I know, has been ignored by the most interesting of the recent theories on

design: Klaus Krippendorff's (2006) *semantic turn* and the theory of product language of the so-called 'Offenbach approach' (Steffen 2000). It is not the object as such, in its materiality, that possesses a meaning (not the image, not the sound emitted) but the object as experienced, the object of a particular person's experience: what Husserl called the noema.

The second thesis argued here, and which is a consequence of the first one, is that the acts of signification and communication are not logically equivalent. They are not on the same plane. It is possible to conceive signification without communication; it is not possible to conceive communication without signification. Communication which does not end in a signification has failed; it is not communication at all, it is only a failed attempt to communicate. If the recipient is lacking so too is the communication. This is because signification *precedes* communication and *makes it possible*. They are not two phenomena of equivalent level, but the one is a more general phenomenon on which the other is grounded. This is, to my mind, the fundamental theoretical key to understanding what happens when people communicate.

The ability to produce meanings is a fundamental skill of human beings. We live, not in a world of things but in a world of meanings. Our ability to communicate draws on this fundamental competence of signification to introduce into person-to-person relations – alongside processes of physical interaction – those of cognitively mediated interaction. If, in fact, our competence of signification enables each of us to 'interpret' the surrounding environment – that is, to see beyond brute facts and grasp in them signs of something else (the smoke for the fire) – then for all the others, for our potential interlocutors, there opens up a new possibility: they can modify our surrounding environment in order to direct our act of interpretation to the construction of those meanings that they desire. It is thus possible, for example, to use smoke to send signals.

Every social actor knows that s/he can influence the behaviour of others not only by materially influencing their bodily dispositions, but also by influencing the horizon of their meanings through change in their physical environment. Hence, to communicate is not to transmit or to share pre-packaged meanings, but to act by changing the surrounding world in view of the recipient's presumed ability to make sense of the new reality experienced. Communicating is a way to exploit the signification competence of others to one's own advantage; or in other words, to the advantage of

one's need to induce certain behaviours (or mental states) in the addressee. As Sperber and Wilson put it:

Communication is a process involving two information-processing devices. One device modifies the physical environment of the other. As a result, the second device constructs representations similar to representations already stored in the first device. Oral communication, for instance, is a modification by the speaker of the hearer's acoustic environment, as a result of which the hearer entertains thoughts similar to the speaker's own (Sperber and Wilson 1986, 1).

At this moment I am speaking to you. I am communicating ideas to you. But it makes no sense to think that, together with the sound waves leaving my mouth and reaching your ears, there is something like ideas which follow the same trajectory and pass from my mind to yours. Nothing can pass from one mind to another. The sounds that I am emitting are nothing but a minor transformation of our shared environment, which I make in the awareness that, thanks to the existence of a shared code, it should induce you to form mental representations similar to those that I want to arouse in you.

Codes are no more than devices useful to standardize the physical environment and its modifications. As such, they facilitate the task of communication. But they too derive from the basic ability of human beings to construct meaning. To communicate is not to transmit messages, but to transform the reality in which we live, so that our interlocutor is able to produce acts of signification similar to those that we desire: if we want someone to pass the water at table, we must modify his/her physical environment (by emitting sounds, by altering the position of our body or of objects: for example, by holding our glass out) so that s/he realizes that we want to drink.

Relationship-centred design

To conclude, I must briefly clarify how a phenomenological-inferential model of communication is better able than the hydraulic model to interpret the communicative function of objects in contemporary society. I will restrict myself to two considerations.

In modern society, objects, as said, are valuable instruments for interpersonal communication. As a result, their design has become an activity which occupies a prime position in the process of social

communication. Defining the sensible appearance (the 'form') of an object is to define its communicative potential, and therefore to open one array of communicative possibilities while innumerable others are closed. In this sense, the work of the designer can be well interpreted through the category of communication. But the code model is unable to explain this form of communication, because it presupposes the existence of a code shared by the user of a certain object and its surrounding social world, a code concerning precisely the meanings of objects. And this circumstance seems highly unlikely. The inferential model, by contrast, describes communication as the production and interpretation of clues by drawing on shared experience of the surrounding environment, and this is much more compatible with the communicative use of things.

But there is a second aspect which makes the phenomenological-inferential model particularly interesting. If one admits that communicating means altering the state of affairs in a such way as to arouse a desired reaction in the interlocutor, then it must be said that design is a very powerful way to alter the state of affairs. To design, as I said at the outset, is to modify the world. By modifying the world, the designer changes not only the physical environment (the system of causal connections), but also the experience of people and therefore the processes of signification that they enact. Altering the physical environment arouses in the addressee, the consumer, new acts of signification. To design, therefore, is not to produce meanings, but to produce material situations that are potentially meaningful. Only on the basis of a phenomenological-inferential model does the role of the designer in contemporary society emerge with all its potency. By designing objects, the designer opens (and simultaneously closes) new possibilities for communication and, therefore, for the production of identity in contemporary society. Neither the object nor the human being is at the centre of the designers activity, but social relations. Something to which Lucius Burckhardt directed attention some decades ago:

The discipline that I would want to represent teaches that at the centre is not the object, but ... 'but the human being', one often hears. False. The building blocks of the world are not human beings, nor things, but the invisible rules of social processes, be they called roles, relations, expectations of behaviour, or whatever else (Burckhardt 1970).

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