4.1   Language

Language is a complex concept. Although people are aware of using a language, they rarely know much of what is going on while speaking, listening, or reading. Writing is taught in grammar school, where students are made aware of pronunciation, spelling, grammar, composition, and rhetoric and led to think this is all there is to know of language. For the purpose at hand, this understanding is insufficient, however. To set the stage, the following distinguishes four approaches to conceptualizing language and settles on the last without much justification.

- **Language as** *a system of signs and symbols*: This essentially is the Saussurean (1916), Peircean (1931), and logical positivist view of language. It considers language a *medium of representation*, takes truth as the validity criterion, and looks for references in a nonlinguistic, often physical, world.

- **Language as** *a medium of individual expression*: This concept underlies much of literary theory, emphasizing authorial intentions, for example, and is fundamentally committed to individualism. It takes sincerity and consistency as a validity criterion, and looks for meanings in speakers' emotions, ideas, and cognitive structures, more generally, in the structure of the human mind.

- **Language as a** *medium of interpretation*: This view looks for meanings in the possible rearticulations of forms (or texts) and relies on a community to determine the legitimacy of the interpretations offered by its members (Hirsch, 1967).

- **Language as a process of** *coordinating the perceptions and actions* of its speakers — languaging for short (Maturana, 1988): This view identifies meanings in the manner in which the members of a community live with each other: coconstructing their realities, developing an understanding of each other, and enacting their conceptions of each other and of each other's artifacts. It takes the viability of the linguistic practices within their community as criterion, i.e., whether they survive their use. Here language is dialogue, "the house of being"* (human).

    A brief enumeration of several outstanding characteristics of the notion of *language as a process of coordination* will reveal its human-centeredness:

- **Language use** *directs attention*, points out, warns, foregrounds, or brings forth and distinguishes. Talking of an artifact selects that artifact for attention and highlights particular dimensions and features of which there usually are many. Calling a car a big car, a designer's car, an expensive car, a lemon, an Italian car, or a sedan brings forth certain characters of a car at the expense of others. Language distinguishes between what it highlights and what it hides.

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* Letter on Humanism [Heidegger (1947/1977:193)].

- **Language use *frames perception*.** Metaphors are excellent examples of the structuring of perceptions. Talking about communication in terms of the common container metaphor renders messages as having contents that authors need to enter into the message they are composing and readers need to get out of what they read. When thinking through these entailments, this might be difficult to comprehend, but the metaphor makes us think that meanings are contained in messages. By contrast, talking of communication with the vocabularies of influence, exchange, conversation, or dance has entirely different entailments (Krippendorff, 1993a). For example, in debates, the war metaphor is common. Accordingly, we attack our opponent, score a hit, defend our position, or succeed in shooting down an opponent's argument. We do not merely talk that way but also experience when we are attacked, perceive our opponents' aggressiveness, relish our victory or feel demolished when defeated — as if human communication were a war with words (Lakoff and Johnson, 1980:4). In political elections, competing candidates introduce language into the deliberations that make the other appear unelectable. BMW calling its cars an "efficient driving machine" induces a perception that is quite different from VW, which calls its car a "new beetle." People cannot help but perceive their world through the vocabularies they are using, even if only to describe it.

- **Language use *creates facts*.** Declarations, promises, requests, and acknowledgments have no truth-value. They are acts that are performed in speech (Austin, 1962; Searle, 1969) and constitute what they say (Searle, 1995). The constitution of a country is not just a piece of paper. When used, referred to, believed in, and enacted, it creates political practices, institutions, and a government, if not a country. When an insurance company assesses a car that was involved in an accident too expensive to repair, it declares it as a total loss. This declaration has very real consequences for the owner of that car. Often, declarations come in the guise of predictions that, if believed true and acted upon, create the reality they state. The economic crisis in the 1920s and the oil crisis in the 1970s are well known examples. The economic crisis was triggered by the belief that banks could not pay their customers and the oil crisis by the belief that gasoline stations would soon have no gasoline to pump. Fads and fashions are largely created by the self-fulfilling declarations of opinion leaders concerning what is "in" to wear, to use, or to say. When a sufficient number of people come to believe this is so, and act on that belief, there is a good chance that it becomes so. All facts and artifacts occur first in language, and the structure of accounts of them has much to do with what becomes real.

- **Language use *is relational*:** *Everything said is said by someone and in the expectation of being understood by someone else.* Narratives are told in the expectation of being retold or at least acknowledged or responded to. They invoke second-order understanding and suggest that meaning,

whether of words or of artifacts, resides in a recursive relationship between speakers and listeners: Speakers choose their words for listeners to understand them as intended. Listeners respond to what they believe speakers had in mind. Consequently, speakers come to know what their narratives actually meant to their listeners. An example of this recursion is the attribution of interpersonal relationships, authority, for example. Authority cannot exist without some people attributing it to someone and that someone reciprocating by actually performing that role, further encouraging that attribution. Thus, language use not merely organizes people's perception of artifacts, it 'negotiates' these perceptions within human relationships, or more generally, within the very social structures in which people and artifacts constitutively participate.

• **Language use** *is an embodied phenomenon*. The ability to use language entails the ability to articulate, listen, learn, and conceptualize experiences, including feelings. This ability is inseparably tied to the human body. Abstracting a system out of the process of languaging, as practiced in structural linguistics, misses what is central to understanding the role of artifacts in human communication: second-order understanding, intrinsic motivation, emotions, coordination within a community, and the enrollment of stakeholders. Meaning does not exist outside a human body.

If the fate of all artifacts is decided in language, it stands to reason that they must be designed to survive in language and human communication, in the social processes that construct, constitute, or support them, but that can also put them out of use. This elementary fact is rarely recognized among designers. A probable reason for this lack of attention is the popularity of the previously mentioned system concept of language, of semiotics, among one of its branches, which prevents seeing language as implicated in what artifacts mean in the lives of their users. Language is as complex as human nature; in fact, it is indistinguishable from human nature. The foregoing snapshots of the fourth theory of language are intended to prevent readers from falling back on the other conceptions of language. The aim here is to develop a few design-relevant language-based concepts worthy of further explorations.