Introduction

Gregory Bateson (Bateson, 1972) in his *Ecology of Mind* Defines information tantalisingly as any difference that makes a difference. By this he means that an environment with no evidence of, what we referred to in Chapter 4 as modulation, conveys no information. In other words, if the environment is entirely uniform in nature then it will have no effects upon organisms. Fortunately, differences are endlessly transmitted around the physical environment. Differences in the surface of an object become differences in the wavelengths of light. Differences in light signals become differences in stimulation on the sensory cells making up the eye of some organism such as a human. These differences stimulate in turn differences in patterns of activity in the nervous system of the organism which in turn stimulate differences in bodily movement such as posture and locomotion.

Bateson thus argues that differences are continuously being made in the world. However, only those differences that can be perceived and interpreted by an organism can be considered signs. Hence, differences may have an objective existence over and above perceiving actors in the sense that differences are evident in the signalling of things. But only when such signals become *capta* (Holwell and Checkland, 1998a) – are perceived as symbols – and assigned some meaning by actors should we speak of the presence of signs.

This highlights an important point about symbols: a symbol points in two directions. On the one hand, it points to the physical world and
relates to signals emanating from the ambient environment. On the other hand, a symbol points to the social world: it relates to effects such as individual and social actions. Interposing between these two is the realm of psyche – of perception and cognition – the motors for the generation of meaning. In Chapter 2 we introduced the term informa to refer to this latter pattern of organisation; which is the focus of the current chapter.

Informa underlies our response to the world in numerous areas of our lives. Take the area of consumption and our response to advertising. We might argue over the issue of whether advertising conveys information but we probably would not argue that we normally have some response to it. What marketing people attempt to do is to manipulate our responses in subtle ways. They attempt to affect not only our perceptions of products and services but how we think about such products and services; this is in the hope that they can influence our reaction to such products and services. This is the realm of informa.

Informa therefore relates symbols to meaning. Semantics is concerned with the content or meaning of signs used within the message conveyed in a communicative act. As we shall see, a simple model of meaning is one in which a sign is broken down into three component parts which are frequently referred to collectively as the meaning triangle (Ogden and Richards, 1923). The meaning triangle helps distinguish systematically between data and information. As we have seen in Chapter 6, a datum, a single item of data, corresponds to a symbol or a set of symbols in the meaning triangle. Information concerns intentionality (with-a-t) and intensionality (with-an-s). Information conveys the aboutness of thoughts. Information also occurs in the ‘stands-for’ relations between the symbol (designation) and its concept (intension) as well as in the imputed relation between the symbol and its referent (extension). However, the association between information and meaning is not an immutable one. Information is both a noun and a verb. Meaning is an accomplishment, is ever-changing and is reliant on actors using sign-systems.

We bring together and expand upon a number of previous examples to help illustrate the nature of information within this chapter: clay tokens, khipu and human facial expressions. However, to set the scene, let us first consider some of the difficulties of defining the precise nature of information.