Image building in the information governance discourse: Steps to economies of meaning
Beijer, P.

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Critique of Meaning

‘Some have concluded that, if meaning is negotiable, then it is no longer of any use in explaining the way we understand one another (Eco, 1999, p. 271)’

‘Meaning comes from the self-reproducing organic system that is language. But what happens when speaking disengages from the organic being of language, and re-engages in a logic of flow? What happens when speaking becomes ‘parole’ without ‘language’ becomes performance in the absence of competence? What happens with a new hegemony of flow, of flows of utterances? We then ask less what words mean but instead what they do. How they perform (Lash, 2003, p. 216).’
Introduction

Previously it became clear that a concept of meaning in the discourse of information governance is essential to make responsible choices in a semiotic order. In general, meaning is an elusive concept and provides no explicit solution to allow that discourse. It makes sense then to explore various concepts of meaning that are relevant to this discussion. To do that, I will explore and elaborate on various concepts of meaning and develop a theoretical perspective on a concept of meaning that is necessary for the discourses in information governance. It is the second step in the research: elaborating on the notion that emerged from the first step. Its purpose is to find the necessary concepts for enhancing image building in the current discourse in governance.

I must note that it is not my intention to deep-dive into the theory of linguistics, the natural connotation with the concept of meaning. Although there are many concepts related to meaning in the linguistics domain, the sole purpose of elaborating on meaning is to constrain the research and move it into the direction of a mental framework of meaning, the purpose of the remainder of this research.

The chapter starts with a short introduction of the philosophical origin of the concept of meaning in general, followed by introducing the concept of communication to create a foundation for elaborating on the concept of meaning in relation to communication and information. It then dives into various aspects of meaning in the interplay with communication and information. It visits the technical interpretation of the transformation of meaningful signals and the socio-technical interpretation of how subjects meaningfully respond to information. Next, the chapter supplements this view on meaning by developing a more comprehensive concept of meaning that adds how subjects meaningfully react to information, symbols, and their environment. In a synthesis, the chapter consolidates all notions of meaning and develops some specific conclusions. They serve as the foundation for an overall proposition of a concept of meaning for the discourse in information governance. The chapter closes with an overall conclusion and a summary of how different theories contributed to the developed notion of meaning.

Introducing meaning

At first, the notion of meaning was the interest of philosophers. Schleiermacher (1768-1834) and Dilthey (1833-1911) introduced the novel idea of what we now call hermeneutics in philosophy. With Hermeneutics and Criticism (1838), Schleiermacher laid the foundation to the art of understanding, the meaning of discourse; interpretation of language and thought affects understanding and needs both linguistic and subjective interpretation in order to truly understand the spoken or written discourse (Scott, 2003). With The Rise of Hermeneutics (1900), Dilthey advanced on ideas from Schleiermacher by generalizing it into a systematic program in order to reconstruct meanings in human sciences. Today one calls this the
hermeneutic circle, which suggests the iteration between the implicit and the explicit, the particular and the whole in discourse (Ramberg & Gjesdal, 2009).

Later, Saussure (1857-1913) and Peirce (1839-1914) introduced the semiotic approach to the notion of meaning. Saussure introduced the term *semiology* as the study of the role of signs in social life – their meaning in life. Peirce introduced the term *semiotic* to consider the formal doctrine of signs. Today one uses the term semiotics as an umbrella term for the whole field (Chandler, 2002). Morris, a behaviorist who studied the communication of animals and other organisms, further refined semiotic studies as a triad of 1) Syntactics, the relations among signs and formal structures, 2) Semantics, the relation between signs and the objects they refer to, and 3) Pragmatics, how signs affect the people (or animals) that use them (ibid., p. 231). Various disciplines have accepted this semiotic scheme to study processes involved in communication.

**Communication**

Communication processes include various aspects such as signal, signs, message, and information. Using the semiotic triad, we can distinguish these aspects to determine their role and analyze the transmission of information at three levels: syntactic, semantic, and pragmatic level. The syntactic level merely concerns the relation between signs and transmission signals. They act according prescribed rules, and if technical interference alters these rules, such as a sequence error, it will disturb the communication. The syntactic level does not involve meaning because it merely relates to the transmission of signals. At the semantic level, the sender and receiver of the signal apply a meaning to the signs. If the sender and receiver have a semantic agreement – both apply the same meaning to the signs – the sender can transmit an actual message to the receiver. If the receiver assigns the wrong meaning to a sign, the message does not come across. The pragmatic level concerns how the intention of the sender affects the receiver. Put differently, a sign’s meaning affects the receiver, turning the message into information.34 If the receiver considered an important message as non-relevant, the communication failed because the receiver did not act according to the intention of the sender. (Shannon & Weaver, 1949; Wigand, Picot & Reichwald, 1997). Table 8 summarizes how we can analyze communication processes using the semiotic triad.

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34 According to this scheme we can interpret information as purpose-oriented knowledge – information triggers action (Wigand, Picot & Reichwald, 1997).
Table 8: Levels of information transmission (after Wigand et al., 1997)

<table>
<thead>
<tr>
<th>Semiotic Level</th>
<th>Description</th>
<th>Communication disturbances example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pragmatic</td>
<td>The sum of the transmission of signs, their meaning, and intention of the sender</td>
<td>The receiver considers an important message as non-relevant</td>
</tr>
<tr>
<td>Semantic</td>
<td>The sum of the transmission of signs and their meaning</td>
<td>Receiver assigns a wrong meaning to a word</td>
</tr>
<tr>
<td>Syntactic</td>
<td>Transmission of (physical) signs</td>
<td>Sequence of signs distorted by technical interference</td>
</tr>
</tbody>
</table>

Viewing the semiotic scheme from a meaning interpretation, we see that semantics concerns the meaning of the formal structures, while pragmatics addresses its usage. The contribution of the semiotic scheme to the introduction of the concept of meaning is the notion that, especially on the semantic and pragmatic level, communication and information are key concepts to understand aspects of meaning. Allegedly, communication, information, and meaning are all elusive concepts because we interpret them differently in various contexts and disciplines. An illustrative example outside the information management discipline is how biological research on the human immune system uses these concepts. It applies Shannon’s (Shannon & Weaver, 1949) probabilistic theory of information in order to study the ‘communication’ between the environment and bodily tissue in analyzing how the autoimmune system of the human body reacts to the environment (e.g. Atlan & Cohen, 1998). Other examples outside the information management discipline are the ‘communication’ and meaning of art, the environment, ‘communication’ in neurosciences, and ‘communication’ within social constructions (e.g. Blok, 2003; Eastman, 1954; Tylén, Wallentin & Roepstor, 2009; Giddens, 1984; Fish, 1980).

**Meaning and communication**

Information theoretical approaches are part of the earlier discussed concepts of meaning and communication. A closer examination of information in connection with system and communication theories will show that their concepts of meaning are ‘materialistic’ by nature. They do not have much in common with a concept of meaning required to cover the informational experience in the information governance discourse, because information has no value or intrinsic meaning (Sveiby, 1998; Miller, 2002).

First, when we consider the meaning of information in the cybernetic sense – systems theory – we can only refer to meaning in a system of systems relation, hence, only in the case of communication in third-order cybernetics. As discussed in chapter 3, second-order systems are operationally closed systems, because information from the environment does not directly determine system behavior. Their structure, cognition, defines their behavior (Maturana & Varela, 1980).
Meaning in second-order systems concerns the communication from self-generated signals. Through the feedback loop, they determine how the system reacts. This ‘information’ means something for the purpose of the system, but its meaning has no meaning outside the system. Its sole purpose is to maintain the system. Systems at a higher level determine goals or objectives for a system. The observer – another system or individual, but at the end always a human being – determines the goal of the system and, therefore, ascribed meaning to the system. Because the meaning of the observer interrelates with the meaning of the system (Sveiby, 1998), it is necessary to distinguish between the meaning of information internally in a system and externally to its environment. Operationally closed systems cannot exchange information with their environment; there is no communication.

Second, meaning in communications theory concerns the intentions of the sender. Similar to the levels in semiotics, as defined by Morris (Chandler, 2002), communication theories distinguish three levels of communication, a syntactic, semantic, and pragmatic level of communication (e.g. Wigand et al., 1997). Some have written about three levels of information such as syntactic, semantic, and pragmatic information (e.g. beim Graben, 2006). Alternatively, as Weaver explained in a most influential work *The Mathematical Theory of Communication* (Shannon & Weaver, 1949), the ways that individuals affect one another are a technical problem, a semantic problem, as well as an effectiveness problem. In this model, meaning concerns the meaning of the signs used to transmit information, required to bring across the intention of the sender. Meaning in this context is a convention. Language psychology describes this as denotative meaning, which concerns how we express the relation between a sign and object in reality (Wigand et al., 1997).

Transmission signals carry the information from the sender, and the receiver must interpret the meaning from the sender outside the transmission itself. The sender and receiver must share a common language; otherwise, expressions – messages – are meaningless and can have a large, if not infinite, number of interpretations. Shannon’s (Shannon & Weaver, 1949) probabilistic communication theory shows that meaning and information are not the same concept and that the signals that transmit the information operate on another level. Signals can represent an infinite amount of information, and information can represent an infinite number of possible meanings, explaining the adjective probabilistic of his theory. It is as with a physical object; it is meaningless in itself, but contains an infinite number of

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35 Most discussions on communication theories revert to the probabilistic communication model from Shannon and Weaver. However, the model originated from Shannon who worked on the technical problem of transmitting information. Weaver gave a more panoramic view on communication that included all human behavior such as speech, music, pictorial arts, and theatre. Shannon’s publication *A Mathematical Theory of Communication* and Weaver’s publication *Recent contributions to the mathematical theory of communication* were combined by the University of Illinois in 1949 as *The Mathematical Theory of Communication* by Shannon and Weaver. Noteworthy is the subtle difference in these titles.
potential meanings if we consider its characteristics such as size, weight, and atomic structure.

Schoderbek, Schoderbek and Kefalas (1985, p. 152) characterized data as unevaluated ‘objects,’ and information as evaluated data for a problem or situation. Following the aforementioned notion that data is meaningless in itself, it is tempting to explain meaning by contrasting information with data in Shannon’s communication theory. Data would then be equivalent to Shannon’s signals and information the meaning of these signals. According to Sveiby (1998), this is a wrong approach in explain meaning because in the Shannon sense one can only transmit data, not information.

Successors of Shannon have suggested mathematical additions to include meaning in his theory. Jumarie (1990) referred to Brillouin who suggested denoting information as the difference in the ratio of possible answers before and after the transmitted signals. Jumarie (1990) proposed a quantitative model to include the subjectivity of the observer in Shannon’s information theory. ‘The suggested mathematical additions to Shannon’s theory have found little practical usage, however. Is it perhaps because they try to relate two categories which are not possible to combine (Sveiby, 1998, section: Meaning in Shannon’s Sense)?’

**Meaning and pragmatic information**

Central in the discussion of meaning using the semantic application of information is the concept of information as a potentiality – the potential impact of symbols. The intrinsic issue this discussion raises is whether the receiver of the message has also understood the meaning of a message. After all, ‘information is only what is understood (Weizsäcker & Weizsäcker, 1998, p. 503).’

A possible way to solve this problem is the concept of *pragmatic information*, first proposed by E.U. and C. von Weizsäcker in the early 1970s (beim Graben & Atmanspacher, 2006; Gernert, 2006). The premise of pragmatic information is that a message distinctively influences the receiving system or recipient when they understand the information. ‘A *receiving system* or *recipient* may be an individual, a social system (team, group, organization), an animal, a part of a living organism, a technical information-processing system, or even a component of a physical process [emphasis in original] (Gernert, 2006, p. 142).’ Pragmatic information does not rely on direct access to meaning, but we can see it as a measure of meaning.

The concept of pragmatic information shows that previous experiences affect the level of pragmatic information. Information will only have effects when it neither is entirely new nor entirely confirms past experiences. In the case of novelty, information is too new to make any sense of it, because one simply does not know

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36 Sveiby (1998) marks this as a potential source for Bateson’s famous statement ‘information is a difference that makes a difference.’

37 cf. Bateson’s ‘information is a difference that makes a difference.’
what to do with it. For example, to convince someone of the business benefits of social media is difficult when one has no previous experience with social media. In the case of confirmation, information only confirms what we already know. Information then is merely a message, because it has no pragmatic content. For example, it will be highly unlikely that a chess master visiting a beginner’s class will gain any new knowledge on chess.

The two notions of novelty and confirmation are fundamental in the concept of pragmatic information. Novelty and confirmation are complementary variables that independently can range from zero to hundred percent (see Figure 4).\[38\]

This non-commutative aspect of novelty and confirmation is noteworthy because the concept of pragmatic information holds that ‘any valuation [of information] can alter the basis for a subsequent one (Gernert, 2006, p. 152).’ Some thinkers developed mathematical models to measure pragmatic information, such as beim Graben (2006) who proposed the concept of dynamic semantics to describe meaning as the transitions of cognitive states.

Figure 4: Pragmatic information according to E. and C. von Weizsäcker (1998)

More pragmatic approaches to meaning

Watzlawick, Beavin and Jackson (1967) took another pragmatic approach toward meaning and developed a sociopsychological oriented theory, which concentrates on the behavioral effects in human communication. The theory defines five basic axioms that consider aspects of content as well as relation in the

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\[38\] Some graphical representations of the concept of pragmatic information show novelty and confirmation on the same abscissa, assuming that novelty and confirmation always add up to hundred percent (e.g. Wigand et al., 1997). According to Gernert (2006) such a diagram is misleading because novelty and confirmation not always maintain a constant sum. He mentioned the rather artificial example of asking an individual first to evaluate the degree of novelty in a text and secondly asking for the degree of original understanding of the remainder of the text. It is very unlike that reversing the two questions will lead to the same result (ibid., p. 152).
communication between two individuals; if one of them is disturbed, the communication between the two might fail.

- The first axiom stated that ‘One cannot not communicate (ibid., p. 51).’ – From the premise that behavior is a kind of communication and there is no anti-behavior, communication always happens; non-communication is impossible. Behavior has a meaning, even if, for example, a manager walks by a co-worker without saying a word a communication takes place.
- The second axiom stated that ‘Every communication has a content and a relationship aspect such that the latter classifies the former and is therefore a metacommunication (ibid., p. 54).’ – In communication the information (content) is always accompanied with the behavior from the communication parties and thereby defines a relationship.
- The third axiom stated that ‘The nature of a relationship is contingent upon the punctuation of communicational sequences between the communicants (ibid., p. 59).’ – When two parties communicate, they have different perspectives on the interaction resulting in different interpretations that punctuate the sequence of the communication.
- The fourth axiom stated ‘Human beings communicate both digitally and analogically (ibid., p. 66).’ – Digital communication relates to the content. It has the advantage of being precise and formal such as words and numbers. Analog communication concerns the frame information. For example, when we are sarcastic, we communicate the right (digital) content but we mean something different.
- The fifth axiom stated ‘All communicational interchanges are either symmetrical or complementary, depending on whether they are based on equality or difference (ibid., p. 67).’ – We communicate symmetrically when a communication partner is at the same relation level such as two managers; complementary communication takes places between, for example, a co-worker and a manager.

The five axioms from Watzlawick et al. (1967) show that the construction of meaning by communicating actors involves not only the (pragmatic) information in the message, but also the supplemental information. This will become apparent in the other pragmatic approach that follows.

Another sociopsychological-oriented communication model comes from Schulz von Thun (1981), who postulated that a message has four different aspects in terms of communication behavior of individuals. Apart from the content and relation aspects addressed by Watzlawick et al. (1967), the approach from Schulz von Thun (1981) also included aspects of appeal and self-disclosure. Moreover, Schulz von Thun (ibid.) even included body language in the aspects of meaning. For example, a mother states to her visiting daughter: ’it is nice to see you again.’ When we consider the content, relation, appeal, and self-disclosure aspects from Schulz von Thun
(ibid.), the conjugated meaning of that message is a complex of various meanings, as shown in Table 9.

**Table 9: Meanings after Schulz von Thun (1981)**

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Meaning</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>It is nice you are here</td>
<td>It is good that my daughter is here</td>
</tr>
<tr>
<td>Self-disclosure</td>
<td>I am lonely</td>
<td>The mother is glad to see her again because she missed her</td>
</tr>
<tr>
<td>Relation</td>
<td>You are not visiting me enough</td>
<td>Un undertone implies the close relationship that mother and daughter have</td>
</tr>
<tr>
<td>Appeal</td>
<td>You should visit me more often</td>
<td>The mother (mis)uses the message to express her wish</td>
</tr>
</tbody>
</table>

The communication model according to Schulz von Thun (1981) shows that during communication many meanings wonder around, created by the supplemental information that arise in the communication processes. Even though the model from Schulz von Thun (ibid.) addresses supplemental information such as body language and voice tone, it is a linear one-way model that only considers the flow from the sender to the receiver of the message. In practice, human communication is a two-way meaning-constructing process where actors interact with each other through feedback. For example, a possible feedback from the daughter in the previous example could be that she kept silence and averted her eyes because she was ashamed, which in turn could be interpreted by the mother as: ‘she does not care.’ This everyday example shows that the concept of meaning in communication processes is ambiguous because of the supplemental information involved.

Schulz von Thun’s (1981) contribution to the understanding of meaning is that meaning not solely concerns the factual message that actors communicate. Various communication-intensive disciplines, such as physician and conflict management, have applied the communication model from Schulz von Thun (1981) as a guide to prevent or solve communication problems (e.g. Geisler, 1991; Brinkmann, 2006).

From the previous discussion on the various aspects of meaning, we can conclude two things. First, meaning in relation to communication concerns a deliberate act of communication between a sender and a receiving system or recipient – communicative intent. Second, from the concept of communication, we can discern three modes of communication: a linear, interactional, and transactional mode; meaning relates to all modes of communication, be it though with varying aspects of meaning. Table 10 lists the various modes of communication with aspects of meaning.
Table 10: Modes of communication

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
<th>Meaning</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linear</td>
<td>One-way communication omitting feedback</td>
<td>Meaning is singularly constructed by actors</td>
<td>Reading books, blogs, forums, etc.</td>
</tr>
<tr>
<td></td>
<td>Uses one channel to accommodate straightforward transmission from sender to</td>
<td></td>
<td>Television, blogs</td>
</tr>
<tr>
<td></td>
<td>receiver</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interactional</td>
<td>Two-way communication with messages received one at a time but direct serialized response is possible</td>
<td>Meaning is negotiated</td>
<td>Instant messaging</td>
</tr>
<tr>
<td></td>
<td>Uses two channels to accommodate transmissions from each communicating party</td>
<td>Meaning is mutually constructed as a result of a series of communication events</td>
<td>A series of emails</td>
</tr>
<tr>
<td>Transactional</td>
<td>Two-way communication where messages can be received and sent simultaneously</td>
<td>Meaning is negotiated</td>
<td>Participating in a forum discussion</td>
</tr>
<tr>
<td></td>
<td>Uses the same channel both ways</td>
<td>Meaning is instantly and mutually constructed by actors</td>
<td>Face-to-face dialogue</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Telephone conversation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Video conferencing</td>
</tr>
</tbody>
</table>

This distinction in modes of communication contributes to the understanding of meaning in two ways. First, except for the special case of the linear mode of communication, as we will see in a moment, meaning is a subjective construct that communicating parties mutually construct. Even in the interactional mode of communication where there can be a considerable delay in the communication steps while using different channels, the construction of meaning is the result of a series of interactions between communicating parties. In its essence, both interactional and transactional is a negotiation of meaning by the meaning-making communicating actors. Second, it shows that the fundamental assumption in the concept of meaning in all three modes of communication is that meaning occurs as an objective act of reference. I refer to this as objective meaning: in constructing meaning, we refer to something when describing the properties of objects, artifacts, or state of affairs.

I see the linear mode of communication as a pure hypothetical case as in practice eventually there is always a feedback loop opposed by one or more overarching systems. For example, take the one-way communication of blogs, if no one is reading it, the chance is high the blog will deceased to be maintained by its creator.

Summary

The foregoing illuminated that even though there are rich models of communication that surpass the language of words (e.g. Watzlawick et al., 1967;
critiques of meaning. They concern validity, conditions, and the newness of information in the context of the receiving system or recipient. Meaning in the aforementioned views and models limits to objective meaning. With the pragmatic approaches according to E.U. and C. von Weizsäcker (1998), Watzlawick et al. (1967), and Schulz von Thun (1981), and the way that models, such as from Gernert (2006) and Beim Gräben (2006), can operationalize them, it is possible to verify whether a recipient has understood the meaning of the message. The premise is that it triggers action or changes the receiver’s structure or behavior. However, it is not possible to judge the response of the recipient when the response is different in language, nonverbal or nontransparent (Atmanspacher & Weidenmann, 1999). In the next section of this chapter, I will discuss other interpretations of meaning that go beyond the limits of the reference approach of meaning.

A more inclusive concept of meaning

The notions of meaning described in the previous section are not enough to develop meaning-driven governance, because making responsible choices by governing actors involves more than objective meaning. In the creation of governing images, governing actors must develop an understanding of the products that come forth from the contemporary information society. The issue for them is to understand what it means to know something about the concepts in informational developments, how it can help them to make responsible choices, and what they mean to the constituting elements that make up the enterprise.

Part of the issues raised here is analogous to the issues that research for mathematical education has discussed. Students in mathematics classrooms question the use of the difficult concepts they need to learn. It requires looking more closely at the discourse in the mathematics classroom and creating a condition for meaning making that goes beyond the rationalistic orientation of mathematical concepts (e.g. Kilpatrick, Hoyles, Skovsmose, & Valero, 2005; Radford, 2006; Seeger, 2011).

This is similar to the information governance situation. In order to help enterprises understanding how and why to make responsible choices with regard to the contemporary information society, developing a concept that allows for meaning-driven governance, requires a more inclusive concept of meaning. A concept of meaning that provides the conditions for meaningfulness in the discourse of information governance.

First, from a meaning perspective, the clear distinction made by the semiotic scheme – syntactic, semantic, pragmatic – only justifies itself at an abstract level. In the previous section, it became clear that the concept of meaning is present at various levels of the semiotic scheme, involves supplemental information, and has various context-dependent interpretations to represent something. However, as
soon as mental phenomena and human behavior enters the context, the clear demarcation of the semiotic scheme dissolves because there is more involved than solely objective meaning. Indeed, a message may invoke an action with a recipient, but this action does not necessarily depend on the content of the message. Factors such as situation, context, and memories may also affect the recipient. Therefore, it is not sufficient to judge the receiver’s behavior by a pure pragmatic view of meaning – judgment is eminently important in order to make responsible choices in a society where information is superfluously available.

Second, when people consider things such as products, artifacts, and even information that transcend their physical need, they enter the world of the symbolic (e.g. Grubb & Grathwohl, 1967; Elliott, 1997; Lash, 2002). Symbols play a significant role in people’s life because they contribute to human aspects such as identity and self-esteem. This is a very different concept of meaning compared to objective meaning. Because the information society is full of symbols, it is necessary for governing actors to judge products, events, or situations where symbolic phenomena emerge such as the information-centered socialities that develop through blogs and forums.\footnote{For the notion of information-centered socialities see page 9.}

Third, the processes involved in forming governing images heavily depend on the interactions governing actors have with the information world. I have argued in chapter 3, that these processes are of a phenomenological nature. Therefore, concepts of meaning must also consider a phenomenological orientation.

In what follows I will advance on the pragmatic view of meaning, visit the symbolic aspects of meaning and explore meaning in the phenomenological context.

**Advancing pragmatics: inherent meaning**

Advancing on the pragmatics of meaning involves going beyond the limits of objective meaning and include mental phenomena and human behavior. The pragmatic view of meaning in general first appeared in Wittgenstein’s (1958) *Philosophical Investigations* in which the philosopher suggested that the meaning of concepts and statements could be understood in terms of their use (Kilpatrick et al., 2005, pp. 1–8).

In the first chapter of *Philosophical Investigations* Wittgenstein referred to Augustine’s *Confessions* as a showcase for interpreting meaning as a reference – because a word refers to an entity, it has meaning (Skovsmose, 2005, p. 84). Wittgenstein developed a notion of meaning that considers the meaning of linguistic acts, instead of the meaning of words. It refers to the whole situation and its complexity in which one uses a sentence. ‘The meaning of a sentence has to be understood in “the stream of life” (ibid.).’ With this notion of the meaning of a sentence, Wittgenstein makes *use* and context of *use* equal to semantic concepts. ‘To look for the meaning of (the use of) a sentence is no longer the pre-eminent
choice. One might as well look for the meaning of (the use of) a formulation, a gesture, a text, an attitude, or any other action (ibid.).

According to Wittgenstein’s broader notion of the concept of meaning, communication becomes a pragmatic concept where with we should be able to answer questions such as ‘What might a concept do with the recipient?’ ‘How would its meaning affect its behavior?’ From a constructivist interpretation, we could say, what does this concept allow a person to do, instead of, what is the reference of this concept?

In *The Theory of Communicative Action*, Habermas (1984) developed an even broader approach to the pragmatic notion of meaning. He presented meaning as a performative complex of the practice, the context, and the commitment of the actors involved in a concept he called *communicative action*. This notion of meaning allows supplementing meaning as a statement or concept expressed by a person with the whole situation and context in which the communicative action happens. According to Habermas (ibid.), the result of communication – pragmatic actions – depends on the way actors engage in communication. He defined a number of concepts that constitute his theory of communicative action: 1) **Instrumental action** in which communicating actors implement means according to technical rules, from either empirical knowledge or theoretical models, to instrumentalize their opponent(s) in order to succeed. The actor is ego-centrally, non-social, success oriented. 2) **Strategic action** in which both actors also orient to their success but assume a rational opponent and adapt their strategic act to each other. While still being egocentric, it is a social orientation toward success. 3) **Communicative action** where actors, instead of egocentric profit objectives, engage in a way that the act of communication – the use of language as a medium – is used to reach a shared understanding on the situation at hand. After reaching consensus on the situation, communicating actors execute their individual consensus-based plans; they are social and agreement oriented (Janson, Cecez-Kecmanovic, & Brown, 2001). According to Habermas (1984) communicating actors take either the (egocentric) *success* or the *agreement* position, because both attitudes are mutually exclusive. Habermas (ibid.) has confronted the attitudes of the communicating actors with social and non-social circumstances; social, the situations where the rules of community apply, and non-social, where the situations that strictly refer to an objective world apply (Janson et al., 2001; Wigand et al., 1997, pp. 67-70). Table 11 summarizes the concept of communicative action.
According to Habermas’ (ibid.) theory of communicative action, the concept of the living world is significant because it represents the entire background knowledge that is tacitly present in people’s language and lives; it determines people’s thinking and speaking. Everything one says, thinks, writes, or does, always results from prior experiences and believes; this so-called connotative meaning is specific for each individual. Therefore, in the various action types that Habermas (ibid.) defined, the living world always hovers in the background.

From a meaning perspective, Habermas’ (ibid.) theory of communicative actions contributes to the understanding of the concept of meaning that meaning, as the result of communication, includes the complete human context together with its prior experiences and background such as social sphere and objectives. They all play a role in the construction of meaning of the individual communicating actor. For example, back in the 1970s those who grew up in the age of mainframe computing could not understand the meaning of mini computers, let alone personal computing.

The structuration theory, developed by Giddens (1984), takes the social theory of communicative action one-step further. Developing a notion of meaning that draws upon the concepts from Wittgenstein and Habermas reveals that human action plays a fundamental role in sociology. However, in contrast to action as a series of separated individual acts – the analytical philosophy of action – Giddens (ibid.) has treated action as a continuous flow of acting. ‘Human action occurs as a durée, a continuous flow of conduct, as does cognition [emphasis in original] (ibid., p3).’ This continuous flow of conduct is a significant element in developing an inclusive concept of meaning, because meaning builds up in the durée of the lived experience.

The concepts proposed by Wittgenstein, Habermas, and Giddens show that an advanced pragmatic orientation of meaning concentrates on much broader notions of human action, because it includes prior experiences and life-worlds. Giddens’ notion of action is important in this, as we will see later when discussing the concept of meaning from a phenomenological stance.

<table>
<thead>
<tr>
<th>Circumstance</th>
<th>Attitude orientation of communicating actors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Success</td>
</tr>
<tr>
<td>Non-social</td>
<td>Instrumental action: apply empirical knowledge and models to steer opponent</td>
</tr>
<tr>
<td>Social</td>
<td>Strategic action: adapt action to opponent</td>
</tr>
<tr>
<td></td>
<td>Agreement</td>
</tr>
<tr>
<td></td>
<td>Communicative action: seek consensus through language and consensually act</td>
</tr>
</tbody>
</table>
Henceforth I will refer to the advanced pragmatic orientation of meaning as\textit{ inherent} meaning. It emphasizes that in the stream of life prior experiences, life-worlds, and believes are inseparable – inherent – from everything one can say, think, write, or do.

\textbf{Transcending physical needs: symbolic meaning}

When people encounter something that is compelling, interesting, or in any other way worthy, they experience it as meaningful. When that transcends the mere physical needs of products, one enters the realm of symbolic meaning. People find symbolic meaning in many places. Music and art, for example, are rich of symbolic meanings (e.g. Palmer, 2007; Galbraith, 2011; Bundgaard, 2011). One can also find symbolic meanings in stories and movies such as the phenomenal success story Harry Potter (Black, 2003), and the Matrix trilogy movie, as discussed by de Mul (2003). People try to find meaning in the way they experience music and art, or through the unfolding of stories in movies and literature.

Architecture is another domain where we find symbolic meaning, because we can sometimes ‘read’ from a building its purpose. For example, buildings with a religious function often show a lot of symbolism (Sorkin, 2005). To be more specific, how ornaments play a communicative role in architecture (Bordeleau, 2009). One can even see the transport of political and cultural statements in architecture, as shown in studies on architecture involved in Olympic Games (Modrey, 2008).

We find symbolic meaning also in consumption. Some utility products from certain brands or with strong community affiliation mean a lot to people because of their symbolic meaning. We also find consumption of symbolic meaning when people collect things, which can even be utility products without using them such as limited series fountain pens and classic cars. There has been an increasing awareness that studying consumptive behavior should incorporate the issue of affection when buying products (Derbaix & Pham, 1991). Symbolic meaning is one of the affective parameters discussed in behavioral studies on consumption. They have shown that symbolic meaning, besides how certain products look or feel, also relates to how it can increase consumer self-respect and self-esteem (e.g. Desmet, Overbeeke & Tax, 2001; Westbrook, 1987). Put differently, the characteristics of products elicit emotions and determine consumer preferences, but the intangible characteristics of a product are responsible for the symbolic meaning consumers attach to them (Desmet, Hekkert & Jacobs, 2000).

\footnote{A typical example is \textit{The Ambassadors} (1533) painting by Holbein (1497-1543) that includes a lute with a broken string next to a hymnbook of Martin Luther, a commonly accepted symbol of discord emphasizing the bitter conflicts between the scholars and clergy.}

\footnote{de Mul (2003) discussed, in an essay series, the Philosophy of The Matrix movie trilogy by the Wachowski brothers who, according to de Mul, where mesmerized by the three core philosophical questions from Kant: What can I know? What can I do? What may I hope?}
Consuming symbolic meaning is a central proposition from the postmodern theories of consumption (Elliott, 1997), and following Baudrillard (1998), we can speak of a commodity of signs when people consume products for their symbolic meaning instead of their material utilities. ‘[T]he consumption of symbolic meaning [...] provides the individual with the opportunity to construct, maintain and communicate identity and social meanings (Elliott, 1997, p. 285).’

Allegedly, symbolic meaning is important in people’s life because the meaning of their existence is by large determined by symbolic meaning (Elliott, 1997). However, the interpretation of symbolic meaning in, for example, music, art, stories, architecture and consumption is fuzzy and complex because the symbolic is intangible and represents a world that is not there. Do we consider the symbols used by, for example, the composer, writer, artist, or architect to express something? Alternatively, do we consider the meaning applied by, for example, the consumer, reader, or listener? Clearly the two highly relate to each other, but at the same time also decidedly differ. For example, a painting that contains symbols intentionally used by a painter to express something, such as a religious message, can mean a lot when it reminds to a difficult situation in one’s life. The former is the case where we talk about symbolism – the use of symbols to express abstract or mystical ideas – the latter is about someone’s personal construction of identity and social meanings.

My notion of symbolic meaning refers to a subjective interpretation of a state of being and involves people’s personal feelings, belief, and it constructs their identity. Symbolic meaning is about the interaction between symbolism and constructivism. It follows Kaiser (2008), who differentiated between personal meaning and objective meaning. Symbolic meaning then is subjective and individual; the person constructs his own meaning with respect to certain objects and evaluates its relevance in personal significance – what is in it for me? This contrasts Kaiser’s (ibid.) objective notion of meaning, which represents the common meaning of a community, the general norm about an object, a symbol, which in its turn we can use to construct a personal meaning.

In studying symbolic meaning, it is tempting to deconstruct symbolic meaning according to the semiotic scheme. However, from the relation of symbolic meaning with symbolism we can conclude that the process of applying symbolic meaning intertwines the personal and objective perspectives. Moreover, things and events have no implicit meaning (Kaiser, 2008), but people construct their own personal meaning of them. It is the result of people’s interpretations of the patterns, they

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42 There is a large debate on the various kinds of meaning involved in mathematics education. According to Kaiser (2008), the difference between personal meaning and objective meaning finds its roots in the contrast of philosophical and non-philosophical interpretations of meaning. ‘Personal meaning is subjective and individual. This means that every person has to construct her or his own meaning with respect to a certain object. There is no given objective meaning which just has to be applied; meaning cannot just be endowed. Also, as the construction of meaning is not collective but individual, different students sitting in the same lesson can also construct different meanings (Kaiser, 2008, section: Personal meaning vs. objective meaning).’
recognize in their life-world as results of coherent understanding of phenomena. Applying meaning then is also context dependent because situations and life-worlds change all the time. With a semiological analysis of symbolic meaning, we would ‘fall back’ to the semantic level, as in the meaning of a symbol. Similarly, Holbrook and Hirschman (1993), who discussed the interpretation of symbolic consumer behavior in popular culture and works of art, have concluded that a semiological analysis is not sufficient to study consumption behavior (as cited in Østergaard, 1996). I suggest that a good understanding of symbolic meaning involves both the personal perspective and the objective perspective.

Symbolic meaning contributes to the understanding of the concept of meaning in general that it is a substantial factor to consider in studying meaning, because it relates to one’s identity, and therefore, one’s behavior. Deconstruction of symbolic meaning using symbolism or semantic concepts for the analysis of the continuous flow of conduct is difficult because of its interrelationship and context dependency.

Referring back to the contemporary information society, we see informational phenomena that are symbolic to organizations and their information users. We can find examples such as, the concept of disorganizations (Lash, 2002), the idea of information-centered socialities, both discussed in chapter 1, and the use of devices that connect people to the information society. These constructs and devices have all become relevant and significant for users in the information society; they involve their personal feelings, their belief, and construct their identity. In the contemporary information society, meaning in the symbolic context becomes a more transparent concept, especially with the rise of social media; social media make social interaction much more explicit.

Meaning in general, in the context of information governance, refers to what one considers organizationally, socially, culturally, or personally significant, to informational developments. The process of forming governing images is a process that interacts, communicates, with the information world. I have argued in chapter 3 that it is a process of a phenomenological nature, therefore, it makes sense also considering meaning in the phenomenological context.

**Phenomenological orientation: contextual meaning**

Christopher Alexander (1979) wrote in *The Timeless Way of Building* about how people experience buildings, towns, etc. and how their characteristics can make or break that experience. The way Alexander formulated ‘that what cannot be named,’ in the journey to a timeless architecture, is a typical example of what one can consider as meaning in the phenomenological context:

‘There is a central quality which is the root criterion of life and spirit in man, a town, a building, or a wilderness. This quality is objective and precise, but it cannot be named. The search which we make for this quality, in our lives, is the central search of any person, and the crux of any individual person’s story. It is the search for those moments and situations when we are most alive (ibid., p. ix).’
Alexander searched for the criteria needed to design buildings that satisfy that what cannot be named, in order to make us feel at home. Similarly, Vogler and Jørgensen (2005) looked at how space habitats need to be build and argued that the integration of functionality with mental representation and symbolic meaning is essential to feel at home.

The space habitat example illustrates that a symbolic meaning and phenomenological orientation of meaning certainly can intertwine with each other. At first sight, they look remarkably similar because they also share the first-person point of view, which is so typical for phenomenology (Smith, 2008). Consider the following two examples. Phenomenological: “I enjoy sitting in this room because . . .” and symbolic: “I like this painting very much because . . .” A closer look will show that the difference between the symbolic orientation of meaning and the phenomenological orientation of meaning is far from subtle. The phenomenological example expresses an experience of being in a physical location; with the symbolic example, however, one does not necessarily need to be at the location of the painting. In what follows, I will show that the philosophical roots of phenomenologically oriented meaning and symbolic meaning distinctively differ.

Symbolic meaning is rooted in a two-world thinking paradigm where individualized subjects have created meaning by externalizing the properties of their experience – their erfaehrung. Subjects will most likely judge that meaning differently because their judgment depends on factors such as bias, contexts, and location. For example, a piece of text, badly written, or with unusual typesetting, or electronic appearance such as a Tablet PC, can trigger mental blockages by those sensitive for this (e.g. O’Hara & Sellen, 1997; Slattery & Rayner, 2009). The essence of a two-world model is that one observes and judges ‘from a distance,’ that one derives knowledge from explaining the causalities of phenomena (Lash, 2002, p. 165). Conventional wisdom tries to understand the world through epistemology, creating valid scientific knowledge through explaining the relationship between things and their representations (Lash, 2002, p. 15). Referring back to the example of the first-person view regarding symbolic meaning, people try to explain what a painting means to them – as a symbol.

The phenomenological stance is different because it is rooted in a one-world thinking model. It is a model that assumes engagement; it includes the in-the-world context. It assumes no objective observer that judges from a distance, but an in-the-world subject that has an interest in the objects, events, and social processes it encounters. The subject is no longer transcendental to these things, but embodied with the same things it encounters; subject and object become one. The subject

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43 For example, when designing a house or making a painting, the final artifact will represent the properties – externalization – of the experience of the one who created it.

44 To read a long report many still prefer a piece of paper instead of an ‘electronic’ version that is readable on a device.

45 See also footnote 28.
becomes an actor in a life-world with similar actors, and builds up knowledge through direct experiences – in-the-world context – rather than through abstraction of analysis and judgment. The actor contextually engages with its life-world. For the actor, from a meaning perspective, things ‘open up;’ it is able to experience the existential meaning of objects, events, and processes, based on the deeper knowledge of their ontological structures. They express their meaning, less through explanation than through explication (Lash, 2002, pp. 14-17, pp. 164-166). Table 12 summarizes the two models.

Table 12: One-world model versus two-world model according to Lash (2002)

<table>
<thead>
<tr>
<th>Two-world model</th>
<th>One-world model</th>
</tr>
</thead>
<tbody>
<tr>
<td>The observing and judging subject</td>
<td>The experiencing and describing subject</td>
</tr>
<tr>
<td>Knowledge through causal reasoning</td>
<td>Knowledge through experience as a result of interest (intentional attitude)</td>
</tr>
<tr>
<td>Explanation</td>
<td>Explication</td>
</tr>
</tbody>
</table>

Lash (2002) has called for a technological phenomenology because, in contrast to ‘the older era of representation [where] there is a clear distance between the cultural representation,’46 the object it represents, and the subject […] setting up a particular set of relations, the information order is characterized by immanence where the subjects become interfaces within the network of communications. [emphasis in original] (Wood, 2009, p. 200).’ A technological phenomenology concerns the user’s experiences in the flow of its technological form of life in terms of connectivity and relationships rather than its judgment of objects from a relatively fixed position (Lash, 2002).

The immanent character of the information order surfaces a specific type of reflexivity,47 which is characteristic for the global information society (Lash, 2002, p. 169). According to Lash (ibid.), practices in the information order characterize themselves by a special type of reflexivity in a sense that they ‘incarnate.’What Lash means is that the new ways of connectivity through the flood of devices places users at the center of the networks of communications, which results that users adapt to their life-world and renew their practices that are so typical for the information society – they incarnate. Although the things that users do, are still rationally tied to the rational attributes that make up today’s enterprises and businesses, the way users do their things – incarnate – makes it reflexive and, therefore, a truly special type of reflexivity (Lash, 2002, pp. 169-170).

46 This notion of presentation – vorstellung – refers to a representing subject that externalizes his or her subjectivity as representations.

47 See also the discussion on reflexivity in the section of chapter 3 on Meaning-driven governance that covers Image formation in the semiotic order on page 48.
Assuming the technological context, phenomenologically oriented meaning, then is about how users adapt to their connectedness with the environment building up relationships, contexts. Since they are phenomenologically engaged actors, they make up that connectedness themselves – subject and object are one, are the same context. Therefore, the essence of phenomenologically oriented meaning is that users become their life-world due to the flow of experiences that emerge through that connectedness. Of course, rationality from-a-distance – two-world thinking – is and remains also a part of user activities in the information society. It is the technological life-world, however, that biases what users do and how they do it. The technological life-world comprises two aspects that bias informational activities in the information society. 1) The immanent legacy users have built up with respect to the form and nature of the communication of information and 2) their engagement toward objects.

According to Lash (2002), the way users engage objects in a technological culture is synonym with the paradigm of play, which is central in this culture. There are two sorts of play: agon (the contest) and child-play. The difference in logic that both sorts of play follow, highlights the difference between the traditional representation-based culture – agon – and the technological culture – child-play. Play does not follow the logic of exchange-value, but the logic of fate and luck; it is not about prices but about prizes. As a player one is so involved in play, that play suspends judgment. Because the technological culture with its connectedness entirely involves users, the actors incarnate and act as in play.48 Because playing suspends judgment, technology and everything involved in the technological culture becomes a finality in itself, and not a means to an end (Lash, 2002, p. 160). Therefore, meaning is about the extent that actors are involved in the ‘game’ they ‘play,’ that is, to what extent are they involved with the attributes of their life-world?

The gaming world recognizes a message-based model of meaning and an immersion-based model of meaning – predefined plots versus player-generated stories (Gaynor, 2009). In the immersion-based model of meaning, one ‘visits’ places that are outside prior experiences and since the player itself is the author of the plot, playing immersive games can deeply affect the player’s experience.49 Studies on collaborative game-based learning have confirmed this and showed that immersion indeed affects learning results, but only if there is flow and little or no distraction.

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48 Lash (2002) frequently used the term ‘incarnate,’ to emphasize the absence of representation, the symbolic, and that the user in the information society becomes one with its life-world instead, as in play. ‘Play’s magical language is metonymic, not metaphoric. There is no symbolic correspondence between the man and the kangaroo. Instead the man becomes the kangaroo […] (ibid., p. 158).’

49 Message-based games rely on Hollywood style plots to convey a message, morals, philosophy, etc. Immersive games abdicate authorship and try to invoke personal revelations and experiences of the player. ‘[They] take the act of travel as its primary touchstone, instead of relying on traditional media such as film, the novel, or even sculpture, music or painting to inform the author’s role. (Gaynor, 2009).’
such as technical difficulties (e.g. Admiraal, Huizenga, Akkerman, & ten Dam, 2011).\textsuperscript{50}

The paradigm of play shows that the phenomenological actor creates meaning in the flux of its actions. It reflexively creates meaning in-the-moment, in contrast to the representation-based culture that creates meaning reflectively out-the-moment – from a distance. From a play perspective, one could say that meaning is about the extent that users in the information society adapt to the ‘game.’ Table 13 summarizes how the traditional representation-based culture compares to a technological culture.

What phenomenologically oriented meaning contributes to the understanding of the concept of meaning is the notion of intangibility; actors cannot explain how meaningful their involvement is in the information society because they are part of the whole context. They are the context because object and subject become one. In contrast to symbolic meaning where one can explain why something is meaningful, actors can only explicate how that affects the way they work and experience it.

In its essence, the phenomenological stance regarding meaning, is about the question: how does the appearance of the information society affects its users? From the two-world thinking model, the essence of meaning is rationality. For people’s daily technological life the fringes of meaning, of intangible things, are equally important (Lash, 2002, p. 171).

From the perspective of the actor, the phenomenological orientation of meaning involves the context of its environment. Moreover, the actor is in its technological life-world – in-the-world. In fact, the actor becomes the context because object and subject become one. Therefore, I refer to the phenomenological orientation of meaning as contextual meaning.

\textsuperscript{50} Flow theory describes that the experience of flow occurs when skills needed to overcome challenges are balanced; it is a state of complete concentration and absorption of human activities in situations (Csikszentmihalyi, 1997).
Table 13: Representation-based versus technological culture after Lash (2002)

<table>
<thead>
<tr>
<th>Representational culture</th>
<th>Technological culture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aspects</strong></td>
<td><strong>Aspects</strong></td>
</tr>
<tr>
<td>Presumes the dualism of</td>
<td>Subject is in-the-world with objects</td>
</tr>
<tr>
<td>a distance between subject and object</td>
<td>Immanence and monism</td>
</tr>
<tr>
<td>Transcendence and dualism</td>
<td>All three of them are in the same immanent world. Subject, culture, and reality are one.</td>
</tr>
<tr>
<td>Subject, cultural object, and real object are distantiated because of two dualisms: 1) Subject vs. cultural entity and 2) Cultural entity vs. the reality it represents.</td>
<td>Reflexivity is knowledge tied to action</td>
</tr>
<tr>
<td>Reflexivity is distant organizing and distant decision-making.</td>
<td>Metonymic (substitutes)</td>
</tr>
<tr>
<td>Metaphorical (represents)</td>
<td>Reflexivity produces instability of traditional meaning-making structures. Systematic relationship between the signer and the signified will be dissolved.</td>
</tr>
</tbody>
</table>

**Summary**

The treatise on a more inclusive concept of meaning was motivated by the presumption that objective meaning, as described in the previous section, is not enough for the concept of meaning-driven governance. First, the pragmatic view on meaning following the semiological interpretation is not sufficient to judge the receiver’s behavior. Second, meaning also transcends the physical needs of objects – artifacts, processes, information – as denoted by the notions on symbolic meaning. The concepts discussed from Wittgenstein (1958), Habermas (1984), and Giddens (1984) show that inherent meaning concentrates on human action. The notions on symbolic meaning from Baudrillard (1998), Elliot (1997), and Kaiser (2008) show that
symbolic meaning is detached from material utility and intertwines the personal and objective perspectives. Contextual meaning, the phenomenological stance on meaning, heavily based on Lash’s (2002) presentation of a technological phenomenology, shows that an overarching concept of meaning in the information order also includes the direct experiences of users in their technological life-world. Common in the pragmatic, symbolic, and phenomenological orientation of meaning is that, in the information order, subjects construct meaning in the flow of the experience. The phenomenological orientation also shows that subjects incarnate the objects they encounter resulting in a strong interaction between actors and their environment; meaning is an elusive concept because object and subject become one. This section showed interpretations of meaning that I collectively categorize as connective meaning. In contrast to objective meaning, which follows the semiological interpretation of meaning, connective meaning concerns engagement; ‘connects’ the actor.

Synthesis

The discourse on notions of meaning so far recognizes four main orientations: communicative meaning, symbolic meaning, inherent meaning, and meaning in the phenomenological context – contextual meaning. Each of them reveals different aspects.

- Communicative meaning – concerns the validity, conditions, and newness of information in communicative intent. Communicating parties mutually construct meaning and it is negotiable, except for the linear mode of communication. A judgment problem arises though when communicative events take place outside the agreed protocol such as communicating non-verbally, non-transparently, and in (slightly) different languages.

- Inherent meaning – actually includes a communicative aspect because it concerns what actors do because of communication, albeit, that it is not necessarily communicative intent. The term inherent in this context emphasis that communication takes place in the stream of life – durée as Giddens (1984) called it. It includes the implicit assumptions of communicating parties as an immanent plane that hovers in the background. Therefore, meaning includes the entire background knowledge that is present in the language and lives of communicating actors. Everything they have experienced in the past entangles their thinking and doing and may be of a content that is more than written or spoken language.
• Symbolic meaning – is intangible in a sense that it transcends the physical objectives of objects, events, and processes. It are their intangible characteristics that shows that symbolic meaning is created in a world that is not physically there; a world subjectively constructed by humans. Although humans can explain symbolic meanings, they do not necessarily need to coincide with the purpose of objects, events, and processes or in the case of symbolism, the purpose of symbols.

• Contextual meaning – is also intangible, but in contrast to symbolic meaning, assumes engagement of the subject with objects, events, and processes, from a one-world paradigm. Where actors explain what objects, events, processes symbolically mean to them, with contextual meaning they are in-the-world experiencing the deeper meaning of ontological structures. The experiencing actor can only explicate this type of meaning. This contrasts the conventional epistemological approach where one explains meaning through the relationships of things and their representations. With the one-world notion of meaning, the actor ‘becomes’ its life-world. Meaning then is about the extent to which actors adapt their behavior – renew their legacy – based on the experiences ‘as’ their life-world.

These notions of meaning, lead to a number of conclusions. First, communicative meaning fundamentally differs from the remaining three in a sense that it assumes communicative intent of actors. In this case, meaning occurs as an objective act of reference. In fact, one could deconstruct the other interpretations of meaning also with a communication perspective, but they lack the notion of communicative intent. Indeed the ideas from Wittgenstein and Habermas do contain communicative aspects, but the essence of their notions of meaning has focused on a much broader concept of meaning – how communication and context affects subjects. Similarly with contextual meaning, one could say that the life-world ‘communicates’ with the actor, however, it would frame it into a two-world thinking model in which we would ‘fall back’ in a semiotic discussion; hence, miss the phenomenological essence. To demarcate these fundamental differences, I have referred to objective meaning and connective meaning (see also Table 14).

<table>
<thead>
<tr>
<th>Objective meaning</th>
<th>Connective meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semiological</td>
<td>Empirical</td>
</tr>
<tr>
<td>Communicative intent</td>
<td>Occurrence</td>
</tr>
<tr>
<td>Objective act of reference</td>
<td>Subjective experience</td>
</tr>
<tr>
<td>Negotiation (two-worlds)</td>
<td>Explication (one-world)</td>
</tr>
</tbody>
</table>
Second, the idea of a life-world plays a dominant role in all notions of meaning that involves human experience. The notion of inherent meaning concerns how life-world and actor influence each other, or opposes onto the actor. The discussion on the symbolic notion of meaning does not address the idea of life-world directly. However, because symbolic meaning is subjectively constructed, it is by definition subject to the actor’s life-world. In the notion of contextual meaning actor and life-world become one – the actor incarnate, adapts, its life-world.

Third, in terms of inclusiveness, the extent of increasingly subjective and deeper ontological meaning, the four concepts of meaning seem to be hierarchical. Not in a way that communicative meaning cannot stand on its own, but contextual meaning, for example, includes symbolic meaning, inherent meaning, and communicative meaning. Figure 5 illustrates how each concept of meaning may include another concept meaning.

![Figure 5: Hierarchical inclusiveness of concepts of meanings](chart.png)

At this point, I want to refer to the overall theme developed in this thesis: in order to make responsible choices in a semiotic order, it is necessary to include a comprehensive concept of meaning in information governance – the case for meaning-driven governance as developed in chapter 3. The review of meaning in this chapter shows that prior research and publications has been rich about ideas on the subjective interpretation of information. However, none of them provides models or constructs for governing actors to ascribe meaning on how they experience things, situations, or opportunities in the contemporary information society, such that they can make responsible choices.

For governing actors to make responsible choices they need to consider the impact of new values – the proliferation of sign-value – against the background of the environment they operate in, do business in. Therefore, from a meaning perspective, the question then rises, what concepts of meaning do they need in order to fulfill this?

In the contemporary information society, where information is abundantly available and a technological form of life prevails, informational objects, events, and processes are opposed on the actor through technology and the actor ‘becomes’ its life-world. It was for Lash (2002) a reason to call for a technological phenomenology,
which has its roots in a one-world paradigm. However, it is impossible from a meaning perspective to avoid two-world aspects. Indeed, with a technological life form, actors do incarnate their life-world, but they also communicate, act upon information, and use objects that are appealing to them symbolically. The simple fact that if someone prefers a device from a certain brand to communicate and act in preferred communities, shows that semiological as well as experiential aspects of meaning matter. I submit that the discourse in information governance is in need of all the orientations of meaning that I have discussed here, in order for governing actors to make responsible choices. Information governance needs an inclusive concept of meaning that, besides objective meaning, also addresses connective meaning.

With this postulate, the key question rises, how to operationalize objective meaning as well as connective meaning in the discourse of information governance? The next chapter will develop a meaning-making framework that will address this issue.

**Conclusion**

This chapter started with a generic introduction of meaning in which it became clear that the first notions of meaning developed into a formal interaction model of how signals relate to formal structures, how signals relate to objects they refer to, and how signs affects subjects that use them. To be specific: the syntactic, the semantic, and the pragmatic interpretation of meaning – the semiotic scheme. This notion assumes communication and is more of a technical nature than the first notions of meaning of what one calls today the hermeneutic circle.

A notion of meaning based on a communication perspective shows that, in essence, all aspects of meaning relate back to the probabilistic theory of information as defined by Shannon (Shannon & Weaver, 1949). Theories of meaning in this perspective concentrate on the informational content in communicative intent, and to what extent this communication succeeds in sending across a message between the sending and the receiving system or actor. Less of a technical nature is the notion of meaning that relates to the pragmatic perspective of the semiotic scheme. Theorists in this domain considered meaning in terms of how information affects a receiving system and positioned mathematical theories of meaning that considered the newness of information, and sociopsychological theories that considered the supplemental information in the communication between two human actors.

All these theories on meaning relate to different modes of communicative intent – linear, interactional, and transactional – and concern the validity, conditions, and newness of information, based on a protocol between sender and receiver. I have denoted this as objective meaning.

Although each of the levels in the semiotic triad has its concept of meaning, the semiotic scheme only justifies itself abstractive. As soon as mental phenomena and
human behavior enters the semiotic realm of meaning, the clear demarcation of the semiotic scheme dissolves; there is more involved than solely objective meaning.

A more inclusive concept of meaning adds more aspects: human action, the symbols humans encounter in their life, and the direct experiences in the flow of the day-to-day business. From a more advanced view on the pragmatic interpretation of meaning, it became clear that meaning in the context of human action is a broad concept. This notion of inherent meaning includes everything humans have done and experienced in the past and how they construct meaning in the flow of the lived-experience – the life-world. Symbolic meaning plays a prominent role in this because humans make up their identity with symbols, and that influences their behavior. Contextual meaning shows that humans directly – reflexively – experience their environment. However, they cannot explain its meaning because events and processes in this environment happen at the spur of the moment through the technological interfaces they use. They become ‘one’ with their environment and meaning is about the direct experience of their technological life-world. I have denoted all concepts of meaning that involves human behavior and experience as connective meaning, in order to delimit it clearly from semiological orientations of meaning, which is fundamentally different.

The synthesis of all notions of meaning showed that there are four main orientations of meaning to recognize: communicative meaning, symbolic meaning, inherent meaning, and contextual meaning. A close look at them revealed three main conclusions. First, communicative meaning fundamentally differs from the remaining three in a sense that it assumes communicative intent of actors. Second, the idea of a life-world plays a dominant role in all notions of meaning that involves connective meaning. Third, in terms of inclusiveness, the extent of increasingly subjective and deeper ontological meaning, the four concepts of meaning shows a hierarchical inclusiveness.

Putting the critique of meaning in the context of making responsible choices in a semiotic order it seems essential, that information governance needs a comprehensive concept of meaning. A concept of meaning that addresses objective meaning as well as connective meaning.

Overall, I claim that the ramification of the concept of meaning is difficult, because a systemic orientation in the jungle of concepts of meaning seems impossible. There are several reasons for that. First, there is no reasonable classification of concepts. Second, one refers to meaning from fundamentally different concepts such as communicative intent and symbols. Third, meaning is subjective and depends on the philosophical stance of subjective transcendental or immanent. Fourth, meaning tightly interconnects with other ambiguous concepts such as communication, information and language. It is common knowledge that all these three concepts are more inclusive.

Table 15 summarizes the concepts and propositions of the authors that contributed to the notion of meaning I developed in this chapter.
Table 15: Overview of authors contributing to concepts of meaning

<table>
<thead>
<tr>
<th>Authors</th>
<th>Key concept or proposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maturana and Varela</td>
<td>Meaning in the cybernetic context is a linear concept in order to maintain the purpose of the system. A higher order defines the meaning of the overall system.</td>
</tr>
<tr>
<td>Schoderbek, Brillouin and Jumarrie</td>
<td>Meaning can be elicited from the difference between data and information.</td>
</tr>
<tr>
<td>Shannon and Weaver</td>
<td>Meaning and information are distinctly different concepts.</td>
</tr>
<tr>
<td>Weizsäcker</td>
<td>Meaning can be stated as pragmatic information, the level of novelty and confirmation. Prior experiences affect the construction of meaning.</td>
</tr>
<tr>
<td>Watzlawick</td>
<td>Meaning is constructed as a fusion of factual information and supplemental information according to five axioms.</td>
</tr>
<tr>
<td>Schulz von Tun</td>
<td>The conjugated meaning of a message is a complex of meanings by content, self-disclosure, relation and appeal. Prior experiences affect the construction of meaning.</td>
</tr>
<tr>
<td>Wittgenstein</td>
<td>Besides a sentence, meaning can also include formulations, gestures, texts, attitudes, and actions.</td>
</tr>
<tr>
<td>Habermas</td>
<td>Meaning is the performative complex of, the practice, the context, and the commitment of the actors involved. It includes the whole human context and its background (prior experiences).</td>
</tr>
<tr>
<td>Giddens</td>
<td>Meaning builds up in the durée of the lived experience.</td>
</tr>
<tr>
<td>Baudrillard, Eliot and Kaiser</td>
<td>Symbolic meaning is detached from material utility and intertwines the personal and objective perspectives.</td>
</tr>
<tr>
<td>Lash</td>
<td>The deep meaning of ontological structures of objects, events, and processes (phenomenologically) can only be constructed through engagement. Note: Actors have to ‘become’ their life-world to fully grasp the meaning of it.</td>
</tr>
</tbody>
</table>