Chapter 3

Understanding and Being

In this chapter we introduce Heidegger's analysis of understanding and Being. Heidegger's writings are both important and difficult, and we will make no attempt to give a thorough or authoritative exposition. Our intention is to bring out those aspects relevant to our examination of language and thought and to our understanding of technology. Before turning to Heidegger, however, it will be useful to look briefly at issues that arise in interpreting texts. In addition to the obvious relevance of this material to our discussion of language, we have found that it is easier to grasp the more radical phenomenological statements about interpretation if we first consider interpretive activity in a more obvious setting.

When someone speaks of 'interpretation,' the most likely association is with artistic or literary works. The musician, the literary critic, and the ordinary reader of a poem or novel are all in some immediate sense 'interpreting' a collection of marks on a page. One of the fundamental insights of phenomenology is that this activity of interpretation is not limited to such situations, but pervades our everyday life. In coming to an understanding of what it means to think, understand, and act, we need to recognize the role of interpretation.

3.1 Hermeneutics

Hermeneutics[1] began as the theory of the interpretation of texts, particularly mythical and sacred texts. Its practitioners struggled with the problem of characterizing how people find meaning in a text that exists over many centuries and is understood differently in different epochs. A

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[1] Palmer's *Hermeneutics* (1969) is an excellent first introduction to hermeneutics, including both its historical roots and its current meaning for literary criticism.

mythical or religious text continues to be spoken or read and to serve as a source of deep meaning, in spite of changes in the underlying culture and even in the language. There are obvious questions to be raised. Is the meaning definable in some absolute sense, independent of the context in which the text was written? Is it definable only in terms of that original context? If so, is it possible or desirable for a reader to transcend his or her own culture and the intervening history in order to recover the correct interpretation?

If we reject the notion that the meaning is in the text, are we reduced to saying only that a particular person at a particular moment had a particular interpretation? If so, have we given up a naive but solid-seeming view of the reality of the meaning of the text in favor of a relativistic appeal to individual subjective reaction?

Within hermeneutics there has been an ongoing debate between those who place the meaning within the text and those who see meaning as grounded in a process of understanding in which the text, its production, and its interpretation all play a vital part. As we will show in Chapter 5, this debate has close parallels with current issues in linguistic and semantic theory.

For the objectivist school of hermeneutics,[2] the text must have a meaning that exists independently of the act of interpretation. The goal of a hermeneutic theory (a theory of interpretation) is to develop methods by which we rid ourselves of all prejudices and produce an objective analysis of what is really there. The ideal is to completely 'decontextualize' the text.

The opposing approach, most clearly formulated by Gadamer,[3] takes the act of interpretation as primary, understanding it as an interaction between the *horizon*[4] provided by the text and the horizon that the interpreter brings to it. Gadamer insists that every reading or hearing of a text constitutes an act of giving meaning to it through interpretation.

Gadamer devotes extensive discussion to the relation of the individual to tradition, clarifying how tradition and interpretation interact. Any individual, in understanding his or her world, is continually involved in activities of interpretation. That interpretation is based on prejudice (or *pre-understanding*), which includes assumptions implicit in the language

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[2]Emilio Betti (*Teoria Generale della Interpretazione*, 1955) has been the most influential supporter of this approach. Hirsch's *Validity in Interpretation* (1967) applies Betti's view to problems of literary criticism.

[3]Gadamer, *Truth and Method* (1975) and *Philosophical Hermeneutics* (1976).

[4]In his discussions of hermeneutics, Gadamer makes frequent reference to a person's 'horizon.' As with many of the words we will introduce in this chapter, there is no simple translation into previously understood terms. The rest of the chapter will serve to elucidate its meaning through its use.

that the person uses.[5] That language in turn is learned through activities of interpretation. The individual is changed through the use of language, and the language changes through its use by individuals. This process is of the first importance, since it constitutes the background of the beliefs and assumptions that determine the nature of our being.[6] We are social creatures:

> In fact history does not belong to us, but we belong to it. Long before we understand ourselves through the process of self-examination, we understand ourselves in a self-evident way in the family, society and state in which we live. The focus of subjectivity is a distorting mirror. The self-awareness of the individual is only a flickering in the closed circuits of historical life. That is why the prejudices of the individual, far more than his judgments, constitute the historical reality of his being. — Gadamer, *Truth and Method* (1975), p. 245.

Gadamer sees in this essential historicity of our being the cause of our inability to achieve full explicit understanding of ourselves. The nature of our being is determined by our cultural background, and since it is formed in our very way of experiencing and living in language, it cannot be made fully explicit in that language:

> To acquire an awareness of a situation is, however, always a task of particular difficulty. The very idea of a situation means that we are not standing outside it and hence are unable to have any objective knowledge of it. We are always within the situation, and to throw light on it is a task that is never entirely completed. This is true also of the hermeneutic situation, i.e., the situation in which we find ourselves with regard to the tradition that we are trying to understand. The illumination of this situation—effective-historical reflection—can never be completely achieved, but this is not due to a lack in the reflection, but lies in the essence of the historical being which is ours. To exist historically means that knowledge of oneself can never be complete. — Gadamer, *Truth and Method* (1975), pp. 268-269.

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[5] The attempt to elucidate our own pre-understanding is the central focus of the branch of sociology called 'ethnomethodology,' as exemplified by Garfinkel, "What is ethnomethodology" (1967), Goffman, *The Presentation of Self in Everyday Life* (1959), and Cicourel, *Cognitive Sociology* (1974).

[6] The widely mentioned 'Sapir-Whorf hypothesis' is a related but somewhat simpler account, in that it emphasizes the importance of a language-determined 'world view' without relating it to tradition and interpretation.

We can become aware of some of our prejudices, and in that way eman-
cipate ourselves from some of the limits they place on our thinking. But we
commit a fallacy in believing we can ever be free of all prejudice. Instead
of striving for a means of getting away from our own pre-understanding,
a theory of interpretation should aim at revealing the ways in which that
pre-understanding interacts with the text.

Gadamer's approach accepts the inevitability of the *hermeneutic circle*.
The meaning of an individual text is contextual, depending on the moment
of interpretation and the horizon brought to it by the interpreter. But
that horizon is itself the product of a history of interactions in language,
interactions which themselves represent texts that had to be understood
in the light of pre-understanding. What we understand is based on what
we already know, and what we already know comes from being able to
understand.

Gadamer's discourse on language and tradition is based on a rather
broad analysis of interpretation and understanding. If we observe the
hermeneutic circle only at the coarse-grained level offered by texts and
societies, we remain blind to its operation at the much finer-grained level
of daily life. If we look only at language, we fail to relate it to the inter-
pretation that constitutes non-linguistic experience as well. It is therefore
necessary to adopt a deeper approach in which interpretation is taken as
relevant to ontology—to our understanding of what it means for something
or someone to exist.

3.2   Understanding and ontology

Gadamer, and before him Heidegger, took the hermeneutic idea of inter-
pretation beyond the domain of textual analysis, placing it at the very
foundation of human cognition. Just as we can ask how interpretation
plays a part in a person's interaction with a text, we can examine its role
in our understanding of the world as a whole.

Heidegger and Gadamer reject the commonsense philosophy of our cul-
ture in a deep and fundamental way. The prevalent understanding is based
on the metaphysical revolution of Galileo and Descartes, which grew out of
a tradition going back to Plato and Aristotle. This understanding, which
goes hand in hand with what we have called the 'rationalistic orientation,'
includes a kind of mind-body dualism that accepts the existence of two
separate domains of phenomena, the *objective* world of physical reality,
and the *subjective* mental world of an individual's thoughts and feelings.
Simply put, it rests on several taken-for-granted assumptions:

   1. We are inhabitants of a 'real world' made up of objects bearing prop-
      erties. Our actions take place in that world.

2. There are 'objective facts' about that world that do not depend on the interpretation (or even the presence) of any person.

3. Perception is a process by which facts about the world are (sometimes inaccurately) registered in our thoughts and feelings.

4. Thoughts and intentions about action can somehow cause physical (hence real-world) motion of our bodies.

Much of philosophy has been an attempt to understand how the mental and physical domains are related—how our perceptions and thoughts relate to the world toward which they are directed. Some schools have denied the existence of one or the other. Some argue that we cannot coherently talk about the mental domain, but must understand all behavior in terms of the physical world, which includes the physical structure of our bodies. Others espouse solipsism, denying that we can establish the existence of an objective world at all, since our own mental world is the only thing of which we have immediate knowledge. Kant called it "a scandal of philosophy and of human reason in general" that over the thousands of years of Western culture, no philosopher had been able to provide a sound argument refuting psychological idealism—to answer the question "How can I know whether anything outside of my subjective consciousness exists?"

Heidegger argues that "the 'scandal of philosophy' is not that this proof has yet to be given, but that *such proofs are expected and attempted again and again.*"[7] He says of Kant's "Refutation of Idealism" that it shows "...how intricate these questions are and how what one wants to prove gets muddled with what one does prove and with the means whereby the proof is carried out."[8] Heidegger's work grew out of the questions of *phenomenology* posed by his teacher Husserl, and developed into a quest for an understanding of *Being*. He argues that the separation of subject and object denies the more fundamental unity of *being-in-the-world (Dasein)*. By drawing a distinction that I (the subject) am perceiving something else (the object), I have stepped back from the primacy of experience and understanding that operates without reflection.

Heidegger rejects both the simple objective stance (the objective physical world is the primary reality) and the simple subjective stance (my thoughts and feelings are the primary reality), arguing instead that it is impossible for one to exist without the other. The interpreted and the interpreter do not exist independently: existence is interpretation, and interpretation is existence. Prejudice is not a condition in which the subject

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[7] Heidegger, *Being and Time* (1962), p. 249, emphasis in original.

[8] Ibid., p. 247.

is led to interpret the world falsely, but is the necessary condition of having a background for interpretation (hence Being). This is clearly expressed in the later writings of Gadamer:

> It is not so much our judgments as it is our prejudices that con- stitute our being.... the historicity of our existence entails that prejudices, in the literal sense of the word, constitute the initial directedness of our whole ability to experience. Preju- dices are biases of our openness to the world. They are simply conditions whereby we experience something—whereby what we encounter says something to us. — Gadamer, *Philosophical Hermeneutics* (1976), p. 9.

We cannot present here a thorough discussion of Heidegger's philoso- phy, but will outline some points that are relevant to our later discussion:[9]

Our implicit beliefs and assumptions cannot all be made explicit. Heidegger argues that the practices in terms of which we render the world and our own lives intelligible cannot be made exhaustively explicit. There is no neutral viewpoint from which we can see our beliefs as things, since we always operate within the framework they provide. This is the essential insight of the hermeneutic circle, applied to understanding as a whole.

The inevitability of this circularity does not negate the importance of trying to gain greater understanding of our own assumptions so that we can expand our horizon. But it does preclude the possibility that such understanding will ever be objective or complete. As Heidegger says in *Being and Time* (1962, p. 194), "But if we see this circle as a vicious one and look out for ways of avoiding it, even if we just sense it as an inevitable imperfection, then the art of understanding has been misunderstood from the ground up."

Practical understanding is more fundamental than detached the- oretical understanding. The Western philosophical tradition is based on the assumption that the detached theoretical point of view is superior to the involved practical viewpoint. The scientist or philosopher who de- vises theories is discovering how things really are, while in everyday life we have only a clouded idea. Heidegger reverses this, insisting that we have primary access to the world through practical involvement with the *ready- to-hand*—the world in which we are always acting unreflectively. Detached contemplation can be illuminating, but it also obscures the phenomena

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[9]This overview is based on Dreyfus's *Being-in-the-World: A Commentary on Division I of Heidegger's Being and Time* (in press). It uses some of his discussion directly, but also includes our own interpretations for which he cannot be held responsible.

themselves by isolating and categorizing them. Much of the current study of logic, language, and thought gives primacy to activities of detached contemplation. Heidegger does not disregard this kind of thinking, but puts it into a context of cognition as *praxis*—as concernful acting in the world. He is concerned with our condition of *thrownness*—the condition of understanding in which our actions find some resonance or effectiveness in the world.

We do not relate to things primarily through having representations of them. Connected to both of the preceding points is Heidegger's rejection of *mental representations*. The common sense of our tradition is that in order to perceive and relate to things, we must have some content in our minds that corresponds to our knowledge of them. If we focus on concernful activity instead of on detached contemplation, the status of this representation is called into question. In driving a nail with a hammer (as opposed to thinking about a hammer), I need not make use of any explicit representation of the hammer. My ability to act comes from my familiarity with *hammering*, not my knowledge of *a hammer*. This skepticism concerning mental representations is in strong opposition to current approaches in cognitive psychology, linguistics, artificial intelligence, and the foundation of cognitive science, as described in Chapter 2. Representation is so taken for granted that it is hard to imagine what would be left if it were abandoned. One of the major issues discussed in later chapters is the connection between representation and mechanism; this discussion will aid our understanding of what it means to take seriously Heidegger's questioning of mental representation.

Meaning is fundamentally social and cannot be reduced to the meaning-giving activity of individual subjects. The rationalistic view of cognition is individual-centered. We look at language by studying the characteristics of an individual language learner or language user, and at reasoning by describing the activity of an individual's deduction process. Heidegger argues that this is an inappropriate starting point—that we must take social activity as the ultimate foundation of intelligibility, and even of existence. A person is not an individual subject or ego, but a manifestation of *Dasein* within a space of possibilities, situated within a world and within a tradition.

3.3 An illustration of thrownness

Many people encountering the work of Heidegger for the first time find it very difficult to comprehend. Abstract terms like 'Dasein' and 'thrownness,' for instance, are hard to relate to reality. This is the opposite of

what Heidegger intends. His philosophy is based on a deep awareness of everyday life. He argues that the issues he discusses are difficult not because they are abstruse, but because they are concealed by their 'ordinary everydayness.'

In order to give more of a sense of the importance of thrownness (which will play a large role in the second half of the book), it may be useful to consider a simple example that evokes experiences of thrownness for many readers.

Imagine that you are chairing a meeting of fifteen or so people, at which some important and controversial issue is to be decided: say, the decision to bring a new computer system into the organization. As the meeting goes on you must keep things going in a productive direction, deciding whom to call on, when to cut a speaker off, when to call for an end of discussion or a vote, and so forth. There are forcefully expressed differences of opinion, and if you don't take a strong role the discussion will quickly deteriorate into a shouting match dominated by the loudest, who will keep repeating their own fixed positions in hopes of wearing everyone else down.

We can make a number of observations about your situation:

You cannot avoid acting. At every moment, you are in a position of authority, and your actions affect the situation. If you just sit there for a time, letting things go on in the direction they are going, that in itself constitutes an action, with effects that you may or may not want. You are 'thrown' into action independent of your will.

You cannot step back and reflect on your actions. Anyone who has been in this kind of situation has afterwards felt "I should have said..." or "I shouldn't have let Joe get away with..." In the need to respond immediately to what people say and do, it is impossible to take time to analyze things explicitly and choose the best course of action. In fact, if you stop to do so you will miss some of what is going on, and implicitly choose to let it go on without interruption. You are thrown on what people loosely call your 'instincts,' dealing with whatever comes up.

The effects of actions cannot be predicted. Even if you had time to reflect, it is impossible to know how your actions will affect other people. If you decide to cut someone off in order to get to another topic, the group may object to your heavy-handedness, that in itself becoming a topic of discussion. If you avoid calling on someone whose opinion you don't like, you may find that he shouts it out, or that a friend feels compelled to take up his point of view. Of course this doesn't imply that things are total chaos, but simply that you cannot count on careful rational planning to

find steps that will achieve your goals. You must, as the idiom goes, 'flow with the situation.'

You do not have a stable representation of the situation. In the post-mortem analysis, you will observe that there were significant patterns. "There were two factions, with the Smith group trying to oppose the computer via the strategy of keeping the discussion on costs and away from an analysis of what we are doing now, and the Wilson group trying to be sure that whether or not we got the computer, they would remain in control of the scheduling policies. Evans was the key, since he could go either way, and they brought up the training issue because that is his bailiwick and they knew he wouldn't want the extra headaches." In a sense you have a representation of the situation, with objects (e.g., the two factions) and properties (their goals, Evans's lack of prior loyalty, etc.), but this was not the understanding you had to work with as it was developing. Pieces of it may have emerged as the meeting went on, but they were fragmentary, possibly contradictory, and may have been rejected for others as things continued.

Every representation is an interpretation. Even in the post-mortem, your description of what was going on is hardly an objective analysis of the kind that could be subjected to proof. Two people at the same meeting could well come away with very different interpretations. Evans might say "Smith is competing with me for that promotion, and he wanted to bring up the training issue to point out that we've been having difficulty in our group lately." There is no ultimate way to determine that any one interpretation is really right or wrong, and even the people whose behavior is in question may well not be in touch with their own deep motivations.

Language is action. Each time you speak you are doing something quite different from simply 'stating a fact.' If you say "First we have to address the issue of system development" or "Let's have somebody on the other side talk," you are not describing the situation but creating it. The existence of "the issue of system development" or "the other side" is an interpretation, and in mentioning it you bring your interpretation into the group discourse. Of course others can object "That isn't really an issue—you're confusing two things" or "We aren't taking sides, everyone has his own opinion." But whether or not your characterization is taken for granted or taken as the basis for argument, you have created the objects and properties it describes by virtue of making the utterance.

Heidegger recognized that ordinary everyday life is like the situation we have been describing. Our interactions with other people and with the

inanimate world we inhabit put us into a situation of thrownness, for which
the metaphor of the meeting is much more apt than the metaphor of the
objective detached scientist who makes observations, forms hypotheses,
and consciously chooses a rational course of action.

3.4   Breaking down and readiness-to-hand

Another aspect of Heidegger's thought that is difficult for many people
to assimilate to their previous understanding is his insistence that objects
and properties are not inherent in the world, but arise only in an event of
breaking down in which they become *present-at-hand*. One simple example
he gives is that of a hammer being used by someone engaged in driving a
nail. To the person doing the hammering, the hammer as such does not
exist. It is a part of the background of *readiness-to-hand* that is taken for
granted without explicit recognition or identification as an object. It is
part of the hammerer's world, but is not present any more than are the
tendons of the hammerer's arm.

The hammer presents itself as a hammer only when there is some kind
of breaking down or *unreadiness-to-hand*. Its 'hammerness' emerges if
it breaks or slips from grasp or mars the wood, or if there is a nail to
be driven and the hammer cannot be found. The point is a subtle one,
closely related to the distinction between thrownness and reflection on
one's actions, as discussed above. As observers, we may talk about the
hammer and reflect on its properties, but for the person engaged in the
thrownness of unhampered hammering, it does not exist as an entity.

Some other examples may help convey the importance of this distinc-
tion. As I watch my year-old baby learn to walk and pick up objects, I
may be tempted to say that she is 'learning about gravity.' But if I really
want to deal with her ontology—with the world as it exists for her—there
is no such thing as gravity. It would be inappropriate to view her learning
as having anything to do with a concept or representation of gravity and
its effects, even though she is clearly learning the skills that are necessary
for acting in a physical world that we (as adult observers) characterize in
terms of abstractions like 'gravity.' For the designer of space vehicles, on
the other hand, it is clear that gravity exists. In anticipating the forms
of breaking down that will occur when the normal background of gravity
is altered, the designer must deal with gravity as a phenomenon to be
considered, represented, and manipulated.

If we turn to computer systems, we see that for different people, en-
gaged in different activities, the existence of objects and properties emerges
in different kinds of breaking down. As I sit here typing a draft on a word
processor, I am in the same situation as the hammerer. I think of words

and they appear on my screen. There is a network of equipment that includes my arms and hands, a keyboard, and many complex devices that mediate between it and a screen. None of this equipment is present for me except when there is a breaking down. If a letter fails to appear on the screen, the keyboard may emerge with properties such as 'stuck keys.' Or I may discover that the program was in fact constructed from separate components such as a 'screen manager' and a 'keyboard handler,' and that certain kinds of 'bugs' can be attributed to the keyboard handler. If the problem is serious, I may be called upon to bring forth a complex network of properties reflecting the design of the system and the details of computer software and hardware.

For me, the writer, this network of objects and properties did not exist previously. The typing was part of my world, but not the structure that emerges as I try to cope with the breakdown. But of course it did exist for someone else—for the people who created the device by a process of conscious design. They too, though, took for granted a background of equipment which, in the face of breaking down, they could have further brought to light.

In sum, Heidegger insists that it is meaningless to talk about the existence of objects and their properties in the absence of concernful activity, with its potential for breaking down. What really *is* is not defined by an objective omniscient observer, nor is it defined by an individual—the writer or computer designer—but rather by a space of potential for human concern and action. In the second part of the book we will show how shifting from a rationalistic to a Heideggerian perspective can radically alter our conception of computers and our approach to computer design.