The Role of Context in Meaning and Understanding

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1) Introduction

1.1) Context and Meaning

Context affects meaning. This much at least seems fairly uncontroversial. Sometimes for example we can determine the object of a verb from the sentence in which it is imbedded, as in, “He got out of his car, turned around and kicked it,” where it is clear that “it” is referring to the car. And a word can mean something different when it occurs in various sentences. “Take” means one thing in the sentence “Take one, they’re free,” another thing in “Take a bath,” and something altogether different when “Take me, I’m yours!” is shouted on a movie set. So the meaning of a word such as “take” appears to rely on the context of the sentence in which it occurs.

But why stop there? For even the same sentence can mean something quite different depending on the context in which it is uttered. “There is a great deal of energy stored here” might mean one thing when uttered by the guide during a tour of a hydroelectric dam, and something else again when uttered by a healer choosing a particular crystal for its curative powers. Right away we should notice that the word context seems to be referring to different sorts of things in some of our examples.

In much of the literature thus far available on context there is a tendency to distinguish between the so-called ‘situational’ and ‘propositional’ aspects of a context.¹ This amounts to drawing a distinction between the outward or extra-linguistic circumstances surrounding an utterance (such as where and when it was made) and the so-called ‘inner’ aspects, by which can be meant, for instance, simple grammatical mechanisms such as the anaphoric reference in our very first example in paragraph one, above.

¹ Gauker (1998) makes just this distinction, though we will encounter it again in other guises.
But some would include among the inner contextual factors of a statement the presuppositions upon which it rests. And here things begin to get (if they haven’t already gotten) complicated. Are the propositional aspects (e.g., presuppositions) of a context only those things to which the speaker (and only the speaker) has immediate access? But what then of the hearer, for surely he or she comes equipped with a set of presuppositions too? Might the notion be extended so as to include information generally available to the community, information to which the speaker ought to have access, and indeed perhaps ought to have accessed? Think of a claim by a scientific researcher that inadvertently ignores some important evidence in her field, even though that information was published in a major scientific journal and is widely known within the scientific community. How do things like the availability and relevance of information to the community and the responsibility of the agent within the community affect the determination of context? Does the notion of the context of an utterance go so far as to include such things?²

Here we seem to be going beyond the traditional propositional/situational split to include a social aspect of context. This is a Pandora’s Box that we cannot resist opening. A socially construed context might be synonymous with any of the different ways in which we order social relations, from family and work circles on up to language communities, or to religions and cultures. We will come to deal with these issues too, but lest we start at such heights of theory that the air quickly becomes too thin, perhaps we had best come back down to earth and start this inquiry at ground level.

1.2) Pre-Theoretic Notion

The first question to ask concerning context is whether we already have some sort of notion about it, and if so, what that notion might look like. Setting aside specialized lexicons, let us see what a general paperback dictionary such as the Webster’s New World Dictionary of the American Language has to say.³ It defines ‘context’ as “The parts just

² Cf. Clark (1992), Cohen (1987), and Hookway (1996) for affirmative answers to this question.
before and after a word or passage, which determine its meaning.” Would that
determining meaning were really that easy! But let us get a second opinion, this time from
an old hardcover dictionary, the *MacMillan’s Modern Dictionary*. Here we find ‘context’
defined as “What comes before and after a text or passage quoted or considered and helps
in its interpretation.” Aside from the possible shades of hermeneutics here, there is a
remarkable agreement between the two definitions. But do they really reflect our
everyday understanding of context?

It seems apparent that people often use the term ‘context’ to refer to more than
just the rest of the text under consideration (what Bar-Hillel calls the ‘co-text). When
something is ‘quoted out of context’ this usually means that the words were, for whatever
purpose, lifted out of their verbal surroundings. It is this verbal environment—the
preceeding and following text—which is needed if we are to see the quoted bit in the right
light. Consider for example how the National Rifle Association selectively quotes only
the second clause of the second amendment to the U.S. constitution, intentionally
ignoring the first clause and its possible implications for the meaning of the amendment
as a whole. This is a clear case of manipulating the context through avoidance. But what
about the extra-textual content: the intentions of the ‘founding fathers,’ the historical
events of the day, and the times in which they lived? Surely such factors must be taken
into account when considering the context of the amendment.

So sometimes when a remark (or even an entire speech) is taken out of context,
there is more involved than simply the surrounding text. A politician making a stump
speech might make a remark such as, “The Water of Life shall flow unimpeded!” Now if
that remark were made before a meeting of the Wisconsin Tavern League (W.T.L.) it
would seem to mean one thing, but if the same remark were uttered at a Women’s
Christian Temperance Union (W.C.T.U.) meeting, it would seem to mean something else
altogether. The point is that, even at a pre-theoretic level, there is more to the notion of
context than merely the surrounding verbal text.
Our pre-theoretic notion, therefore, appears to lend initial credence to the
demonstrated tendency to parcel context into situational and propositional aspects.
And perhaps into a social aspect as well, for the political scenario just sketched does
hinge on social factors, which go beyond the merely situational. That this is so can easily
be seen if one imagines the W.C.T.U. meeting actually replacing the W.T.L. meeting,
literally, in the sense of its occurring in the same hall at the same time that the W.T.L.
meeting was supposed to take place. It seems clear that our pre-theoretic notion requires
us to take audience or community into account.

On the other hand, it seems equally clear that our pre-theoretic notion with its
rough divisions of context may not be up to the task of handling questions that need to be
answered with great detail and exactness. As we have seen, there is need for more
exactness, for example in distinguishing between social and situational aspects of context.
There are many areas of inquiry in which the notion of context comes to play an
important role, and there is a corresponding desire for a detailed explication of the
concept.

1.3) Interest and Import

At this point, we will briefly survey some of the areas in which the concept of
context has come to play an important role. We will take a look at what interest there is in
context and why; at what is being done; and at where interest in these areas may be
headed. We will in this section try to remain at a descriptive level, saving the details for
later. Though not all of these areas will receive equal attention later, each is worthy of
inclusion to give an adequate picture of the current scope and import of that notion of the
context.

We can name at least six different areas of study in which context currently plays
a key role: in Artificial Intelligence research.\(^4\) In Philosophy.\(^5\) In Anthropology.\(^6\) In

\(^4\) Akman (1997)
Psychology. In Literary Theory. And of course, in Linguistics. This is not intended to be an exhaustive list, nor is there always such a clear-cut distinction between each research area. We shall examine some of these areas in more detail, but for the purposes of an introduction let us briefly look at some of the ways in which context affects research in each field.

In Artificial Intelligence one of the most important research questions has been directly concerned with context: can context be formalized, and if so how? It was thought that formally represented contexts would help to make generalized assertions easier to process, since the assertions could then be made relative to certain contexts. Although much research in AI concerns the formalization, and thus the purely computational aspects of context, some recent research has begun looking farther afield to the contributions (to context understanding) of Literary Theory and Psychology, for example. The reason for this broadening of the AI perspective appears to stem from the acknowledgment that interpretation only takes place within shared contexts. This means that to develop computers fully capable of natural language processing, researchers will have to take into account both individual and social aspects of language use. Other areas of interest within the AI field in which context plays an important role include intelligent information retrieval and knowledge representation.

In Philosophy the notion of context has come to the fore recently as the debate over relativism has flared up. The question of whether a Rortyian style relativism is a tenable position or not sometimes seems to pale beside the claims of those who assume it to have been answered in the affirmative. Inquiry goes on as to just how context-relative

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5 Gauker (1998)  
6 Hanegraaff (1998)  
7 Baars (1997)  
8 Harris (1988)  
9 Perry (1998)  
10 cf. Akman (1997)  
are knowledge claims, ethical judgments, and even meaning itself, and as to how contexts are related to one another. It may be a simple matter to show that a radical relativism is self-defeating, but there may be other forms of relativism that are not so easily swept aside. Or so it seems. One burning question that remains to be answered is whether one can have a little bit of relativism without ending up with too much. In other words, is there a way of recognizing that our pre-theoretic notion is basically correct without ending up on a slippery slope? The argument goes roughly like this: if meaning is determined to some degree by context, and there is no principled distinction between that which does and that which does not belong to the context, then everything can belong and the notion suffers from combinatorial explosion. It thus loses its explanatory power and becomes trivial. This is a sort of context-holism. So relativism and the notion of context are interrelated. There are issues, such as whether one might be able to use pragmatic rather than principled distinctions to delineate contexts, which are of current interest in Philosophy.

It would be wrong, however, to think that the current philosophical scene consisted of hordes of wild-eyed relativists on the one side and a handful of pragmatists barely holding out on the other. There are those, such as Davidson,\textsuperscript{12} who stand above the fray and pronounce it nonsense. Besides investigating the notion of context, we will have a look at both the arguments for and against contextual relativism, and also at arguments which purport to nip the problem in the bud before it develops into such an aberration.

There is one form of ethical relativism that historically finds its chief proponents in the field of Anthropology, and so I have chosen to keep it separate from Philosophy, at least while introducing it. This form of relativism is called Cultural Ethical Relativism, and a good deal of its popular appeal can be traced to the work of Margaret Mead, although she is only the most visible representative of a kind of thinking which has gained widespread support in various camps. The basic idea is that cultural values need not make appeal to any absolute standard, and are free to adopt any standards they may

\textsuperscript{12} Davidson (1973)
choose. The upshot is that, all standards being relative to some culture, there is no basis for judging one culturally determined form of behavior over against another. Paradoxically this usually only amounts to claiming the moral high ground for one’s own position. The importance of this line of thought can be seen if one replaces ‘culture’ by ‘context.’ Depending upon how context is defined, we may find ourselves involved in a deconstructive regression of ‘our culture’ into even smaller and more exclusive sub-cultures, however one may choose to define them. On what basis could we justify national standards if the nation developed into competing sub-cultures? Such a tendency would surely have startling political, legal, and educational ramifications for any so-called multi-cultural society, which is just what most of the leading western democracies tout themselves as. So ethical/cultural relativism, with its links to the notion of context, must be dealt with in any adequate treatment of context.

Moving from the outer to the inner realm, we can see that Psychology is also interested in questions of context. Though ‘context’ is often used in Psychology to refer to physical surroundings, there is another more specific sense in which it refers to unconscious representations. This serves to highlight the role of unconscious information in shaping conscious experience; as unconscious mental representation acting upon conscious mental representation. This does not, however, limit talk to conceptual contexts, for problems involving perceptual contexts often hinge on how contextual information is mentally represented. Baars uses a wonderful example of “gaining your sea legs” while sailing, and then of readjusting to walking on dry land. There is an affinity here with Peirce’s views on habit, in that information is seen to become part of habits or automatic processes, which then affect conscious experiences.

Talk of context in Psychology also bears either directly or indirectly on some of the interests of Artificial Intelligence researchers. For instance, psychologists are concerned with such things as accessing and leaving contexts, and with how contextual

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13 Baars (1997)
14 Baars (1997) p.2
representation is used in processing to deal with ambiguities of meaning and experience, and the question of how contexts are modified. More and more we will come to see that important matters concerning context are not limited to any one field, but have an interdisciplinary effect.

Literary Theory is another area in which the notion of context comes to the fore. What prevents us from interpreting a literary text to mean whatever we want it to mean? After all, we could simply invent some context which would provide significance for our interpretation. So why does the center hold at all? What prevents the loosing of mere anarchy upon the world of literary interpretation?

There is, as one might expect, a whole range of responses to this issue. On the one hand, a Reception Theorist like Fish, by placing the burden of a text’s meaning wholly upon the reader, may stand accused of solipsism.\(^{15}\) On the other hand, New Historicism argues that the most plausible context for understanding a text is the historical one during which it was written. Within Literary Theory there is a triad consisting of Text, Author, and Reader, and how a text is best interpreted often seems to involve a decision or assumption about which of these has priority. This amounts to making assumptions and decisions concerning contexts: the contexts within which the author composed the work; the contexts within which the work takes place; and the contexts within which the reader interprets the work.

But this is only a first step, for then there must be some sort of consensus about how these contexts are structured, about how we are to consider them. Another triad has evolved which emphasizes the predominant themes of race, sex/gender, and economic power relations. So we have an intricate web of relations involving members of both triads and their possible interconnections, as well as those of any sub-categories brought

\(^{15}\) See Eagleton (1983) p. 86 for a discussion of how Fish guards against charges of solipsism.
into play.\textsuperscript{16} But the main point is this: much of the discussion taking place within Literary Theory is about the nature and role of contexts in creating and evaluating meaning and understanding.

What is the situation in Linguistics? If we consider Linguistics as the study of language, and follow the traditional division of labor within the field into Syntax, Semantics, and Pragmatics, under which heading do we find questions about context? Or, if we consider just the recent history of Linguistics, since Chomsky slew the Behaviorist dragon,\textsuperscript{17} how is context dealt with there?

On the traditional scheme, syntax studies sentences, semantics studies propositions, and pragmatics studies utterances and their contexts. One of the major problems seen to belong to the domain of pragmatics is the determination of the proposition expressed by a sentence, or put another way, the disambiguation of the proposition expressed. An expression such as “Racing cars can be dangerous” has two obvious meanings, and it was held to be a job for pragmatics to determine in which sense it was being used. But recently there have been attempts to formalize pragmatics,\textsuperscript{18} based upon possible world semantics and truth-functional semantics, a move that appears to blur the traditional tripartite division.

Chomsky and his followers view language as a two-tiered system, consisting of a surface structure and a deep structure. On such a model, disambiguation is a question of linking the utterance up to the correct proposition in the deep structure. The surface structure is overt, while the deep structure is mental or innate in nature. To use an analogy, the surface structure is like a software program and the deep structure is hard-wired. Context is relegated to the surface phenomena, along with other ‘accidentals’ such

\textsuperscript{16} Consider for example that Feminist, 2\textsuperscript{nd} Wave Feminist, 3\textsuperscript{rd} Wave Feminist, Gender Studies, and Queer Theory all fall under the rubric of Sex/Gender. Each of these can be further broken down according to, for example, the political leanings of their adherents.

\textsuperscript{17} Chomsky (1959)
\textsuperscript{18} Cf. Stalnaker (1973)
as historical development of the language, and maybe even which language is under consideration. On this model ambiguity is handled not by reference to external context per se, but to differences in deep structures. The chance for success of such an endeavor is sharply debated, but it warrants mention simply by virtue of its widespread appeal and influence.

We have looked briefly at these six areas of study (Artificial Intelligence, Philosophy, Anthropology, Psychology, Literary Theory, and Linguistics) to gain an impression of the wide range of interest and of the importance of context. Now that we have seen where some of the interest in context lies, let us also look at some of the problems that it may encounter.

1.4) Problems of Context

In section 1.3 we touched upon some of the difficulties facing an effective notion of context. Problems of holism, relativism, and indeed the very intelligibility of certain construals of context, we saw, need to be confronted. Now we will cast a glance in the direction of these challenges.

The lead torchbearers of the anti-holism campaign are Jerry Fodor and Ernest LePore. It is chiefly to their enormously popular work *Holism*\(^{19}\) that I make reference in creating an argument to contextual-holism, since mine is merely a parallel argument to their (straw) argument for semantic-holism. It will prove interesting to see if, and if then what sorts of arguments can be mustered for and against contextual-holism. Will a sort of ‘molecularism’\(^{20}\) save the day for contexts? Or must there be some sort of ‘principled distinction,’ such as Fodor and LePore call for, to arrest the slide toward holism?

\(^{19}\) Fodor and LePore (1992)

\(^{20}\) Doyle (1998). Roughly, the slide to belief holism is to be blocked by positing sets of disjunct sets of beliefs, any of which is sufficient for having a belief but no particular one of which is necessary.
When we turn our attention toward relativism, however, other players enter the scene. Rorty\textsuperscript{21}, as well as Fish\textsuperscript{22}, are actually proponents of relativism, whereas Böhler\textsuperscript{23} and others attack contextualism for failing to stem the rising tide of relativism. Rorty gleefully accepts a sort of cultural relativism in the belief that it will somehow help to promote all that is good about democratic societies, while pessimists like Böhler tend to forecast a complete breakdown of standards, the ability to judge, and even of reason itself. Böhler believes that rational thought requires some transcendent notion of \textit{Verstand} if it is to hold in every case. There is such a wide discrepancy between these positions that we simply must look more closely at them to find the merit of each.

Davidson\textsuperscript{24} has argued that any notion of context which seeks to somehow equate a context with a ‘conceptual scheme,’ and further, which maintains that meaning is relative to such a scheme, is an incomprehensible project. To ascertain that another scheme is beyond the pale, we have to be in a position to make sense of its claims. It is just this fact which gives the lie to any notion of conceptual schemes to which meaning is supposed to be relativized. If Davidson is correct in his assessment, what effect will this have upon the idea (i.e., our pre-theoretic notion) that context affects meaning? Is his argument aimed only at radical forms of (conceptual) contextual relativism, or does it have ramifications for any notion of meaning that relies even in part upon context?

Another interesting argument which seeks to curtail the excesses of contextualism is offered by H.J. Schneider\textsuperscript{25}, who points out that the determination of what belongs to a context depends upon what the hearer of an utterance needs to understand the utterance, and further, upon the ‘level’ at which that understanding is intended. The working-out of understanding is, he maintains, a \textit{process}, since every achieved understanding may be either wrong or incomplete and stand in need of further explication. Therefore, it is

\begin{itemize}
  \item \textsuperscript{21} Rorty (1980) and (1982)
  \item \textsuperscript{22} Fish (1980)
  \item \textsuperscript{23} Böhler (1986)
  \item \textsuperscript{24} Davidson (1973)
  \item \textsuperscript{25} Schneider (1993)
\end{itemize}
impossible to give ‘the context’ for an utterance as if context were some predetermined abstract range of circumstances and situational characteristics.

These are three main problem areas faced by any theory of context: holism, relativism, and coherence. We touched upon some of the alleged difficulties of relativism, including the cultural and conceptual varieties. Now I want to look at the work of someone who has been accused not only of being a holist, but also of being both a cultural and a conceptual relativist-- Ludwig Wittgenstein.

1.5) Wittgenstein

Glock has said of Wittgenstein that he embraces a cultural relativism which follows from the conceptual relativism of the ‘autonomy of grammar.’ Why should we trouble ourselves with his work if it only leads to relativism? First appearances aside though, we shall see that Wittgenstein’s inquiries into the workings of language shed a huge amount of light on the issues of context that are of concern to us. However, having said that I must admit that it is not always easy to correlate Wittgenstein’s terminology with that which is currently in vogue. For instance, how are we to relate terms such as ‘Language-Games,’ ‘Forms of Life,’ or even the aforementioned ‘Autonomy of Grammar’ to current discussions of context? Part of understanding Wittgenstein’s contribution to the field consists in coming to understand how his idiosyncratic terminology (let alone his idiosyncratic style!) matches up with current jargon. Nor is it really a simple matter of ‘matching-up,’ for sometimes it is because his terms don’t fit our accustomed ways of thinking that we are forced to reconsider our word choices, or concepts, and our way of looking at things. This is precisely the point.

Wittgenstein offers us a new and pragmatic form of relativism which is neither radical nor chauvinistic. I believe this synthesis of pragmatism and relativism is what

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26 Glock (1996) p.126
27 see section 1.6 below
Wittgenstein refers to in *On Certainty* (§ 422), when he says that he is trying to say something that sounds like pragmatism, but that he is being thwarted by a kind of *Weltanschauung*.

Though he dealt with issues of context a great deal in his later philosophy, nowhere did he more directly confront the issues concerning us than in his last work, *On Certainty*. The book is primarily known for its discussions of G.E.Moore’s essays ‘A Proof of the External World’ and ‘A Defense of Common Sense,’ or in other words for its handling of epistemological themes. But there is a wealth of material within its pages on understanding, doubt, conceptual schemes or frames, their limits, and on the possibilities of communication between those with different frames or contexts. Wittgenstein’s work and *On Certainty* more than any other single source will be used in support of the position which I intend to develop in this paper.

1.6) My Take

I am a whole-hearted supporter of a pragmatic form of relativism and of contextually informed meaning. By a pragmatic form of relativism, I understand a stance which is neither chauvinistic nor radical. Radical relativism posits mutually exclusive contexts. Consider that popular example, substance ‘x,’ held to have been ‘gold’ somewhere in the past based upon the best tests then available, but which more modern atomic weighting shows to be some other substance. Radical relativism would have to say that ‘x’ *really was* gold then, but isn’t now, because truth is strictly context-determined.

A chauvinistic relativism maintains that, although one is in and remains within a certain context (or frame, scheme, etc.), this is no impediment to understanding and judging other contexts. It is chauvinistic because in practice it nearly always casts a
condescending glance at other contexts. It tries to defend the superiority of (or promote the transcendental nature of) its own criteria in judging other contexts.

A pragmatic relativism recognizes that we are always in some context as a matter of fact, but sees this more as a starting point than as a limitation. It maintains that there is a good deal of leeway between radical and chauvinistic relativisms, and that intercontextual understanding is something that can be achieved one step at a time. Contexts interweave and overlap; they can be expanded without requiring a transcendent consciousness. It sees no need to insist upon an either/or dichotomy (e.g., that either contexts are closed like monads, or that one must attain a God’s-eye view).

By contextually informed meaning I understand a notion of meaning which lies between the extremes of context-holism on the one hand and context-free sentence meaning on the other. Context-holism involves a notion of context so inclusive as to trivialize or at the very least drastically reduce the explanatory power of the notion. Context-free sentence meaning envisions a notion of meaning removed from every context. Context is said to come into play at some level other than in our grasping of the proposition expressed by an utterance. This sort of ploy has, at least since the time of Frege, been much more fashionable than context-holism. But I would argue that meaning is always to some degree contextually informed. I cleave to the middle, to a pragmatic relativism. To the idea that ‘everything’ (meaning) is informed by context, but a context is not informed by everything.

It follows from this pragmatic notion that context cannot be completely formalized. This does not mean that investigations in that direction are without merit, only that they are bound to fall short of capturing entirely the ways in which contexts function in natural language. The contextual parameters being explored in AI research will no doubt lead to vastly more powerful and flexible machines and programs with a

\[\text{I will argue that contexts are open systems that do not lend themselves to formalization due to the ways or processes by which they change. The very nature of their openness precludes a strict formalization.}\]
myriad of useful applications. But we are primarily interested here in human beings and natural language. We will do well to carefully consider any research source on context for this is an interdisciplinary field and interesting results may come from many perspectives.

1.7) My Approach

There are five main points to my approach to the complexities of context. First, contexts are necessary to any adequate account of meaning and understanding. We make use of context both explicitly and implicitly in most everything we do with language. Whether it is utterance meaning, literal meaning, or propositional meaning under consideration, context plays a role, not merely in doubtful cases where some clarification is needed, but most all the time. Translation, for example, would be impossible without contextual considerations.

Second, context is irreducible to some form of representation. Contexts always involve an active human presence: agents who experience situations in ways not reducible to symbolic representation. Ultimately this human aspect of context is connected with the physical body and how it noncognitively experiences various situations.

Third, contexts are open. This means they cannot be completely and predeterminately delineated. It is impossible (except in a few non-typical cases such as by stipulation) to draw a definite boundary to a context, due to factors such as information, relevance, and understanding, or hearer’s needs.

Fourth, though contexts are in principle open, this does not lead to doubt, confusion, or chaos because we do have a way of locating the parameters of context. This hinges upon what Wittgenstein called ‘ordinary certainty.’ We don’t doubt in ordinary cases, and we only need to determine definite borders in cases where doubt does creep in. It is a maxim of pragmatism that one needs grounds in order to doubt. But even before
this, there must be something held certain, in the sense that some things must stand fast and cannot be doubted if doubts are to be at all possible. This kind of certainty is not knowledge per se, but something belonging to a different category. As we shall see, a person’s grasp of a context seems inversely proportional to their degree of doubt. In other words, when we near the limits of a context we can recognize this by an increase in doubt; expressed as a lack of certainty in word and deed.

A pragmatic approach to the study of context is advocated, and it leads directly to my fifth major point, which is that contexts are accessible. There are various ways in which contexts alien to one’s own might be accessed; among them the sharing of practices; intentional context formation (i.e., task-oriented groups); and the importance of imagination and metaphor. Metaphor is used here not only in the usual sense, but also in Schneider’s sense of ‘syntactic metaphor.’ ‘Syntactic’ refers to sentence building, so that syntactic metaphor indicates the multiplicity in meaning of complex expression-building devices.

Finally, in the summary chapter, I show how these many facets of context come together to help us understand the dynamics of a highly-charged socio-political situation in the United States, the so-called ‘Culture Wars’. Each of the opposing sides in the array of debates (on topics such as abortion, gay marriage, and the war in Iraq) that constitute the ‘Culture Wars’ seeks to manipulate the context of the debate in such a way as to determine the outcome in advance in favor of their own side. A careful examination of the dynamics involved should enable the reader to avoid the pitfalls and snares that await the unwary and uninformed.

Each of the five points of my approach has strong ties to Wittgenstein’s later work. The idea of defining contexts pragmatically has obvious links to the slogan of ‘meaning as use.’ Frameworks and framework facts are prominent notions in On

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29 Cf. On Certainty §94; §162; §308.
30 Schneider (1993a)
Certainty, as are certainty and doubt. But in my discussions of intercontextual communication, or bridge-building, I strike a somewhat more optimistic note than did Wittgenstein. One sometimes gains the impression, in reading On Certainty, that Wittgenstein was frustrated by a lack of insight (compounded by the certainty of his impending death) into what for him was obviously a very dear topic. “Here is still a big gap in my thinking. And I doubt whether it will be filled now.”\textsuperscript{31} My hope is that this work will go some way toward filling in that gap.

\textsuperscript{31} On Certainty (5.4) p.62e.
2) Contextual Necessity

Contexts are necessary components of normal language usage. This can be approached in many ways, through such notions as utterance meaning, literal meaning, propositional meaning, and translation. The overarching consideration in this section is the idea that context is always involved in discourse, not merely in special cases (such as in the determination of reference for indexicals).

Consider the view criticized by Wittgenstein in the opening passages of the Philosophical Investigations: the ‘Augustinian’ view that words stand for things. Learning a language, on this view, consists of learning which things which words stand for. This view has been called “Naïve-Realism” by Schneider1, who correctly points out that it would only be the case if one already had a language and were merely supplementing it. But learning a language also involves complex social dealings that underlie the language. And these social skills, assumptions, traditions, etc., are learned mostly by doing, in a process of becoming acclimated to the culture in which the language is used.

This type of learning by doing is often called knowing-how, to distinguish it from the alleged body of propositional knowledge called knowing-that. Understanding a language requires knowing how to do certain things, such as being able to create and understand new sentences. This in turn requires some context in which the results of these (i.e., utterances) are said to make sense. Meaning-as-use theories point in this direction. The key point concerning knowing-how is that it does not necessarily reduce to knowing-that. What one knows how to do (a capability) is not necessarily expressible in a propositional form. It is simply not possible to wrestle all that makes up the contexts of normal language usage into the propositions of the form, “It is the case that….” Searle puts it thus: “One develops skills and abilities that are, so to speak, functionally

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1 Schneider (1993a)
equivalent to the system of rules, without actually containing any representations or internalizations of those rules.\textsuperscript{2}

Schneider has pointed out that meaning arises on a case by case basis\textsuperscript{3}, and that cases can differ greatly. They are only recognized when one considers that the context, which is necessary to speak of a ‘word’ or ‘expression of speech’ in the first place; a nonlinguistic context of interpersonal action. In this section, we will look at some of these cases, including the attempt to develop a ‘context-free’ meaning.

2.1) Meaning and Understanding

In \textit{On Certainty}, Wittgenstein says (OC 348) that meaning is not \textit{determined} by the situation, yet it stands in need of such determination. We could paraphrase this here as ‘meaning is not determined by the context, yet it stands in need of such determination.’ The situation or context is not merely that slice of space/time in which an utterance takes place. Wittgenstein tells us that if there has to be anything behind the utterance, it is ‘particular circumstances’\textsuperscript{4}. In a similar vein, we should try not to think of context as information, but should ask ourselves in what sort of case, in what kind of circumstances, do we say, ‘Now I know how to go on.” In the sense in which there is information characteristic of a context, context is not information. We must look to the role of context rather than to some truncated definition. That this is so can be seen in the misguided attempts of Dummett\textsuperscript{5} and others to narrow the focus of an adequate theory of meaning down to an understanding of the truth-conditions for an expression. The understanding of a sentence is, on this view, to be derived from an understanding of its component words and the rules of combination. This approach may underlie the common

\begin{itemize}
\item \textsuperscript{2} Searle (1992) p. 142
\item \textsuperscript{3} Schneider (1992) p. 735
\item \textsuperscript{4} Wittgenstein (1953) (§154-55)
\item \textsuperscript{5} Dummett. (1975) p.69 Though Dummett does consider other theories, such as verification, justification, and incorrectness, he remains committed to the notion that meaning is to elucidated in terms of an understanding of truth conditions.
\end{itemize}
tendency to view context in terms of discrete units of information. It is all too easy to parse context into a space/time component (situational) and a propositional component (the propositions to which one is logically committed by acceptance of the utterance in question). However, as is the case with truth-conditional theories of meaning, this approach seems both arbitrary and artificial, leaving the contextual aspects of normal language usage unaccounted for.

2.1a) Utterance Meaning

Why is the distinction between situational and propositional aspects of context called ‘arbitrary’ (in section 2.), if we have also seen that there is a pre-theoretical notion to that same effect? Earlier we saw that the situational/propositional split was too neat (sec. 1.2). It left out the key aspects of what we normally consider to be the context of an utterance, such as the speaker and hearer’s social relationship. But why the rush to draw such a distinction if it means that we risk leaving out important aspects? It appears to be motivated by the desire to isolate a neutral or context-free sentence meaning. Not merely to isolate such a meaning, but to give it certain priority, a higher level of importance than any given utterance said to express some variation of it. A further step in reducing the importance of utterance meaning is taken whenever one tries to abstract the ‘information content’ of a situation. The mistake is compounded by then equating the abstracted information with the situation itself. For the situation always ‘contains’ more than can be abstracted. Situations are dynamic, not static. Utterances take place in these dynamic contexts. Gendlin says⁶ that such attempts to generalize or to pin down the ‘essential’ aspects of the context of an utterance are mistaken; they ignore the speaker’s relationship to the situation, a relationship that is always more than verbal. In this work, we shall try to focus on utterances and the circumstances in which they take place rather than on abstraction and analysis of what we have abstracted. By reversing the usual direction of inquiry we will try to stay grounded in the actual, rather than becoming caught up in a web of theory.

⁶ Gendlin (1993)
2.1b) **Literal Meaning**

One type of theory splits an utterance’s so-called literal meaning from its conveyance in any particular circumstances. Theories of this sort are usually Fregean in nature and make a distinction between the sense and the force of an utterance. This distinction is supposed to allow us to consider the ‘literal meaning’ of the sentence apart from its conveyance in particular circumstances. This is said to be important because otherwise we would have to hold that meaning of a sentence changes whenever its role changes; for instance, when it becomes part of a longer sentence. A sentence becoming an antecedent clause would be an example of such a move.

Fregeans often accuse meaning-as-use-theorists of conflating semantic and pragmatic distinctions. For a use-theorist, it seems odd to try and distill some ‘literal meaning’ from a sentence apart from any use of it. For even this attempt is a usage and takes place in certain circumstances within certain contexts.

Further, there is nothing about ‘literal meanings’ that would block strange ‘literal’ interpretations. Wittgenstein showed this to be the case for rule-following, and the same holds true for any language usage (it being a rule-governed activity). Searle called this the “radical underinterpretation” of meaning. Nothing about literal meaning blocks wrong interpretations. What blocks wrong interpretation, according to Searle, is that we have some knowledge of how the world works; a set of abilities for coping with the world. Literal meaning only determines conditions of satisfaction against a Background (of capabilities, dispositions, know-how, etc.), which is not itself a part of the semantic content of the sentence. In other words, what counts as doing something (x-ing, y-ing, or z-ing) will vary according to the context.

2.1c) **Proposition Meaning**

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7 Searle (1992) p.131
We can consider the notion of ‘propositional meaning’ as representing one end of the spectrum. This is the idea of context-free sentence meaning. At the opposite end of the spectrum we would find ‘context-holism.’ The spectrum ranges between a notion of meaning in which context plays no role at all to one in which context plays an all-inclusive role (and in effect trivializes or at least drastically reduces its explanatory power). We will see that the notion of a context-free propositional meaning has permeated our conception of language to such an extent that even the Pre-Theoretic Notion (see sec. 1.2, above) reflects this way of thinking. It is for this reason that Pre-Theoretic Notion is misleading: it draws a false dichotomy between situational and propositional aspects of context, and it does this because it fails to grasp the nature of propositions.

In truth-conditional theories of meaning, a fundamental concept is that to grasp the sense of a sentence is to know under what conditions that sentence is true. This grasp is of what would make an assertion true, independently of whether or not we have the means of actually determining if it obtains or not. This way of thinking informs the dominant view of language, as can be seen in the Pre-Theoretic Notion. But here we are going to look at the limitations of this way of thinking and go on to examine alternatives.

Wittgenstein drew a tentative distinction between the notion of being true or false and the notion of making sense. He examined cases in which confusion and doubt might cause our measuring or calculating practices to become not false, but senseless. He also considered cases in which propositions are not yet imbued with sense, and he makes it clear that sense is more closely aligned with use than it is with truth conditions. These considerations were a major part of Wittgenstein’s transition from a truth-functional theory of meaning to a view of meaning based in use. In other words, the early Wittgenstein, like Frege, held that the sense of a proposition was bound up with its truth conditions. The later Wittgenstein moved toward a notion of sense based upon what we

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8 Wittgenstein (1978) p.200
count as correct and incorrect usage; toward a notion of sense in which the application, employment, and use of a proposition serve as criteria of understanding. As I have pointed out elsewhere (Doyle, 1998), this shift is what allowed Wittgenstein to speak of a sentence *making sense* rather than of it *having a sense*. Why is this important to the present inquiry? Because if sense is dynamic, active, present, and involved in the practice of language, then it cannot be extricated from context as it might if sense were something merely *accompanying* the language. If sense, use, and context belong, then there is nowhere for the truth-conditional scalpel to enter. There is no acontextual meaning.

Another attempt to separate a propositional content out from the sentence is seen in Searle’s notion of ‘predication’⁹. According to this account, sentences such as the following share the same reference and predication, though the Speech Act differs in each case:

1) Sam smokes habitually.
2) Does Sam smoke habitually?
3) Sam, smoke habitually!
4) Would that Sam smoked habitually.
5) Mr. Samuel Martin is a regular smoker of tobacco.

The key move comes when Searle seeks to ”detach the notions of referring and predicating from the notions of such complete Speech Acts as asserting, questioning, commanding.”

This is a difficult move at best, but Searle obviously wants to abstract the same proposition out of each of these sentences. What he does is to draw a finer distinction than ‘proposition’; positing instead a ‘reference’ and a ‘predication.’ But these are derived from the proposition, which traditionally has taken the standard form of “it is the case that…” since at least the Tractatus. However, the later Wittgenstein clearly rejected

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⁹ Searle (1969) p.23ff
the notions of a ‘propositional form’ and ‘propositional content.’ Schneider has explored this topic quite thoroughly, and he offers another pragmatic account of ‘propositional content.’

Schneider asks what we can understand by ‘propositional content’ if we remain determined not to fall prey to psychologism; the view that the ‘propositional content’ is what we ‘have in mind’ or ‘grasp’ when we utter or understand the given expression. The alternative and pragmatic view of Schneider is to look at equivalency relations. A precise and non-psychologistic determination of the concept of propositional content can be won by comparing different forms or expressions of knowledge (e.g., technical drawings, written instructions, etc.) if there is an equivalence relation between them, then one may abstract out and speak of the abstracted equivalency as the propositional content. What does this equivalency consist of? It is a pragmatic equivalence; we can speak of an equivalence relation when two forms of expression serve to enable the hearer (and observer) to engage in certain actions. For example, following our technical drawing and written instruction example from above, either one may prove adequate to enable someone to assemble or perhaps repair the object in question.

What Schneider and the later Wittgenstein are doing is providing a pragmatic alternative to the traditional Fregean notion of a proposition. Unfortunately, just such a platonic Fregean view still holds sway throughout much of the philosophic and linguistics communities. However, in this investigation into context, ‘proposition meaning’ is taken to indicate pragmatic equivalency relations after the manner of Schneider.

But why is this important to an investigation of context? It is of central importance because of the prevailing tendency to see context partly as consisting of a propositional component, which the agent is said to bear a knowledge relation. Some

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10 H.J.Schneider (Die Sprache…)
11 Either explicitly or tacitly, depending upon which author one reads. So for example, Clark and Carlson (1992) define context as “…information that is available to a particular person for interaction with a particular process on a particular occasion.” It is unclear just what ‘available’ means here. Gauker at least is stricter in defining
points of this view are in need of explanation: how do we come by this knowledge? What criteria for inclusion and relevance are at work?

2.1d) Translation

One of the standard translations found in philosophical literature is as follows:

1) It is raining.
   1’) Es regnet.

Sentences (1) and (1’) are said to express the same proposition. The early Wittgenstein would say that both sentences picture the same fact, or that they both describe the same location in logical space. Frege might have said that they both express the same thought. So far, so good. But let us look at the act of translating and see where context enters into the picture. If translation were simply a matter of going from a sentence in one language to a sentence in another language, then translation would not require very much. A dual-language lexicon and a set of algorithms might suffice. This situation seems to parallel that of positing a *tertium comparationis*, in as much as the dual language lexicon represents the transcendent position of objectivity.

The first step, the one from a sentence to its corresponding proposition, is the one we overlook. But it is also the one that leads us astray. If the mechanism of this step were clear and well explained, then the move from the proposition to a sentence of the second language would be easy, merely a mirror image of the first step. But when we look more closely we see that the serious difficulties arise before we can get to that second step. In fact, the first step never occurs in quite the way imagined, so there is no way in which the second step can be a mirror image of it. (But it can, as we will see, mirror the *ability* exhibited by an understanding of the first sentence.) To refute the standard view of translation, it would be helpful to have an alternative to offer in its place.

propositional context as “…facts relevant to conversational aims of the interlocutor whether they are aware of these facts or not.” (1996) p.149
What I want to do here is look at Schneider’s account of ‘abstract sense,’ and then to expand upon it to account for and remedy some of the difficulties besetting the received view. What is it to ‘grasp’ the sense of a sentence? Grasping is here used in a metaphorical sense, so we will want to get beyond that to the actual mechanism involved. Schneider offers us a way to do this\textsuperscript{12}. Schneider shows how a sense arrived at compositionally may still fall short of an adequate understanding of the sentence, even if we know some sense for each word in the sentence plus its structure building rules. He takes pains to point out that it is still useful to have a neutral way in which to speak of the content of a sentence. However, this is not to say that this is what we do in using language, and surely not in translating. Most people who’ve learned a foreign language have experienced the following phenomenon: one ‘knows’ all the words in some newly encountered sentence, and even recognizes that the grammatical structure is valid, and yet one is unable to do anything with the sentence. What is going on here? This lack of ability to use the sentence, despite in some sense ‘knowing’ it, is a context failure. What this means is that one fails to recognize within one’s repertoire a context in which to use the sentence that makes sense. This is what being “unable to make any sense of it” consists in.

We have to move beyond a view in which sentences have senses and adopt a viewpoint in which sentences make sense. For if a sentence makes sense, it is not enough to merely grasp an abstract sense, but one must possess an ability to use the sentence in some relevant context. This means that context is essential to understanding our own language right from the beginning. The move from sentence to sense was ill conceived. If one equates making sense with having some use, then there is no more dubious travel to and from an abstract realm to be accounted for.

Now translation must be looked at in a new light. No longer are we moving from a symbolic system (i.e., the first language) into an abstract realm of propositions and then back down into a second symbolic system (i.e., the second language). If one follows

\textsuperscript{12} Schneider (1990) pp.137-153
Fodor and company and posits a ‘language-of-thought,’ then this abstract realm is not a second external language, but yet a third symbolic system. Instead we are recognizing our ability to use a sentence in some context in one language and then, looking for a similar usage (i.e., a similar context of usage and the words used in that context) in the second language. But there is still much that can go wrong along the way. There may be some crucial context of usage for the sentence in one of the languages that the would-be translator is not familiar with. This account also goes some way in explaining how we translate idioms, which are sometimes quite difficult to do unless one is well versed in many contemporary (quite often pop-culture) contexts.
3) Irreducibility

After necessity, the second key point about contexts is their irreducibility, and right away I want to distinguish irreducibility from ‘openness,’ which is the topic of the next section. There are some similarities between the two notions which will be good to note, but there is still a difference fundamental enough to warrant the distinction. The irreducibility of a context is a reflection of the fact that there is always an active element of the human present: contexts involve agents, and the agents experience situations in ways that are not always reducible to representations. There is an element of awareness, of being-in-the-world that is intimately connected with having a body; an active presence within the situation which reminds us that experiencing is not purely a cognitive activity. (This is not to deny that a situation may eventually be formulated to the satisfaction of those involved. But we should not be misled into thinking that the formulation was already tacitly present within the context. I will come back to this in section 5.1d.)

Another aspect of the irreducibility of context is apparent in Searle’s musings on the ‘Background’ of intentionally. Although I take issue with him on his interpretation of this phenomenon, nonetheless he has hit upon an important ingredient in language capabilities, and so we shall delve into this in some detail.

This is similar to what Wittgenstein in his later work referred to as ‘circumstances,’ a particular word that he chose to indicate the context, situation, or surroundings in which an expression is used, learned, or taught, in which it makes sense. For Wittgenstein, circumstances also refer to the bigger picture, to certain anthropological facts without which our rule-following behavior would make no sense. But these facts are by their very nature left unuttered; they form the foundation of all operating with thoughts and language (OC 401). This is closely related to Wittgenstein’s notoriously difficult notion of a ‘form of life,’ which will also come under investigation in what follows.
The common thread here is the notion of language as being an integral part of human lives, experiences, and activities; language does not exist in a vacuum. In this chapter on irreducibility, we will focus on the human aspects of contexts, and in the next chapter we will compare it to a related but separate notion, of openness, wherein the emphasis is less on the human and more on the linguistic aspect. But there are overlaps between the two, as we would expect when we consider how interwoven language learning and usage are with the activities of life. The very openness of contexts entails their irreducibility. But further, this openness is often related to human interests. This will become especially apparent when dealing with issues of relevance, which enter from various quarters and affect our considerations on many levels.

3.1) Situatedness

Assume that someone finds himself or herself in a certain situation, and they know what they are doing, for example, recognizing and nodding to someone who is walking by in the opposite direction on the sidewalk. That the agent knows what he or she is doing is just to say that they know the situation they are in. The situation becomes more complicated if the agent recognizes that he or she knows the oncoming person but cannot remember the name of that person or where they have met before. The agent does, however, feel that he or she has a problematic relationship with the oncoming person. The agent feels his or her stance or attitude towards the other. At this point the whole transaction might take place without utterances; it may be all actions. But as Gendlin points out, there is an immediate felt-sense of one’s relationship to that other person, a sense that is neither pre-linguistic nor necessarily reducible to some set of tacit knowledge in propositional form.¹ Gendlin’s description of felt-sense calls to mind Dewey’s descriptions of experiences, in that the felt-sense of a situation reminds us of Dewey’s notion of the quality of an experience.

¹ Gendlin (Thinking Beyond Patterns)
Understanding is inextricably linked to inquiry. In fact, Hookway argues that “the central focus of epistemic evaluation is also an activity, the activity of inquiry.” He goes on to say that “…philosophers have paid insufficient attention to the logic and semantics of questions.”

Understanding, according to Dewey, begins with doubt or conflict within a situation or coordination, and demands a reconstruction or reconstitution of that situation. The situation within which doubt or conflict arises is permeated by a particular quality, without which questions of ‘relevance to’ would lose their point. By using the situation (i.e., context) as the basic unit of experience, Dewey manages to do two things: he undermines the subject/object dualism which (in my opinion) allows one to view agents, information, and contexts as distinctly separate entities. He thereby places inquiry and understanding squarely within a contextual matrix. This is important for our own investigation into contexts, for it lends credence to the idea that contexts are delineated pragmatically. Understanding is not a static state, and neither are contexts static or closed. They are an integral part of the ongoing flux of human inquiry and exchange.

However, whereas Dewey seems to have left the quality of an experience potentially cognate, Gendlin reminds us again and again of the crucial and irreducible role of the body in the felt-sense of a situation. One cannot divorce the body from the situation by trying to locate the felt-sense in some hidden store of implicit knowledge, waiting to be brought to light to show us how we ‘really’ felt. That this grasp of a situation does not consist of implicit knowledge can be seen, according to Schneider, in the fact that no one can ever say when this so-called implicit knowledge has been made fully explicit. We shall consider the topic of tacit knowledge in greater depth (in sec. 4.2b), but for now the emphasis remains on the active role of the human agent, which must be accounted for in any adequate description of contexts in natural languages.

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4 Schneider (1995) p.424
This view of the active human element in contexts is radically opposed to the standard account given by Situation Theory, which sees in situations structured sets of discrete units of information. Something like Gendlin’s notion of a ‘felt-sense’ is anathema to Situation Theory, whose theorists, such as Sperber and Wilson\(^5\), risk circularity by trying to bring in ‘relevance maxims’ to give an account of individual experiences. Attempts of this sort seem to be another manifestation of the age-old desire to achieve a context-free sentence meaning. But relegating the human aspects of contextual understanding to some set of algorithms for determining relevance just seems wrong-headed. I am aware of no attempt in this direction thus far that does not impose severe and arbitrarily stipulated constraints upon the potential richness of meaning, the subtleties of nuance and metaphor, and the role of the human body in active everyday language usage.

3.2) Background

Searle’s response to such attempts to encapsulate and represent all aspects of meaning and understanding is to posit a non-representational Background. According to him, even if all the contents of the mind were to be represented we would still require a set of Background capacities for their interpretation.\(^6\) It is important to note that Searle is not referring here to tacit presuppositions, nor to any other form of propositional knowledge. He does make reference to a ‘Network’ of representational knowledge, but he is careful to distinguish this from the non-representational Background.\(^7\) To have any belief, one must have many beliefs.\(^8\) The problem for Searle arises because even if one were to somehow list every proposition making up the Network that gives any given belief its sense, it would still be open to (mis-) interpretation. So a Background set of

\(^5\) Sperber and Wilson (1986)
\(^6\) Searle (1992) see esp. pp. 186-191
\(^7\) Though Searle maintains this is a category mistake to try and draw a sharp line between the two (1992 p. 187).
\(^8\) I have dealt elsewhere with problems of Holism (Doyle, 1995), and will not address the ranges of issues here. However, some discussion of Holism will be unavoidable when examining the notion of ‘combinatorial explosion’ for contexts, in section 5.2a, below.
capacities that serve as pragmatic constraints is required. What makes this tricky is that sometimes items from the Background can become part of that Network, but individually, and never everything at once; the Network itself stands in need of a Background. For instance, Searle allows (1992 p. 186) that inquiry may lead us to form a proposition regarding some aspect of the Background that hitherto had served in a nonrepresentational capacity. So it no longer belongs to the Background, but enters into the intentional Network. At the same time, however, the satisfaction conditions pertaining to its correct use remain supervenient upon other, non-representational Background capacities.

Another related reason for positing a Background is because a great deal of our capacity to understand and use language consists in abilities rather than in propositional knowledge. Knowing-how and Knowing-that are not the same, and since Knowing-how is required for understanding, it follows that the context in which the action or ability makes sense must be included in an accurate account in meaning and understanding. The notion of ‘meaning-as-use’ points in this direction, in so far as the meaning of an utterance cannot be given in a purely programmatic way, but must take into account the varied uses of the utterance and its surrounding circumstances. Searle says, "The actual capacities that people have for coping with themselves and others are for the most part not in propositional form. They are in my sense Background capacities. For example, how we respond to facial expressions, what we find natural in behavior, and even how we understand utterances are in large part matters of know-how, not theories.” (1992 p. 58).

So there is, according to Searle, a non-representational background of capacities required for language use, and this would be the case even if all that is in our minds were somehow represented in propositional form.

Abilities such as being able to engage in certain practices, knowing how to do certain things, even knowing certain ways of doing things are important factors in language competence. How important? Searle holds that the standard view of understanding as consisting in our grasp of the meanings of the components of a sentence plus combinatorial rules is completely inadequate. Both a grasp of literal meaning and of
compositionally are necessary, but are still insufficient to account for linguistic competence. This, says Searle, requires Background capacities like those previously mentioned. I should note here that the most crucial ability we need to account for in describing linguistic competence is the ability “continue,” or to be able to move freely within the medium of language by continuing series, creating new sentences and metaphors, and understanding and responding to new utterances.

3.3) Frameworks

What exactly is the connection between a non-representational Background in Searle’s sense and a ‘framework’? Or between a framework and a context? In some instances, as we shall see, they are synonymous. But we must not carelessly conflate the many terms such as ‘conceptual scheme,’ ‘belief system,’ or ‘paradigm.’ These are not everywhere interchangeable, and in some instances they are nearly at odds with one another. One difference turns upon the representational status of the knowledge involved, a distinction which Searle recognized.

Searle is not the only person to have recognized that communication must rest upon some sort of non-representational Background. Here we will see that Malcolm (1977) and Finch (1977) have both located such a notion in Wittgenstein’s later work. Both find in On Certainty evidence for a non-representational ‘framework of facts’ upon which rests the very possibility of making sense in a representational system. Glock examines this notion in detail, and attributes a “framework or scaffolding of facts” as one of three elements in Wittgenstein’s recognition of the importance of the surroundings of language.⁹

In this chapter we will investigate what sort of facts make up a framework and examine the evidence for attributing such a position to Wittgenstein. We then look at the

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nature of these alleged frameworks, as well as their ramifications for meaning theory in
general and for our inquiry into context in particular.

3.3a) Facts

Searle (1992 pp.184-5) illustrates the idea of Background with the example of a
visitor to California who, upon experiencing a minor earthquake, realized that he had
never “...prior to the moment, had a belief or a conviction or a hypothesis that the earth
does not move; he had simply taken it for granted.” Malcolm considers (1977 pp.200-
202) the belief that familiar material things do not cease to exist without some physical
explanation. They don’t ‘vanish in thin air.’ “Such a principle belongs to what we might
call an “unreflective part of the framework.” Finch (1977 p.221-2) calls such things
"world view facts," making note that they include a vast number of things that we take for
granted. The common denominator here seems to be that such facts do not belong to the
conscious or intentional realm, but are nonetheless crucial for it to function smoothly.

We shall not pursue very far the idea of such facts being tacit or implicit, for as
we shall see they may vary their status depending upon the role they are fulfilling at a
given time. Besides, there are other, more important aspects to be considered, such as
how we learn such facts, how they form a framework or structure, or what impact
counter-conditional framework facts might have. When they do belong in the framework,
or Background, we can assume that they remain ‘behind the scenes.’ Should the fact itself
become the object of inquiry, then its status changes. This idea of facts varying according
to their role is nothing new: we find it in Dewey, who was critical of the sharp
distinctions between fact and theory, between observation and conceptual formulation.
Dewey thought such distinctions important, but merely functional.10 What counts as fact
is dependent upon the mode of inquiry, which is to say that facts are selected and
described because they are supposed to have some relevance to the inquiry, i.e., to the
resolution of the perceived difficulty. Some facts function as evidence; they serve to back

10 Cf. Bernstein (1967) p.106ff
up or warrant the assertibility of our claims. It is nearly a platitude that for Dewey truth was ‘warranted assertibility.’ But facts do more than just serve as evidence in an inquiry; they also play an important role in that which leads to inquiry, as well as in that to which the inquiry (in the best cases) leads. Facts figure largely in the pragmatic views of doubt and certainty. Facts lead their lives somewhere between these extremes; they sometimes supply the norms and standards upon which inquiry rests, and other times the evidence that supports hypothetical claims. It is important to recall though that for Dewey inquiry is a process. One and the same fact may play a number of roles at different times in this ongoing process.

3.3b) Propositional Role

Wittgenstein speaks of the ‘peculiar logical role’ of a certain type of proposition (OC § 136). He is speaking here of empirical propositions that are somehow exempt from testing, whose exempted status is what sets them apart from ordinary empirical propositions. Yet for all this there is really nothing extraordinary about these propositions. They can be the very same propositions that we, under different circumstances, would consider open to testing (OC § 98). One proposition is treated here as a testable claim, and there as a rule; is this a paradox? Not really. We must be careful to pay attention to the use of propositions and not be misled by their form alone, which is often indistinguishable from that of empirical propositions. Even Wittgenstein sometimes ran into difficulties in describing this phenomenon, as when he remarked that (OC § 402), “The expression ‘propositions of the form of empirical propositions’ is itself thoroughly bad.” By focusing on their use, we can see more clearly the variable nature of propositions and avoid thereby the danger of subliming the logic of language.

Note that whereas ordinary empirical propositions are confirmable or disconfirmable through experience, some propositions are “affirmed without testing” (OC § 136). These propositions help make the frame-of-reference within which empirical testing makes sense (OC § 83). Moreover, they form the foundation of all operating with
a language (OC § 401). But for all that, there is no sharp distinction between methodological propositions and propositions within a method (OC § 318); there is no sharp boundary between propositions of logic or rules and empirical propositions (OC § 319). Morawetz (p. 43) claims that there is no sharp division, apart from context, between the proposition tested and the rules of testing. The question naturally arises whether one might ‘hold fast’ to any propositions at all, while making adjustments to the rest of the system, in a Quinean sense (see ‘Two Dogmas of Empiricism’). Wittgenstein considered this (OC § 321) and expressed dissatisfaction with his own answer, that any empirical proposition might be turned into a postulate or norm. His dissatisfaction seems to be due to the recognition that this formulation makes it sound as if individuals can voluntarily choose which propositions count as framework propositions for them. This would commit two mistakes: an individual can hardly be in a position to do this; what we call frameworks are not chosen, but inherited, in the sense that they are taken up along with the language and culture as we learn it. Wittgenstein’s tentative formulation ignores the communal and tacit aspects of the frameworks. If individuals could pick and chose which propositions served as framework propositions for them, this could lead to a rampant form of relativism. Morawetz (p. 43f) distinguishes four levels of ‘holding-fast.’ He notes that some propositions can’t be changed gradually; it’s either/or. As an example he offers, “George Washington was the first president.” Another type of proposition might change the system, but only partially. For example, “Adlai Stevenson died of a heart attack in 1965.” We might discover that he died of poisoning, but we would make adjustments within the system to accommodate for this new information. Still another type of propositional role change might be based not on evidence but on persuasion. Morawetz says that intentional attributions are like this; we might, for instance, reassess the motives of the founding fathers. The last and most stable role is played by those propositions that we consider unassailable. Morawetz offers, “The earth existed 200 years ago,” and notes that it is hard to see how such a proposition could be eroded at all.

11 It seems to me that much of what passes for postmodernist theory is headed in this direction, down the slippery slope of relativism.
When considering framework propositions, Morawetz points out that, “some propositions are not vulnerable to recalcitrant experiences; they seem transevidentary and transcontextual. No experiences can undercut them because no experiences are said to support them” (p. 114). Examples given by Morawetz include “there are physical objects,” and “historical time did not begin 100 years ago.” Interestingly, Morawetz (p. 127) seems to think that there is a way of coming to view such propositions in a new light, but that it is akin to a conversion experience. It is not based upon either reason or recalcitrant experience. But for him, conversion is “an alteration of conception of evidence” (p. 129). This seems close to, but not quite the same as Wittgenstein’s notion of ‘aspect-seeing.’ I say not the same because aspect-seeing can involve a changing conception of evidence, but it need not. A change in the way one perceives something does not always involve seeing it as evidence for or against some proposition. That in itself is another form of aspect-seeing. But Morawetz’s point is well-taken, insofar as the ‘conversion’ mechanism.

3.4) Forms of Life

We will try to avoid controversies over the correct exegesis of this term and focus instead upon its relationship to contexts. Glock points out (Glock p. 124) that, “Wittgenstein’s term… stresses the intertwining of culture, world-view, and language.” Wittgenstein himself says that, “…the speaking of language is part of an activity, or of a form of life” (PI § 23). Both these statements indicate that meaning does not occur in a vacuum, but that the very meaningfulness and richness of language is due to the fact that language is imbedded in human activities. In light of such considerations, human activities could then be seen as contexts. Forms of life have been variously described as “Social or cultural behavior in so far as it is meaningful”; “Established patterns of actions shared in by members of a group”; and “Any action established as belonging to a group and which has a common meaning shared in by the members of that group” (Finch p 90). The emphasis here is clearly on group behavior and group meaning, over against
individual behavior. Although the ‘meaningful actions’ are carried out by individual members of the group, such actions gain their meaning at the group level. Searle (p 24) goes so far as to claim that ‘collective intentionality’ is primary, that individual intentionality is often derived from it. When he speaks of ‘social objects’ as being constituted by social acts, and the objects being just the continuous possibility of the activity (p 36); he is reinforcing the notion of context as something pragmatic. As he rightly points out (Ibid), the grammar of noun phrases conceals the fact that process is prior to product. We often are led astray by the grammar of our language—we would do well to remember that content is more a capability, a process, than it is an inanimate ‘thing’ to be parsed into discrete units. The interesting thing about this is that ‘Forms of Life’ (which are only mentioned five times in the investigations) as a term covers such a broad range; from the activities of the builders in (PI § 2) and the phenomena of hope (PI p 174) to “what has to be accepted, the given…” (PI p 226). In this inquiry we will mainly focus on the broad scope, on ‘the given,’ as much as possible. Our reason for doing is given here succinctly, and touched upon in the following sections.

Finch writes, “What holds (language-games and) forms of life together is not rules but a still wider context presupposed by both of them, the context of everyday life and everyday certainties… this wider context is not something we “know,” but is rather the framework in terms of which our knowing and judgments and investigations take place.”12 In other words, contexts can be seen as nesting within larger contexts, much as one Russian doll nests within another. No matter where you start, there are other potentially larger or smaller contexts. They are, in a sense, arbitrary; but in another sense not, for we are not entirely free to choose. The claim Finch seems to be making is that the largest, the outermost or most inclusive of these contexts, is by far the most commonplace. The ‘ordinary certainty’ inherent in this sort of base context is the cornerstone of any framework (in the sense of framework mentioned above; sec 3.3). How do we recognize a form of life? Look at ‘everyday life’ and ‘everyday certainty’ is

recognized: the answer is through actions. (We will examine certainty and doubt more thoroughly in sec. 5.1).
4) Openness

Contexts are ‘open,’ meaning that they cannot be (with few exceptions) fully circumscribed. This is a very different notion than irreducibility, the subject of our previous chapter. The difference is this: whereas irreducibility is concerned with the human present in contexts and the ways in which it resists a reduction to symbolic terms; openness is that aspect of context which (even if all aspects of context were reducible to symbolic terms) can stymie any attempt to draw a definite boundary to a context. Which is not to say that in normal cases we are unclear about the contextual limits; it’s that having open borders is sometimes the best policy. In other words, we are not thrown into doubt and confusion by the openness of contexts, but our certainty (see ch. 5) is of a different kind than that demanded by the reductionist.

We can see the open nature of contexts in a number of ways. I will focus here on three: understanding, information, and relevance. These cover a broad range of interesting phenomena related to openness. In ‘understanding’ we look at the speaker/hearer relationship and at meaning/understanding as a process. Under ‘information’ we look at attempts to formalize context as well as at the important notion of implicit rules. Finally, in ‘relevance’ we look at a notoriously difficult problem and seek to show just how thorny it remains.

4.1) Understanding

One way in which contexts remain open can be approached using Schneider’s notion of ‘syntactic metaphor.’ An important aspect of this concept is that it serves to remind us of the gap between representational form and any particular function or use of that form. For instance, a person may know the meaning of a complex-building device of some language if he or she knows some of its uses. For any given utterance of a sentence, a person may know some use of each of its component words and some use of each complex-building device. Yet this still does not necessarily constitute a knowledge and
understanding of the meaning of the utterance (nor of the other utterances composed of the same elements). As with any metaphor, the gap has to be closed by imagination. I will return to, and look more closely at the notion of syntactic metaphor in section 7.5 (Metaphor).

In a similar manner, it seems that imagination is required to close the gap between the meaning of an utterance and its relevance for a context (even if one views the meaning as consisting purely of ‘information’).

Recognizing some use for each of the component parts of a sentence and of its complex-building devices, one may still not be in a position to judge its relevance to a given context. To bridge the chasm between understanding at this abstract level and being able to judge contextual relevance, one must possess two further abilities. These are an ability to competently use the sentence as a whole, and the ability to distinguish legitimate from illegitimate applications of the expression.

4.1a) Understanding and Hearer’s Needs

The degree to which these abilities are honed will vary from person to person. The more areas in which one is able to apply an expression correctly, the better able one ought to be to judge contextual relevance. However, the flip side of this is two-fold: when we consider the situation from the hearer’s angle we get the following description: what determines what belongs to a context depends upon what the hearer needs in order to understand. This depends upon what level of understanding is intended.

How much must be explained for a hearer to understand depends partly upon how much he or she already knows of the language and situation, as well as how in-line his or her assumptions are with the speaker’s. (See Schneider 1993b)
Schneider says we cannot predetermine criteria for placing a given proposition in a certain context because belonging to a context is partially a function of the hearer’s needs. But doesn’t something (some bit of information) belong to a context regardless of whether the speaker is aware of it? Yes. But this is accommodated for in Schneider’s views. If we say that the context contains some relevant information of which the hearer is unaware, this merely supports the idea that the hearer’s needs (to attain that level of understanding of the context) have not yet been met. When are they met?

4.1b) Hermeneutics

What we end up with, since the process of determining and renewing understanding is potentially endless, is a sort of hermeneutic loop. Recall Wittgenstein’s adage (OC § 384) that “… meaning is not determined by the situation, yet stands in need of such determination.” Such a notion might be criticized for being circular, but it is more a hermeneutic loop than a circle. Gendlin, too, recognizes the organic nature of understanding. He indicates (p. 14) that implicit historical determinants can be altered because actions and actual situations can be sources of new determinants. It is a category mistake to think that experience is already and always organized according to definite determinants, and to believe that experience can only occur within those determinants. Experience (see sec. 3.1) refuses to be pigeonholed.

When we, as speakers, are called upon to explain ‘what we meant’ by some expression, the possibilities open to us are endless. The hearer’s inquiry and our response to that inquiry help raise the hearer’s level of understanding, which may prompt further demands for exegesis. This pattern can be repeated indefinitely, though pragmatic constraints often draw it to a close. Consider the game children often play of repeating “Why?” to every explanation, until the exasperated adult ends, and loses, the game by declaring “Because I said so, that’s why!”). Hermeneutics promotes the open nature of contexts. In recent years, the Artificial Intelligence community has begun paying quite a lot of attention to hermeneutics. One reason is because the hermeneutic loop seems reminiscent of the computational notion of ‘bootstrapping,’ whereby a process uses a
lower order component (the so-called bootstrap component) to build a higher order component that is used to reconstruct and replace the lower order component. The alleged similarity between bootstrapping processes and the hermeneutic loop is leading some AI researchers to examine hermeneutics for suggestions as to possible constraints and criteria for use in natural language processing (see especially Akman & Surev). On the other hand, hermeneutics also serves as a source of doubts for AI research. It has been suggested (Dreyfus, 1972) that natural language and human understanding are beyond computational models and that the current Cognitive Science Paradigm (i.e., machine functionalism) is mistaken. AI researchers today take the more positive view that hermeneutic considerations may help to reconstruct the functionalist paradigm. But explanations that may add to a hearer’s understanding also have another interesting aspect to them, for they, too, are moving forward.

4.1c) Temporal Movement

A speaker’s commentary on utterances already uttered is not directed toward the past. Explanations are not about some closed-event that we can examine in detail so as to better describe it. Our expressions of ‘what-we-meant’ are directed toward the future. They continue to expand the event itself so long as circumstances allow for new expressions to grow and be useful. To consider some segment of a discourse isolated, as an entity unto itself would require an artificial and arbitrarily stipulated closed-system. But in fact we find ourselves situated within a network of ongoing practices with links to history as well as to possible futures.

Gendlin (A,3.2 p.45) asks if the action (of uttering) dissolves instantly in the form. Does the action of ‘saying’ become immediately part of the ‘text’? If coming-to-understand is a process, it is a diachronic one, moving forward in time even as it includes the past. It is a category mistake to think of ‘meaning’ as existing at one point in time, because meaning doesn’t exist without the process of understanding.

4.2) Information
Many writers refer to context as if it were a collection of information—never mind just yet what that information may consist of, for that will become clear in time. This is a commonly held viewpoint, and it is thoroughly mistaken. Gauker (1996) considers propositional content to be comprised of those facts relevant to the conversational aims of the interlocutors. Clark and Carlson (1992) view context as information available to a particular person for interaction with a particular process on a particular occasion. These are representative samples of the viewpoint.

The model is one in which one seeks to encode all the ‘relevant information.’ This is pretty much the state of things within the Artificial Intelligence community, where ‘machine functionalism’ holds sway. Machine functionalists try to determine the causal role of context. For instance, is there a need to disambiguate propositions, or to determine the anaphoric referent? The challenge is to physically encode (in some form; functionalism allows for multiple instantiations) the information said to constitute the context.

Consider the amount of information needed to deal with a case of anaphoric reference. Quite often it is simply the sentence in which the reference occurs (“She aimed at the target and hit it dead center.”), though often more of the discourse needs be included (The first thing he did was to wash the car. When he was done with that he took a nap.). If that were all there were to it, we would be able to say with ease what is relevant to the anaphoric reference. But there are two important points here. First, we are not saying that the context in which the referent is identified is made up of such and such information. Second, we are defining the context partially in terms of what it does, in terms of pragmatic function. In these two simple examples of anaphoric reference we have let the range of the context expand until we have accomplished our goal, which in this case is identifying the referent. Is it begging the question to do this? Must we not already know the context to keep letting more of it in until we have reached our goal? No. This is merely a trick of language clouding our vision. We say that we are ‘expanding the
context.’ But one might just as easily say that we are determining the context. It is not as if it existed previously, and we come along and see how much of it we needed. The creation of a context is akin to Wittgenstein’s observation about the definition of rules. The applications of the rule help to define it. This seems nearly paradoxical, but it is not, and closely parallels the way in which we define context. How could there be the rule ‘add 2’ if there where no examples of what we mean by adding 2? How could just these things serve as examples of ‘adding 2’ if we didn’t already know what the rule meant? The point is that rule and application arise together, just as context and the need for context arise together. This doesn’t mean that all the ‘information’ making up this context wasn’t already there. But all information is equal until it becomes relevant.

4.2a) Formalization

It is generally assumed within AI that human language usage can be seen as a rule-governed cognitive process involving computation with symbols. This section is meant neither as a history nor as a critique of the philosophy of AI, but rather as a survey of some important research within AI. This research can not be neglected by anyone with an interest in context. First we will look at three approaches to meaning that have been considered by AI. Then we will examine some current approaches to utilizing context in AI.

Akman and Surav (1996 p. 56) locate the proposals underlying all computational attempts at formalizing context in the work of McCarthy (1993). McCarthy gives three reasons for having a formal definition of context. First, because it would simplify axiomatizations (which could otherwise grow to unwieldy lengths to accommodate enough background information to provide for the disambiguation and understanding of propositions). Second, qualifying over a specific context allows the use of specialized vocabulary and information needed to operate under specified circumstances. Third, McCarthy proposes that by using explicitly represented contexts we can then design
systems that are flexible and capable of modifying the concepts they use by transcending the context they are in.

We survey three AI approaches to meaning, as an introduction to some of the issues and problems encountered. These three strategies are sometimes called Toy-Worlds, Frame Systems, and Multi-Context Systems (Penco 1995). They represent, respectively, meaning as procedure, meaning as stereotype, and meaning through context.

‘Toy-Worlds’ are simple artificial situations. The system is based on the notion of meaning as a procedure, so that the representation of the meaning of an expression is given by the procedure attached to that expression. Procedures may be the way in which an object, a class, or a command is given (for individual terms, predicates, and sentences, respectively). Contexts are rigid and artificially determined. A procedure might utilize context by searching for facts within the database, which then determine which aspect or meaning is ‘meant.’ For instance, the same basic command procedure ‘go to’ might occur unchanged in various situations. Because procedures are viewed as compositional, other facts from the database (but represented in the sentence) determine whether the command requires, say, driving an automobile or moving a piece on a game board. But this approach is too restrictive: our ordinary concepts are more vague and more flexible than rigid procedures, even compositional ones, can allow for.

Another problem with Toy-Worlds is that they are so simple and artificial. They don’t adequately reflect the working of natural language in real situations. Artificial Intelligence has responded to these limitations, and that is what we will now look at.

Frame Systems address the problems of flexibility and vagueness. A frame consists of a set of slots with default values, where the frame represents a concept and the slots the possible properties of the conceptual object. A frame for ‘bicycle’ might be seen as a set of slots with default values, such as:

- Is a vehicle
- Has wheels (2)
• Has saddle (1-2)
• Has gears (1-27).

And so forth. Each slot (whose value possibilities are here represented by the numbers in parentheses) may be connected to another frame, thus allowing for flexibility, but the representation given by the frame is supposed to represent the average use of the expression within the linguistic community. This requires a bit of stereotyping or even idealization. Given that every frame in a system may, through the connections of its slot values, be interconnected, how is combinatorial explosion (i.e., Holism) prevented? One strategy, the one of most interest to us, is to define a set of relevant contexts to which the slot values are allowed access. This involves semantic hierarchies, but also requires that the notion of relevance be stipulated in advance to avoid holistic expansion. Even if we allow for some determination of contexts, the notion of relevance remains tricky. The relevance of contexts must be definable in a noncircular manner.

Earlier (sec. 1.3, above) we touched upon the idea of using contexts to represent generality. Generality was one of the shortcomings of Toy-World systems, since they could not move beyond the limits of their narrowly defined worlds. Frame systems tried to overcome this through the use of slot default value interconnections. But besides facing the possible threat of holism, earlier Frame systems came up short in adequately accounting for both common sense and language understanding. Understanding a language consists in more than just concept mastery, and common sense in more than just organization of concepts.\(^1\) The basic idea behind contextual research in AI is that, by explicitly representing contexts, one can achieve generality by having a program make its assertions about specific contexts. This is the main reason for trying to incorporate contexts into a formalized, or computational, system.

The third type of approach in our survey is that of Multi-Context (MC) systems. These build upon some of the insights of both Toy-World and Frame systems. They

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expand upon the Toy-World notion of an enclosed language, but see language as being composed of many Toy-Worlds, each with its own language and knowledge base. Multi-Context systems can also incorporate Frames as concepts; there is no essential disagreement between them. It may be helpful to note some of the differences between Frame systems and MC systems. MC systems replace the idea of a single language with the notion of languages, each of which is adapted to some particular area of knowledge. There is overlap allowed, so that a given expression may occur in different languages. Still, questions arise: how to avoid the artificial limitations of Toy-World theories; how to allow for overlap between contexts while still avoiding holism; how to account for unique situations; and how to compare meanings between contexts or worlds. Multi-Context systems can theoretically avoid holism because contextual interconnections are not necessary but rather are contingent upon constraints of the system. The notion of relevance is employed in working out these constraints, and this is precisely the point at which AI research on contexts faces one of its greatest challenges. An adequate notion of relevance must be flexible enough to allow for uniqueness and common-sense, but it must be able to search contexts efficiently and to know when to curtail a search before it expands beyond reason.

Three points of contact between MC systems and our philosophical inquiry are as follows: the identity of meaning over contexts, contextual levels or hegemony, and communication between contexts.

The identity problem can be seen if we ask whether expressions belonging to different contexts have the same meaning. Penco suggests two approaches to answering this question. First, we may choose to have some context where an expression has its most basic or stable meaning. A second approach eliminates the notion of a base meaning or home-context, relying instead on compatibility relations between expressions. Compatibility means simply that the expressions may be used in the same contexts, and if they are used in different contexts they cannot be considered identical. This attempt puts

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the notion of meaning itself in a new light, for we can no longer speak of ‘meanings’ as we could under the first plan.

4.2b) Hierarchical or Single-Level Contexts?

The ideas of contextual levels and of intercontextual communications are intertwined. If all contexts are on the same level, then the task of developing algorithms for intercontextual relations should be eased. Rules for movement between contexts (entering and exiting), for borrowing and sharing (lifting rules), and for inference from one into another context (bridging rules are simplified if contexts are of a level). But if contexts are of a level and the system is based upon compatibility relations rather than on a global lexicon or home-context approach, aren’t we faced with difficulties involving incompatible or contradictory assertions made over the same domain? Can a computational approach solve such problems?

Accepting the challenge to AI as consisting of basically two parts, an epistemological question (roughly, how to represent facts-about-the-world) and a heuristic question (roughly, how best to process or manipulate those representations)\(^3\), the question confronting AI has been not \textit{whether} but rather \textit{how} contexts can be formalized. Only quite recently, as we shall see, have doubts arisen about the very feasibility of the endeavor. This needn’t concern us at this introductory stage, but we shall mention this challenge again later. For now it is more important to gain an idea of the contextual issues facing AI and of its responses as we dig deeper into the philosophical ground on which they stand. Contextual definition, identity between contexts, intercontextual communication and validity, and relevance are topics on which AI research may have a good deal to offer.

\(^3\) Barr and Feigenbaum (1981) vol.1, p.170
4.3) Relevance

If we are trying to determine, instead of the referent of some anaphoric sentence, let us say, the author’s intent in using some particular imagery (for instance the ‘whiteness’ in Poe’s *The Narrative of Arthur Gordon Pym*), what role do information and context play? Must we consider the socio-historic-political-geo-racial-gender (and so on ad infinitum) aspects of Poe and his times? Does the scope of the context expand outward, threatening to become all too inclusive? If it is not to do so, how are we to control it? Merely gathering information will surely not help, for there is far too much of that available than we could ever gather, whether our search be synchronic or diachronic. Herein we see a problem with the AI notion of ‘relevant information’: we must set relevancy constraints *in advance*. This means that relevance is not something contained *within* the information through which we sift, but that it is to some extent determined by us. On the other hand, we were supposed to be looking for things relevant to the author, not to ourselves! Note, too, that if context is said to be constituted by relevant information, then the same sort of problem is encountered. For gather as we will, there is just no extracting a context out of information. The mistake is in assuming that information alone will somehow provide us with a context. In other words, the ‘relevance’ is not encoded in the information itself. Relevance bestows upon the information its causal role. One might be tempted to say that relevance is in the eyes of the beholder, but this, too, would be wrong, or at least not entirely correct. The reason is because there is a whole realm of relevant material which may not even be available to the agent, but which still must be taken into account in any adequate analysis of context.

Sperber and Wilson (1986) concentrate on the propositional aspects of relevance, thus defining propositional information as relevant to a context if it has certain contextual effects. These are: 1) Implication, 2) Strengthening, and 3) Contradiction or Elimination.

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4 Though they also consider psychological, epistemological, semantic, social, physical, and causal aspects of relevance. See Sperber and Wilson (1986 p.86).
These effects are described in turn as efforts in mental processing, this leading Sperber and Wilson to a ‘Relevancy Maxim,’ which states that the effects measured are to be balanced against the amount of effort required to compute or mentally process them. In short, information with a high effect/low effort is very relevant, whereas conversely a high effort/low effect indicates irrelevance. Their findings are echoed in Harter (1992), who sees relevance as leading to cognitive changes in the user. Bach (1999 p.14), attacks Sperber and Wilson for ignoring what he takes to be a basic fact of communication, that the hearer is to recognize the speaker’s intention partly because he so intended. In other words, according to Bach, Sperber and Wilson miss the point that contextual information, being a matter of pragmatics, can only be relevant if it can be considered as intended to be taken into account. This is not the place to discuss the relative merits of Gricean theories of communication. But we should note that Bach’s criticism of Sperber and Wilson does not appear to allow for contextual relevant information in the broad sense in which it is beyond the speaker’s grasp.

In Situation theory, where Sperber and Wilson’s ideas have taken hold, we encounter the idea of ‘oracles.’ An oracle is a collection of information from the set of available situations which is relevant to some object in a particular context. There is a two step procedure for building oracles: first a search and locate process, and then a measurement of relevance and acceptance if the information is deemed relevant. What interests us here is how relevance is measured. An infon (a basic, discrete unit of information) is said to be relevant to a context if it has some contextual effects on that context with a ‘small anchoring size.’ Small anchoring size is roughly equivalent to ‘within preset effort parameters.’ Processing effort is a function of the complexity of anchoring. In short, pragmatic limits are set on the amount of effort worth expanding for a given amount of contextual effect in return.5

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5 For a complete account see Akman and Surav ‘Contexts, Oracles, and Relevance’ 1995
5) Contextual Boundaries

5.1) Certainty and Doubt

Key to understanding how contexts in natural language are bounded is the concept of ‘ordinary certainty.’ Wittgenstein (OC § 308) says that knowledge and certainty belong to different categories. The type of certainty under consideration has nothing to do with empirical nor with psychological grounds. It would be more correct to say that ‘ordinary certainty’ is groundless. The knowledge relation (OC § 90) is supposed to express not a relation between me and the sense of a proposition, such as “I believe,” but between me and a fact. Whereas ordinary certainty is groundless, the knowledge relation is usually based on grounds.

Wittgenstein calls ordinary certainty a logical category (OC § 136), and he repeatedly shows how necessary and yet subtle it is. Necessary because without it we would be incompetent at using language, and subtle due to the ways in which it manifests itself. Subtle, too, because though it permeates our language practices, it is most easily recognized indirectly. For instance, (OC § 102) Wittgenstein notes that we could not describe the system of our convictions, but insists that they nonetheless do form a system, a structure. How then are we supposed to recognize these convictions, these certainties? Wittgenstein turns the search around, looking in the shadows, as it were. He says that the reasonable person does not have certain doubts (OC § 220). By looking at what one does not doubt we can surmise what one holds fast. However, as we shall see in a brief discussion of implicit rule-following behavior (5.1d below), the agent stands in a peculiar relation to some of his or her certainties.

There are countless general empirical propositions that count as certain for us (OC § 273). Some of these propositions describe a framework (see 3.3, above) or a worldview. As such, they rarely if ever get called into doubt. There is a simple reason for this,
as Wittgenstein points out that “the child learns believing the adult. Doubt comes after belief.” (OC § 160)\(^1\)

Malcolm has shown that our *attitude* toward such general propositions as “material things do not go out of existence without having been crushed, melted, eroded, broken into pieces, burned up, eaten, or destroyed in some other way”\(^2\) is not something that we try to support with grounds. Such propositions he says, belong to ‘the framework’ of our thinking about material things. This attitude indicates what we consider possible and what we exclude from the realm of sensible propositions. This exclusion marks the boundaries of a context, what Wittgenstein terms ‘a system.’ (OC § 105)

Malcolm also points out that we do not *decide* to accept framework propositions; rather we *grow into* a framework. We come to accept it with the conviction of religious belief (see OC § 459). This puts it outside the realm of hypothesis, evidence, or grounds.\(^3\) This is precisely the brand of certainty that I am calling ‘ordinary certainty.’ It is the (mostly implicit) body of ordinary certainties which makes up the background against which we recognize ‘the normal case’ as normal. The strong claim is that contexts of natural language are pragmatically determined as well as constrained by ordinary certainties and doubts.

5.1a) The Normal Case

We seem to have reached an impasse: Wittgenstein says (OC § 27) that normal circumstances are recognizable but not precisely describable. Surely we cannot rest with this, but must ask how normal circumstances are recognized; why they are not precisely describable; and what the import of this vagueness is for our inquiry.

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\(^1\) The fact of doubt being logically dependant upon belief is reminiscent of Schneider’s examination of ‘vertical movement’ between language games. See sec. 7.3, below, for an explanation of this notion.

\(^2\) Malcolm (1977) p.200

\(^3\) Malcolm (1977) p.203f.
‘Normal circumstances’ as I am using the term is roughly synonymous with ‘normal context’: the type of context in which we should expect any competent speaker of the language to be able to intelligibly converse. This might exclude things such as conversations requiring specialized jargon or regional idioms. When discussing the weather, for instance, we might expect any competent speaker to have some extremely basic knowledge (“It is hot today.” “It looks like rain,” etc.), but not necessarily knowledge of peculiarly regional phenomena. Still, the proof is in the pudding, as they say.

Baker and Hacker (1984, p. 29) see circumstances as consisting of a complex background of normative behavior forming a standard practice, to which the agent intends his/her actions to conform. I mostly agree with the first part of this statement, but disagree with them on the role of intention (for reasons made clear in 5.1d). However, the notions of a standard practice and of normative behavior do go some way as a first attempt at describing context in this normal case. But they can also be potentially misleading. When we consider context in ‘the normal case,’ we must be careful not to make it seem as if we are dealing with a closed system, as if the forms which constitute a ‘standard practice’ were static, fixed, no longer open to change. We must also be careful not to shortchange the ‘complex background of normative behavior.’ This background does not consist of normative behavior, and if we think that it does, we may be misled into believing that background normativity consists of implicit rules. There are compelling reasons to reject this view (see 5.1d).

In considering normal case contexts, we will look at the notion of ‘competence’: what constitutes normal linguistic competence? As a corollary to this we shall also look at some ways in which people come to attain that competence. In other words, we look at how learning a first language situates the learner within a context, at what is learned as well as how it is learned.
5.1b) Competence

One way to approach ‘linguistic competence’ is to ask what it means to be a competent speaker of, say, American English. It is interesting that we who are native speakers of this tongue consider ourselves and many others to be competent speakers of the language; yet there is no examination required, no certificate of proficiency handed out. What is it that makes us competent speakers? It is our possession of certain capabilities, which are ‘tested’ daily in the course of our social interactions. Competence is closely aligned with certainty and doubt and to what I have called the normal case. Competence consists largely of two related abilities: grasping and being-able-to-continue. We say that a person speaks competently when they appear to follow or to understand the conversation, and when they go beyond that to active participation. By active participation we mean not merely parroting or responding by rote, but moving the conversation forward, creating novel new sentences, new metaphors, finding relevant connections to other areas, etc. These are not technical definitions, but it doesn’t seem as if a technical definition would fit here. This will become clearer perhaps when we look at how a child learns and becomes adept in a language in the first place (5.1c below).

Note that competence is ability; it is a knowing-how to do something rather than a knowing-that something is the case. It is most decidedly not a bringing to light of an implicit calculus. There is, of course, an aspect of implicit rule following to competence since language is a rule-governed activity, but that is not all there is to it. Nor is the nature of these implicit rules what the received view would maintain (see Doyle 1998). To be competent one must be able to operate as well; and perhaps most importantly, in the non-rule governed regions (e.g., in bridging metaphorical gaps). This bears explication.

5.1c) Learning

What do I learn when I learn to speak my native language? I have purposely phrased the question in that way to differentiate my view from that associated with the
more commonplace “What do I know when I know a language?” What is the chief difference between these two questions? Simply, it is the difference between theory and practice. Asking “What do I know…?” invites the hearer to look in the direction of some knowledge relationship, toward theory, implicit rules, and mental representations. Asking “What do I learn…?” focuses instead upon skills, abilities, and the actual contexts in which they are developed. Another way of looking at this difference is to say that the ‘theory’ view is concerned with alleged internal occurrences, while the ‘skills’ view is concerned with external manifestations of learning that reflect an increasing competence. We are concerned primarily with first language acquisition, and so we avoid questions of learning strategies for second language acquisition. Having made this distinction, let us see how context affects learning.

In (PI § 5; 6) Wittgenstein emphasizes the role of training in teaching/learning a language. Three key points he makes in these sections are: 1) The teaching of this language is not yet explanation but training (seen in the fact that ostensive teaching is not ostensive definition at this early stage, because the child cannot yet ask for names); 2) The children are raised to perform certain actions, to use certain words, phrases, grammatical forms, etc., as the community does, and to react in certain ways to the words of others; 3) The possibility of learning depends upon many factors. This dependence relation is expressed metaphorically in (PI § 6); “…Given the whole of the rest of the mechanism. Only in conjunction with that is it a brake-lever, and separated from its support it is not even a lever; it may be anything, or nothing.” These other factors are what Wittgenstein called ‘circumstances,’ by which he meant the context, situation, or surroundings in which an utterance is learned, taught, or uttered in which it makes sense. In other words, the context surrounding the teaching/learning is crucial to the success of the venture.

4 Cf. Dummett (1978)
5 Wittgenstein also uses ‘circumstances’ in a larger sense to refer to ‘necessary circumstances.’ By this he means anthropological facts rather than logical necessity. (See Doyle 1999, p. 24).
These three points can also be related to other notions. First, there is the idea that *something* has to be taught us as a foundation so other things may be learned at all. Some facts initially are not learned along with other contingent facts, but are taken up in the mastering of a technique. Later these framework facts may come under scrutiny (see chapter 3, above), but for language learning to proceed, the learner must simply accept some things as certain. Authority and trust are taken up with the language. It is very important to note, however, that these certainties are not to be equated with objects of belief or disbelief. It simply makes no sense to attribute *propositional* knowledge of certain basic facts to the early language learner. Wittgenstein (OC § 7; 427) says that our conduct exhibits certainty which is neither empirical nor psychological. Morawetz (p. 25) asks about the role of belief propositions vis à vis ordinary certainty. He concludes that in so far as these certainties are evidenced by our behavior, that behavior is not evidence for a belief proposition. The belief is imputed as a necessary part of the behavior by us, the observers, to make it understandable. Morawetz considers counterfactuals: take away the belief and the speech/action becomes incoherent. What is most important is how these certainties fit into a practice, into a context in which they make sense.

The second point concerned the relationship between the language learner and the community of competent speakers. For the student to become a member of that community requires that the student react to teaching in a ‘normal’ manner (PI § 143), for example in continuing a series as the rest of us do. Third, learning depends upon ‘other’ factors, some of which are only implicit. It is to these that we now turn.

5.1d) Implicit Knowledge

When we first begin to look closely at ‘context,’ one of the most common reactions is bemusement, because this thing called ‘context’ seems ready at hand until one tries to pin it down. Then, it seems, we grasp at smoke- our pre-theoretical notion seen displays its shortcomings, yet we are unsure how to adequately account for our abilities in utilizing context in everyday language. One reason for the inadequacy of the
pre-theoretic notion is that it presupposes that what we are looking for is a theoretical representation of a practical ability.

Typically, such attempts look to distinguish between practical activities which could be innate, such as swimming, and those that require some degree of learning before they can properly be said to have been executed. Skilled activities either require no appeal to propositional knowledge, or an appeal to explicit propositional knowledge. Dummett offers as examples of each type of skilled activity riding a bicycle, following a recipe, and speaking language, respectively.\(^6\)

The difficulty arises when we fail to “…make a radical break with the idea that language always functions in one way…”\(^7\) This remark was part of Wittgenstein’s overhaul of his own ideas on language, an overhaul that included reinvestigating implicit knowledge. Acknowledging language as a rule-governed form of behavior, one might try to bring to light these rules. Such a quest, however, may prove misguided. For example, Wittgenstein looks anew at the relationship between a rule and its application, and this by careful description of what actually takes place when a pupil learns some new rule. Wittgenstein’s careful observations lead him to a new point of view regarding the nature of rules and language. We do not have to impart an explicit rule formulation in teaching, nor does the pupil need to use such an explicit formulation in successfully using language. There are two important points of contact between these observations and our own inquiry: one is that we need to look more closely at the circumstances surrounding the learning of rule-following behavior; the second is that the relationship between rule and rule-follower needs to be more carefully examined. We will look at circumstances more fully in sec 6.2, but here we turn our attention to the problem of implicit knowledge attributions.

\(^6\) Dummett. (1993)
\(^7\) Wittgenstein (PI § 304)
What criteria do we have for someone implicitly grasping a rule? According to Dummett, an agent is incapable, unaided, of formulating an implicit rule, but he or she would assent to a formulation of the rule when presented with one.\(^8\) Some Wittgenstein interpreters attribute a somewhat similar stance to him. Glock says of Wittgenstein’s view that, “He (the agent) does not have to think about or consult the rule-formulation while X-ing; it is only required that he would adduce it to justify or explain his X-ing. This excludes the idea of rules which are completely unknown to the agent...”\(^9\) Each of these views by Glock and Dummett may have some validity, but they are mutually exclusive as presented because one denies the agent access to the rule, while the other demands that access in principle. What they share is a demand that an explicit and determinate rule can be made available to the satisfaction of the agent.

Wittgenstein, contrary to both of these views, says that an agent may explain or justify his X-ing by reference to a rule, but this is by no means necessary. In (PI § 82) he asks, “what do I call ‘the rule by which he proceeds’? ... How am I to determine the rule [...] He does not know it himself.” This is not to deny that an agent may offer a rule as justification or explanation. It is, however, meant to deny two things: that rules are mental entities (I include ‘representations’ here) somehow existing backstage from our actions; and that we must somehow be able to access such rules through introspection, acknowledgement, prompting.

The reason Wittgenstein’s views on implicit rule following are so important to this inquiry into context is because there is a real parallel between what he meant by ‘implicitly grasping a rule and what we will call ‘understanding a context.’ Indeed he states (OC § 95) that the role of propositions that would describe his world-view are like the rules of a game and can be learned practically, without learning any explicit rules. These implicit convictions form a system, a structure (OC § 102), but it is not a system

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\(^8\) Dummett (1978) p.95
\(^9\) Glock (1991) p.325
that one could describe explicitly. What criteria do we have for the existence of such a system?

Consider the criteria for someone’s following a rule. The bottom line is the ability to successfully continue on one’s own. Surrounding that base line criteria are what Wittgenstein calls ‘circumstances.’ What we learn when we learn to speak our mother tongue is more than just grammatical rules and vocabulary. We’ve encountered the idea of ‘Framework Facts,’ in sec. 3.3 but now we are presented with a problem: If something must be taught as a foundation (OC § 499), yet no individual proposition of those we take for granted (i.e., implicit framework propositions) has to be singled out and made explicit, then how exactly are they maintained and passed on? It is as if he is speaking of a communal implicit knowledge. This talk of propositions is not to be confused with his notion of propositional role, which shows how a proposition can at one time serve as a framework proposition and at another as an empirical proposition. No, what Wittgenstein is after this time is more elusive. He is describing how we come to adopt a world view in the first place.

There is a very real danger here, and we must be careful not to assume that our attitude toward the world is based on propositional knowledge. Here is how such a distorted view may arise:

1) (OC § 263) The schoolboy believes his teachers and his schoolbooks.
2) (OC § 283) For how can a child immediately doubt what it is taught?
3) (OC § 160) The child learns by believing the adult. Doubt comes after belief.
4) (OC § 141) When we first begin to believe anything, what we believe is not a single proposition; it is a whole system of propositions. (Light dawns gradually over the whole.)
It looks as if what the child learns is a great series of propositions. But Wittgenstein recognized that attributing only propositional knowledge left too much out--that what surrounds the propositions is at least as important to understand. For example:

(OC § 144) The child learns to believe a host of things. i.e., it learns to act according to these beliefs. [...] What stands fast does so, not because it is intrinsically obvious or convincing; it is rather held fast by what lies around it.

Learning to act needn’t be the learning of propositions. This idea, that a large part of our world-view, of our ‘outermost context,’ is learned some way other than propositionally, brings together a number of points. It ties together Searle’s ‘Background,’ Gendlin’s situatedness, and the Wittgenstein notion of ‘circumstances.’ Just as when we investigate rules we find that the result gained (e.g., the sum of adding two numbers) partially defines the rule, so too does the gradual, holistic adoption of a world-view entail that some things are both, for example, normative and empirical. As Wittgenstein puts it:

(OC § 152) I do not explicitly learn the propositions that stand fast for me. I can discover them subsequently like the axis around which a body rotates. [...]  

Learning a rule-governed system such as language and learning a world-view or a way of life are intertwined so as to be inseparable. Both rely for their successful learning on the ‘student’ accepting some things as certain. Since these things need not be explicit propositions, and since a context is normally open (see chap. 4), and since (anticipating Quine?) Wittgenstein saw that no single proposition in such a system was beyond revision, we might question whether it is possible to ever model such a context. With his emphasis on a pragmatic resolution, on a descriptive approach, he notes that (OC § 342)
certain things indeed are not doubted. This emphasis on the practical aspect of learning is seen in (OC § 94-95):

“But I did not get my picture of the world by satisfying myself of its correctness; nor do I have it because I am satisfied of its correctness. No: it is the inherited background against which I distinguish between true and false.”

“The propositions describing this would-picture might be part of a kind of mythology. And their role is like that of rules of a game; and the game can be learned purely practically, without learning any explicit rules.”

Still, the crucial point is that even if we tried to elicit and make explicit propositionally all that we could of a world-view context, our efforts would not deliver a natural and satisfactory end product. This should be clear from considerations of the irreducibility, openness, and ‘fuzziness’ of contexts as detailed thus far (Chs 3, 4, 5). In other words, the implicit working knowledge of our own context(s) is/are based not on propositional knowledge, but upon familiarity, upon being skilled enough to function with certainty.

Propositional elucidation of implicit contextual knowledge may play a role in helping toward understanding, but it is neither a prerequisite nor even necessary for understanding to take place. It is even questionable whether ‘knowledge’ is the correct word to use; perhaps ‘implicit contextual understanding’ would be better. In his critique of Moore’s epistemological musings, Wittgenstein says that (OC § 90) ‘I know’ is supposed to express a relation, not between me and the sense of a proposition (like ‘I believe’) but between me and a fact.” He sees a relationship between facts and actions such that each fact can be questioned, but we do not doubt them all. Not doubting them all is simply our manner of judging, and, therefore, of acting (OC § 232). Or, as he also puts it (OC § 358) certainty (i.e., comfortableness, familiarity) is a form of life.
5.2) Sense and Nonsense

In trying to locate contextual boundaries, we always run up against examples that leave us shaking our heads. Consider the non sequitor: in the midst of a conversation, one of the participants suddenly unleashes a sentence that seems to have absolutely nothing to do with the discussion:

1. “Yes, I agree. The stock market seems particularly susceptible to media reports of corporate and individual greed.”
2. “To bolster public faith in the essential soundness of free-market capitalism, we need to make examples of some of these CEO’s who’ve made vast personal…”
3. “I had a kitten once!”

The interjection at this point in the conversation would leave the speakers of numbers one and two scratching their heads, trying to make sense of the third speaker’s sudden verbal ejaculation. What has gone wrong here? The third speaker uttered an intelligible, well-formed English sentence; why did it have the effect of killing the conversation? The answer is because that pronouncement had no obvious usable connections to the ongoing conversation. It made no sense within this context, though it might’ve in some other context. The ability to recognize this simple fact—whether a given utterance makes sense or not—is the ability to recognize the bounds of a context. Make no mistake about it—this ability is a skill, more highly developed in some than in others. At one level, it is the ability to recognize the non sequitor, but there are other levels as well. The ability to determine, upon hearing some novel sentence, whether or not it makes sense, is largely the ability to locate it in some usable context. In other words, a string of words is nothing meaningful to us until and unless we are able to find a context for it in which it makes sense. As we saw earlier (sec 5.1d), this ability involves more than computation; it involves skilled use of the imagination.
In every day life, it is not a skill that most people ever stop to consider. “Thinking within the box” as they say, is precisely *avoiding* the boundary regions of the contexts in which one normally moves. Yet all competent users of a language must have some working knowledge of the bounds of sense. Sense, however, is an organic thing, not some predetermined category.

5.3) Relativism

The question naturally arises: if sense and nonsense are context-relative, do we encounter the usual problems associated with relativism? What are those problems and how do they affect this inquiry into context?

‘Conceptual relativism’ is the view that there is no standard of agreement with reality higher than the assent of the relevant community. In other words, there may exist a myriad of incommensurable frameworks, conceptual schemes, contexts; each may have its own ‘truth.’ The consequences of such a view might prove drastic. Böhler, for example (Böhler 1986 p. 283f.), claims that a Wittgensteinean contextualism negatively affects the sense and validity of theories, in particular for the history of science and of philosophy. Relativising such notions as ‘truth,’ ‘reality,’ and ‘objectivity’ would, according to Böhler, effectively undermine intellectual criticism. No longer in a position to critique other conceptual claims beside those ‘within our own scheme,’ we could only ‘describe’ those positions that differ from our own.\(^\text{10}\) Böhler takes a strongly anti-pragmatic stance, claiming that rationality requires a transcendental criterion of understanding.

Davidson, in ‘On the Very Idea of a Conceptual Scheme’ (1984), doesn’t believe that problems of conceptual relativism (at the ‘scheme’ level) can even get off the ground. He says that we can’t even make sense of a ‘conceptual scheme.’

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\(^\text{10}\) Böhler is unsure that we could even do that, for *accuracy* could no longer be judged.
The reason is because to make sense of some incommensurate alien conceptual scheme we must first count most of its beliefs as true. This in turn requires (following convention T) translating the consequent of a truth-conditional statement into our language. But this is precisely what ‘conceptual scheme relativism’ says we cannot do. Following Davidson, such a relativism is self-refuting. Then, too, the notion of mutually exclusive contexts presupposes a set limit to each context. Such limits are not forthcoming, not with the degree of rigidity required to make contexts into ‘islands.’ One might see convention T as how we translate truth into our own conceptual scheme by intuitions similar to our own. (We might be able to observe this within one language.) Davidson may be conflating two points: that we have to translate into our own ontology because it’s the only one we’ve got; and that there is a common ontology to all languages which allows us to translate into ours (cf. Davidson p. 192). Still, the point he makes about relativism requiring an omniscient point of view seems somehow right. Not all forms of contextual relativism need be as extreme as conceptual scheme relativism. We might still encounter other, less encompassing forms of contextual relativism.

Full-blown conceptual relativism, in which contexts are (at the framework, worldview, or scheme level) mutually incommensurable, is a radical view. According to this interpretation of contextualism, meaning is so context-relative and contexts are so isolated from one another that even if the same terms are used in more than one context, they are not speaking of the same things. In short, they inhabit different worlds. This is the view referred to as radical-relativism.

The opposite extreme on the spectrum of relativism would be a so-called chauvinistic relativism. This differs from radical relativism in holding that one can judge (and, therefore, make sense of) other contexts, but that one cannot ‘transcend’ one’s own context. Transcending one’s own context means climbing out of it or undermining it. Let us look at these together. Why should one not be able to leave one’s own context? The argument hinges upon context as the anchor of our meaning and our ability to make sense of utterances. Without some context in place (in the sense of ordinary certainties and
established patterns of meaningful group activities) we would simply lack the wherewithal to make sense of the world. To continue our analogy, we would be adrift in a sea of absurdity.

But is this really so? For the question was not asking what it should be like to leave all contexts; it was asking whether (and if so, how) we could move into some other context. This is quite a different move to make. Wittgenstein (OC § 612) noted that coming to view propositions in a new way is not necessarily based upon reason, nor upon recalcitrant experience. He described it as akin to a conversion experience. Morawetz (p. 127) seems to think that such conversion must happen in “understandable ways,” that is to say must be based upon reason or recalcitrant experience. He describes conversion as “… an alteration of a conception of evidence.” (p. 129).

Wittgenstein went beyond this, partly because he was already aware that ‘aspect-seeing’ does not hinge upon recalcitrant experience. Perhaps this notion, along with his view of the fluid nature of propositions vis-a-vis role-switching, helped him to reach a point where he could declare (OC § 422) that, “… I am trying to say something that sounds like pragmatism. Here I am being thwarted by a kind of Weltanschauung.” If we consider large-scale contexts as ‘frames-of-reference,’ the quote above begins to make sense, especially when seen in the light of Wittgenstein’s earlier remark (OC § 305) that, “Here once more there is needed a step like the one taken in relativity theory.” The step is to break with the kind of thinking exhibited by the likes of Davidson and Morawetz.

But where does this leave us? Is Wittgenstein saying that the only way to access other contexts (at the level of large-scale schemes) is via some sort of conversion experience? Could we even accept such a conclusion? It would be akin to saying, “Well, either you ‘get it’ or you don’t.” Hardly a satisfactory way to end our inquiry.

But for now we should note that Wittgenstein is refuting (or at least seems to be) the idea that contexts are mutually exclusive; he is also refuting the notion of a
chauvinistic relativism. We shall examine his ideas on accessing other large-scale contexts again in chapter 7.

Having looked at both radical and chauvinistic forms of relativism, we should then ask if there is another alternative. What of a pragmatic approach, one which recognizes that as a matter of fact we do find ourselves within some context as a starting point, but that there is a strong possibility of intercontextual movement and communication? How tenable is this position? How could we delineate it? It is to this approach that we now turn.
A Pragmatic Approach

A pragmatic approach to understanding context recognizes the shortcomings of attempting to find some set of necessary and sufficient factors which would then constitute ‘the context.’ Instead, the pragmatic approach is to emphasize *what context does*, at what it allows us to do, and at how we recognize its boundaries in practice. The pragmatic viewpoint looks toward communication, including meaning and understanding as a process, and at context as part of that process.

The traditional tripartite division of linguistics has treated context as an unwanted stepchild. Stalnaker (1973 p. 392) offers a typical drawing of the lines: “Syntax studies sentences, semantics studies propositions. Pragmatics is the study of linguistic acts and the contexts in which they are performed.” The job of pragmatics is seen as “…defining interesting types of speech acts and speech products: second to characterize the features of the speech context which help determine which proposition is expressed by a given sentence.” (Stalnaker *ibid*). Stalnaker leaves context largely undefined, but does say that “where rules determining the denotation of the singular term are considered as part of the context, what is relevant is not what is true, but what is presupposed.” (1973 p. 403)

I’ve quoted Stalnaker at some length because he is representative of what is perhaps the dominant viewpoint in contextual research today. Though it lumps context under the rubric of pragmatics, it seems as if this view is anything but pragmatic. Instead, it is pretty much part of the movement to formalize all relevant aspects of linguistics. This is, in my opinion, just plain wrongheaded. Copi puts it rather nicely (Copi 1982, p.79): “There is no mechanical method of distinguishing language that is informative and argumentative from language that serves other functions. […] There is no mechanical technique for recognizing the presence of an argument. Recognizing the different functions served in a given context requires careful thought and sensitivity to the flexibility of language and the multiplicity of its uses.” Throughout this inquiry we have seen repeatedly that there are aspects of competent language usage where context: 1) plays a crucial role; 2) cannot be reduced to symbols and rules (i.e., cannot be completely
formalized); 3) remains in principle open ended due to issues of understanding and relevance; and 4) is pragmatically determined.

A pragmatic approach to the study of context recognizes the worth of interdisciplinary research in the field. It does not say to the formalists, “Your work is useless”; instead it says, “Your work is very valuable and will no doubt have many practical applications, but it may help you in your research to acknowledge some of the more pragmatic aspects of context.” But what are these?

This inquiry is not intended as a straightforward promotion of so-called ‘use theories.’ But it does seek to ameliorate a situation in which formalists and pragmatists talk past one another, thus failing to recognize the worth of each other’s contributions. Much of the rest of this paper will focus on practical applications of the pragmatic principles developed. How, for example, might pragmatic notions concerning contextual accessibility benefit a researcher in AI, where the notion of context is sometimes quite rigid (think of ideas on ‘weighting’ and ‘lifting rules’)? How might those seeking to formalize context benefit from some of the insights of philosophers of language who are sympathetic to ‘meaning-as-use’ theories?

A pragmatic approach emphasizes aspects of context that have been overlooked by approaches that assume only limited and specific roles for context (e.g., proposition disambiguation), such roles usually being considered secondary to the main goal of information processing.

6.1) Functionalism and Pragmatism

What context is and what it does are inseparable. This sounds like the classic definition of functionalism: the essential feature of something is its casual role. But whereas functionalism (usually) goes on to equate causal role with some physical instantiation or another, there are good reasons to believe that this step is unwarranted, particularly in the case of contexts.
Pragmatism is closely related to functionalism, too, because both are dealing with facts that function as certain for us. To compare and contrast the two, let us look at the different treatment each gives to the notion of mental representation.

While I do not think for a minute that contexts are equitable with propositional attitudes, mental states, or information in-the-head (the next step being a materialist reduction, if one adheres to functionalism), I think that a pragmatic approach may sometimes appear so close to Functionalism as to confuse the naive or unwary.

Functionalists are likely to seize upon Wittgenstein’s point about explanation coming to an end and going over into description. These descriptions are ultimately of forms-of-life, cultures, groups within cultures, etc. This point, when combined with the above notion that facts function as certain for us, appears to leave meaning in an untenable position. Meaning would be relativized to these groups, and this kind of relativism would undermine the objectivity of science. (Postmodernists may embrace these conclusions, but material functionalists do not.) Though it may undermine some radical bio-teleological theories of meaning (see Millikan, 1994), it does not harm objective science, on the contrary, it indicates what ‘objectivity’ consists in.

The outstanding difference between a pragmatic definition and most of the so-called functional definitions is simply this: a pragmatic definition is non-reductionist. This refers to attempted ‘functional’ reductions such as that of context to information, as well as to the further reduction to physical instantiation. Functionalism is so fraught with difficulties that it makes more sense to define contexts in a pragmatic way.

Having said that contexts are irreducible does not mean that they are in some mysterious way unamenable to description. Each and every tacit assumption is, for example, capable of being brought into the light. But this still wouldn’t get us as far as
functionalism, and to suppose that it does is just to commit the fallacy of composition.
But first, a caveat.

There are contexts that may be completely described, perhaps because stipulated. These are what might be called ‘closed contexts,’ as opposed to the more common open-ended variety. It is quite probable that such closed contexts are perfectly amenable to formalization, whereas other contexts are not. An instance of the first sort might be the *entire book*, when the discussion centers on a particular excerpt from that book. Formalizing such a context would be easy: simply type the entire text of the book into a computer. But it should be obvious that we are more interested in the kinds of contexts that are not so neatly packaged, stipulated, artificial. We are interested in the contexts of living language in action, in what philosophers and linguists often refer to as ‘natural language,’ as if it were some beast in the wild that we civilized folk have not yet tamed.

An instance of the second sort (i.e., an open-context) might be the *time at which the book was written*. We do speak of the historical time during which a book was written as its *historical context*, but we must recognize how enormously flexible this term is. It is not just that; it is because there is no upper limit on the amount of potentially relevant information. There is no principled distinction that could predetermine what is and what is not relevant. Relevant in this case means relevant to the reader/hearer (though the historical context must also include everything of possible relevance to the author). How much of this potentially relevant material must be included depends upon the needs of the hearer and upon the level of understanding aimed for. It is for just such reasons that context cannot be predetermined or fully formalized. In other words, what the hearer needs in order to understand an utterance (text, etc.) is part of a *process* of understanding and not a component of a fixed state.¹ This is one reason why I say that a pragmatic notion of context is non-reducible in the sense in which functionalist definitions purport to be. To make this distinction clear, I want to look at functionalism in regard to mental representation.

¹ Schneider (1993) p. 12.
One of the best portrayals of functionalism is to be found in Kim Sterelny’s *The Representational Theory of Mind* (Oxford, Blackwell, 1990). The basic tenet of mental functionalism is that “The essential feature of any mental state is its causal role.”\(^2\) Causal role here means its job; so that the function of a mental state is the job it performs in the overall mental life of the agent. Sterelny makes good use of this analogy and extends it to clarify the point that a physical state realizes a functional state, just as a person occupies a job and fulfills the job description. But a job description need not describe the agent responsible for that particular role, only the responsibilities (both responsible *to* and responsible *for*).

As Sterelny tells it, our mental states can be described functionally, too, for they seem to fit certain job descriptions. Thus, a mental state such as anger has both distinctive causes and distinctive consequences. We attribute intentions to an agent in order to describe their mental state. If, for instance, we were to witness someone smashing the furniture in their apartment we might say that their actions (distinctive consequences) are a result of their belief that someone had done them wrong (distinctive cause). We are fairly accurate in ascribing intentions to describe and explain behavior. This is an important point, for a *compatibilist* functionalist such as Sterelny will want to reconcile his views with our common views, or *folk psychology* as it is often called. He would not defend the idea that folk-theory is always correct, but he is committed to the idea that intentional attribution is fundamentally correct, and indeed is our most powerful predictive theory of human behavior.\(^3\)

Functionalists are physicalists, even if that doesn’t follow strictly, but would be difficult to imagine anyone still seriously entertaining a “ghost in the machine" theory. One way in which functionalism tries to reconcile its views with a requirement of physical instantiation is through the use of double-descriptions.\(^4\) The first type of

\(^2\) Sterelny (1990), p. 2.
\(^3\) Sterelny (1990) p.153
\(^4\) Sterelny (1990) pp. 4-5.
description emphasizes certain aspects of the described object or system. The second type uses a functionally specified notion for a theoretical entity, when we do not know its physical realization. As an example of the first type of double description there is the computer, which can be variously described by either an information flow chart or by a hardware description. Each serves to highlight a different facet of the same entity and may be more or less useful depending upon one’s aims and requirements. Both descriptions, however, are of an object or system that is a human artifact. Humans designed, built, and understand it. There is nothing mysterious or hypothetical about the matter.

This stands in stark contrast to the second type of double description. In these cases, it is precisely because we do not know the exact nature of the beast that we hold open the option of filling in our missing knowledge. In some instances, history bears us out, and our functional description of the hitherto hypothetical entity or process looks more like a prescient assumption than mere speculation. Sterelny’s favorite example is that of Crick and Watson’s discovery of the structure of DNA. Until then, population geneticists used a functional description of a gene without knowing its physical realization. They understood the role before they knew the exact nature of the thing which filled the role.

It is not always the case that a theoretical entity later gains confirmation. History of Science is littered with discarded or falsified theories. The ‘ether’ which was thought to pervade the heavens is just one example. But, all other things being equal, when the available evidence supports one theory over others, then we are at least justified in using that theory, in full recognition of its role as theory until it is confirmed or some better theory is developed. It is as if we had created a job description and were searching for the right applicant to fill the role. The key move in functionalism is to claim that there will always be a physical description forthcoming of the theoretical entity that fits the role.

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A functionalist might try to determine the casual role of context (propositional disambiguation, anaphoric reference, etc.), and then go about identifying some (remember that functionalism allows for multiple instantiations) physical realization of it. They might create a model of context in which what is to be physically instantiated is just ‘information’. Then the challenge is to somehow encode all the ‘relevant’ information. This is largely the state of things within the Artificial Intelligence community. But the term ‘relevant’ is a loaded one, as we will see.

Searle (1983 pp.142ff) looks at a functionalism that is quite pragmatic, and which purports to shift the emphasis from ‘language-reality’ relations to ‘language-behavior’ relations and to ‘behavior-reality’ relations. Instead of drawing a causal connection between behavior and institutionalized structures (such as grammatical rules), Searle posits a functional level in the middle. Here is how it works:

“... Instead of saying, the person behaves the way he does because he is following the rules (of institution), we should just say, first (the casual level) the person behaves the way he does because he has a structure that disposes him to behave that way; second (the functional level) he has come to be disposed to behave that way because that’s the way that conforms to the rules of institution.”

In other words, one develops skills and abilities that are functionally equivalent to the system of rules, but which do not necessarily involve an internal representation of those rules. It is wrong to say of someone that they act the way they do because they are unconsciously (tacitly) following a rule. Searle posits a third level, saying in essence that behavior matches the structure of the rules because we have evolved a set of dispositions that are sensitive to (“co-evolved precisely so as to be sensitive to”) the rule structure.
Here we see a pragmatic model of linguistic behavior that does not fall prey to some of the problems of material functionalism. Its strength is that it avoids the tendency to posit a level of internal representation or a language of thought.6

6.2) Wittgenstein: Grammar and Circumstances

Glock notes that Wittgenstein uses the term ‘grammar’ to denote both the constitutive rules of language and the philosophical investigation of them.7 Wittgenstein’s use of ‘grammar’ and his use of ‘circumstances’ dovetail in many of his discussions, and this provides us with valuable insight into the idea of context. Consider the following passages from Wittgenstein:

―Try not to think of understanding as a ‘mental process’ at all… for that is the expression which confuses you. But ask yourself: in what sort of case, in what kind of circumstances, do we say...” (PI § 154).
―If I do speak of a fiction, then it is of a grammatical fiction.” (PI § 307)
―We have only rejected the grammar which tries to force itself on us here.” (PI § 304)

The aspect of grammar here under scrutiny is expressions that are commonplace but which lead us unwittingly into philosophical difficulties. Wittgenstein says that to dissolve the problem we must first understand the context in which it arises:

―The grammar of “to fit,” “to be able,” and “to understand” [...] what criteria

6 Bechtel & Abrahamsen (1991)
There is work in parallel distributioned processing (PDP) systems that shares this point of view. ‘Externalist’ PDP systems use a hidden layer of units, processors at a level between inputs and output, so that networks develop an ability to interpret and produce symbols which are external to the system. Learning consists of changing the weights of connections between units, so as to alter the way the network processes inputs on subsequent occasions. This avoids the internalization of algorithms, and may model human language learning better than models relying on rule and symbol internalization.
7Glock (1996) p.150.
are used[...] in what kind of case does it make sense to ask [...] in what circumstance would it count as justification to say.. PI § 182…But did...mean the same as...or something different? We may say that, in those circumstances the two sentences have the same sense, achieve the same thing.” (PI § 183) “In different circumstances we apply different criteria for a person’s reading.” (PI § 164)

When we look for some justification for using an expression, we must look to the circumstances in which it makes sense. In so doing, we come to find that these circumstances play a larger role in meaning and understanding then we had perhaps thought.

“In ordinary circumstances these words and this picture have an application with which we are familiar. — But if we suppose a case in which this application falls away we become as it were conscious for the first time of the nakedness of words and the picture.” (PI §349)

This passage indicates how inseparable meaning/understanding and context are, but also points toward grammar as “...All the conditions necessary for the understanding of the sense of a propositional...”

The pattern repeats itself: to understand the grammar of the language, i.e., the possibilities of making sense within that particular system of rule-governed behavior, we must look to those sets of circumstances in which sense is made. This is a wider view of context than previously encountered in the pre-theoretic notion. A survey of current definitions of context lends support to the pre-theoretic notion, but there is another aspect of context not quite captured by the simple situational/propositional dichotomy. To

8 Finch (1977) p.149.
9 Finch (1977) p.149
account for relevance we must look toward the functions of context. Context is not merely brought in to determine the domain or referent of certain linguistic phenomena (e.g., indexical, anaphora, etc.), nor is its role limited to the exegesis of certain texts and discourses. In a broader way, context is concerned with the possibilities and determination of meaning. When Wittgenstein speaks of ‘grammar,’ it is this third and most broadly defined function of context of which he speaks, though he uses the terms ‘grammar’ and ‘circumstances.’

If the *Tractatus* is concerned with ‘logical space,’ so the later Wittgenstein was concerned with context. He replaced the a priori, transcendental logical matrix of the *Tractatus* with something mundane: circumstances (PI §§ 164; 177; 349; 539; p.192). In the *Tractatus*, the possibilities of sense were logical structures shared by language, thought, and the world. In the *Investigations*, they become the established linguistic practices and conventions. The important point here is that what belongs to grammar are all the conditions contributing to the meaning and understanding of utterances. This is where Wittgenstein’s inquiry into language moves beyond ‘merely’ linguistic phenomena to include practices such as language-games and forms-of-life. These are levels of contexts that we must grasp if we are to understand Wittgenstein’s pragmatic approach. His use of ‘grammar’ to include both language-games and forms-of-life is indicative of his pragmatic and contextual views on meaning and understanding.

As an example of the way in which context acts as a heuristic tool for Wittgenstein, consider that he reminds us (PI § 155) that it doesn’t matter what sort of experience a person might claim to have had in understanding the rule of a series. For us, it is the circumstances that justify him/her in saying that he/she understands and can continue the series. These circumstances may include such things as the agent’s having learned algebra, or having used similar formula before (PI § 179). We are cautioned against thinking that there is some set of necessary and sufficient conditions corresponding to the nature of each case (PI § 183). If someone of whose circumstances

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10 Finch (1977) p.149
we knew very little were to stake claim to an ability, then it would be sufficient justification for their claim that they actually succeed in carrying out the ability. This has a definite pragmatic ring to it. In (RFM pp. 37-38) the interlocutor even asks whether being true means being useful or usable. Wittgenstein’s reply is that the question is misguided: it can’t be said of our language that it is true, but ...”that it is usable, and, above all, *it is used.‖ In (PI § 241) Wittgenstein says that it is not human agreement that decides what is true or false, but that truth and falsity occur as properties of statements *within* a language. We ‘agree’ in the language that we use; as a form of life, it is not agreed to explicitly, but it is simply a shared practice. This justification-in-use echoes his statements on forms-of-life: “what has to be accepted, the given, is — so one could say — forms of life (PI p. 226). This idea is a cornerstone of Wittgenstein’s later work, that explanations come to an end somewhere and eventually nothing is hidden. It is the job of philosophy to clear up misunderstandings by looking toward the context in which what was said makes sense. Context is used as a heuristic tool.
7) Accessibility

One of the most damning indictments against use theories (and a pragmatic approach to context is a species of use theory) is that they posit any number of mutually exclusive contexts, language games, or forms of life. This is the view referred to at various points throughout this work as radical relativism. It is the idea that if we make meaning too dependent upon context, we end up with many meanings, many contexts and no way for them to communicate with one another. But that is an extreme position and one that not too many people actually hold.

A less extreme form of relativism, and one which does seem to have a good following, is that there can be some communication between groups/contexts, but there is also a measure of inaccessibility. This is not an oxymoron. Consider Sapir and Whorf’s hypothesis⁠¹ that certain concepts in one language (i.e., one group/context) are not translatable into terms that would allow ‘outsiders’ to really grasp the concepts in question. Or consider the idea, espoused by Kuhn’s followers, that there is no standard of agreement with reality higher than the assent of the relevant community. We may, for all intents and purposes, inhabit different worlds.

We have already examined relativism (5.3 above) and found it lacking. What we will now investigate are ways in which intercontextual communication can and does take place. Not merely how it is theoretically possible, but how we can practically promote understanding between disparate contexts. It is one of the key premises of this work that contexts are, in principle, accessible. Let us now look at some of the ways in which contexts can communicate with one another.

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¹ In Crystal (1987) p.15
7.1) Overlap

Perhaps the most straightforward way for someone from one context to come to understand someone from another is for them to have some starting point in a mutual practice. An overlap of a same or similar practice or actions provides a foothold. After all, most of what we learn when we learn to speak our native tongue is how our practical world is constructed; how to do things and how to interact with other people. According to Meløe (in Boehler et al, p. 118), without this kind of knowledge we would not be able to use words correctly. Moreover, words and utterances are so closely interwoven with practical deeds that we never understand the words or utterances better than we do the corresponding actions (p 119). Meløe also cautions us against thinking that actions are what are translated, reminding us that it is speech that is translated. It is because speech is embedded in so many human actions that we are able to look to those actions as a way to help us understand the speech.

In Wittgenstein’s terminology, what is translated is not one language game into another, but what is said in one. Language games are more individuated by actions, not by utterances. In Wittgenstein’s simplified examples we can see the borders clearly, as with the builders (PI § 2) or in the shopkeeper scenario (PI §1). We can build upon these oversimplified cases: what the builders and the shopkeeper/customer might share is that they use counting to help execute their transactions. So whereas the builders carry out their ‘form of life’ and the shopkeeper/customer theirs, both of these scenarios share a common language game; that of counting. As things become more complicated, more like real lives, it does not cloud the issue but instead opens up greater opportunities for understanding.

Meløe (p.123) rightly points out that people can participate in a myriad of actions and transactions, and that an action or ability constitutive of one language game is not excluded from other language games. Not just that, but language games, like Russian dolls, can ‘nest’; one language can be made up of many others, and can in turn be a
A new, shared game may arise through such interactions, or through teaching and learning, some of the non train-savvy children may come to play much in the same manner as the children of the train culture.

Sedmak spent time in Bhutan, so many of his examples are drawn from his experiences there. He notes instances of cultural game-sharing, such as when Austrian aid workers learned a Bhutanish dance, or when they began to eat the local rice-based diet. One Bhutanish restaurant began using an impressive glossy new menu, even though

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3 Sedmak p. 185.
4 Wittgenstein (PI § 282).
5 Sedmak (1999) p.188.
they could only produce a small number of the dishes on it. Local children began to imitate scenes from the latest Hollywood movies.

On a larger scale, Sedmak points out that this sharing between cultures always changes the existing standard of life. He considers the introduction of telecommunications, computers, and connections to world-markets, even the ‘automobilization’ of a culture as culture games.

There are two points salient in his discussion: first, that learning, through interaction, is the point of sharing and of intercontextual communication. Second, he says that there can be pragmatic constraints on cultural game sharing. As an example of such a constraint he points out that the topography of Bhutan effectively limits highway construction and the resultant culture of the automobile.6 We will take a closer look at constraints on intercontextual communication later (sec. 8.2). Here we will look at one aspect of learning, one skill that can help intercontextual understanding.

7.2) Projection

Meløe (p. 126) says that an agent should learn to recognize schemes or recurring patterns. In the builder and the shopkeeper example the scheme is this: X says the name of an object to Y, and Y gives to X the object named. By learning to recognize language games that correspond to one which he or she knows, the agent increases his or her chances of understanding the context in which they take place. Commonality of ‘schemes’ offers hope of accessing contexts foreign to us. The mechanism by which this takes place is projection of a known ‘scheme’ into an unfamiliar context and recognition of similarity.

Projection is a kind of feeling-out of a situation, looking for familiar patterns. We do this all the time. You go to a party where you only know your ‘date.’ As you gaze

6Sedmak (1999) p.188.
around the room, you are watching, listening for something to hook on to, when suddenly you recognize a situation: a young woman speaking with a small group over in one corner. She is standing on one foot on tiptoes, and reaching out as far and as high as she can with one hand, the other close to her body. Both hands are in a tight grasping position. She appears to be straining to her utmost. Her small audience sits open-mouthed as they listen. It is clear to you that she is a rock-climber, regaling them with a tale of some particularly difficult move. Moving closer, the words “...Crux move...” confirm this, and as you are a bit of a climber yourself, you attach yourself to this group, standing on the perimeter. Soon introductions are made, and you have entered into the conversation.

How does one learn this skill? It seems analogous to how we learn to apply rules in new situations. The pupil learns a rule through guidance, copying, having attention directed toward some aspect, and all other manner of circumstances associated with teaching and learning. The key point is that we do not say the pupil understands the rule until he or she is able to continue on his/her own, is able to extend the rule into new cases. This involves learning to recognize correct and incorrect applications of the rule and may require overcoming mistakes both systematic and random. An important aspect of learning to follow a rule is that at no point is it absolutely necessary to impart an explicit formulation in applying it.\footnote{Likewise, learning to recognize familiar ‘schemes’ in unfamiliar contexts is a matter of pattern recognition, but one that needn’t be overly formulated. The recognition is based upon a certain commonality, an overlap between two or more contexts. But the ability to \textit{project} into unfamiliar territory can work in more ways than one.}

‘Schemes’ are based upon \textit{actions}, especially insofar as those actions are enmeshed with uses of language. Now we will examine another type of projection, one based upon the \textit{structure} of language. Common to both is of course the ability or skill of

\footnote{For more on the relationship between rule and rule-follower, see Doyle (1999) sec’s 5.3-6.2}
being able to cast about in uncharted waters, to come up with newer applications. This requires imagination.

Schneider (1990, p. 158) claims that it is, “...one of Wittgenstein’s important merits to have shown that the problem of telling for an expression, which moves are legitimate responses to it… and which are not, cannot be solved by a formal procedure.” Briefly, Schneider calls ‘syntactic metaphor’ the phenomenon of multiplicity in meaning of those devices of our language that we use to build complex expressions. The forms which we use to build up complex expressions sometimes appear contrary to their meaning. He stresses two points about syntactic metaphor: our language can be understood by comparing it to a gradual development of language games from simple to more complex; and, ‘syntactic’ in his use means ‘related to sentence building.’ As with traditional metaphors, a gap exists between a form of a representation and any particular function of this form and specific usage. This gap is closed by the imagination. This is a type of projection.

The gist of Schneider’s idea is that to know the meaning of a complex-building device of a given language is to know some of its uses. For any particular utterance of a sentence, a person may know some use of each of its words and some use of each of its complex-building devices. But this does not guarantee knowledge of the full meaning of the utterance, nor of some other sentence constructed of the same elements.

Schneider calls this limited knowledge of the ‘abstract sense’ of the sentence. Two things may still be lacking that contribute to a fuller understanding of the sentence. First, knowing some use for every constituent does not entail an ability to use the sentence as a whole; it is not possible to derive sentential meaning from abstract sense. Second, knowing both the abstract sense and the normal use of an expression doesn’t imply the ability to distinguish legitimate from the illegitimate applications of the expression.
Wittgenstein makes note of this phenomenon too, (PI §§ 305-308) where he looks at how easily we transfer the grammar of propositions about physical processes to talk about mental processes. He is sounding the alarm here, warning us that this step is subtle, dangerous, and part of the “bewitchment of our intelligence by means of language” (PI § 109).

Schneider here is looking at the role of imagination as a basic fact about linguistic competence and as a first step toward metaphorical usage in the traditional sense. Rather than focus on semantics, Schneider looks toward structural projection; of the projection of a structure into fields different than the original one.

7.3) Vertical Movement

Schneider works with Ter Hark’s notion of vertical movement between language games to show how communication between conflicting forms-of-life may be affected.\(^8\) The idea of vertical movement stems from the recognition that not all language games operate on the same logical level; some are logically dependant upon others. For example, there could be no language game of ‘feigning interest’ if there were not already a language game of ‘showing interest.’ Irony makes use of this vertical movement, as does much satire and humor. As Schneider points out, grammatical jokes indicate and sometimes test our ability to simultaneously recognize different levels of language games. As an example of this sort of humor, he points to the Woody Allen one-liner, “Not only is there no God, but try getting a plumber on the weekend.”\(^9\)

The point that we need to focus on is that though the positioning of one language game to another is relative (i.e., the question of base or primary games is still open),

\(^8\) Michel Ter Hark 1990 beyond the inner and the outer. Wittgenstein’s philosophy of psychology (kluwer) 1990, p. 33-42 Dordrecht.

\(^9\) Allen quoted in Schneider (‘Offene Grenzen’ p. 150).
movement *between* levels of games is an ordinary skill, common to competent users of a language.

Another important point brought out by the recognition of vertical movement between language games is that we do not need a ‘third’ game to gain an observation point. The communication between different level language games takes place without requiring some transcendent or objective stance. This in turn provides a way of understanding intercontextual communication based upon a series of short vertical steps moving from one context to another. The model is one of a network, which is directly opposed to the earlier radically relativist view, on which contexts were mutually exclusive.

It may not be easy or even possible to always locate the steps by which two contexts could be linked,\(^\text{10}\) but this model does provide a mechanism for linkage. Earlier I used the example of two different uses of the word ‘energy’ to show how context affects meaning.

In one instance of the phrase, “there is a lot of energy stored here,” energy was a measurable physical quantity; the potential for the stored body of water to do work, whether that potential be measured in calories, kilowatts, or what have you. In the second instance the utterance, “there is a lot of energy stored here,” was made by a healer choosing a crystal for its alleged properties. Same sentence, different context. Is there any connection, or are the contexts incommensurable?

It looks as if one might explain the disconnect or lack of understanding between these disparate uses of the term ‘energy’ by means of Schneider’s model: some members of the speech-community have made vertical steps which were either not followed or

\(^{10}\) For example, one or more of the steps may be idiomatic, metaphoric, or some other difficult to recreate usage of language.
were outright rejected by others in the community. We have reached an impasse, or perhaps this is our starting point.

Is the task of resolving the conflict one that can be approached in small steps? For it is a conflict: when people pay billions of dollars each year on ‘alternative’ methods of healing, and these methods are not recognized or paid for by most health insurance providers, then we have a very concrete (and expensive) conflict. Hardly anyone remains neutral, and this justly so, because a feigned neutrality, say in the name of tolerance or relativism, is not a live option. We do always speak from some perspective; the pressing question for us is whether, and if so how, we can change or expand our perspective. This is not to suggest that all such conflicts are either grammatical in nature or even resolvable. But by coming to recognize how they might arise we are at least promoting a mutual understanding among participants in the conflict.

Looking for a series of viable vertical steps between two very different contexts is akin to looking for logical connections, since the dependency relation mentioned is a logical one. If we were to locate some such series of steps, then it seems that formalizing the notion of vertical movement would be theoretically feasible. However, much depends upon the actual mechanisms involved, and there is no guarantee, just because one language-game is secondary to another, that it was arrived at by logical means.

7.4) Aspect-Seeing

How does ‘aspect-seeing’ differ from disambiguating between ‘the senses’ of a term or phrase? For example if, ‘the judge upbraided the lawyer for not wearing a serious suit in court,’ how would one disambiguate the meaning ‘suit = attire’ from the meaning ‘suit = legal process,’ given that the context one is searching within would be ‘legal’? Is this ‘problem’ based on the fact that we reason differently than our machine programs, so that it is only a problem for them and not for us? Or what? It could be an inadequate
model. Perhaps we make some move(s) that we have not as yet recognized, and, therefore, left out of our formalization models.

The courtroom ambiguity seems to arise when we label the context as ‘courtroom’ or ‘legal,’ and use these headings to gather, and at the same time to limit associations. Under the heading ‘courtroom’ a ‘suit’ is usually a legal action, but that reading misses completely. Nor is the example contrived, as it would be if we said instead, ‘the judge dismissed her suit as being frivolous.’ In this case, we are being intentionally misleading, since ‘having a suit dismissed’ is normally a legal maneuver, and not an outcome of fashion snobbery.

What allows us to immediately understand that the first sentence is about clothing, not about law? Is it because the phrase in which the ambiguity occurs contains the verb ‘wearing’? Perhaps. But we could also ask how the contextual label ‘courtroom’ or ‘legal’ became attached to the utterance in the first place. Did it become attached as we read the word ‘judge,’ or after the third word? At which point we had a subject and verb in search of an object?

When does this ‘contextualization’ take place? After all, it is because of the need for re-contextualization that this first example works in the first place. I am not sure that there is a single answer to the question. Some people pounce upon our words, never letting us finish a sentence before they are replying. Sometimes they miss something important that may occur late in the utterance and which casts the whole in a new light. Other people sit quietly and listen to the whole sentence or utterance before responding, and sometimes that response is itself a request for more information for further clarification.

Could we say that this second type of person has some number of possible contexts in mind in which to make sense of the utterance, and that their very questioning is part of a disambiguation process? If so, then we must ask ourselves where lies the
alleged difficulty for a machine to disambiguate the potential sentence meaning? A machine could represent some of the potential meanings of each word in the sentence. It could also then move to the phrase level. Next it could link the phrases, giving weighting according to found instances of use, say in a web search. Finally it could give probabilities to certain uses of the sentence as a whole. But would this solve the problem? Probably not, for the machine might have to go beyond the grammatically correct sentence, and it’s unclear whether it could do this without encountering problems involving relevance and metaphorical usage.

Despite having adequate computing capability, which would make short work of the sheer number of combinatorial possibilities, there is the question of how to decide which of those possibilities to lend credence to. The root philosophical problem here may be this: is there some algorithmically describable ‘projection relation’ between the utterance and a coherent context of its usage?

We use our imagination in an attempt to locate a novel utterance in a context to make sense of the utterance. Sometimes, however, it appears that we get stuck. We think we know more than just the abstract sense of an utterance, and yet we are unable to fully make sense of the utterance. It doesn’t ring true to us; we find no home for it in our form of life. Wittgenstein addresses just such difficulties in Lectures and Conversations (hereafter ‘LC’)\(^\text{11}\) where he says in relationship to belief in a judgment day:

“In one sense, I understand all he says— the English words “God,” “separate,” etc., I understand. I could say: “I don’t believe in this,” and this would be true, meaning I haven’t got these thoughts or anything that hangs together with them. But not that I could contradict the thing.”

It seems that Wittgenstein is de-emphasizing the articulation of a position, focusing instead on its connection with the nonverbal. It is actions which ‘hang together’

\(^{11}\) Wittgenstein (1972)
with words. He also says that the expression of a belief may play an absolutely minor role. This may make Schneider’s statement appear odd, that a conflict between forms-of-life means a conflict between their articulations.\textsuperscript{12} I think both may be correct: Wittgenstein emphasizes the role of the nonverbal within a form-of-life; Schneider emphasizes the role of language in mediating between forms-of-life.

7.5) Metaphor

There are at least two ways in which metaphor can facilitate contextual access. First, a really good metaphor can create a new context. Second, because the structure of a sentence can also be used in metaphorical ways, sentences usually ‘at home’ in one context or language game can move into new contexts, new language games.

Fermandois\textsuperscript{13} argues that a strong or vital metaphor (as opposed to a conventional or dead metaphor) requires active interpretation. More importantly it must ‘fit’ the situation, in the sense that it must be relevant and lead to important results relative to the interests and needs of the persons involved. A fitting metaphor can call forth constellations of emotions that fit a given situation. Further, whoever makes the metaphor is suggesting a new context in which to adequately handle a particular theme. By putting a theme into a new context, the speaker creates an opportunity for the dialogue participants to take a new stance toward the theme. Fermandois points out that whoever started the “poverty is crime” metaphor created a whole new context in which poverty could be reconsidered. Moreover, by so doing he or she implied that this is the right context for looking at the problem of poverty.\textsuperscript{14}

Obviously this sort of process can also work to create contexts designed not to promote but rather to hinder intercontextual dialogue. A Croatian student once gave me the following example: The U.N. peacekeeping forces in former Yugoslavia were looking for

\textsuperscript{12} Schneider (1995) p.140
\textsuperscript{13} Fermandois ( ) p 6.
\textsuperscript{14} ibid. p. 13.
Mirko Norac on war crimes charges. The Serbian authorities used a metaphorical slogan, “We are all Mirko Norac!” to close the ranks of the Serbian people. This promoted a polarized ‘us vs. them’ mentality. This only serves to bolster Fermandois’ claim that a fitting metaphor serves the interests and needs of those involved.

The second way in which metaphor can facilitate intercontextual communication is through metaphorical manipulation of sentence structure. Schneider\textsuperscript{15}, following Stenius, calls this ‘syntactic metaphor.’ It occurs whenever the syntax of a sentence is used in a new and metaphorical way. For example, the subject position in a subject/predicate sentence structure is usually occupied by some worldly entity or another, as in ‘The boulder is heavy.’ If the subject position is occupied by some non-physical thing, then we may have a case of syntactic metaphor, as in ‘Her thoughts are heavy.’ Clearly, to predicate a property of something is usually a basic move in the language game of describing physical entities, so when the subject place becomes occupied by a mental state the predication is metaphorical and based on a new use of a familiar syntax.

One might also consider that the role of the verb can undergo a similar metaphorical shift. A grammatical device indicative of a particular type of action may be used for another, quite unrelated kind of action, and this, too, seems to be a metaphorical usage. In this case, the activity itself is no longer the literal one with which the verb was originally linked. For example, we can say “In Vietnam we bombed indiscriminately,” but we can also say, “On Friday I bombed my Chemistry final examination.” There are surely other types of syntactic metaphor out there waiting to be illuminated.

Combining the two notions of syntactic metaphor and vertical movement (sec. 7.3 above), we see how a kind of metaphorical ‘leapfrogging’ can occur. Vertical metaphorical movement involving syntax could take us by understandable steps from one context into another. It could also help facilitate communication between two disparate contexts by

\textsuperscript{15} Schneider (1990) p.139
creating from them a third, more neutral context. Roser\textsuperscript{16} says that dissension between language games is a result of one group failing to accept or to understand a vertical move made by some other group. These moves are said to be articulations of forms of life.

\textsuperscript{16} Roser (1999) p.28
Summary

Context has generally been approached using some form or another of one of two paradigms. Either one tends toward the situational aspects of context, focusing on external factors such as time, place, and speaker, or one cleaves toward the propositional aspects such as background assumptions and propositional knowledge. Each of these approaches has its strengths and its adherents. External factors tend to be stressed by those from the truth-functional semantics camp, while internal factors are often highlighted by researchers in Artificial Intelligence. These divisions are, of course, oversimplified in order to point out major trends, and it is certainly not the case that all context research does or even must fall neatly into one category or the other. This basic dichotomy does serve, however, to indicate some of the underlying motivations and concerns of those working in the field. Many of those whose main concern is with situational contextual factors came to the field from model theoretical semantics, and were motivated by the search for logic adequate to handling demonstratives and indexicals. On the other hand, motivation for A.I. researchers to investigate context must, at least in part, trace back to McCarthy’s attempts to formalize general assumptions over domains.

In this paper I have taken a stance that tries to draw from the research of all interested parties, and to try to indicate those areas in which a synthesis of either research or results might prove beneficial. Conversely, there are places where it appears a line of approach may be misguided or even wrong, and to those attention is also drawn.

It has been a rock-bottom assumption throughout this paper that working with contexts is a pervasive and necessary part of ordinary language competence. A corollary to this is the notion that an essential part of our competency consists in our ability to imaginatively manipulate our language: to transgress recognized structural boundaries, to intentionally abuse them in creative and meaningful ways. This includes both semantic and syntactic
metaphorical projections, and importantly, understanding the utterances of others by being able to take these steps as hearer.

When we looked at the pre-theoretic notion we saw that it captured the basic dichotomy of situational and propositional aspects of context, but that it glossed over or even ignored the imaginative or non-rule-governed side. The pre-theoretic notion of context appears to be an offshoot of a naïve transport model of language, in which communication takes place when a speaker encodes some context-neutral proposition in a language, and then passes this linguistically wrapped content to a hearer, who must then ‘unwrap’ or decode the correct propositional content. Context, on such a model, usually enters the picture in cases of misunderstanding or ambiguity: to disambiguate between possible meanings. This view of context just seems to miss its tremendously rich character and subtle workings, which come to the fore when our inquiry centers on the pervasive metaphorical and imaginative uses of language. These uses are not to be prioritized downward – they are absolutely commonplace, being learned by children as they learn their mother-tongue. Attempts to isolate some context-free sentence meaning are, as we have seen, misguided. So, too, are attempts to abstract some set of information content out of a context and then to equate that abstracted information with the context itself. Contexts are dynamic – they necessarily involve both speaker’s and hearer’s relationship to the situation, relationships that are always more than merely linguistic. Context plays a commonplace role in our linguistic capabilities, but that fact should not tempt us to trivialize that role.

Often one hears that the main point of communication with language is to convey information. This *is* a notion whose triviality is easily seen. When, for example, an exchange is the telling of a joke it would miss the point entirely to insist that information exchange is the main point of the transaction. To the extent that there is information exchanged, its role is minimal. The meaning of a discourse is not generally determined by its informational content, even if it does sometimes stand in need of such determination.
We have also seen that contexts are, in general, not reducible to symbolic representation, due to human presence as an integral part of the context. Those who would reduce the human aspect of contexts to some set of implicit knowledge or information are seriously in error. Situation Theory seems to me to put artificial constraints on its subject matter, constraints that seem to ignore the dynamic nature of natural languages. This is not to deny that modeling efforts will yield any useful results, but only to suggest that some of the most interesting aspects of language, such as its richness and its interconnectedness with people and their lives, will forever fall outside the purvey of such models.

Having said that, how are we to reconcile it with a statement such as this, from the cognitive scientist George Lakoff: “Everything we know is physically instantiated in the neural systems of our brains”? But in what sense of the word ‘know’ can I be said to ‘know’ a metaphor that I’ve yet to create? Perhaps vocabulary and rules can be modeled in a formal system, but what we do with language can often only be so modeled after the fact. To think otherwise is to put the cart before the horse.

Another interesting thing about metaphors and contexts is their relationship. As Fermandois correctly pointed out (sec. 7.5, above) sometimes a powerful metaphor can actually serve to create a new context, a new discourse, with all of its attendant possibilities. It should be noted that context is generally a more inclusive concept than is metaphor: to declare a ‘war on poverty’ is to reframe the issue metaphorically, thus creating new possibilities of approaching the problem that might not have occurred to the discourse participants otherwise. Still, this new recontextualization of a theme by means of a metaphor does not create an entirely new and independent context. The reason for this is because the metaphor, in order to be understandable, must have some connection with a context or contexts that are already familiar. This is how the hearer makes sense of the new metaphor, by anchoring it in some known context.

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1 Lakoff (2004) p.52
8.1) Applications

An example of the metaphorical contextualization of an issue, or a whole cluster of issues, is happening at present in the United States. We are currently witnessing what the media refer to as the ‘culture wars.’ This term refers to bitter political disputes over a whole range of issues from women’s reproductive rights, school vouchers, stem cell research, to Supreme Court nominations and the proper role of the judiciary. They are diverse issues conveniently packaged for mass consumption under the rubric of ‘Culture Wars.’ This term is a powerful metaphor, unless of course one is slowly becoming inured to the overuse of war metaphors in American culture. Within the last thirty years we’ve had a ‘war on crime,’ a ‘war on terror,’ a ‘war on drugs,’ a ‘war on poverty,’ and quite a few actual wars. The war metaphor is being brought to bear once more. The real power of the term ‘culture wars’ lies in its connection of the war idea with the notion of culture.

Whose culture is at war? By whom or what is it being attacked? Who are the defenders of culture? The answers to these questions reveal an extraordinary coupling of metaphor and context, as well as a masterful manipulation of language, the media, and of public discourse. Observing the intricacies of the ‘culture wars’ provides a remarkable illustration of many of the summary points of the present work.

Let us start with the assertion that our culture is under attack. What is ‘our culture’? Is ‘the American Way of Life’ the sort of thing Wittgenstein might allow to count as a form of life? Perhaps, but since we are probably the least homogenous society on earth (and not just for that reason) I suspect not. To speak of ‘our culture’ in reference to America is a convenient fiction. It does, however, serve a purpose, which is to frame the debate.

Unless one is aware of this move one may unconsciously use the term ‘culture wars’ without realizing that by so doing one is handing a partial political victory to a vocal minority with a radical political agenda. Those who frame the debate have already ‘won a battle.’ With this in mind, let us examine what this alleged culture consists in. What exactly is it that is claimed to be under attack?
The key to understanding the so-called ‘culture wars’ in America today is the term ‘values.’ Just how important this is becomes apparent when one reflects for a moment on contextual hierarchies, for values contexts always seem to trump other contexts such as epistemological ones. Lakoff has shown that, “…in considering whether a statement is a lie, the least important consideration for most people is whether it is true!”\(^2\) For most people there are other, more important factors at work. Lakoff may be slightly overgeneralizing when he says, “When facts don’t fit the frames, the frames are kept and the facts ignored.”\(^3\) Recent events in American history seem to support his findings. For instance, a majority of Americans believe that Saddam Hussein was somehow connected with the 9/11 attacks, despite a lack of any evidence to support this claim. The important point for this investigation is what kind of frames or contexts have the greatest hold on us. The answer is clearly values contexts. This is why politicians, military leaders, and religious leaders so often couch their agendas in terms of morality.

If one is in disagreement with another person’s political stance vis-à-vis some issue, it might seem wise to seek a workable compromise. This takes a lot of work, and one ends up with less than originally hoped for, while giving up some ground to the opposition. All well and fine one might think, but in American politics today the fine art of compromise is the exception rather than the rule. The tendency today is toward an intractable polarization based upon moral pronouncements. Simply put, one does not seek compromise or even accept it when offered, if one sees one’s opponent to be holding a morally inferior position. This might seem odd at first to anyone familiar with American history, which could be viewed largely as a series of political compromises. Could, that is, until Watergate.

According to Robin Tolmach Lakoff, prior to Watergate compromise was the rule, as legislators “…considered it impolitic to make deadly enemies over any one piece of

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\(^3\) Lakoff (2004) p.73.
legislation – they might need their cooperation another time.”

What has happened in the interim? How did the events surrounding Watergate lead to the political situation of today? Tolmach Lakoff points to two key factors. First, it created bitterness and suspicion between Republicans and Democrats, and second, in the wake of Watergate the congressional seniority system was overhauled. Key committee posts had gone to those with the most seniority, but post-Watergate such positions went “...to neophytes favored by the party leadership. After Watergate there was no longer a shared memory of common purpose, civil discourse, or compromise. Since then every action has been framed as a move in a game of revenge, a quid pro quo, me vs. you.” If she is right about this, and I suspect she is, then a good deal of the rancor between the sides in the ‘culture wars,’ in so far as both sides are represented by the major political parties, traces back to Watergate and the ensuing fallout.

But this historical digression only gives us part of the picture. For the current ‘culture wars’ to aid in summarizing the present work, we have to see how language works in these ‘wars.’ It is not enough to merely point out that there is a grand narrative metaphor at work. We need to see how context comes into play in other ways as well, and in a larger sense, how the philosophy of language is pertinent to the present political situation. I take it to be one of Wittgenstein’s contributions to the philosophy of language that he showed how language usages arise within particular language games, and that these are originally tied to specific purposes. Later these usages can become projected into new areas. Most, if not all, of these situations involve interactions with nonlinguistic entities. Some entities are socially constructed (e.g., gender, the monetary system, the institution of marriage, a touchdown), and some are the result of metaphorical uses of language. The main point is that the language/reality distinction is not always so easily drawn.

Socially constructed ‘realities’ that are firmly entrenched take on an aura of being somehow rooted in extra linguistic reality. One problem with adopting a sharp distinction

5 Ibid, p. 121.
between language and reality is that it shortchanges language. It makes the humanities and the social sciences take a back seat to the ‘hard’ sciences. But it does more than this; it glosses over the commonalities between socially constructed ‘realities’ that are firmly entrenched and those which seek to challenge the dominant or status quo. It does so by making the status quo seem rooted in reality, while the challengers are seen as merely special interest groups (consider, for example, current legislation aimed at preserving the status of marriage as between one man and one woman). There are numerous ways in which the dominant group seeks, through language, to maintain its hold on social and political control, but the bottom line is always the same – outside groups have to gain control of the language. This might involve coming up with a new and powerful metaphor to help re-frame the debate over some particular issue, or it may involve a marginalized group asserting the right to name itself rather than be labeled by their oppressors (in the 1960s, for example, the Black Panthers chose the word black precisely for its strong semantic opposition to the term white).

An underlying assumption here is that meanings are made, not given in some pre-existing stable order of things. Meanings, as I have indicated throughout this inquiry, arise within contexts. Frege’s context principle put meaning on the level of the sentence, while Wittgenstein ratcheted it up to the level of a language game. Based upon considerations from chapter 2, I locate meaning within a context, pragmatically defined.

Contexts are, as we saw in chapter 4, open. This very openness gives us an indication of how the various factions in the ‘culture wars’ might proceed if they ever genuinely desire to promote dialogue, understanding, and perhaps, compromise.

Because the relationship of meaning and understanding between speaker and hearer is a process, we find that there is a great deal of contextual overlap already in place so that communication can proceed. It is not that the adversaries in the ‘culture wars’ do not grasp the communiqués being issued from each other’s camp, but that they understand

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7 Some ways the dominant group seeks to maintain control of the language are by framing the debate (Tannen 1979); by exnomination (Barthes 1972); and by playing upon the expectations and cultural knowledge of the majority
each other all too well. ‘Staying on message’ is a technique employed by both sides, liberal and conservative. It consists in a dogmatic adherence to, and repetition of, key buzzwords and phrases intended to call forth and reinforce the context in which it wishes the debate to take place. This is, of course, a recipe for gridlock, as it leads to further polarization, oversimplification, and exaggeration of differences. Firmly entrenched within their frameworks, neither side acknowledges the potential of the fertile middle ground of dialogue.

The openness of contexts shows how a dialogue might proceed. Participants with opposing viewpoints could take some concrete steps to begin a dialogue that could prove beneficial to all those involved. First, agree that on any given contentious issue a final solution may not be forthcoming; the objective at first ought to be to promote dialogue, not to try for a final conclusion. If we consider their respective frames or contexts as starting points, then the participants could begin to identify words, terms, phrases, and syntactic structures that reinforce their frames. Another step would be to identify a set of moral values that each side feels strongly about. Comparison of their respective lists of values would most likely yield some overlap in values.

Using these first steps, our hypothetical adversaries could begin working toward a shared context in which mutual understanding is the goal. For instance, each party would agree to avoid their own list of frame reinforcing terminology, trying instead to come up with new and mutually acceptable language. As we saw earlier (sec. 7.1) this notion of shared practice can go some way toward building trust and understanding. It might also result in the creation of some new and powerful metaphors, which may put social issues in a whole new light, thus increasing accessibility for all involved.

Another method of creating a shared context, one that fosters continuing dialogue, is to focus on shared moral values instead of perceived differences. For instance, both sides in

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8 I follow Weston’s definition of moral values as, “Those values that give expression to the legitimate needs and expectations of ourselves and others.” Weston (2001) p.41.
the abortion debate, ‘pro-life’ and ‘pro-choice,’ agree that every child should be wanted. Even a step as small but significant as this recognition of shared values can lead to further discussion.

Each of these suggestions on furthering dialogue is at the same time a way of re-contextualizing an issue that has become the source of social and political polarization and mistrust. Lakoff seems to be saying to the left, ‘Look how successful the right has been in framing the debates; let us borrow their techniques.’ But to my way of thinking this will not, of itself, prove beneficial to society as a whole. It may lead to more dogmatic and entrenched posturing on both sides, and to even less actual dialogue and its attendant compromise. As Josef Simon puts it a conflict of forms of life arises from the intention to understand ‘the other’ from one’s own perspective; to understand, explain, and act solely from this basis. It is only possible within one’s own form of life to act unquestioningly. The present ‘culture wars’ in America can be seen, at least in part, to be a result of the breakdown of the fine art of compromise and the rise of sectarian rhetoric to new levels.

Contexts in natural languages generally have pragmatic boundaries, which is to say that we allow boundaries to remain open and flexible according to our needs. Information that may seem irrelevant may suddenly, in the light of some newly acquired knowledge or in response to an arising need, become relevant. Since contexts are open, there seems to be no principled distinction that one could stipulate in advance, no way to decisively predetermine contextual boundaries. On the other hand, since it is impractical to try and make everything whatsoever somehow relevant to an ongoing dialogue, we must have some practical constraints in place.

Some of the pragmatic constraints considered earlier (sec. 6.1) focused largely on epistemological issues. Using the ‘culture wars’ as an example once again, we can see that there are also social and political constraints at work. Such things as group

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membership, self-identification, the influence of special interests, and the media all play roles in creating and maintaining contextual boundaries. In chapter 5 we looked at contextual boundaries and discovered (sec. 5.2) that most people avoid discourse at or near the boundary regions of their usual contexts. There is comfort in certainty, even if that certainty is groundless (sec. 5.1). Wittgenstein has said that we could not describe the system of our convictions (OC 102), but can learn to recognize those convictions by what we do not indeed doubt (OC 220). It is apparent that some of these convictions or contextual framework statements involve ethics and/or religion. With this notion in place we can see that the ‘culture wars’ really are what the media have called ‘a battle for the hearts and minds of the next generation.’

We saw an important shift in emphasis from the epistemological to the sociological (sec. 5.1c) when we examined the roles of authority and trust in first language acquisition. Since the child has to have some beliefs in place (in the sense of ordinary certainties) before doubt can arise, it seems obvious that what will come to seem normal to the child are just those actions, terms, and even judgments of the community. Wittgenstein points out that in learning a first language, when we first begin to believe anything, it is a whole system of beliefs, a totality of judgments that is made plausible to us (OC 140; 141). This includes not merely empirical truths but ethical and religious pronouncements as well. The sedimentation of a worldview begins at home. But it also takes nourishment from the classroom, at church, and on the local level, through the media, to name a few. Every such formative social context must be considered when we look toward pragmatic constraints. In the ‘culture wars’ it is plain to see that control over the language, in framing the discourse parameters and in controlling the terminology, is inextricably intertwined with control over the ethical pronouncements of the society. Some debates within the ‘culture wars’ blur the distinctions between ethical, religious, and empirical judgments: attempts to redefine ‘science’ to allow the teaching of ‘intelligent design’ in the high school science curriculum is one such debate. In each case, we usually find a clash of worldviews. Science is often pitted against religion, as if the two were mutually exclusive.
8.2) Wittgenstein

Conflicting contexts at the level of worldviews were of particular interest to Wittgenstein in his last works. This was the source of his frustration when he wanted “…to say something that sounds like pragmatism…” but where he was…“being thwarted by a kind of Weltanschauung.’ (OC 422) This was the point of departure that he said would require a step like the one taken in relativity theory (OC 305). What did he mean by this? Was he then able to take this step? What relevance does this have for the current inquiry?

At first glance it might seem that Wittgenstein was flirting with a sort of postmodern relativism. Moving away from the *Tractatus*, he held that there was no universal logical structure inherent in all languages, but that languages grounded out in forms of life. On the relativity analogy these forms of life might be equated with frames of reference. It seems as if he did take that first step. What becomes crucial for our investigation are two questions: does his later view support a form of relativism; and, what was the form of ‘pragmatism’ that he mentioned?

The answer to the first question is a qualified ‘yes’; one may indeed argue that Wittgenstein’s later work supports relativism, but exactly here is where pragmatism enters the picture. It appears that Wittgenstein’s own worldview grounded out in the scientific, and that this empiricism is what he felt was thwarting his understanding. This can be seen in his frequent references in *On Certainty* to the types and roles of propositions, and in his tendency to return again and again to empirical propositions.

Wittgenstein repeatedly points out that worldviews aren’t the sorts of things about which it makes sense to say that they are either true or false. Instead he focuses on the nature of
the empirical proposition, which can at one time belong to the framework itself, and at
another time come up as an empirical hypothesis. Encountering a person who still
questions those empirical propositions that we hold to be beyond doubt, Wittgenstein
says that “…if we compare our system of knowledge with theirs then theirs is evidently
the poorer one by far” (OC 286). These are hardly the words of a relativist! At the same
time, however, he realized the futility of trying to justify, based on objective criteria, one
worldview over against another. In (OC 336) he notes that what is reasonable and
unreasonable alters with time, and so he asks, “Is there no objective character here?” He
follows this with an important remark to the effect that some very intelligent people
believe in creation while others hold it to be proven false, and that the grounds of each are
known to the others. Unfortunately, the result of such a difference in worldviews is all too
familiar. He puts it succinctly, “Where two principles really do meet which cannot be
reconciled with one another, then each man declares the other a fool and a heretic”
(OC611). This seems to be an accurate account of the actions of some of the more
strident participants in the ‘culture wars.’ Indeed, Wittgenstein himself uses metaphors of
war in describing these kinds of misunderstandings. Encountering people who did not
regard the propositions of physics as good grounds for guiding behavior, he says that if
we call their actions ‘wrong’ we are “…using our language game as a base from which to
combat theirs.”(OC 609)

Yet for all his remarkable insight, Wittgenstein was in the end ‘thwarted by a worldview.’
To his credit he recognized this, and saw as well that ‘combating’ others through the use
of slogans (OC 610) was the wrong way to go. Moving from the use of slogans (in which
I see similarities to the actions of Luntz and Lakoff) to recognizing that both slogans and
reasons may fall short, Wittgenstein notes that, “At the end of reason comes persuasion”
(OC 612). This is a perceptive move, based upon his recognition of the groundlessness of
belief. In other words, you usually cannot reason someone out of a position that they did
not reason themselves into in the first place. The place where I think Wittgenstein came
up short is in his insistence on comparing other worldviews to a scientific worldview, in
going caught up by this dichotomy. Because he seemed convinced of the superiority of
this worldview, I feel that he missed some of the more subtle maneuvers by which intercontextual communication can be achieved; things such as metaphor, syntactic metaphor, vertical movement, and so on.

Throughout this work I have drawn upon Wittgenstein’s later work as a source of insights and observations. Earlier I indicated (sec. 1.5) that a synthesis of pragmatism and relativism might have been what he was aiming at. I remain convinced of that assessment, and I also remain hopeful that this paper, with its emphasis on the pragmatics of contexts, helps further that line of thought.
Bibliography


--------- (1996): “Steps Toward Formalizing Context”; AI Magazine 17/3 pp. 55-72


--------- (1997): In the Theater of Consciousness: The Workspace of the Mind


-------- (1998): “


Fish, S. (1980): Is There a Text in This Class? The Authority of Interpretive Communities, Cambridge, MA (Harvard University Press)


http://www.lettere.unige.it/sif/structure/9/epi/hp/penco/pub/holism.htm
Accessed 09.05.99 21:24.

http://www.csli.stanford.edu/~john/context/context/context.html
Accessed 15.06.99 14:53.
Ratner, Joseph (editor) (1939): Intelligence in the Modern World: John Dewey’s Philosophy, New York (Modern Library)


------- (1982): Consequences of Pragmatism, Minneapolis (University of Minnesota Press)


------- (1992): Phantasie und Kalkuel, Frankfurt (Suhrkamp)


-------- ( ): “Die Sprache: truebes Medium oder Lebenselement der Kommunikation“

-------- ( ): “Fortsetzung statt Uebersetzung! Eine pragmatische Sicht auf das Problem des Kulturverstehung.


-------- “Kontext Und Sinn: ein typologischer Versuch zu den Sinnstrukturen des >New Age<, Soziale Welt 41 pp.383-403


-------- (1973): “Pragmatics” in: Petoefi und Franck (Hrsg), Praesuppositionen in Philosophie und Linguistic, Frankfurt am Main (Athenium Verlag)


Deutsche Zusammenfassung

Das Thema ‚Kontext‘ wird generell mit Hilfe eines der beiden folgenden Paradigmen betrachtet:
von Demonstrativa und indexikalischen Ausdrücken geeignet ist. Forscher im Bereich der
künstlichen Intelligenz sind zumeist von McCarthys Versuchen beeinflusst, generelle Annahmen
bezüglich bestimmter Bereiche (‘domains’) zu formalisieren.

In dieser Dissertation bemühe ich mich, alle Seiten einzubeziehen und versuche zu
zeigen, in welchen Bereichen eine Synthese von Forschungen oder Teilresultaten von Vorteil
sein kann. Bereiche in denen ein solcher Ansatz fehl am Platz wäre, werden ebenfalls behandelt.

Eine grundlegende Annahme in dieser Arbeit ist, dass der Gebrauch von Kontexten ein
weitreichender und wichtiger Teil der normalen Sprachkompetenz ist. Daraus folgt auch, dass es
ein essentieller Teil unserer Kompetenz ist, mit unserer Sprache phantasievoll umgehen zu
können, d.h. bekannte strukturelle Grenzen zu überschreiten und sie in kreativer und
bedeutungsvoller Weise zu „missbrauchen”. Dies beinhaltet sowohl semantische als auch
syntaktisch metaphorische Projektionen sowie auch die Fähigkeit, die Aussagen anderer durch
Anwendung dieser Schritte zu verstehen.

Bei unserer Betrachtung vortheoretischer Vorstellungen werden wir sehen, dass diese die
grundlegende Zweiteilung von situationsbedingten und propositionalen Aspekten erfasst, aber
gleichzeitig die phantasievolle oder unregulierte Seite vernachlässigt oder ganz ignoriert. Die
vortheoretische Vorstellung vom Kontext scheint der Ableger eines naiven
Sprachtransportmodels zu sein, dem gemäß Kommunikation sich wie folgt abspielt: der Sprecher
verschlüsselt eine kontextneutrale Proposition in einer Sprache und gibt den linguistisch
verpackten Inhalt an einen Hörer weiter, welcher dann den korrekten „Inhalt” auspacken oder
entschlüsseln muss. Der Begriff des Kontextes ist in einem solchen Modell generell dort von
Wert, wo es zu Missverständnissen oder Mehrdeutigkeiten kommt, da er es dann erlaubt, 
zwischen möglichen Bedeutungen zu entscheiden. Diese Auffassung von Kontext scheint 
allerdings seinen unglaublich reichen Charakter und seine feinen Nuancen zu übersehen, was 
besonders auffällt, wenn sich unsere Untersuchung auf die weitreichenden metaphorischen und
phantasievollen Anwendungen von Sprache konzentriert. Wir können diese Anwendungen nicht
als unwichtig oder nebensächlich hinstellen, denn sie sind absolut alltäglich und werden bereits
von Kindern zusammen mit ihrer Muttersprache erlernt. Versuche, einige kontextfreie
Satzbedeutungen zu isolieren, sind, wie wir sehen werden, fehlgeleitet. Dies gilt auch für
Versuche, einen Teil des Informationsgehalts eines bestimmten Kontextes heraus zu nehmen und
diesen entnommenen Inhalt dann kurzerhand mit dem Kontext gleichzusetzen. Kontexte sind
dynamisch, - sie beinhalten immer sowohl die Beziehung des Sprechers als auch die Beziehung
des Hörers zur jeweiligen Situation. Diese Beziehungen sind immer mehr als nur linguistisch.
Kontext spielt eine alltägliche Rolle in unseren Sprachfähigkeiten, aber dies sollte uns nicht dazu
führen, diese Rolle zu trivialisieren.

Es wird oft behauptet, dass die Weitergabe von Informationen die Hauptrolle der
sprachlichen Kommunikation ist. Die Trivialität dieser Behauptung ist sehr einfach erkennbar.
Wenn z.B. ein Witz erzählt wird, wäre es vollkommen fehlgeleitet, darauf zu bestehen, dass das
Ziel der Unterhaltung der Austausch von Informationen ist. Insofern wir überhaupt von einem
Informationsaustausch sprechen können, ist dessen Rolle auf jeden Fall minimal. Der Sinn eines
Diskurses wird generell nicht von dessen Informationsinhalt bestimmt, auch wenn eine solche
Bestimmung oft als notwendig erscheinen mag.

Wir werden sehen, dass Kontexte generell nicht einfach auf symbolische
Repräsentationen reduziert werden können, denn das Vorhandensein von Menschen ist ein


Drittens, Kontexte sind offen. Dies bedeutet, dass sie nicht vollkommen und nicht in vorbestimmter Art und Weise beschrieben/eingegrenzt werden können. Durch solche Faktoren
wie Informationen, Relevanz, Verständnis und Hörerbedürfnisse, ist es (mit wenigen, eher untypischen, Ausnahmen wie zum Beispiel bei 'Voraussetzungen') unmöglich, genaue Grenzen um einen Kontext zu ziehen.


\textsuperscript{10} Cf. Wittgenstein, On Certainty §94; §162; §308. Ich bedaure, hier im Moment keine Originalfassung der Schrift Wittgensteins zur Verfügung zu haben.
gemeint sondern auch Schneiders ‘syntaktische Metapher.’ Der Terminus ‘syntaktisch’ bezieht sich auf die Satzbildung, und folglich signalisiert die Rede von ‘syntaktischen Metaphern’ eine Vielfalt von komplexen Ausdrucksbildungsmitteln.

Jeder der fünf Punkte ist mit Wittgensteins Spätphilosophie verbunden. Die Idee, Kontexte pragmatisch zu definieren, ist offensichtlich mit der These “Bedeutung ist Gebrauch” verwandt. Bezugsrahmen und Rahmenfakten sind häufig verwendete Konzepte in *On Certainty*, was natürlich auch für Gewissheit und Zweifel gilt. Allerdings bin ich in meiner Diskussion von Interkontextkommunikation, d.h. dem Überbrücken von Kontexten, etwas optimistischer als Wittgenstein. Man gewinnt manchmal den Eindruck, dass Wittgenstein von seiner mangelnden Einsicht in das ihm sehr am Herzen liegende Thema frustriert war (was die Gewissheit seines baldigen Todes sicher nur verschlimmerte). “Here is still a big gap in my thinking. And I doubt whether it will be filled now.” Ich hoffe, dass meine Arbeit ihren Teil dazu beiträgt, diese Lücke zu schließen.

Kontextkonflikte auf der Ebene der Weltanschauungen waren in seinen späteren Werken von besonderem Interesse für Wittgenstein. Dies war der Grund für seine Frustrationen wenn er etwas sagen wollte “that sounds like pragmatism” (OC 422). Statt dessen fühlte er “being thwarted by a kind of Weltanschauung” (OC 422). Dies war ein Ausgangspunkt, der eines Schrittes bedurfte, welcher in Gewicht mit der Formulierung der Relativitätstheorie gleichzusetzen gewesen wäre (OC 305). Was hat Wittgenstein damit gemeint? War er in der Lage diesen Schritt zu machen? Warum ist dies relevant für diese Untersuchung?

11 siehe Kommentar in Sektion 1.4
12 *On Certainty*, 5.4.51 p. 62e. Hier ist eine grosse Lücke in meinem Denken, und ich bezweifle, dass diese jetzt noch gefüllt werden kann. (meine Übersetzung)
13 das pragmatisch klingt (meine Ueb.)
14 von einer Weltanschauung behindert (meine Ueb.)


Wittgenstein sagt mehrfach, dass es bei der Frage der Weltanschauungen unsinnig ist, von richtig oder falsch zu sprechen. Stattdessen konzentriert er sich auf die besondere Art empirischer Propositionen, die manchmal Teil des Bezugssrahmens sind und manchmal als empirische Hypothese erscheinen. Mit Bezug auf eine Person, die immer noch an den von uns als gewiss akzeptierten empirischen Propositionen zweifelt, sagt Wittgenstein, “. . . if we compare our system of knowledge with theirs then theirs is evidently the poorer one by far” (OC 286).\(^\text{15}\) Dies sind kaum die Worte eines Relativisten! Allerdings ist er sich zur selben Zeit bewusst, dass

\(^{15}\) ...wenn wir unser Wissenssystem mit ihrem vergleichen, dann ist ihres bei weitem das ärmere. (meine Übersetzung)
es sinnlos ist, eine Weltanschauung gegenüber einer anderen mit Hilfe objektiver Kriterien zu rechtfertigen. Er merkt außerdem an, dass das, was wir als vernünftig oder unvernünftig bezeichnen, über längere Zeit nie gleich bleibt (OC 336). Folglich fragt er, „Is there no objective character here?“ 16 Dieser Frage folgt eine Bemerkung, in welcher Wittgenstein feststellt, dass sehr intelligente Leute an die Schöpfung glauben, während andere dies als falsch bewiesen sehen, und dass die Gründe der einen Gruppe der anderen Gruppe bekannt sind. Unglücklicherweise sind die Folgen solch unterschiedlicher Weltanschauungen nur allzu bekannt. Wittgenstein bemerkt sehr treffend: „Where two principles really do meet which cannot be reconciled with one another, then each man declares the other a fool and a heretic“ (OC 611) 17. Dies scheint eine recht gute Beschreibung der Taten einiger sehr extremer Teilnehmer der ‘culture wars’ zu sein. In der Tat verwendet Wittgenstein die Metapher des Krieges in seinen Beschreibungen solcher Missverständnisse. Mit Bezug auf Personen, deren Meinung nach die Propositionen der Physik keine gute Grundlage für Verhaltensregeln sind, sagt er, dass wenn wir deren Taten als ‘falsch’ bezeichnen “[we are] using our language game as a base from which to combat theirs” 18 (OC 609).


16 Gibt es hier keinen objektiven Charakter? (meine Üb.)
17 Wo sich zwei Prinzipien, welche nicht miteinander vereinbar sind, tatsächlich gegenübertreten, dort erklärt jedermann den anderen zum Dummkopf oder Ketzer. (meine Übersetzung)
18 verwenden wir unser Sprachspiel als die Grundlage von welcher aus wir sie angreifen (meine Üb.)


\(^{19}\) Wo die Vernunft endet beginnt die Überzeugung. (meine Üb.)
Abstract

In this work the concept of ‘context’ is considered in five main points. First, context is seen as always necessary for an explication of the concepts of meaning and understanding. That is to say that adequate discussion of the concepts of meaning and understanding is only possible with consideration of the phenomenon of context. Context always plays a role and is not merely brought into consideration when handling a special class of words, or when there is doubt and clarification is necessary. Such a false understanding of the nature of context tries to bring it into play only when there is misunderstanding or ambiguity; tries to use it primarily to disambiguate between possible meanings. When we consider the wide-ranging metaphorical and imaginative uses of language that children learn as they learn their native language, such a limited view of context becomes readily apparent. The imaginative use of language includes the ability to meaningfully and creatively ‘misuse’ recognized structural boundaries. The use of context is a normal and essential part of our language competence. Second, context cannot be completely reduced to some system of representation. The reason for this is the presence of humans, which is always an important component of a context. Contexts in natural languages always include an active human presence; humans experience situations in ways that are not reducible to symbolic representation. The human aspect of a context is related to the non-cognitive experience of situations. Modeling of contexts may indeed achieve valuable
results, but it appears that important aspects of context such as their diversity and their connection to humans and their lives, cannot be captured by models.

Third, contexts are in principle open. In normal cases they cannot be determined or described in advance. Factors such as information, relevance, hearer’s needs, etc, make it impossible to proscribe in advance hard and fast borders for a context. All attempts to reduce the relevant aspects of a context to some sort of list falls short. Language is alive, dynamic; a context is not to be equated with a collection of information. Contexts always include the relationships of the speaker and of the hearer to the situation, and these relationships are always more than just linguistic.

Fourth, we understand the parameters of a context pragmatically, which is why we are not led into doubt or even to meaning skepticism by the open nature of a context. We recognize and work well within many different contexts, and this kind of certainty is not to be equated with propositional knowledge. This pragmatic knowledge belongs in the category of an ability. It is not absolutely necessary that a competent speaker has mastered the ability to transcend contexts; one may suffer a kind of ‘aspect-blindness’, in which certain abilities or competencies are lacking. But when one is capable of doing something one does not hesitate in doubt; one simply does it. This is one of the main points in Wittgenstein’s On Certainty. It is also a main tenet of pragmatism that one has to hold some things for certain in order to raise doubts about other things. The ability to grasp a context is inversely proportional to the weight of these doubts: that is to say that when we near the boundaries of a context our level of uncertainty increases both in word and deed.

Fifth, contexts are, in principle, accessible. This denies the idea that some contexts are incommensurable. Here to a pragmatic solution is at hand: there are many different ways of accessing unfamiliar contexts, such as by forming task oriented working groups, by identifying common customs or traditions, by building tertiary contexts through creative metaphors (including syntactic metaphors), through vertical movement between language games, etc. Of particular interest in this work are contextual conflicts at the level of ‘world-views’. In the U.S.A. we are witnessing a cluster of conflicts commonly referred to as ‘the culture wars’. These are conflicts between groups whose opinions on contemporary questions such as for example gay rights, or evolution in the school curriculum, are so far apart that each group in the dispute calls
the others ‘heretics and fools’. It is no panacea, but when we at least try to understand their conflicts in light of context research, then there is reason for optimism that a step by step approach to conflict resolution may work.