Meaning as Use in the Digital Turn

ANAT BILETZKI, TEL AVIV

"In saying 'When I heard this word, it meant …. to me' one refers to a point of time and to a way of using the word." (PI p. 175)

Introduction

In the spring of 1993 I undertook to demonstrate that the digital revolution now, that is, then, with us, while inventing new words with attendant new meanings and bequeathing new meanings to old words, precluded our familiar philosophical discourse on the meaning of meaning itself. When I embarked on writing that old, actually ancient, article in the spring of 1993 I used several illustrations – of both techno-talk and ordinary language in novel computer contexts. Half-a-year later I had to desert some of those examples – they were obsolete, or irrelevant, or had simply but literally disappeared. And then, for the next several years, in half-year intervals, I rewrote that article (calling it by various titles – but always retaining the theme of theories of meaning in the computer age). I finally relinquished the project, for I arrived at the realization that all I could do, all that was philosophically feasible, was to write an article on writing that article. For, in trying to show how our classical theories of meaning (the referential, the causal, the semantic, the pragmatic, the syntactic) could not be made to accord with the revolution in meaning now accosting us, I could only conclude that something deeply conceptual was going on: we could no longer, I concluded, formulate theories of meaning. Perhaps that is the inevitable ending of this contemporaneous discussion too.

Trying to delimit this conversation, its subject matter and theses, one may ask whether it deals with philosophy *of* digitization, philosophy *in* digitization, or philosophy *and* digitization; and one may answer, tentatively, that it is, indeed, a positing of questions in the philosophy of digitization. Also, strangely perchance, in doing such philosophizing, "we want Wittgenstein to help us do it."[1] Here too, things must be delimited. This offering is not a reading of Wittgenstein on digitization (or computation, or mathe-

matics),[2] but rather Wittgenstein *for* digitization. That is to say, Wittgenstein, and specifically his time-honored "meaning as use," will be appropriated in striving to make sense of the conceptual revolution alluded to by the modestly descriptive term – "digital turn."

Another remark is called for, but now in the opposite direction of delimiting. While saying "digital turn," for the purposes of the argument to be made shortly, one could just as well have pronounced on "computers," meaning and referencing anything having to do with digitization. More specifically, the thoughts to be adumbrated here could be formulated concerning any of the numerous podia upon which the digital turn has taken place. We venture that they pertain to, and could have been noted about, e-mail alone, computer games alone, digital media alone, or the internet alone. It behooves those expounding on these subjects in technologically exact contexts first to differentiate between them and then to provide the lay reader with the lay of the land: how do internet and e-mail relate, what is the connection between computer games and internet, how does the move from windows-based applications to web-based applications impact our procedures and products, and so on, ad infinitum (with no facetiousness intended). Calling them all "digitization," actors in the digital turn, is legitimate in the present case only because we are attempting to unearth an insight that pertains to them all equally, precisely because they are the platforms of digitization. Each and any of them will be allowed, in the present analysis, as representing the whole. Perhaps, and not unexpectedly, much of the discussion will revolve around the internet; yet this is not due to technological preference or expertise but to the worthy illustration supplied by the internet for most of the points made herewith.

A Conceptual Revolution

Think of a typical web-site, even a typical philosophy web-site. It sports two key traits which make the internet anticipatory of revolution: 1) a gargantuan mixing of subjects, or topics, or disciplines, or professions – "mixing" being a poor designation for intertwining and connecting, and 2) an accompanying plurality of means – "means" being a just-as-poor label for methods, venues and mechanisms – for reaching the disparate ends that dealings in these subjects posit. One could translate this talk of "key traits," which involves such a plurality of themes, to more profound yet systematic constructs such as content and form, or subject and framework, or topic and

method, all the while being aware of the basics: that we are involved in the bringing together of several of the first with several of the latter. It is not just the multiplicity that is astonishing (with quantity and speed leading, say some, to a qualitative difference); it is the juxtaposition, both of several topics with one another or several means with one another, and of topics and means in crossings among them. The result is, I – not alone – submit, a conceptual revolution, no smaller in scope and significance than the print revolution or the industrial revolution.

This insight, or discovery, or supposition, or just plain statement – that we are in the midst of a conceptual revolution – is the basis upon which the ensuing conversation is built. It can, of course, be argued whether, and to what extent, this is a revolution at all,[3] and then whether it is a conceptual revolution in particular. Without addressing such arguments explicitly here, I take a stand on, and for, one side by claiming that the acknowledgement of the revolutionary nature of the digital turn provides the context for our discussion and thesis. In more convoluted fashion let me also suggest the following inverted nuance: our "success" in describing the current goings-on of the digital turn, and our "failure" in formulating a theory of meaning for it, will buttress the posit of "revolution." "Philosophy really *is* 'purely descriptive'" (*Blue Book* 18).

Be that as it may, we are versed in speaking about historical revolutions and, by extension, economic, political, technological, or cultural revolutions. The digital turn comprises a *conceptual* revolution, and an exceptional one at that. Being a conceptual revolution it demands that we ask fundamental questions having to do with something seemingly deeper, surely different than technology, or commerce, or law. A conceptual revolution pushes us in the way of meanings – first, by compelling us to ask about the meanings of several old concepts and about the reference of many new terms. But this specific conceptual revolution then propels us forward to the more philosophical point, which may be thought of as a meta-meta-point. Not only does a revolution arouse questions of its immediate context (like questions about, in this instance, technology and technological culture); not only does a conceptual revolution provoke queries about both old and new concepts; but this very singular conceptual turn does something more *philosophically* revolutionary: it lays to waste our (old) theories of meaning, demanding either a fundamental restructuring of the old or a formulation of something new – a new theory, so to speak, of meaning. Unfortunately, however, it may perhaps pilot us – and this may remain an open question –

into despair concerning all theories of meaning, that is to say, concerning the very possibility of devising theories of meaning. In concrete analogy: a revolution may change the circumstances of, for instance, property; a conceptual revolution, often-times accompanying another revolution, will change the meaning of the term "property"; and this specific revolution, the digital revolution, asks of the meaning of many terms and concepts (including, by the way, that of "property"), but strikingly of the meaning of meaning itself.

The Use of *Meaning as Use*

What do we mean when we pronounce, here, "meaning as use"? Does the appropriation of that phrase and that icon – meaning as use – commit one to take a certain interpretative stance on what we have inherited from Wittgenstein as "meaning as use"? While not entering the interpretative conundrums, and specifically not engaging with the Kripkean perspective that takes us in the direction of skepticism (which is, in this context, tempting and surely promising), let us adopt, tentatively, the (mostly McDowellian) reading of following-a-rule, which posits normativity and objectivity as necessary in describing the use of a word as rule-governed.[4] This ties together meaning as use with rules – "…you use it in such-and-such a way or according to such-and-such rules" (*PI* 74) – and with a community,[5] as opposed to the private individual, following those rules. Such, then, are the rules of use which go into meaning.

Saying "meaning as use" and attempting to use this construct/theory/intuition/insight for understanding the vagaries of meaning in and because of the digital turn, one encounters several ways of (perhaps facile) adoption of "meaning as use" in computers that have come up in the research literature.

First, there is the currently popular intuition that overtakes and overdoes the turn to pragmatism and pragmatics, and from there to more subjectivist, relativistic theories of meaning in the philosophy of language, but also in philosophy at large. Although not solely addressed to the digital turn and its technologies, this talk of meaning tackles the problematics currently arising as a result of these technologies and their social, cultural, moral and political implications. What is eschewed in these fashionable philosophies of the new media are not only algorithms, computation, even logic, but systematicity as such in explaining meaning. Consequently, "meaning as use" has

become a catch-all for our inability to explain the ways of words in such turbulent conceptual – and cultural – times. The label of triteness may attach to this school not because I diverge from it in all ways (in fact, in the sequel I may be coming very close to it), but because I disagree with the tone of "anything goes" that it assumes. Meaning as use should be taken seriously, as prescribing a normative, objective conception of meaning. Call it constructive rather than destructive, if you will, although, again, our final conclusions might be less than happy.

Alternatively, there is the other observation – is it trite as well? I think not – that signs are there to be used, and in its wake the understanding that a certain functional description of these signs, especially in computer languages, is necessary for their deployment. This may be, and is sometimes, called functionalism, but it is not really meaning as use. In this school we come across sophisticated computational theories that attach the title "meaning as use" to formalized computer languages when speaking about networks, randomization, etc., assuming that the non-linear and more complex systems they develop are instantiations of use precisely due to their complexities. Similar and parallel to these are the suggestions of meaning pertaining to computer use that are based on behaviorism and procedural semantics. In other words, what we encounter in all these cases is an acceptance of the computational version of mind affixed, in an admittedly non-naïve manner, to "meaning as use" as an accommodating title for complexity, nuance, and a touch of humanism. This makes sense in the ordinary-language sense of "use", but is not a very Wittgensteinian "meaning as use".

There are, to be sure, some allusions to "meaning as use" within the context of the information industry and economy (rather than society) that can be percieved as taking meaning as use studiously. One such occasion (Governor 2003), for example, is a comment made in a professional, web-based conversation, which accepts and develops the thought that concepts get their meaning through community use. Understanding that "meaning can emerge from behavior" (rather than be there for the use/behavior), it capitalizes on the ability of the internet to monitor behavior, thereby developing a framework which can accommodate rule-change as a result of diversity of behavior. Both rules and community receive the proper theoretical treatment, rendering the meaning of the concepts introduced as essentially deriving from their use within the system. Another illuminating example (Reimen 2005) conscripts Wittgenstein to elucidate the exact machinations of information-management as essentially use-dependent –

once more, not as a follow-up to information "being there" to be used, but rather as supplying the information with meaning, indeed, making it information only via its use. And again, as in the case above, this use is both rule-governed and community based.

Novel Use

What are we attempting to formulate and pinpoint? Where are we trying to go? To a thought about our workings with words and concepts under the auspices of digitization that anchor the meanings of those words and concepts in use. This does not mean locating, first, the reference of terms and then purporting to explain how they are used, when they are used, by whom and for what purpose. As Wittgenstein tells us: "One has already to know (or be able to do) something in order to be capable of asking a thing's name" (*PI* 30). Furthermore, if one is to remain Wittgensteinian, that is to say, if one is to employ "meaning as use" as a Wittgensteinian contribution, this involves the additional Wittgensteinian matters of rule-following and community of practice – in other words, a denial of private language or of an individual wielding meaning alone, whether internally or externally – in the essential framing of our questions.

But what words? Which concepts? It is not difficult, indeed, it seems to be an almost automatic feat, to list those terms and concepts that have emerged either as newly articulated words or as words changed and changed anew with the digital age. Think of those new-fangled words which have become staples of ordinary language in the digital world: internet, interactivity, interface, multimedia, cyberspace, database, connectivity, hypertext, blog, web. Then consider some concepts – here the list is daunting – that have changed in meaning, such as property, exchange, copyright, privacy, seller/buyer, speaker/audience, space, time, song, music, book. Finally, add some other words, whose very change is implicated by their digital self-reference: communication, community, information, artificial intelligence, network, computation, machine, memory, and even that most nondescript of words – search.

"We must focus on the details of what goes on; must look at them *from close to*" (*PI* 51). In order to understand these novelties, in order to grasp their meaning, one must go the Wittgensteinian way of describing the use of words and concepts. What can be said about each of them can, in a way, be extrapolated immediately to any other. In a way – the way of focusing on

the details of their use from close up. Beyond thereby telling simply of their meaning, such an account, never an explanation, of their uses would be, intentionally, exposing the hinges upon which a theory of use hangs: no clear and transparent representation, but rather context dependency, following-a-rule, and community. Importantly, however, this exposure would also unearth the depths of the changes we are now coming upon – not only of meanings but also of these scaffoldings of meaning as use. So the examples of communities that use these concepts are not necessarily the old, social, anthropological communities that we were acquainted with in our traditional anthropological studies; instead we have communities defined by the ways and purposes for which they use the internet. The examples of rules would reveal novel, sometimes unfamiliar rules, with a new, almost indescribable preponderance of rapid rule-change. And if context be minimized, for a moment, to place and time, we would discover fresh references to unfamiliar places and strange times, indeed "locations" which hardly merit the nomenclature of "place" or "time".

Naturally accompanying such descriptions of use in the Wittgensteinian context is the question of how we learn these innovative uses. Reflect, then, on how children today use computers and more so, how they learn to use them. As recently as twenty years ago computer-programming schools were giving courses – out of school, extra-curricular courses – for children who wanted to learn how to play computer games, how to solve computer problems, and finally, for older children, how to write computer programs. But looking at children of today, watching how they play computer games, work their mobile phones, operate visual and audial media, engage with others on the internet, design web-sites, and even take on financial and commercial enterprises, one cannot but be struck by how un-didactic their learning has become. This is not to say, however, that there are no *rules* of use; it is only to say that these rules are not necessarily taught *a priori*, before the use, in order that a child may learn to apply them to the digital technology at hand. On the contrary, true to Wittgenstein's somewhat convoluted rendering of the relation between a rule and its application, it is now apparent that understanding the rules consists in knowing how to apply them rightly and (what is considered) wrongly;[6] subsequently, it is the use itself that teaches. I have asked several children to explain what they are doing, not only when they engage in what may seem to be semi-automatic activities like computer games or SMSs, but even when they undertake advanced digital projects that require what may seem to be theoretical,

computational know-how. Almost invariably these children proclaim, explicitly, that they cannot "explain" what they are doing (algorithmically or systematically). They so often fall into the Wittgensteinian "this is what I do" (*PI* 217).

Meaning as Use of Meaning

Meaning as use, when used by Wittgenstein, coincides with his admonition that we describe rather than explain or theorize, that we look rather than think, that we amass human behaviors in order to understand – perspicuously – that which we, or others, do. Asking about, and then describing, the regular, but also the irregular, behavior of using a word is sufficient for understanding it – i.e., for achieving its meaning. But we now climb up an additional step to the proposal that not only have certain words and concepts been subject to a change in meaning, but that meaning itself, the search for it and its determination, have undergone a substantial transformation.

What does a Wittgensteinian do when looking for the meaning of a word? She looks at and listens to its use. The current, digitally aware Wittgensteinian, however, can google the word – and encounter far more uses than any that were conceivable before the digital age. This is, initially, a quantitative leap in the *number* of uses, and we need not belittle quantity since it has a relevant effect on the human ability to use a word. Still, there is an undeniable qualitative aspect here in which we are also directly immersed. Not only do we encounter an extended list of uses – but these uses propel us, immediately, to other uses (by links to links); these uses have no categorical limitations or disciplinarian attachments; these uses do not abide by any hierarchical order (except, of course, the algorithm which google uses, about which we are constantly inundated with hints); these uses do not easily, or even complicatedly, obey a criterion of relevance; these uses may be routine or exceptional; these uses may be repetitive or surprising. Finally, and there's the rub, the encounter with these uses changes from day to day, changing not only the "list" of uses but the encounter itself. In other words, any attempt to describe the use of a word is fated to succeed only temporarily, giving way in a matter of hours, days, at most weeks, to different descriptions, i.e., different uses, i.e., a different meaning. I'm gesturing here at what I exclaimed at the beginning: the

meaning of a concept may change daily if its meaning is its uses. This may be fascinating, yet it is a straightforwardly anticipated point. But our procedure of searching for, finding, and finally describing the uses which encompass meaning has changed as well. That is to say, our access to the use of words has been radically altered. And that is to say that the meaning of "meaning", if dependent on use, has, itself, undergone revisions of a deeply transformative, sometimes seemingly transitory, type.

How has this happened? This is not a technological question– for that we have technological expertise – but rather still the Wittgensteinian one. How have the rules of use of words – their grammar – been capable of allowing such inordinate changes? Where is the community within which these rules operate? And closely related, what can we say about the authority that makes the rules and that decides their manner of application? For Thomas Hobbes, the meaning of (certain) words were decided by the political sovereign; for certain professional communities the meanings of a specific terminology are given to experts; for children, parents, who are the sovereigns of the family community, are meaning-giving authorities, at least insofar as they teach the meanings of (certain) words. Wittgenstein's favorite authority is "We", we who participate in a community and who share a form of life.[7] Clearly, Wittgenstein's emphasis on use entails the authority to use words according to rules, but this authority is invested in us all, in all who use words. In fact, there is a turnaround involved: it is the use itself which provides the internal, so to speak, authority (rather than any external such) for a certain use, i.e., for giving a certain meaning. And, indeed, there is no mention in Wittgenstein of specific authorities being more or less legitimate in laying down proper usage.

All that being said, however, we cannot ignore our extra-Wittgensteinian knowledge of the ways of the world – of who writes, who reads, who speaks, who censors, who controls media, and who exercises power. The "who's" of such control over words, traditionally perceived as political, social, economic, military, or even sometimes intellectual aristocracies, have given way in/after the digital turn, to…to who? Use, i.e., meaning, is no longer solely determined by such long-established elites, or definitely less so, but rather by a myriad of users of digitization, users of internet and mobile communication, users of accessible media producing accessible products and services, at any given time in countless places. True, we are still witness to the powers that be who can and do control these machines. We also cannot deny that, interestingly, the powers that be who do control

the machines are no longer, or not necessarily, political (states), but rather financial (corporations). And it is almost old hat, by now, to speak of the digital divide. Nevertheless, and notwithstanding all these caveats, we are now in the throes of massive participation in the information society, spawning considerable influence, management, control and change over far more than information – rather over the very meanings of the use of words in this society.

Epilogue

A final note is called for, almost an aside, which hopefully leads to a more meaningful question. In a recent conference on philosophy of law and society,[8] people alluded often to Wittgenstein. He was "used" – abused? misused? – for tracts and debates on the law and on political and social issues by reference to following-a-rule, to particularity, to language-games, to family resemblance, and yes, to meaning as use. This use of Wittgenstein presents us with a fundamental quandary: If Wittgenstein's "theory" of meaning as use is acknowledged as being correct, then it can be allowed to do work for the language-games of law, for the religious form of life, for the language of science, for literary experiences, i.e., for any language, and for all the different language-games, that we engage in; the digital milieu becomes, then, just one more well-defined context of language use. This is a fundamentally strong position but it harbors no novelty. Simply put, if we can bring "meaning as use" into play to explain meaning, all meanings, there is no reason to portray those emerging from and in the digital turn as in any way exceptional. The other side of the quandary, the one opined and preferred by the present exposition, holds – in perhaps a startlingly non-Wittgensteinian stance – that it is not absolutely compelling that one must adopt meaning as use as one's favored theory of meaning. In that case, however, using meaning as use presently for the elucidation of meanings in the digital turn – that is to say, accepting that there has been a noteworthy turn in meanings here, not just an addition of another language or language-game – is more significant. It is precisely because the digital turn has provided and challenged us with a new behavior of meaning that we can make sense of it only, and only of it, via meaning as use. That is what is meant, verily, by calling it a *conceptual* revolution.

There is, nevertheless, a final reservation. It is said and almost-consensually agreed upon that Wittgenstein did not offer us theories – of meaning or any other philosophical issue (theories belong only in science) – and additionally, that he supplied us with the grounding to shun all philosophical theories. We do not here enter this profound fray beyond expressing a basic agreement with this reading, coupled with some unease. But, paradoxically perhaps, it is precisely this reading of "meaning as use" – not as a theory of meaning but as a Wittgensteinian way of letting us see, perspicuously, what meaning is – that is so appropriate to the conceptual revolution now with us. Let us put it another way: had this article been presented a year ago its tone would have been more congratulatory, more optimistic in anticipating the state of things to come in matters of global communication, mobile novelties, networked communities, digital education, medical inventiveness, and countless other applications of concepts aided by the promulgation of use, as it has been described above. Asking what makes the use of words in or after the digital turn different or singular, asking what gives them meaning, lets us see how only meaning as use can explain the positive emergence and change of meanings. It can just as well, however, describe the negative dissipation and chaotization of meanings. For such a rendition, "meaning as use" need not, indeed, be a *theory* of meaning. "A main source of our failure to understand" says Wittgenstein, "is that we do not *command a clear view* of the use of our words…A perspicuous representation produces just that understanding which consists in 'seeing connexions'…[this] is of fundamental significance for us. It earmarks the form of account we give, the way we look at things. (Is this a 'Weltanschauung'?)" (*PI* 122). So turning to, describing, our digital use of words does not mean formulating a new theory of meaning; it merely shows us our current world-view – and this means showing that we are in the midst of a conceptual revolution, be it one of happy proliferation of meanings (some might say "hype"), or one of wild loss of control over the meaning of meaning.

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Notes

1. The context of this article being the Wittgenstein conference in Kirchberg (2007) devoted to the theme of "Information Society," it is legitimate to ask about the fit, at most, or any relation, at the least, between Wittgenstein and that theme. These words were voiced by the organizers of the conference in their attempt to clarify that fit/relation.

2. Such renderings of "Wittgenstein on mathematics" are myriad, are more uncommon in addressing Wittgenstein on computation, and are relatively rare for the case of Wittgenstein on digitization.

3. I owe these misgivings to comments made by Andrew Frank, and several others, who have pointed out that the digital turn is an incremental technological development that, even while ushering in great changes, is not revolutionary.

4. We do not engage here with the discussions on rules and their known, attendant qualifications.

5. "Community" is a term fraught with associative tensions. I use it here, and in the sequel, as we have been using it in the Wittgensteinian community – i.e., as inhabiting the analytic opposite of "private individual." There are other mostly social and cultural implications of "community" that are not brought to bear here, but that might complicate my reading, if taken seriously. Furthermore, it is not clear what Wittgenstein means by the rarely used "community." I thank Elisabeth Nemeth for awakening this.

6. See e.g., Wittgenstein, 1956, 331.

7. This insight is more serious than the colloquial "we," used indifferently and with no conscious commitment by most of us. Stanley Cavell has given it intuitive, literary, and mostly Wittgensteinian grounding ("Must We Mean What We Say?", Cavell 1969).

8. The XXIII World Congress of Philosophy of Law and Social Philosophy, Cracow, Poland 2007.