

A Wittgensteinian approach to communication in the mode of information¹

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ABSTRACT

As we move into the age of information electronic writing has become an important technology for both writing and learning. However the extension from printed text to electronic text in the new mode of information has not been sufficiently problematised, especially in education. Electronic text is often treated as an extension of, or as being merely similar to, printed text. This paper, based upon the writings of Wittgenstein on language, challenges this assumption and raises a number of issues with which educationalists need to grapple. Those that are the concern of this paper are: the move from knowledge to information; the nature of electronic languages in (Wittgensteinian) forms of life; the authority of the author; and the ways in which subjects or selves may become constituted in the mode of information.

Introduction

Information is the catch word and the catch cry of bands of enthusiastic 'progressives' and educational reformers in education at the end of the twentieth century: the 'information' is that we are approaching Nirvana. Indeed most curricula in western schools are being restructured by what can be called the information economy. Reasons which are often given for this thrust relate to the conjoint development of electronic communication and the new mode of information. But the *form* that this 'new' education should take in this new age of electronic communication, especially in relation to reading and writing, is seldom discussed or even *problematised*. Essentially it seems to be seen as a continuation and *extension* of traditional print literacy, and the move from the printed word to electronic language is not philosophically problematised in the educational literature (see Marshall, 1996a). But nor in education has the difference between oral and written communication been problematised either, as it has traditionally in philosophy from Plato to Nietzsche at the least (see eg, BGE: #247).

It is my contention that the information economy is a major force restructuring not merely the curriculum but, also, our social and cultural relations, established notions of rights, power and authority, and our notions of subjectivity. The intention of this paper is to problematise these issues from a Wittgensteinian position, by concentrating first upon the concept of 'information', contrasting it with the more traditional concept of 'knowledge', and with how reading and writing are conceived *now* in our form of life. Second, I will look at the logical possibilities of the arrived at account of electronic writing and, finally at the implications for the authority of the author and the constitution of subjects.

The information economy

In the new educational literature there is a great emphasis upon information, and the skills necessary to succeed in the new age of information. The sources which will be used to problematise these notions will be mainly from New Zealand but, I believe, the issues and notions are common to other western educational systems. For a fully discussion of these issues see Marshall (1998).

In 1988 the New Zealand education system was launched into a number of 'stunning' changes. New structures were imposed, and continue to be imposed, rather than negotiated between all stakeholders in education, and they are similar to those which have taken place, or are taking place, in Australia, Britain and Canada, with the intellectual framework encapsulated by the earlier ideas of John Locke and Adam Smith, and the more recent work of such as the Harvard neo-liberal philosopher Robert Nozick, and the Austrian born economist, the late F.C. Hayek. If these proposals for change in New Zealand were launched initially as administrative changes they were soon seen as educational *reforms*; if initially they were seen as providing a more efficient delivery of educational services they were soon said to be capable of providing a *better* education. Further change festers on, with recent moves on university governance and finances, for the universities had initially deflected the worst of the proposals for their changes.

The New Zealand Curriculum Framework states that it (Ministry of Education, 1993, p.4):

describes the elements which are fundamental to teaching and learning in New Zealand Schools. It states the *principles* which give direction to all teaching and learning. It specifies seven *essential learning areas* which describe in broad terms the knowledge and understanding which all students need to acquire. The framework sets out the *essential skills* to be developed by all students. It indicates the place of *attitudes and values* to be developed by all students. It indicates the place of *attitudes and values* in the school curriculum. It gives direction to the development of the more specific *national curriculum statements* which describe in more detail the required knowledge, understanding, skills and attitudes. Finally, the framework outlines the policy for *assessment* at school and national levels (author's emphases).

Even though the term 'knowledge' is used in this opening major statement to this important curriculum document and occurs in a number of other places, it is generally accorded a lowly position, and essentially used to explain other definitions or principles. Thus, while 'knowledge' and 'understanding' get into the text they are not emphasised or seen as crucial in the curriculum 'message', and only appear as part of the definitions of other more important 'things'. In the nine principles said to underlie the curriculum 'knowledge' does not occur in any of the formal wording of the principles. In other words knowledge is not considered important enough to occur in the wording of any one of the principles which 'give direction to the curriculum in New Zealand schools' (ibid.: 6). It is used as part of the definition of 'learning areas' and occurs again in relation to the curriculum (ibid.: 9) but as 'curriculum' has already been defined in terms of learning areas this is merely tautologous, and does not represent any new principled approach to knowledge as being crucially important. Knowledge is not mentioned at all in the four pages (ibid.: 17-20) devoted to skills. Thereby the document's skills are related to information and not to knowledge.

There is then a stunning lack of concern in this document - a silence - with basic and fundamental philosophical questions about the nature of knowledge and associated notions of pedagogy. Central to a consideration of curricula are questions about what counts as knowledge, how it is defined and controlled, and whose knowledge is selected for inclusion - who decides and on what basis? What counts as important knowledge also defines what is seen as *not worth knowing* and, consequently, the interests of different gender, class and ethnic groups may be unequally represented in what is, and what is not, included in the curriculum. At least philosophers have traditionally seen such questions as important!

The curriculum is no longer presented in terms of disciplines - as forms of knowledge structured by such things as key concepts, principles and methodology - but in terms of learning areas, and of getting skilled in those areas. Even though traditional names from disciplinary areas are used the implication is that learning areas are wider concepts than disciplines. Because language areas are not defined in terms of the more traditional disciplines it can only be assumed that interdisciplinary enquiry is possible. But how is historical enquiry to be meshed with mathematics and science with literary appreciation, for example? There is little or no justification for these learning areas, other than pragmatic or economic considerations, and the term 'knowledge' is in no way employed to justify these areas, but at best becomes some pragmatic outcome of skills and information acquisition in these areas.

Students must study in all of the essential learning areas: language and languages; mathematics; science; technology; social sciences; the arts; and health and physical well being. These essential learning areas are said to be broad categories of knowledge and understanding, which take into account the common curriculum experience of schooling today, both in New Zealand and overseas. But how these categories have been developed is not clear. If they are not subjects per se, are they merely descriptive of what goes on - the common curriculum experience of schooling today? If so, to talk of the curriculum as being directed by the principles seems a little inflated. Curriculum principles should be *principled*, providing general grounds for direction and evaluation of what should be in a curriculum. But the list of essential learning areas seems more like a list, and a tick off list at best. There is no rationale provided in the alleged principles for the essential learning areas based upon a coherent notion of knowledge.

Philosophers, traditionally, have also drawn a distinction between knowing *that*, in the sense of knowing *that* something is the case, and knowing *how*, that is with knowing how to do things in practice. The distinction can be illustrated, for example, between knowing that it is raining outside and knowing how to ride a bicycle. In education knowing that has tended to dominate knowing how, but in the reform literature there is a very explicit emphasis on getting skilled, wherein learning as a *process*, and of knowing *how* to do things, has replaced knowing some *content* or thing.

In the areas of attitudes and values in the curriculum documents, it is an attitude towards learning (as a process) that is valued and not an attitude towards knowledge (as something known). It is the processes, the ever ongoing learning and reskilling processes, that are seen as of paramount importance. There are parallels here with the support for approaches to the curriculum which can be called, broadly, constructivist. In constructivist approaches to pedagogy what is important is the process of construction, and not the object constructed, especially in radical versions of constructivism (see eg, Glasersfeld, 1990).

Knowledge has in effect been replaced by *skills* and *learning* processes. Anything which might have been seen as obtaining knowledge - an *object* of an activity - seems to have changed into an activity mode, where what is important is a *process*. Knowledge, in the sense of knowing that something is the case, has been replaced by knowing how, with the explicit emphasis on getting skilled, and learning as process has replaced knowing some thing, in the notion of learning areas, getting skilled and in the area of attitudes and values (p.21). It is an attitude towards learning (as a process) that is valued and not an attitude towards knowledge (as something known). It is the processes, the ever ongoing learning and reskilling processes, that are seen as of paramount importance. As everything is in change the world is in an almost continual Heraclitean flux.

But that is in part because the outcome of all of this is not knowledge but *information*. And because it is (merely?) information it has to be continuously 'relearned', readjusted and restructured to meet the demands of the consumer in the service of the new society in the Age of Information.

When *The New Zealand Curriculum Framework* is searched under the skills section, what is found is information. It is said in that section that students will (1993: 18):

- identify, locate, gather, retrieve and process information from a range of sources;

- organise, analyse, synthesise, evaluate and use information;
- present information clearly, logically, concisely, and accurately;
- identify, describe, and interpret different points of view, and distinguish fact from opinion;
- use a range of information-retrieval and information-processing technologies confidently and competently.

However students are also meant to have problem solving skills. These would seem to be the normal liberal educational set of critical skills which are normally seen as part of the educated person's skills. But what they are given to operate on is a problem. Whilst it is said that fact should be distinguished from opinion, that 'endeavour', however, rests in the mode of information, and on the schema of skills outlined would amount to testing bits of information against other bits of information because the fundamental concepts are in the information mode. There is no attempt to distinguish information from knowledge, or any 'flash of insight' that these notions might be different.

In summary then the economy of information has transformed the curriculum so that it: is tied to the economy and vocational interests (see Lyotard's (1984) prophecy on performativity): has replaced disciplines with language areas: has replaced knowledge and understanding with skills and information: and has downplayed knowing content to emphasise learning processes.

The mode of information

According to Mark Poster (1993: 3):

The prospect of instant universal information, introduced by electronic media, clearly has profound effects upon society, the extents of which are still to be determined. But the conquest of space and time by electronic media augurs more for institutions and for theory than a mere retuning of practices and ideas to new communicational frequencies.

Poster (op.cit.) claims that language is being wrapped differently by new configurations in electronic communications. What does he mean by 'wrapping'? First, there is the distance between addressor and addressee which imposes different relations from say face to face oral communication; there are changes in the traditional notion of the authority of the author; there are new relations between message and context, as there is no real context in which the 'truth' of information can be assessed (in Wittgenstein's terms there is a break between a form of life and everyday language); and there are differences in the ways in which senders and receivers may represent themselves. This new wrapping of language imposes in turn new relations between science and power, between the individual and both society and the state, between authority and the law, between family members, and between consumer and retailer.

There are a number of issues here, and they are not unrelated. These are: a concern with the fragility of social networks; the potential breakdown of traditional authority structures associated with oral and written communication; new ways of exercising power relationships through these different forms of 'knowledge'; and new ways of constituting the self, in the new realm of electronic communication. Finally there is the element of control and/or dissemination of information. When, for example, information is readily available on a scale never previously envisaged, it seems that it is not being freely disseminated. There is a politics of control which may deny access to those who do not have the technology and the assets to *purchase* information. In principle information is available to anyone, with traditional barriers of space and time obliterated by electronic communication. Why restrict access?

Logical and empirical possibilities

In relation to social networks, including the notions of the authority of the author and authority structures which exist and may be needed in a society, we can *logically* envisage a breakdown in what Wittgenstein termed a form of life and, therefore, a breakdown in language. This is for the discussion initially a logical possibility *only*, but one which may become empirically the case. Everyday language might become disconnected from forms of life - the world - where for Wittgenstein language 'gained' use, and in which meaning is embedded. Language was in the world or form of life and not separate from it (see eg, Smeyers and Marshall, 1995: Intro).

Of course this is not to sever a relationship between language and world but to replace a human world or way of life and our language in this world with a world of simulcra and pixels on a screen. This world would at best be a world of technology in the age of information: at worst this world would not necessarily be representative of a human world or way of life, even if it were devised by humans, and of our everyday language (s). In the worst scenario the humans who have devised it have not seen what this could mean for language in our pre-electronic writing world, as the assumption would be that the language on the screen is merely the same as print on the page. Not so and one need not be a Wittgensteinian to understand that new relationships have arisen between terms and pixels on the screen and questions concerning the 'reference' of words on the screen have already been raised (eg, Lanham, 1993). Thus it has been said that the signs on the screen, which we take as 'words', are self-reflexive - they *refer* to themselves. Thereby reference to a 'real' world may break down - and this alleged breakdown does not depend upon construing 'the' world *philosophically* in realistic and objective terms.

If words are no longer used as part of language-in-the-world then we may no longer even have a language - as we know it. Instead we may be entering a world of private languages which, Wittgenstein argued correctly, are incoherent from the implicit assumptions of our everyday language. Wittgenstein used his famous beetle in the box argument to argue that private languages were impossible. His beetle in the box argument in *Philosophical Investigations (PI) is* (PI #293):

If I say of myself that it is only from my own case that I know what the word 'pain' means - must I not say the same of other people too? And how can I generalize the *one* case so irresponsibly?

Now someone tells me that *he* knows what pain is only from his case! --Suppose everyone had a box with something in it: we call it a 'beetle.' No one can look into anyone else's box, and everyone says he knows what a beetle is only by looking at *his* beetle. - Here it would be quite possible for everyone to *have* something different in his box. One might even imagine such a thing constantly changing. But suppose the word 'beetle' had a use in these people's language? - If so it would not be used as the name of a thing. The thing in the box has no place in the language-game at all; not even as *a something*: for the box might even be empty.- No, one can 'divide through' by the thing in the box; it cancels out, whatever it is. That is to say: if we construe the grammar of the expression of sensation on the model of 'object and designation' the object drops out of consideration as irrelevant.

The argument in *PI* follows from an earlier summary or conclusion which he draws from his account of following a rule (PI #242): 'If language is to be a means of communication there must be agreement not only in definitions but also (queer as this may sound) in judgements'. The beetle in the box argument shows that there cannot be agreement either in definitions or in judgements. If one cannot look into someone else's box and if 'the thing in the box' is compatible with there being nothing in the box, and with the object in the box continually changing, then there cannot be agreement on definition. And if we cannot look into the box then there cannot be agreement in judgements because there may be a deliberate deception by someone about there being a thing in the box, under which circumstances we cannot therefore distinguish in principle between cases of there being a thing in the box - a subject to be talked about - and there being nothing in the box - and nothing to be talked about.

Wittgenstein's point here is that 'beetle' could have a use in those people's language games but it could not be used to refer; 'it could not be used as the name of a thing' (PI #293). But what use could it have? Or do we have a very different type of language game than our everyday language game? That is essentially what we have, I would argue, on the screen.

If we use the terms of the beetle from the beetle in the box argument (PI #293), the screen in electronic writing becomes more like the black box than the world, the pixels/signs on the screen like words, and their references are like the private beetles, because the pixels are self-referential or simulcra. But whereas no one else could see the beetle in anyone else's box in Wittgenstein's argument, it might now be thought that they can because of acts of transference of information. I have had pixels transferred to my screen so therefore I can see a beetle of the transmitter it might be thought. But what does that pixel *mean*? One can no longer assume that it refers to anything in the world, or that what it 'refers' to is not continuously changing, because it refers instead to a simulcra - it is a beetle.

In this 'new' language game we do not have a reference to an external world but a reference to simulcra (not even to beetles but to simulated beetles), simulated by the pixels on the screen, where meaning does not seem to be fixed and may be continuously changing.

And the problem is that pixels are not the same as print on a page. The printing machine stabilised style, presentation, meaning and spelling. Print itself had to be controlled, for example to curb the stylistic flourishes of scribes, and for a variety of reasons print was to become more or less uniform. But what has become hidden, lost or forgotten, is that thought, as represented in print, was therefore *mediated*. As Lanham (1993:4) says:

... once all this was done, unintermediated thought, or at least what seemed like unintermediated thought, was both possible and democratizable. And this unselfconscious transparency has become a stylistic, one might almost say a cultural, ideal for Western civilization. The best style is the style not noticed; the best manners, the most unobtrusive; convincing behaviour, spontaneous and unselfconscious.

Now the pixelated print calls this basic order into question, because the size of pixels can be changed, the lines of print and spacing be changed into waves and irregular spacing at the wish or whim of the creator or the reader. Print is no longer author controlled, because of the interactive activity of readers, and the earlier stable transparency has therefore been called into question. If it will thus be possible for literary texts in the past to be changed by a reader does, for example, 'Hamlet' refer to Shakespeare's *Hamlet* when a text is altered so that the 'new' Hamlet does not murder his stepfather and mother. If the answer is 'no' then we have a reference to a simulcra for 'Hamlet': but in the Shakespearean text the pixel 'Hamlet' must also refer to a pixel, for how can we distinguish between the two as texts, apart from the difference in the pixel texts?

However electronic print already has some forms of mediation. There is of course the binary logic which controls forms of presentation, and visual and aural images which pose new forms of 'epistemic' criteria. But only part of the message is presented on the screen - what one can understand can be 'controlled' by the size of the screen. One cannot easily flip a page to recall something for instance. No doubt this is also a technical problem but it does present us with a certain breaking of messages into component parts so that the message is the sum of the parts, whereas there is a composite message in writing that is more than the sum of the parts and which, often, is *shown* and not stated - especially in novels.

Another way of looking at this is at changes which are occurring in the filing of information. The filing cabinet has been replaced by the data base, in which information is stored. But information comes in as a message and is stored as a message. But the defining line between forms of messages is far from clear. The world of advertising gives messages too, and these can be stored as messages like demographic data - that birth rates are increasing/ decreasing depend upon what counts as a birth and so on ... And what seems a piece of factual information is difficult to discern from an advertising message. In many advertising messages the 'jingle' was clear to read off. It was

transparent. But with the breakdown in forms of mediation of print and the use of pixels, and accompanying visual and aural images, the transparency/non-transparency and unmediated/mediated lines become blurred.

In brief then the emergence of 'private' languages in the Wittgensteinian sense is not only possible with electronic writing but may be occurring. In which case we may be faced with a large breakdown in all forms of meaning, understanding and communication. Wittgenstein talked of language as being deeply embedded in a form-of-life. There are problems as to what he meant by this term but, from PI, it would seem that there was not a difference or distinction between a form of life and language. Language was not to be considered as separate from the world but as in the world - it is not language *and* the world but language-in- the-world for Wittgenstein. Cutting the pixel-language-world off from the language-in-the- world view of meaning which we find in Wittgenstein then, is to break language and understanding from human life and practices and to replace them with simulated life and practices 'referred' to by the pixels. Nietzsche made similar points on human life and understanding, but much earlier than Wittgenstein. For example, even in talking of the new philosopher, he said (BGE: #211):

... he himself should have once stood upon all those steps upon which his servants, the scientific workers of philosophy, remain standing and must remain standing; he himself must perhaps have been critic, and dogmatist, and historian, and besides, poet, and collector, and traveller, and riddle-reader and moralist, and seer, and 'free spirit', and almost everything, in order to traverse the whole range of human values and estimations, and that he may be able to look from a height to any distance, from a depth up to any height, from a nook into any expanse

Thus for Nietzsche even the new philosopher must have his base firmly in the world. This passage has many similarities to what Wittgenstein says on meaning and understanding, of what it means to follow a rule, and what it means to use a word (concept).

What I have tried to show above is the logical possibility of the breakdown of forms of public language (and similarly forms of life). That does not mean that this will happen empirically but only that it is possible. At the worst then we may only have to face an amended or changed notion of language as the public language absorbs or tacks on electronic language.

Authority and the author

There are a number of further and not unrelated issues here. The implications from above are that we must have concerns about the fragility of social networks given that one can now stay in an isolated site with all or any form of electronic communication available, with no apparent need to live work and think with other human beings in a form of life other than an electronic mode of information. An outcome of this may be the breakdown of traditional authority structures associated with oral and written communication. First there is a notion of the authority of the author. Instructions from officers of our social and economic institutions may be met differently from the former obedience of the 'serf, by interactive readers as they may on the one hand obey or follow those instructions, alter them so as to change the force or point of application of the instruction, or on the other hand spit on them, or treat them irreverently by turning them into jokes or comic strips.

But the author too can continuously amend and or upgrade his own text on the world wide web. Whereas printed publication meant that a text could be engaged with by others as an intellectual position, now it is unclear which version to engage with as the author's own position can change rapidly.

There are also elements of control associated with the dissemination of information. When, for example, information is readily available on a scale never previously envisaged, it seems that it is not being freely disseminated. Access is not freely available to everyone in a society. In *principle* information is available to anyone, with traditional barriers of space and time obliterated by electronic communication. But there is a social and economic 'politics' of control which may deny

access to those who do not have the technology and the assets to *purchase* information. For those who do have access however there is a danger of economic surveillance for not only are messages able to be intercepted and monitored but also one's social and economic choices can be monitored and potentially manipulated. If it is known what people's choices are then these can be used for economic or political purposes either to maximise or minimise what is politically or economically desirable or undesirable.

From a Wittgensteinian position there are several potential dangers here. First, and as already discussed, there is the potential for a breakdown in meaning and understanding associated with a new electronic form of life. However, even if forms of life and common meaning and understanding are to a certain extent maintained, there is also a potential splintering of forms of life, as some people may be denied access to 'the' electronic form of life, or they may only have access to inferior technology which denies access to certain networks or restricts them, controlling forms of information delivery and permitting non-creative forms of interaction only, to certain communities.

Associated with these restricted forms of interaction then may be a conformity of *style* and little opportunity for the expression of aesthetic notions in communication. This might occur not merely through controls exerted by the software spelling and grammar checks and by the purposes of certain networks (teletext, infomercials, et.), but by the inability of the digital based software to which certain people only have access, to permit stylistic and creative forms of interaction.

There are then new ways of exercising power relationships through these different forms of knowledge and communication. An outcome of this, in addition to changed notions of meaning and understanding, will be new ways of constituting the self.

Constituting the self

Wittgenstein talks of how he found the world and seems to see it as very difficult to change the world. This is probably the outcome of his early reading of Schopenhauer and his adoption and use of certain notions from Schopenhauer, particularly in the *Tractatus* and the *Notebooks*. But it means that to a certain extent one is constituted by the form of life into which one is born and one cannot change that world substantially - at least that is Wittgenstein's message. If forms of life have a substantial role then in establishing or constituting the self, then new forms of electronic life will constitute subjects in certain new ways. But we have already seen cases of this. For example, within the moves to neo-liberalism which Western nations have undergone in the last half of the 20th century we can notice a major change in the notion of personal autonomy away from the rationally guided forms (Kantian principles of universality) of autonomy to a notion of autonomy as making continuous economic choices. The utterance 'Shop 'til you drop' is not a descriptive act but a performative act (Austin 1962) to convince people as to what they should do and become - continuous consumer choosers in both the high street market and in services such as education and training. I will not pursue this Foucauldian notion (Foucault, 1979;1980) further here (see eg, Marshall, 1998). Instead I will turn to Wittgensteinian notions of style, and the importance for the self of being able to express oneself stylistically (cf. Foucault, eg, on Beaudelaire).

Wittgenstein had an expressive theory of meaning in relation to first person utterances. Thus 'I am in pain' is a sophisticated expression of pain for Wittgenstein, and not a report by someone that they are in pain, or a description of an inner mental state. Associated with such first person expressions for Wittgenstein were aesthetic questions of style - thus in expressing aesthetic appreciation or judgement, certain gestures were appropriate for Wittgenstein, whereas others were not. But writing makes questions of style or expression difficult in print (because of the mediation of print), as opposed say to handwriting, and more difficult in electronic writing. This is not because electronic printing has also become mediated, for what that may be is not yet clear, but because of the underlying binary technology of electronic writing. How can we get questions of style into writing, not just for aesthetic reasons, but for issues of meaning and understanding?

Yet Wittgenstein attempted this in the presentation of his thought in printed text. The numbered sections in *Tractatus* are legion. But there is also complicated punctuation to guide the reader, to pause and not rush forward for example, and there are drawings and diagrams which show things that can't be said or written. What of those things that can only be shown, known and understood by participation in a form of life. The *Tractatus* can only *show* those things. Where in electronic communication are those things that can only be shown, when reason giving runs out? Certainly diagrams, pictures, and all sorts of visual and /or aural forms of communication can be incorporated in the mode of information (which presents difficulties for how validity is to be determined, as normal epistemic criteria are clearly insufficient), as can Wittgensteinian punctuation, and aesthetic notions of expression and style, but the problem is that I have to be a participator in the form of life to understand what is being shown and not being said. How to follow the arrow for example cannot be said but only be shown, as Wittgenstein shows. Forms of life in a splintered world of electronic communication may not provide this bedrock.

Conclusion

The argument of this paper is that electronic writing is not just an extension of print technology in the age of information. Following Poster (1993) it has been argued that instead we are presented with a new *mode* of information which makes electronic language quite different from printed text. Educationalists, in the march of performativity (Lyotard, 1984), treat information as conveyed in electronic messages and as stored in electronic data bases - perhaps unknowingly- as mere extensions of print. This is mistaken because there are major problems about the nature of language, of knowledge, of authority and of the self, at the least. In general the new literature of education does not seem to see these as problems.

Notes

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