Calculative Thinking and Essential Thinking
in Heidegger's Phenomenology

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Of all of Heidegger's distinctions penetrating into the impact of information technology on society, calculative thinking and essential thinking has become one of his most incisive. By considering the precious shadows cast by this distinction it is suggested that Heidegger's phenomenology is neither individualistic nor strictly idealist. Furthermore, these shadows cast deeper implications: phenomenology implicitly attempts to reconcile the ideal with the real. An approach to expand on Heidegger's contribution - that of *perspectival thinking* - is discussed in relation to calculative thinking and essential thinking.

Keywords: phenomenology, thing, thing-in-itself, perspectival thinking, calculative thinking, essential thinking.

Introduction

In Heidegger's work "What is Metaphysics?" reprinted with an introduction by Heidegger himself in Kaufmann's *Existentialism – From Dostoevesky to Sartre* (Kaufmann 1975), we find perhaps in all of Heidegger's works the clearest rendition of Heidegger's distinction between calculative thinking and essential thinking. Indeed Heidegger himself returns again and again to this work. Firstly, in relation to calculative thinking, Heidegger says (Kaufmann 1975, pp 261-2):

> All calculation makes the calculable "come out" in the sum so as to use the sum for the next count. Nothing counts for calculation save for what can be calculated. Any particular thing is only what it "adds up to", and any count ensures the further progress of counting. This process is continually using up numbers and is itself a continual self-consumption. The "coming out" of the calculation with the help of what-is counts as the explanation of the latter's Being. Calculation uses every-thing that "is" as units of computation, in advance, and, in the computation, uses up its stock of units. This consumption of what-is reveals the consuming nature of calculation. Only because number can be multiplied indefinitely ... is it possible for the consuming nature of calculation to hide behind its "products" and give calculative thought the appearance of "productivity".... Calculative thought places itself under compulsion to master everything in the logical terms of its procedure.

And of essential thinking, Heidegger says (Kaufmann 1975, pp 263-4):

> The thought of Being seeks no hold in what-is. Essential thinking looks for the slow signs of the incalculable and sees in this the unforeseeable coming of the ineluctable. Such thinking is mindful of the truth of Being and thus helps the Being of truth to make a place for itself in man's history. This help effects no results because it has no need of

effect. Essential thinking helps as the simple inwardness of existence, insofar as this inwardness, although unable to exercise such thinking or only having theoretical knowledge of it, kindles its own kind.

In relation to calculative thinking, Heidegger makes it clear in a further passage (Kaufmann 1975, p 262) that this kind of thinking cannot comprehend itself. One gets a sense of this in view of the notion of calculative thought's compulsion to master "everything in the logical terms of its procedure" at the tail end of the above quoted passage, but the following passage (Kaufmann 1975, p 262) makes it abundantly clear:

> It [calculative thinking] has no notion that in calculation everything calculable is already a whole before it starts working out its sums and products, a whole whose unity naturally belongs to the incalculable which, with its mystery, ever eludes the clutches of calculation. That which, however, is always and everywhere closed at the outset to the demands of calculation and, despite that, is always closer to man in its enigmatic unknowableness than anything that 'is', than anything he may arrange and plan, this can sometimes put the essential man in touch with a thinking whose truth no "logic" can grasp.

Heidegger's distinction follows on from his work on both Hegel and Nietzsche. Indeed Heidegger wrote four large volumes on Nietzsche[1] and the latter himself was very familiar with Hegel's work. This distinction for Heidegger was crucial in underpinning his work that was to follow. Grasping its importance opens the possibility of comprehending Heidegger's notion of Dasein (or human's own way of Being; his/her "little" and individual spark of spirit; human's reconciliation between one's Self and one's being in the world). It is essential thinking only that comprehends human's Being - for ever missed by calculative thinking. Essential thinking is holistic because it is able to be reflective of itself and of the Being by which it itself comes forth. That is, it is able to be both within itself as thinking and also outside itself - in a very important sense to be other than itself - in terms of assessing itself. This is crucial to Heidegger's comment that essential thinking "helps as the simple inwardness of existence" because essential thinking needs time to nurture its wisdom in order to get to a stage in one's life of simplicity. This simplicity is a minimal but nevertheless effective form of thinking that also leads to an economy of, but nevertheless effective, action concerning one's existence. That is, this kind of thinking simplifies by wisdom the enormous puzzling complexity of existence. Clearly also, the sense of "otherness" pervasive to essential thinking and its ramifications as a way of producing wisdom, is crucial to the preservation of others (other people) of like essential thinking capacities. This is precisely why Heidegger says that essential thinking "kindles its own".

Technology and Technofacts

I have been speaking of care of the other and kindling the other as one's own as a by-product of essential thinking. The question inevitably arises, how are we to know that such caring is a genuine care? How are we to know that the care comes from a ground of genuine essential thinking? If the (purported) essential thinking is not genuine, that is, if it has not reached a stage of self-consciousness and is, for example, trapped in self-awareness or spuriously elevated above it, then there is a danger of spurious care of the other. Hence there is a danger of self-awareness attempting to evolve itself, but lacking

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[1] See (Haynes 1990).

the necessary development of care to do so. I take as an example of non genuine essential thinking (calculative thinking in disguise) Don Ihde's case of the *technofact*, namely technology as alterity or the "other", where one's thinking embraces - spuriously cares for as one's own - technology. Consider the following quotations from Ihde (Ihde 1988, p 255):

> These romanticizations are the alterity counterparts to .. dreams which wish for total embodiment. Were the technofact to be genuinely other it would both be and not be *technology*. But even as quasi-other, the technology falls short of such totalization. It retains its unique role in the human-technology continuum of relations, as the medium of transformation but as a recognizable medium.

(Ihde 1988, p 256):

> The existential relations humans experience may also be found within the realm of their own inventiveness, in those technologies which are made, but which, once made, take on the characteristics of the other.

Those technologies, referred to above, do take on the characteristics of the other, but that does not mean that we should be fooled into seeing them as genuine others. Were we fooled then this would be a case of spurious essential thinking, that thinking of ourselves as wise in this respect, we are really fools to our own appearance and do nothing more than give away our own power to care for both ourselves and "others"!

It was mentioned earlier that calculative thinking cannot comprehend itself. This is – by elaboration - to say that calculative thinking can only ever be within itself, but without any comprehension that it is within itself. Calculative thinking sees nothing other than itself and therefore considers nothing other than itself. In calculative thinking humans act like machines, albeit possibly extremely smart machines devoid of emotion, or more precisely, devoid of the experience of emotion. Calculative thinking might *think* that it is acting wisely (as in the case of the above Ihde example), but it has no capacity for recognising genuine essential thinking (or wisdom).

Why is it that "logic" - as found pervasively in Information Technology - cannot grasp essential thinking? Because logic cannot be other than itself. A system of logic defines its own boundaries and therefore cannot move outside those boundaries. In order to grasp essential thinking a sense of the same process by which humans are aware of themselves as self-conscious is required. It is a requirement for a way of thinking that can realise that it is thinking. It is a way of thinking that can answer the question "why do I (personally) believe this to be the case?", as distinct from, "why do I conclude this to be the case?".

Essential Thinking – Thinking Conceptually

Essential thinking is emulated by phenomenology precisely because when a (true) phenomenological explanation is read, we are reading a language that attempts to articulate the nature of concepts and conceptual thinking. By reading a phenomenological explanation of some experience, including the experience or explanation of phenomenology itself, we are reading a language that may seem cumbersome. Concerning this very point Henri Bortoft had the following to say (Bortoft 1996, p 74):

> [A] description of phenomenology [often] seems cumbersome, and it is a source of irritation to those philosophers who insist that if something cannot be said simply in English then it must be muddled. Yet phenomenology describes an experience ….

If phenomenology is possibly unwieldy it is because the expression is trying to present (or show), in the content of words, the forming of the language of (conceptual) thought. In a very important sense phenomenology explicates - to use Heideggerian terminology - the *things themselves*. The way that phenomenology un-covers the things themselves (or the meaning of things, or in the case above, the thoughts or concepts underlying the words) is by revealing the meaning of a thing as a *showing* of that meaning in the thing in question.

In *showing* Heidegger refers to the concept of *phenomenon*, by which he means "that which shows itself in itself" (Heidegger 1987, p 51). But only when something has meaning can it show itself in itself, as he says:

> Only when the meaning of something is such that it makes a pretension of showing itself - that is of being a phenomenon - can it show itself as something which it is not; only then can it merely look like so and so.

This sense of showing has nothing to do with moving backwards and forwards from the formulation of theoretical aspects of phenomenology to the factual representations of the theory. Which it seems Fodor enjoys doing - but in the bad sense. In *Psychosemantics: The Problem of Meaning in the Philosophy of Mind*, Fodor constantly seems to be playing a game, without the game yielding any serious - let alone essential - consequences. I argue that phenomenologically we get a very good sense of this in the following passage from Fodor (Fodor 1988, p 73):

> So here's how I propose to carry on. First, I'll run through a kind of case that is classically supposed to make trouble for denotational theories of meaning. Then I'll sketch ….

I suggest that the upshot of the above passage is typical of Fodor's *method* in the above-mentioned work. In other words, in this work, Fodor never really gets to the essence of anything. He provides a perfect example of the non-phenomenological approach of skating on the surface of things looking for "cases that make trouble for … theories" and thereby calculating in advance the outcome of his theoretical expedition.

Essential Thinking: The Ideal As Real

Since Heidegger's work is synonymous with the development of phenomenology, in the absence of the recognition of the phenomenological effect of the distinction between essential thinking and calculative thinking any conception of phenomenology itself will be seriously limited. Consider, for example, John Mingers' conception of phenomenology. In his work (Mingers 1992, p 175) we find three criticisms of phenomenology as follows:

> My main criticisms are as follows. First, critique, as employed in Critical Theory, involves more than the continual criticism of ideas alone, it also implies change and improvement to the material conditions of people and thus goes beyond the idealism of

phenomenology. Second, phenomenology is irretrievably individualist, that is, wedded to the viewpoint of a single experiencing individual, whereas in fact language, and thus consciousness and being, is necessarily intersubjective. .. Third, it is assumed that any realist ontology must be naively objectivist.

I will deal with each of these criticisms in turn. Firstly let me consider the view that phenomenology is strictly idealist and therefore can be of no service to improving the material conditions of people who embrace it. I agree (pure) phenomenology is idealist, but only in its purest form as Husserlian phenomenology[2]. However Heideggerian phenomenology, as it is outlined in this paper, implicitly goes beyond the subject; goes beyond 'individualism', in the very special sense that it reconciles the subject with the object. Heidegger never explicitly says this, but I believe that such a reconciliation is implicit in his work. My extension or contribution is the attempt at real-ising the ideal in Heidegger's work, or to put it in Heideggerian terms by use of Heidegger's hermeneutic *As*, making explicit the Ideal As Real[3]. As a preliminary to what I mean by the ideal as real I will prepare the way by saying that once a person begins to think in a phenomenological way that kind of thinking begins to define their experiences. What does it mean to think phenomenologically? For Heidegger it means that you must always be attempting to realise your higher purpose and thereby reconcile your higher purpose with your "little spark" (or ground of the soul) or your Dasein (your conscious self's capacity to bring that purpose into being). Heidegger argues that one's being-in-the-world is only an appearance and that the reality "behind" that appearance (or what Heidegger calls the Appearing) is one's Being or higher purpose. By seeing one's being-in-the-world as the only reality one thereby forgets and loses connection with one's Being; with one's central purpose and meaning. One way of appreciating a sense of Heidegger's point is to move to a state of liberating yourself from your being-in-the-world. That is, to do something that does not directly involve yourself or the products of yourself or your thinking about yourself as "the only reality". If you enjoy visiting another country for the first time or bush-walking or sailing or skin-diving, while doing so, do you not get a sense of liberation precisely because your being-in-the-world is now indirectly (that is, you are not concentrating on your being-in-the-world) participating in something grander? And by being absorbed by that grandness, or in moments when that was the case, (a new culture, the mountains, the wind, the sea, etc) are you not able to see yourself (your being-in-the-world as man or woman) - with a sense of joy - in perspective? These points are all the more reinforced by the fact that Heidegger never mentions the word "man" (or "woman") in his work, such a state of being is always referred to as Dasein. Why? Because Heidegger is constantly reminding us that we must try to see things from our Being's point of view, that is, from our higher purposes' point of view. Dasein[4] (or being-in the-world revealed as Being) is our way of realising (bringing into being) our Being (the ideal of our higher purpose). I argue that all of Heidegger's work implicitly attempts this reconciliation between the ideal Being and the real being. In my view this is a demonstration of a thoroughgoing concern and capacity for aiding humankind in its material world in providing for what they need to realise their destinies. This is the case because it serves to focus humankind's capacities on its

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[2] A further point is that Husserl himself received the term "phenomenology" from Hegel. As Lyotard notes (Lyotard 1991, p 65) "it is from Hegel that the term phenomenology received its full and singular meaning, with the publication of *Die Phanomenologie des Geistes*. Phenomenology is "science of consciousness", in that consciousness is, in general, knowledge of an object, either exterior or interior.

[3] Not that "Ideal As Real" is to be found explicitly in Heidegger's work, rather, it is implicit.

[4] Which is never meant, by Heidegger, as singular or individual, although it has an individual expression.

particular and often unique contribution (or purpose) in the world. It also neatly serves to distinguish between need and want: need for their higher purpose or destiny and want (and most often needless want or excessive want) by their being-in-the-world.

Let me now consider Mingers' second point, the notion that phenomenology is "irretrievably individualistic". I would agree that phenomenology as Edmund Husserl (Husserl 1970) first conceived it was individualistic which produced extended analyses of the notion of intentionality. On the other hand Heidegger rarely mentions intentions. Why? Because Heidegger is interested in explaining phenomenology in the broader sense. As indicated above, Heidegger never mentions an individual person referenced as "man" or "woman" in any of his work. Indeed as Haynes (Haynes 1990, p 59) points out this could be a criticism of Heidegger's phenomenology that because Heidegger's phenomenology omits an explication of the subject, it, unlike Husserlian phenomenology, lacks a sense of seeing. But this criticism can be overcome by considering that Heidegger is not interested in strictly explaining phenomenology from the view-point of being-in-the-world, he is far more interested in explaining how being-in-the-world can be reconciled with overall purposes. This takes Heidegger's analysis out of the individual and into the universal or general concern for humankind's welfare. So I see Heidegger's phenomenology as being inter-subjective. Which is the very thing that Mingers accuses "Phenomenology" of not being able to be. I also note, in fairness to Mingers, that Mingers does not refer to Heidegger in his paper.

I now turn to Mingers' third and final point that phenomenology assumes that any realist position or ontology must be naïvely objectivist. I agree with Mingers on this point. But I don't see it as a limitation. From the perspective of phenomenology, which takes as its overriding tenant that whatever objects are seen with the eyes (or apprehended by any of the physical senses) in-the-world are only appearances, it follows that realism will therefore only provide part of the overall scheme of things. If realism cannot see beyond itself then it must be regarded as naïvely objectivist.

Essential Thinking - Artistic Thinking

A further depth to Heidegger's essential thinking can be explored in Nietzsche's distinction between the "artist" and the "scientist". The following passage by Nietzsche provides the necessary detail from *Daybreak*, (Nietzsche 1988, p 9):

> What is astonishing in the world of science is the opposite of what is astonishing in the art of the conjurer. For the latter wants to persuade us to see a very simple causality where in truth a very complicated causality is at work. Science, on the contrary, compels us to abandon belief in simple causalities precisely where everything seems so easy to comprehend and we are fools of appearance. The simplest things are very complicated - a fact at which one can never cease to marvel!

Why is it that the artist as conjurer wants to convince us that there is something more about simplicity than meets the eye? Because simplicity is the result of seeing the underlying idea in the conjuring illusion. Once the idea is discovered - the rest is simple and can be performed with an elegant simplicity given practice. To begin to see the idea one firstly needs to see how all the pieces (or components) to the illusion fit together, i.e. you are looking at the components after they have been sequenced together. Once you have understood how all the components fit together, the comprehension of the idea

underlying that then follows. But seeing the idea in the first place requires going well beyond the content of the components, because in this case, there are initially no components, the components are the result of the emergence of the idea (in the first place). In this case, the artist must be able to "see" in a certain way, to see a certain "form" that the as yet undefined (content of the) components will suit and then work out the content from that idea of the form. The straight-man in the act is the so-called paradigm "scientist" who works the other way around. She/he works in the content of a problem looking for a solution. However, if the scientist discovers the form independently of the content, then the scientist becomes - perhaps unwittingly - the artist. Nietzsche's point is that you will never find form in content by looking at content itself. You have to discover the idea first - the form - and then build the content to suit that and the same applies when you are trying to interpret anything that an artist has produced (look "behind" the work for the idea). In other words, you have to see form As[5] content such that, whatever content is currently seen, one does not lose track of the theme or idea to which the content points. In order to see form as content one needs to synthesise one as the other. Indeed the idea of "form as content" comes from Nietzsche, as follows from *The Will To Power* (Nietzsche 1968, p 433, section 818):

> What it takes to be an artist is that one experience what all non artists call "form" as content, as "the matter itself". With that of course, one is relegated to an **inverted world**. For from now on one takes content to be something merely formal - including one's own life.

How would that process of seeing the idea "behind" the work and yet not losing sight of the work itself, take place? One side of the synthesis is the objective work itself, the content. The other side of it is the idea underlying the work. The idea is not (objectively; literally) lurking in the work (it is not literally behind the work). We, in a sense, have to be able to re-create it. We have to be able to real-ise the idea (make the idea real; bring it into being) and one way of doing this is to do what the artist did in the first place, except we have the advantage of the finished product - whatever that may be. The finished product will forever withhold its idea (its form) if we simply see the "thingness" of the product. Except of course if the product of the idea is an ordinary thing with logical working components then it can be dismantled, only to discover that it has no real (or original; unique) idea behind it. It has a "sameness" about it (it is bereft of form).

So in this sense the "artist" also incorporated a sense of the "artist as scientist". The objectivity of the artist derived in part from a recognition that there was more to life than just its circumstances (or space/time parts). The artist recognised the essential contribution of the subjectivity of circumstances without losing sight of its transformation into an objective content. Such a transformation as content could be in terms of ideas or, for example, insights as medical diagnosis; an academic theory or a dot on a page that becomes a work of art of any kind. It is in this light that "artists", in general, reconcile the subjective with the objective.

Perspectival Thinking: Subjectivity as Objectivity

That artists can reconcile and reveal in their work subjectivity as objectivity axiomatically entails, for the artist, a thinking process. I suggest the essence of the

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[5] This is the hermeneutic 'as' (as distinct from the apophantic 'as') – see later explanation.

reconciliation inherent in that thinking process is a sense of perspective. Consider a specific example of, what I would regard as, perspectival thinking (subjectivity as objectivity) – in two penetrating analyses - by the eminent art critic, Robert Hughes.

For the first analysis, I take Robert Hughes' comment during episode 2 of his 1996 television series on *American Visions*[6], when he said:

> …. and what they [the American pioneers] couldn't do for themselves, they needed Art to do it for them.

The critical issue arises - in the case Hughes' cites - out of the work of the artist capturing the sense of inspiration required for any pioneering work. It is a sense of inspiration, which this time derives from outside of themselves as subjectively experiencing American art forms. Such experiences transform their pioneering objective contributions - of, as it turns out, architecture - through to the formulation of the American constitution.

Indeed Hughes has a very fine sense of perspectival thinking - subjectivity as objectivity - (although he would not express it in this way) as can be discovered from the following passage (Hughes 1990, p 328), in which he describes a painting by Susan Rothenberg:

> They do breathe; light and air - of a rather claustral kind, but atmosphere just the same - bathe the bodies and unify them as objects in the world while threatening always to dissolve them as emblems of personality.

While describing the work of another – perspectival thinking – artist, Hughes himself has articulated his own capacity for perspectival thinking - a clear example of subjectivity as objectivity – in his above viewing of Rothenberg's painting. The content of the painting breathes life into its own representation of what it depicts as objects in the world. The content of the painting clearly brings out the form of what it points to, but in an ironic twist (or perhaps yet another one of these "complications" that in the end helps to see simplicity at work!) the painting is so good that it also points back to itself. It points back to its own capacities (to its own form) and thereby dissolves the need of a real personality (which it depicts) to do it.

Consider as a further example of perspectival thinking the implications of the following quotation from Terry Winograd in relation to Heidegger (Winograd & Flores 1986, p 31):

> Heidegger's work grew out of the questions of *phenomenology* posed by his teacher Husserl, and developed into a quest for an understanding of *Being*. He argues that the separation of subject and object denies the more fundamental unity of being-in-the-world (*Dasein*). By drawing a distinction that I (the subject) am perceiving something else (the object), I have stepped back from the primacy of experience and understanding that operates without reflection. Heidegger rejects both the simple objective stance (the objective physical world is the primal reality) and the simple subjective stance (my thoughts and feelings are the primary reality), arguing instead that it is impossible for one to exist without the other. The interpreted and the interpreter do not exist independently: existence is interpretation, and interpretation is existence.

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[6] Shown on ABC television in Australia, August 1996.

When Heidegger argues that there is an impossibility of the subjective and objective existing without one another he means this in a meaningful sense - or in the sense of Being (which for him was the meaning of being (or merely existing in the world)). Another way of putting this point would be to say that such an impossibility for Heidegger would be unintelligible without Being, since an objectivity viewpoint (that some thing is an object) is only possible from Being's subjectivity. Conversely, people operating at the level of being (merely existing in the world, or, being trapped in calculative thinking), would, for Heidegger, not have a sense of things as objects. For them everything in the world would be an object, except they would not realise that fact and this case is not an objectivity viewpoint, but simply a case of objectivity (in operation).

Heidegger says it is impossible for the subjective and objective to (meaningfully) exist without one another. However, Heidegger does not mean this in the sense that, for example, Hofstadter raises in relation to comments made on Morowitz's *Rediscovering the Mind*, where Hofstadter says, "Does a tree in a forest make a noise when it falls if there's no one there to hear it?" (Morowitz 1981, p 44). For Heidegger the interpreted and the interpreter coexist in a very special way. That is, for Heidegger, *existence itself is interpretation*. So in terms of a perspective, we have existence as interpretation, and similarly, for interpretation is existence, in order for us to see this relation; in order to bring together the two terms as a valid perspective, we have interpretation as existence. It follows then that if it is impossible for subjectivity to exist without objectivity, unless one has a sense of objectivity that comes about from subjectivity, then the interplay of these two categories can be expressed, or conceived as a perspective, as: subjectivity as objectivity.

The Hermeneutic As

In this very important sense it is subjectivity as objectivity that brings into Being objectivity (not that subjectivity brings objectivity into being (or its thingness .. that already exists)). I argue that it cannot flow the other way (objectivity as subjectivity) - nor does it make any sense in view of what has been presented above - as with the example of interpretation and existence. It cannot make any sense to speak of, or render as a conception, objectivity as subjectivity, simply because it is only ever subjectivity (the I) that views. The notion of a conception or perspective of seeing the relation as expressed in this paper between the two terms existence and interpretation and vice-versa and the one-way flow of two terms subjectivity and objectivity is assisted by Heidegger's distinction between the apophantic "as" and the hermeneutic "as". Heidegger distinguishes between the apophantic "as" of assertion "which lets something be seen as something [else]"[7] and the Heideggerian hermeneutic "as" which Fay (Fay 1977, p 29) describes as:

> The hermeneutic "as" of our practical concern takes something in a way in which it is related to man's interests and concerns. The thing is not merely something which is looked at or observed, something available (Vorhandens). It is related to man through being involved in his plans and projects.

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[7]Taken from (Haynes 1990, p 56).

In Brian Birchall's work (Birchall 1991, pp 161-164) we discover an insightful explication using the analogy of "a theme" as a way of seeing the upshot of the Hermeneutic "as". Birchall says (Birchall 1991, p 162):

> The question of meaning is, in aesthetic terms the question of *theme*. In a work of Art we articulate a theme, which is to say, realise and reveal a meaning whose truth is its realization and revelation. Themes do not exist "out there" independently of being articulated. Were this the case, all Art would be representative, concerned solely with the reproduction of the ready-made. Rather, what is articulated is its being articulated (whatever the medium) or, in terms of the hermeneutic AS, we articulate *the what as the how*.

How is it that the hermeneutic "as" renders the "what as the how"? We find examples of "the what" in the physical world, and these are objects, which we may care to look at or consider or reflect upon. If we look at an object without wondering what it is or how it came about, then we do not engage consciously with that object. That is, we do not introduce any of our subjectivity into the question of what it is or how it came to be. But once we begin to associate our experiences with that object and thereby introduce our subjectivity upon that object, the objectivity of the object (what it is) comes into focus with what we think it is or begin to think about what it might be. So we begin to impose our subjectivity upon the object and while the object itself does not change, our interpretation of it begins to emerge and this is precisely why the object as some kind of "what" begins to emerge as some kind of "how". In other words, a theme begins to emerge in our thinking in relation to the object: is it like this or is it like that? How does the theme begin to emerge? As soon as our subjectivity begins to engage upon the object, and because subjectivity is itself not an object, the engagement takes the form of revealing something that the object by itself could not tell us. The upshot of Birchall's argument for this paper is that every such engagement is like the recognition of a theme with respect to any object in focus by subjectivity. And so the hermeneutic "as" in relation to bringing together objectivity and subjectivity as "subjectivity as objectivity", is able to denote the revelation of something additional[8] about an object by connecting a subject engaging itself upon it. Note that in Fay's quote above, the definition or structure of the hermeneutic "as" allows something new to be revealed from an object that is "related to man by being involved in man's plans and projects". In terms of what can be deduced from the Birchall perspective the hermeneutic "as" is always thematically connected with human action.

The hermeneutic "as" can also be appreciated in relation to what Roger Scruton refers to as "seeing as" although, incidentally, Scruton himself does not make the connection. Scruton concludes that "seeing as" is a "strange mixture of the sensory and the intellectual". Note the following elaboration (Scruton 1982, p 112):

> In "seeing as" it is as though I imagined an object and simultaneously saw in it something else; in imagery it is as though I imagined an object and then my imagination came alive in quasi-sensory form. Moreover, the element of thought involved in "seeing as" lies clearly in the field of imagination: it is thought that goes beyond what is believed or inwardly asserted, and beyond what is strictly given in perception. Hence it is thought that is subject to the condition of "appropriateness".

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[8] That is, additional to what an object "provides" in the absence of a subject engaging itself upon it.

Another example of the hermeneutic "as" in action is recognising the implications of "the present as the past". The present is not necessarily like the past i.e. it is not necessarily apophantic, but the present is a synthesis of the past and as such we can make sense of the present by looking at the past[9]. A classic example of this point is found in the notion of cultures. But when we bring to bear upon notions of culture the sense of perspective, perhaps we find that Culture is (a peculiar example of) its own perspective. In short then, this example reveals to us that the hermeneutic "as" also provides us with a perspective on the concept of perspective. It should be noted that the concept of a perspective is itself not a perspective. The concept of a perspective is the form of perspectives in both the general and particular sense.

Understanding a Thing and Knowing a Thing-in-itself

In *What is a Thing?* (Heidegger 1967, p 22) Heidegger mentions the example of a clock, of which he says, "we can open a clock and examine it. Where here is time?".

At the level of thing-ness (physicality, everyday, place, being-in-the-world) if you pull a functioning clock to pieces and put it back together again either in its same configuration or in a different but nevertheless functioning configuration then clearly you understand it. But can you be said to know it? Knowing it entails experiencing it as meaning. In knowing it the part cannot function as the whole: the clock is, in this sense, without why. The clock itself either as a hundred separate parts or as a hundred parts linked together is no more than a thing. It makes no sense to know a clock, but it is perfectly possible to understand a clock. But when the clock works it signifies something else: the present becoming the past or the future becoming the present. At the level of being, understanding what it is that makes it tick does not of itself establish a meaningful connection with what it signifies (or points to). What the moving hands of the clock point to is the meaning of time itself: Time, or more accurately the becoming of time (the past becoming the present). At the level of being through understanding we destroy the thing as it was (i.e. pull it to pieces) in order to re-build it. When it is in pieces we could say it was clock-less and when re-built it is again a clock. Such is the nature of things, but Time itself (in Being) as becoming is transcendent and has no capacity for being "dismantled". Rather you come to know it as a movement and resonate with that movement as an idea and within that movement is also the recognition that clock time is the significant or physical way of representing the becoming of Time. The Being of Time is the present becoming the past or the future becoming the present. Once we have made this transition – and recognised it as a transition - out of thing-ness (in being) we then allow the meaning of Time itself to shine through. The meaning of Time is allowed to reveal itself as Being now made explicit as the object of thought in being represented or signified as the idea pointed to by the clock. The reality (meaning) of Time appears in the appearance or guise of the clock as the object of thought and when its meaning is preserved intact, then, and only then, do we know it. Clock-time is what the thing, the clock, produces, but the clock as thing points to the meaning of clock-time, namely Time and Time (as becoming) is a thing-in-itself[10].

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[9] The saying, which roughly is, "those who forget (the lessons of) history are doomed to repeat it" is of consequence here. In a synthesis you take up the past into the present: your present perspective if it comes from perspectival thinking does not "forget" the past, but is constantly subsuming itself into the present in compassionate terms.

[10] Taken from (Haynes 1990, p 40).

The same point could be made with respect to a person (the body; the appearance; the being) and his/her (historical) identity (his/her culture; his/her Being). The body of the person is a thing, but what the person as identity; as his/her worth; as a human being is, is his/her thingness-in-itself. The fundamental inability to distinguish between things and things-in-themselves is a fundamental lack in our capacity for indirectness; a critical loss of the development of our convictions; a complete diminishment of our sense of subjectivity as objectivity and a minimisation of our sense of Humanness.

A further connection can be made in relation to Information Systems. A development of this Heideggerian theme and another perspective in its own right on things and things-in-themselves in relation to *Humanness as Colonial Systems* comes from Porra. She argues (Porra 1996) that Humanness as a system evolves as a species and in its collective form as a Colonial System (like Humanness itself) cannot exhibit thingness. In other words, Colonial Systems are not things, they are rather, by implication, things-in-themselves. Consider the point explicitly put by Porra as follows (Porra 1996, p 402):

> Since a Colonial System is not a thing, it is not bound by the laws of <u>complexity</u> or <u>structure</u> in a similar way to objects. Its ability to change its size (<u>growth</u>) in radical shifts introduces a system which can alter its complexity and structure at will. Because of its history, a colonial system is a relatively independently operating unit which chooses its <u>goals</u> and the ways to achieve them. This history of the system is the sufficient and only source for the system to achieve its own objectives. The history of the colonial system is also the source of nearly complete endogenous <u>power</u>. As a colonial system humanness is emancipated by definition.

By Humanness Porra means - from Heidegger - "Dasein's kind of Being as a phenomenon of the kind of context dependence in historical time" (Porra 1996, p 401). Dasein is the primordial thing-in-itself which underpins Porra's Colonial System. As such a Colonial System cannot be meaningfully inspected with the logical, fundamental or literal eye, but I would argue it can be thematically appreciated from the perspective of phenomenology. In other words, Colonial Systems make sense perspectivallyT[11]. In relation to Colonial Systems, the word history is not meant in the literal sense "as the sufficient and only source for the system to achieve its own objectives", but rather thematically in the sense of synthesising from its own history what is meaningful for it to evolve. This is precisely why Porra says, "as a colonial system humanness is emancipated by definition". What defines humanness is its own history, not literally but thematically. It both defines (evolves under its own power and is powered by its own evolvement) and frees itself (because it is not a thing which is bounded) not only from itself but also - seemingly paradoxically - from its collective form as a Colonial System. Humanness must emancipate itself by definition, it is the paradigm thing-in-itself.

The Importance of Perspectival Thinking

Calculative thinking limits itself to understanding – without understanding that fact - the part componentry of "things". Essential thinking has the capacity to know "things-in-themselves" including itself. As a species, our relationship with Information Technology dare not restrictively be merely understood, it needs to be both understood and known; it needs perspectival thinking (a reconciliation of understanding and knowing: knowing as

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[11] What I conclude to be the action of being in the perspective.

understanding). If the relationship between humans and Information Technology were merely understood then we could not develop any kind of conviction about Information Technology itself simply because Information Technology, like calculative thinking alone, only contains pieces of information.

Consider the possibility that a subject (a person) recognises that the specific knowledge of, or the path to solve, a problem is hidden already in the question that articulates the problem in the first place. It was certainly true for Heidegger that a (wise) question was far more important than its consequent answer. Heidegger considered this point from the perspective of phenomenology, that to ask a penetrating question is to already have come to an opinion on its answer. Often the very asking of the question was like taking the lid off an almost pre-specified Pandora's box. Imagine now a question entailing and referring to only logic. How could that question, in any sense, contain the seeds of its own answer? The reason is, I submit, that logic has no capacity for perspective. Perspectival thinking is grounded in convictions, values and ethics. Perspectival thinking recognises logic and reason, but does not entirely rely upon it.

Michael Polanyi, for one, recognised the answer hidden in a penetrating question. For example, in relation to intuition, Polanyi saw that ethics was a higher source of thinking than logic or reason. Why is it that ethics provides a different ground which is more fertile for intuition than that of logic and reason for Polanyi? To uncover the hiddenness within this question we need to turn to Polanyi himself. In *Personal Knowledge*, (Polanyi 1962, p 267) the answer already implicit in the previous question, is revealed:

> Our mind lives in action, and any attempt to specify its presuppositions produces a set of axioms which cannot tell us why we should accept them. … Our basic beliefs are indubitable only in the sense that we believe them to be so. Otherwise they are not beliefs, but merely somebody's [some one else's] states of mind.

> This then is our liberation from objectivism: to realise that we can voice our ultimate convictions only from within our convictions - from within the whole system of acceptances that are logically prior to any particular assertion of our own, prior to the holding of any particular piece of knowledge.

Ethics, we deduce from the above passages, that is, our own systems of accepted convictions, from within which we speak with conviction - or what I take to be an instance of a belief in our own beliefs - arise out of the our whole system of acceptances. Such distillation arises not from one piece of knowledge; not one reasoned bit; not one logical element or group of logical elements, but the whole system. So what Polanyi argues is the ground itself for the development of an individual's system of ethics comes from the whole system, not from one individual element. The power of an individual ethic arises because it is respectful of the whole system of acceptances. The emergence of an ethic for an individual - ethic being a belief in the good of things: action that both benefits the individual self and others in that one action - is not sidetracked by any individual desire. Nor is it sidetracked by any set of instances of self-gratification, but subsumes all of these desires and groups into the whole system of beliefs and takes its grounding from that synthesis. In this way an ethic develops independently of any logical or reasoned process. We do not condition our ethic by analysing it, rather our ethic arises out of the integration of all of our beliefs and desires. So our ethic is distilled and distinctly non-logical; non-reasoned and independent of "intellectual" processes.

Our ethic retains its capacity for intuition because it is independent of reasoning and therefore emerges out of a deep sense of care. We are all born with the seeds of this deep sense of care. It is beyond the scope of this paper to suggest how that care should emerge and be nurtured in general. However, one certainly can consider cases of individuals not being able to produce an ethic upon which to base their intuitions. Such a case, for example, could arise where certain obsessions and biases of self-gratification precluded, in the individual, a perspectival synthesis of the whole system of, or collections of, personal beliefs.

As a further example of penetrating questions containing their own (hidden) answers, in *Philosophers of Consciousness*, Webb (Webb 1988, p 78) indicates Lonergan recognised that things that are viewed and thereby known to have hidden qualities have "proportionate beings [and have] .. 'parallel structures' to our knowing". Webb further comments of Lonergan's contribution (Webb 1988, p 79) that by:

> proportionate being, he [Lonergan] says, is intrinsically intelligible because it is precisely that which we are able to inquire into.

In other words there is something in the question itself that triggers a response in the system of beliefs. What does this mean? It means that in asking a question for which we can recognise a hidden answer, we are putting forward a question that has already been asked at an unconscious level. At this unconscious level the asking has been "sorted out"[12] and we, as individuals, are now putting that question forward for the conscious level of our being to apprehend. This is, in my view, the way perspectival thinking allows for what is both recognised as hidden and how it makes itself manifest as a process of uncovering what is hidden.

Perhaps another way of seeing the importance of perspectival thinking is to consider a situation where rational logical thinking is unable to apply. Flemons in *Completing Distinctions* notes a situation based on Taoist principles where rational knowledge is argued to be of no use. Consider the following passage (Flemons 1991, p 70):

> If we are up against a mystery, then we dare act only on the most modest assumptions. The modern scientific program has held that we must act on the basis of knowledge .. but if we are up against a mystery, then knowledge is relatively small, and the ancient program is the right one: act on the basis of ignorance[13].

In other words, from the above passage we deduce that in acting from ignorance we are not contaminating our intuition (inner teaching) with our rational knowledge (outer teaching). And in this strict sense ignorance can ultimately know - in that perspectival way - more than knowledge.

Conclusion

Joseph Kocklemans in his work *On the Truth of Being - Reflections on Heidegger's Later Philosophy*, had this to say concerning Kocklemans' own conception of a Heideggerian thing (Kockelmans 1984, pp 175,176):

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[12] Or more precisely it is placed within the context of the synthesis of the whole system of beliefs.

[13] Quoted from Wendel Berry, in *Home Economics*, North Point Press, San Francisco, 1987, pp 4-5.

> The thing is nothing but formed matter; and this conception also holds good for both natural and man made things. This conception accounts for the thingly element we find in every work of art.

It is precisely the capacity of perspectival thinking – in the special sense of subjectivity as objectivity - that can distinguish what is "thingly" in a work of art and what is not "thingly". This very same capacity distinguishes what is "thingly" in Information Technology and what is not "thingly" in our deliberations about Information Technology. It is the sense of perspective in perspectival thinking that allows us to make this conceptual difference, a difference, which is, to enlist the aid of Hegel, "a difference which is not any indifference of the two as diverse". The "thingly" and the non- "thingly" are in a practical – understood - sense inseparable, but in a recognised known sense they are conceptually distinct. If we cannot continue to conceptually separate the "thingly" from the non-"thingly" in relation to and about Information Technology, our capacity for mindful evolvement will diminish. Perspectival thinking allows us to see this very point. Indeed perspectival thinking allows us to see why we need perspectival thinking.

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