

Cyberbeing and Cyberspace

Alec Mchoul
September 1997

Does cyberculture -- along with its new forms of equipment and, consequently, its new modes of relating to equipment -- constitute a distinct and different way of being in the world from ordinary everydayness ? In other words, is there a distinct mode of being peculiar to the "cyber" ? Is there cyberbeing ? This paper sets out to investigate this possibility, beginning with an outline of Heidegger's concept of Dasein and moving on to look at the changes and modifications to his account that might need to be made in order to distinguish something like cyberbeing.

For Heidegger (Being), what is fundamental to being-in-the-world is that we understand as. But this does not mean : objects exist primordially in themselves as pure presence and we, subsequent to that sheer presence, come along and, as it were, throw an understanding over them. Presence and understanding are not like this. What are they like ?

The first given of what-is is that it is part of, roughly, human socio-cultural being (or Dasein). What can be in this respect is, initially, of two kinds. The first is what is ready-to-hand (Zuhanden) as opposed to the second, what is present-at-hand (Vorhanden). What is ready to hand is part of the everyday world of practical activity and consists of equipment (hammers and promises, for example -- but also the familiar means of using them). It consists of tools and methods. These come first. What is present-at-hand comes later and is only one particular way of using what is ready-to-hand : it is what comes to count as natural, objective and beyond the field of human concerted actions. In fact it is what the picture in the paragraph above mistakenly thinks of as coming first : natural, primordial, independent entities subject to such things as scientific inquiry.

Two ways of being then : the ready-to-hand (cf. "culture") and the present-at-hand (cf. "nature"). But prior to this, as we have seen, is another which Heidegger calls Dasein. Dasein is, loosely, human (as opposed to natural or equipmental) being. More precisely, it is "a being of the same ontological sort that we are" (Okrent 3). And it is ontologically prior to either Zuhandenheit or, naturally, Vorhandenheit. However, Dasein's unique capacity is that it is the only kind of thing which is ontologically constituted such that it can work with what is ready-to-hand (in order to produce, for example, what counts as "natural" and apparently, therefore, primordial). The mistake in philosophy, or indeed in any kind of inquiry, is to begin with independent entities present-at-hand -- with what might be called the merely "occurrent". Adopting Dreyfus's terms then, we can think of Dasein's primordial concern with what is ready-to-hand as "availableness", and its subsequent concern (on top of this primary layer) with what is present-at-hand as "occurrentness" (Dreyfus xi). According to this vocabulary, what is available (tools and methods) must always precede what is occurrent (apparently natural facts).

These then are the main categories of being (cf. Brandom). But we have already said that the involvement of Dasein in availableness is understanding and that understanding is always understanding as. Obviously, if availableness precedes occurrentness (and can perhaps be said to produce it), then understanding, as the first involvement of Dasein in the world, cannot be something, as it were, "naturally given" to it. It cannot have to do with a mind or a consciousness, or with subjective mental states. It must have to do with Dasein's dealings with availableness : equipment.

To understand, then, is to have appropriate dealings with equipment, with tools and the methods of their use.

These tools are part of the ordinary organized social fabric in which Dasein finds itself. Dasein always already finds itself amidst tools : communally sanctioned things for doing things, and ways of doing those things. When it uses equipment in the way that we all do and in the way that we all recognize as appropriate for the task in hand, and in a way which is competent for that task in hand, we say that Dasein understands.

So in this account of being in the world, there is intention to be sure. But to be an intentional agent, as Dasein, is not to have a certain mental orientation towards the world and its ways. Rather it is to be a certain kind of ordinary and organized practice. Therefore Dasein does not have to do with any individual or independent actor and his internal mental states. That idea comes out of the wrong view of things that is sometimes called "representationalist" or "Cartesian". On that wrong view there are, on the one hand, non-human objects in the world ("reality") and, on the other, an ego or consciousness that has to apprehend them in some way : hence intention is the state of consciousness that one of these beings (the human/subjective) has towards the other (the natural/objective). On the Cartesian-representationalist view, intention bonds the subject-thinker to the object-existent.

Against the Cartesian picture, we can say that understanding is a question of knowing how to do something or bring something about rather than a question of knowing that something exists or has such-and-such properties. Dasein can do this latter : it can make interpretations of what is occurrent -- but it can only do so as a function of its operations with (its understanding of) what it has available. So understanding is, effectively, a kind of mastery. As Heidegger puts it : "In German we say that someone can *vorstehen* something -- literally stand in front or ahead of it, that is, stand at its head, administer, manage, preside over it. This is equivalent to saying that he *versteht sich darauf*, understands in the sense of being skilled or expert at it, has the know how of it. The meaning of the term 'understanding'... is intended to go back to this usage in ordinary language" (Basic Problems 276).

Now implicit in all of this is that Dasein is always already social. It is in fact something more like "membership" than it is a "person" (who happens, after the fact of his personhood, to be included as a member). Dasein begins as membership and any particular Dasein-like thing is never not a member. In this sense Dasein cannot be separated from being-with (*Mitdasein*). Being-with is the social and there is no prior form of being that being-with is made up of. It begins (and may indeed end) that way. In this sense understanding is no more than how it is that any particular Dasein displays (or, for example, accounts for) its being-with.

How does this practical understanding operate ? In any practical activity, what is done is done for something. It is done for and goes forth or forward into some further practical activity. Hence I cut down a tree in order to get wood for the fire. The first activity produces the effect of the second. But the second activity (making the fire with the chopped wood), insofar as this is what my *Mitdasein* routinely does in order to warm itself, makes the first intelligible. In this sense, practices are articulated with one another and cannot be separated and inspected for their competent understandings as stand-alone affairs. I have shown one kind of competence when I select an axe for the chopping, another when I swing it in the right way so as to fell the tree, another when I cut the tree up appropriately for use in a domestic fire (which might involve leaving it to cure, for example), another when I use the wood for making a fire (rather than building a roof), another when I lay the fire properly so that the house is heated, and so on. There is a relational totality here which has nothing to do with my individual actions alone. This totality is a whole that precedes the sum of any actual empirical practices. It might be called the "plenum" or "gestalt" of practical competence. Insofar as I orient myself in the course of that plenum or, as Heidegger calls it, a "functionality contexture" (*Bewandtniszusammenhang*), I can be said to have understood. So understanding is always subject to a practical "as" structure, where the "as" marks an actual orientation to the ready-to-hand.

In one sense, then, we might talk about the production and the recognition of social practices as constituting understanding -- providing we don't assume that either of these terms requires a primary capacity for mental acts

on the part of anything that happens to be Dasein. Production means practical activities with equipment and their recognizably competent use. And this recognizing is, as it turns out, understanding as. The recognition can be done by any particular Dasein itself or by another or others. Recognition, in this sense, is the property of the Mitdasein. It doesn't involve seeing somebody doing something and, then, after the fact, turning inwards to see that the "mind" has registered it as in accord with some axiomatic rules for so-doing. Rather it is more-than-immediate. It consists in the very production itself as having been, all along, "how we do it". So one understands a practical activity as what is recognizably competent "for us all". The social world (the being-with) makes sense because (a) its actions are part of the plenum of competent actions and, which is the same thing, because (b) the methods for the production and the methods for the recognition of practical actions are identical. And those methods too are shared equipment.

In some fields of the study of everydayness, the identity between production and recognition methods is called "reflexivity" or "incarnateness" (Garfinkel 1). What it suggests is that this is the bottom line for anything and everything about which ontological claims (claims that they have being of some kind) can be made. We might refer to it as the "self-sustaining" property of Dasein in its direct and reciprocal relation to availability. Brandom refers, instead, to the fact that "anthropological categories" are "self-adjudicating" (387); Rorty refers to the fact that "social practice is determinative of what is and is not up to social practice" (356). These phrases suggest that whatever else might be a candidate ground for "what is social" (things such as "nature", "topography", "cultural attitudes", "psychological dispositions", "the economy" and so on) will in fact be effects of this primordial ontological (and not "merely" or secondarily social) condition of being in the world.

But what about one such obvious candidate : the occurrent, the "natural", the realm of things apparently beyond and outside the control of "man" -- what Brandom calls "the objective, person-independent, causally interacting subjects of natural scientific inquiry" (387) ? As he goes on to show, even this "noumenal" domain arises out of Dasein. It does so, he claims, by virtue of a fairly special ("theoretical") kind of practical orientation to equipment. As we saw above, the appropriate use (appropriation) of equipment constitutes a practical understanding. In taking something as something, we produce-recognize it as the particular thing it is for ourselves (for everyone in the being-with). But what happens if, instead of appropriating the tool or method, we appropriate the understanding of it ? Surely this understanding is just another set of practical affairs -- in fact we said as much above. But in another sense, to appropriate the understanding itself is another order of affairs. In the first instance, Heidegger calls this "deliberation", as a particular variety of interpretation (rather than as "understanding" as such; though, as we have seen, it is ultimately no more than a variety of understanding-as-practice). As Brandom puts it, "Interpretation at the level of deliberation adds to [the] use and appropriation of equipment, the use and appropriation of equipmental understanding of particular involvements" (400). In this case, where interpretation emerges from practical understanding, we have a means of dealing with what is occurrent ("present-at-hand").

This secondary relation is a particular kind of worldly operation and involves assertion. With the equipment of assertions (and eventually inferences from assertions) we do not simply do something with what is available, we are also able to say or state things about the occurrent. This is the kind of position we take when, for example, we don't cut down the tree for the fire but, again for example, consider the general category of trees and make taxonomies; or when we begin a biological investigation of trees; or when we count how many there are in order to study an eco-system. In fact this kind of interpretation arises whenever our interests in something are no longer practical in the direct sense. Nevertheless, since this particular "tension" of equipmental use (the use of assertions and inferences) has its root in quite ordinary practice (such that it could not exist if there were no prior ordinary understandings to take as its own particular equipment), it is still a matter grounded in the self-sustaining, reflexive, or self-adjudicating common ground of all being in the world. While there may be a "practical indifference" (Brandom 406) towards such "theoretic" matters, their ultimate grounding in practice does not, thereby, disappear. The occurrent is, as we have noted, ontologically dependent on the available. This is why, when we forget that dependence, we can be misled into the strange game of thinking that the occurrent

is the first of all there is. This is the mistake of "the doctrine of pure presence-at-hand (or, sometimes, 'Reality')", according to Brandom, who goes on to quote Heidegger as follows :

['Reality'] in its traditional signification stands for Being in the sense of pure presence-at-hand of Things... [But] all the modes of Being of entities within-the-world are founded ontologically upon the worldhood of the world and accordingly the phenomenon of Being-in-the-world. From this arises the insight that among the modes of Being of entities within-the-world, Reality has no priority, and that Reality is a kind of Being which cannot even characterize anything like the world or Dasein in a way which is ontologically appropriate. (Being 211, qtd. in Brandom 406)

This is a unique way of handling the variety of what is. It prioritizes the social (as Dasein and availability) over the supposed primacy of the natural (the occurrent). But it does not, for all that -- and even though it denies "reality" a prior ontological foothold -- lapse into relativism. This is not the thesis of the "social construction of reality" by any means. But what it does begin with, and what sustains it throughout, is understanding (and later interpreting) as. The "purity" of pure occurrence is, as it were, always "contaminated" by the "as" of ordinary practice. So the question that lies before us is no more and no less than this : is there, now, today, the possibility of an alternative to that "as" ? I don't mean, naturally enough, a reassertion of, or an insistence on, pure presence (primordial reality) -- for as we have learned, that would only be another effect of the game with assertions, ultimately returnable to the "as" itself. What I mean is an alternative to understanding as, as a way of being in the world -- perhaps some technological supplementation of the "as" structure ?

Let me propose, as an initial approximation, that there is now a determinate, viable and practical way of being with equipment predicated on something akin to -- but, importantly, not quite the same as -- understanding "as if". "As if" would indeed be appropriate were it not for the fact that this tension of the "as"-structure marks the space of the virtual (as opposed to the sheer "as"-structure of the actual). In this case, something between "as" and "as if" marks an indeterminate space of the possibility of being. This is the space of cyberbeing : cyberspace. But this is not necessarily a fourth category of being over and above Heidegger's three (Dasein, availability and occurrentness). Instead, what I want to propose is that cyberbeing is a new possibility of relations between these categories -- or, more strictly, between Dasein and availability, with the effect that the occurrent takes on a slightly different ontological configuration (different, that is, from its grounding in the practice of assertion).

Cyberbeing, that is, would constitute a new relation between human being and equipment, to the point where the two cease to be distinct ontological categories in the strictest sense. Dasein does not use cyberequipment in the way that it uses fishing hooks and aeroplanes. Rather the two engage in a mutuality of using and being used. This can be seen from the first moment of cyberequipmental engagement. Power has to reach a computer's motherboard and its CPU in millivolts. Standard power outlets, however, range between 100v and 260v. In order to reduce the voltage, the computer contains a power supply device. This consists of, among other things, a board with its own chips. What if this circuit is damaged in some way ? Strictly, the full force of the standard voltage should hit the motherboard and the CPU and "fry" it. But there is a fail-safe device. On the power supply board is a self-checking chip. It can determine whether or not the supply is ready to receive high voltage and is capable of reducing it to the operating voltage. But how does this part of the circuit perform these tasks prior to the mains voltage reaching it ? What powers this part of the circuit ? In fact, it requires so little power that it is able to power on from the current generated by the change in quantum state caused by the operator's finger turning the power switch. In this way, the user's body provides the power for the computer's power supply to anticipate the upcoming mains voltage. There is, from the start (perhaps even before it) a mutuality between person and computer. It is this mutuality that is cyberbeing, and it is encapsulated in this metaphor of mutual switching, turning, relaying or flick(er)ing.

In Heidegger, standard availability, readiness-to-hand or the *Zuhanden* involves *Dasein* in an actual relation to equipment : the "as"-structure. The *Zuhanden* is actual equipment and *Dasein* establishes itself in community-appropriate modes of articulation with that equipment. This is coping. Coping is actual-equipmentality in its everydayness. Against this actual we might pose the virtual. Here, equipment becomes intangible and its characteristic manifestations would be in art, fiction, poetry, and all the technologies of the imaginary whose mode of understanding is understanding "as if". And, parenthetically, this is perhaps why Heidegger's thought undergoes significant alterations when he considers this field in "The Origin of the Work of Art". But we must pause here. For the cyber is not identical with the virtual or the equipmentality of the imaginary -- despite current usage in such terms as "virtual reality" (VR) and so on. Rather the cyber's unique equipmentality flick(er)s or hovers between the actual and the virtual, between the "as" and the "as if". When I use VR equipment such as a headset and an electronic "glove" to play golf, my actual arm moves as it would when addressing an actual golfball on an actual course. However, in this case, there is no actual ball or golf links. Rather the sense of their immediate existence is generated electronically, virtually. That is, I address the ball as a ball but it has its being "as if". The ensemble or gestalt that is the game of "virtual" golf actually circulates at rapid speed between the actual and virtual. The two are brought into a single equipmental space that is cyberspace. So, the cyber is neither actual nor virtual alone; rather it resides in the ranges of space between -- spaces that are neither here nor there, present nor absent, material nor immaterial, "as" nor "as if". To understand cyberbeing "as" would be to over-normalize it; to understand it purely "as if" would be to over-virtualize it. Instead, because cyberbeings rapidly fluctuate between these actual and virtual understandings, they may be said to have the characteristics once ascribed to ghosts. And here we might be reminded that today's dominant computer interface, the graphical user interface, is usually abbreviated to GUI, which is roughly the equivalent of the Chinese word for ghost (Koh). Cyberbeing is gui, ghostly, or, to use Derrida's term, "spectral" (Specters).

To summarize : *Dasein*'s everydayness addresses equipment as actual. This provides the very conditions of possibility for the imaginary/virtual that is the space of artistic play. Between the two is an unbounded space that can be called the gui or the spectral. This is cyberspace, where cyberbeing resides -- and cyberbeing is defined as whatever resides in this space. Accordingly, it is composed of a family of "games" or practices in Wittgenstein's sense. There is not just one cyberpractice but many, though each is held together by a loose kind of family resemblance -- and that resemblance is the unbounded or fuzzy space between virtual and actual. Cyberbeing's characteristic is, then, indeterminate. It has no determinate characteristic (just as, for Wittgenstein, a family is not defined by each member's possession of a single feature -- eyes, nose, gait, and so forth). Rather the resemblance of cyberpractices is identical with the inclusion of whatsoever practices in the space of cyberbeing, between the actual and the virtual. This "between" means that cyberspace is not a set, a category or a genre. Rather it is a disposition of spectral possibilities : neither actual-solid nor virtual-spirituos, but gui (goeey ?). Some such practices would include :

- Cyber environments or spectral architectures where actual building materials combine with virtual surfaces to create possibilities of bodily and disembodied movements through a mutually doubled space.
- Cyber performances such as those of the artist Stelarc, who augments his body with invasive electronic prostheses -- or, rather, augments electronic devices with the prosthesis he calls his "body" -- and who occasionally connects those devices to the Internet so that remote users can make the body-machine move.
- Dildonics : couplings of devices and human-body movements and reactions that might be said to "simulate" sexual activity, were it not for the fact that this is not so much a simple simulation with inert equipment (such as sex toys) as it is a relation between different bodies' erotic capacities and the possibilities opened for them by the limitless space of the spectral.
- Electro-luminescent fibres (ELFs), which are used to cover the body somewhat like clothing. However, unlike the standard equipment of clothing, ELFs alter unpredictably on the basis of small charges given out by the body itself. The ELF then is more a SELF (spectro-electro-luminescent-fibre) than an inert

addition to a body from which it is separate.

- Haptics : this includes devices such as the Phantom, invented by Massie and Salisbury at MIT. By rapidly generating and receiving up to 1000 messages per second in a feedback loop, the Phantom is able to simulate events beyond the two-dimensional visual range that is common to ordinary graphics. This allows its operators to effectively see in three dimensions and indeed to "touch" computer generated objects.
- Games : sometimes called "electronic" games or "computer" games, though the term is misleading and a hangover from pre-spectral thinking. Whether combined with VR technologies or not, games in cyberspace are more like interconnections and passages between humo-machinic "players". They exist in and as these interconnections and passages rather than in the "liveware", "hardware" and "software" that they bring together. And this is because their "rules" reside in these hovering interstices : rules that have the peculiar property of being able to alter according to the unpredictable course of play.
- Hyperlinks, hypertext, hypermedia : the "hyper" is only one, and perhaps a relatively unimportant, member of the family of cyberpractices. Although it was early on the scene, it maintained close links with pre-spectral forms of equipmental engagement (such as the book and, in particular, the dictionary and the encyclopedia). It was in fact a prosthetic look-up device which differed from pre-spectral look-up devices only by virtue of its ultimately digital makeup. It, in fact, provides a good demonstration of how the cyber is not coterminous with the silicon-digital (any more than Dasein is coterminous with the carbon-analogue).
- The Internet : here the merely hyper becomes potentially cyber since, with the indefinite nodal linking of hyper-media phenomena, truly spectral possibilities can arise. A hyper-link is merely digital. But a web of hyper-links is one constituent of the spectral -- at least in potentia. That is, certain features of the Internet retain pre-spectral forms of equipmentality, e-mail being a case in point. With e-mail, we have all the familiar territory of senders and addressees, letters, mailboxes, forwarded copies, enclosures and attachments. E-mail, like ordinary mail, operates in a plane and merely substitutes, electronically, for movements that would occur on that plane anyway. As e-mail documents come to contain relative and absolute hyper-links, however, they move away from their position as a minor supplementation of the plane of written linguistic communication. They leave open, as do all webbed entities, the possibility of unforeseeable coming-and-going, being-here-and-being-there, travelling without given destinations, virtual-actual transitions and the rest of the manifold ways of describing cyberbeing and ~space. What moves is no longer "information" along a "highway" (these terms are inadequate metaphors drawn from the forms of actual being which cyberbeing prosthetises). What moves on the web is the movement of the web itself. Its motion creates the sites that it is possible to move to. This deletes the distinction between space and matter that is so crucial to everyday thinking. On the web, space "informs" matter how to move and matter "informs" space how to shape itself.
- MUDs and MOOs ("Multiple User Dungeons/Dimensions" and "MUD Object-Oriented") are spectral environments where constructed identities can meet and interact. The features of the identities are not determined by those of the persons who are said to "interact" or "communicate" "via" MOOs. Rather they are doubly actual-virtual, so that these constructs can operate and cope as a community in spectral space to create further spectral spaces or objects. They might produce only possible conversations, but they might also produce possible works of art, softwares, parties, games, recipes, tools, music and so on.
- Norns or "virtual pets" have their origins in the quasi-spectral discipline of artificial life (A-Life) and begin as clusters of digital-genetic code (or "eggs") that then "grow" according to less than predictable inter-effects between their code and that surrounding them in cyberspace. While their existence in A-life-based games relies on metaphors of "birth", "development", "nurture", "death" and so on, the important characteristic of this member of the family of cyberpractices is that it actualizes cyber-variants of these aspects of biologically-based life, adding to it and taking away from it (in the way that Stelarc adds his body to the Internet so that it is the body that becomes parasitic rather than vice versa). Norns are less artificial life than they are prosthetic life (cf. Wills).

- VR equipment, as we have seen, is not strictly virtual. Rather it is virtual-actual. With it, the body supplements both electronic equipment and the imaginary spaces and possibilities it can generate; and at the same time, the equipment and its imaginary supplement the body. It is this mutual relay that, as we have seen, is the space (or spacing) of cyberbeing.

This is only a brief list of possibilities, to be sure, and no doubt many other instances can be found. What we do need at this point, though, is a general understanding of the being of (these instances of) cyberbeing. One way of approaching this would be to see how the Heideggerian notion of equipmentality overlaps with (or is supplemented by) Derrida's position on supplementation. From there, we can begin to see at least three aspects of cyberbeing itself : its relation to techno-moralities (positive and negative); its status as a highly unique meta-technology; and its particular way of generating or producing occurrence (which seems to be quite distinct from Dasein's assertional-propositional mode).

Equipmentality in Heidegger is taken up by Derrida (Grammatology 144-157) as the supplement, in the following sense. With Heidegger, Derrida holds that being cannot be simply present to itself. It does not have the characteristics of a "reality" as pure presence. Rather being's equipmentality is the condition for the real, the present-at-hand, the occurrent. For both thinkers, then, there is no being pure and simple. Rather there is always and necessarily a "contamination" -- something impure adding to and taking away from whatever precedes it as a form of being. And this adding and taking is never not in process : so we can only dream of a pure being without supplementation, without the prosthetic, without some form of equipmentality. Being has no "first" supplement, only chains of supplementation, always already in process; and so there is, strictly, no outside to the prosthetic or equipmental character of our being. At each point along these chains of prosthetization, it always only looks as if the prior technology were "more human", "more authentic". So, in the famous case, Plato derides the technology of writing for its negative effects on the natural human capacity for memorizing. In the nineteenth century, the streetlight was thought to corrupt the morality of the urban populace, to destroy its natural distinction between day and night, work and rest. Now computers are supposed to be destroying our natural capacities to read books, to be literate. This is one moral axis that appears to be given off as technologies come into historico-supplemental relations with one another. It sees the replace-ative aspect of the supplement and represses its cumulative aspect. At the same time though, another moral axis works in the opposite direction : writing increases the distances over which communication takes place; it opens the space of democracy and reduces the grip of the priesthood on access to knowledge. Streetlighting reduces crime and brings the leisure of the night out into the open, into a new community. Computers make instant connections to anywhere and reduce the home/workplace and work/leisure dichotomies altogether, freeing us in some sense from a long entrenched mode of production. Two moralities, then, at each point when one technology's "set" and another's meet in a mobile ellipse of confrontations and agreements, breakings-away and comings-together. No point then in engaging in these as far as the cyber is concerned. The cyber, as a techno-prosthetic, can perfectly well generate its own moralities as part of its being. There is no place for the analyst here. So, accordingly, delete any "approval" or "disapproval" for the cyber you may have read here already or will read below. For the point is not to praise or condemn but to begin to think the ontological status of cyberbeing.

Another characteristic of the elliptical spaces where technological "sets" intersect to produce "lines" of technological flight is that they are affected (perhaps even effected) by adjacent lines. Hence the printing press is affected by the adjacent technologies of the wine press, metallurgy, cloth-making, mercantile practice and education, among others. Likewise, the computer hybridizes the adjacent lines of higher mathematics and the chemistry of silicon, again among others. As these effects pass "vertically" into the transitional technological space, they make possible new forms of equipmentality. But the "revolutionary" instances do more than this. For example, the printing press (in its supplementation of writing and its hybridizing of wine-making, metallurgy, and the rest) is not only a model for all the forms of mechanical reproduction it foreshadows, it is also a means of distributing information about such means. Since it can generate identical copies of technical manuals and schematics, for example, it can ensure that close-to-identical forms of production can exist in

spatio-temporally distant locales. The importance of the cyber in this respect -- and here the consequences must be enormous -- is that it supplements or prosthetizes Dasein's very capacity to supplement or prosthetize. Printing is a meta-technology in a limited sense. It permits the distribution of the capacity to supplement Dasein. The cyber, by contrast, does not simply permit or facilitate this, it also carries it out. In making the cyber possible, we have made possible an equipmental formation of equipmentality. We have, in effect, made the distinction between "ourselves" and what we have ready-to-hand utterly indistinct. One morality, of course, will see, as ever, only loss of control and authenticity. Another will only see the opening of indefinite and, eventually indispensable, possibilities of being human differently.

It follows from all of the above that Heidegger's third category of being, the occurrent, the present-at-hand (or that which is mistakenly thought by some philosophers to be pure or primordial reality) cannot, in cyberspace, be a mere effect of the equipment called linguistic assertion. That is : if the "science" that Dasein generates is propositional, then the science peculiar to cyberbeing (its interpretation of the "real") is anything but. The assertional-propositional stems from Dasein's localization with and within the space of the actual. The imaginary-virtual had, all along, never operated propositionally. It always interpreted the real aesthetically, via various kinds of feeling and intuition "as if". Even in Kant, these modes of interpretation were never thought to be properly propositional. But, for the cyber, things are different again. Hyper-links, software code, silicon chips, HTML scripts, digitized images and so on : all of these are subject to a definite logic. They are fathomable and controllable by assertional-propositional techniques. But where links move and go to, cumulatively; how software codes sit alongside potentially multi-millions of others (especially as mini-apps., Java applets and so on); how chips are placed in relation to one another through networked hardwares to form inter- and intra-computers with unpredictable capabilities; what HTML scripts can do and where they can take "information" into new contexts and combinations with unforeseeable consequences; how digitized images are recycled and recombined, distorted and warped, clarified and magnified, combined, overlaid and condensed : all of these are elsewhere than the assertional-propositional. They are not, in the strict sense, virtual; they offer no aesthetic or "intuitive" opening (or production) of the occurrent. Rather they de-assertionalize the present-at-hand. They loosen it from its moorings in logic and logistics; they generate it as more than an effect of pragmata. And if they "assert" at all, they assert between the "as" and the "as if" -- so that the supplementational "between" (the supplement of cyberbeing's meta-supplementation of Dasein) marks the indefiniteness of possibility as opposed to both the definiteness of ordinary, actual assertion and the infinity of virtual "intuition". What we now -- as cyberbeing -- make, care for, govern and hold to be "beyond" us (as "presence") we still make, care for, govern and hold, to be sure. But we now always do this under the aspect of sheer possibility and potential. Presence is neither asserted nor imagined; it is possible presence, presence-to-come. And the space of that possibility and potential is the spectral, gui, cyberbeing and ~space, itself.