



## Abstracts

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## That-which-new media studies-will-become

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The terms new media, new media studies and new media research are being taken up in a number of ways with different traditions, methodologies, and ways of constituting object(s) of study. In an article entitled 'What is New Media Research?' (2001), Chris Chesher has considered what distinguishes the research on new media amongst this proliferation of approaches and methodologies. He notes that many in these traditions just get on with producing new media without engaging with the question of how these media are new. Yet his concern is with a more critical and theoretical New Media Studies, and he has continued to articulate and advocate the kind (brand) of new media studies and new media research paradigm that he would identify with.

It is also this kind of new media studies that I identify with. Chesher's intervention opens up the question of the research paradigm of new media studies/research. He notes that 'new media are nothing new', and advocates the use of the term *new media* against the problematic use of medium specific terms which date quickly (Chesher, 2001:229). Configuring a research paradigm in this context suggests that what must be engaged with is precisely how new media can be thought as "new". In thinking the "new" of new media, the question firstly turns to, not *what are new media* (as particular media technologies), but rather *what is new media studies/new media research*.

In this paper, I will pick up some of the threads of the arguments and ideas Chesher presents, and also add some thoughts on precisely how such a new media studies can be thought as a productive engagement with culture and (new media) technologies. There are two related aspects of his paper that I want to address. Firstly, that new media research is not defined by its object of study, and secondly, the question of the "new" of new media. The question, Chesher says, is not 'how to build a new discipline with clear parameters and boundaries, but how to sustain and foster more research of this kind without deciding in advance what it should actually do' (Chesher, 2001: 228).

Deciding in advance involves all of the potential problematics of a colonising theoretical paradigm, which ultimately returns the object to known forms, or to the terms of known forms with the attendant likelihood of homogenising any radical otherness. Of course, new forms or objects of study arise out of cultural activities (social, political, economic, etc.) rather than out of a vacuum and such continuities need accounting for, as for example we can find in the 'remediation' argument from Bolter and Grusin (Bolter and Grusin, 1999). Remediation is the name Bolter and Grusin give to 'the representation of one medium in another', and they argue that 'remediation is a defining characteristic of the new digital media' (Bolter and Grusin, 1999: 45). This argument asserts that historically new media have always "borrowed", "repurposed", "reused", "reappropriated", and essentially "re-mediated" older media forms.

Deciding in advance and all that implies turns us away from all that is radically imbricated in the "new" of new media. If "new" is taken instrumentally and technocentrically, in a linear progression of emerging/evolving technologies, it implies little more than a technologically determinist world whose forms and events are primarily designed by software and other technology corporations. Here, "new" must not be thought in terms of technologies, as discrete media forms that follow after each other in a progressive series. To think the "new" radically, the question becomes one of value and meaning, and hence of an ethics and politics of the "new" in this context. If we think the meaning of the term in this more radical context, technologies come towards us from the present we have projected them from, and are already imbricated with culture. The question becomes how we can think this orientation towards the future without becoming mired in either a predictive structure or the progression of a technological determinism where we simply react to "new" (media) technologies.

I suggest that this would need to be based in how we think of the "arrival" of new (media) technologies, and of the eventness of this arrival. [1] That is, how we culturally generate and return technology to ourselves, as if for the first time. Rather than defining the field of study in terms of an apparent object I suggest that what distinguishes the new media field, and what allows us to engage the question of the "new", is that it is marked by a change in orientation to its task (somewhat akin to what Derrida would term a change in *tone*). [2]

The key to understanding this question of the "new" in new media in this orientation is through three closely allied concepts from Derrida, Deleuze and Heidegger: the "future-to-come" (spectrality) from Derrida; the "yet-to-come" (virtuality) from Deleuze (via Bergson); and "projection" from Heidegger. For Heidegger, projection belongs to Dasein (being-in-the-world, a being of the same ontological sort as ourselves). [3] The word Heidegger uses for projection is *Entwurf*, the basic meaning of which his translator tells us 'is that of "throwing" something "off" or "away" from one' (Heidegger, 1973: 185, n1). In relation to Dasein, then, it is a pro-jecting, a throwing of existence ahead of itself. It has nothing to do with 'comporting oneself towards a plan that has been thought out' but, on the contrary, Heidegger says 'any Dasein has, as Dasein, already projected itself; and as long as it is, it is projecting' (Heidegger, 1973: 185). This connects to the structure of understanding as projection, understanding throws possibilities ahead of itself, and 'in throwing, throws before itself the possibility as possibility, and lets it *be* as such' (Heidegger, 1973: 185). Deleuze's "virtual" has a similar structure, and it is not to be confused with the "virtual" that appears in the popular notion of "virtual reality". In the first instance, the virtual can be approximated to Massumi's concise designation of Deleuze's "virtual" as 'the future past of the present: a thing's destiny and condition of existence' (Massumi, 1993: 37). This concept of the virtual demonstrates how can we speak of the future, how can we speak of it and with it when it is *not yet*, when it has not yet arrived.

What we would need in order to demonstrate this and to address its implications is a particular instance, and photography provides us with such an instance. This instance shows us two distinctive things: firstly, it illustrates the power of the concept of the virtual. Second, photography provides an instance which demonstrates the very thesis of this essay: that what will be shown as a precursory instance of a new medium in advance of itself demonstrates how we can begin to think the to-come of the present – the virtuality of our time.

Although photography involves the emergence of a particular technology, similar things could be said of any technology, or more broadly, of any cultural form. Geoffrey Batchen's work on photography is especially illustrative in this regard. In *Desiring Production Itself: Notes on the Invention of Photography*, Batchen begins by pointing to conventional histories of photography and their emphasis on the invention of photography by Daguerre and Talbot in 1839 (Batchen, 1991). He argues that this emphasis on 1839 obscures the wider significance of photography's emergence in culture.

Batchen pursues a Foucauldian archaeology which, rather than searching for inventions, attempts 'to uncover the regularity of a discursive practice' (Foucault in Batchen, 1991: 15). Batchen shifts the emphasis from 1839 to what occurs prior to that date, where what he seeks is the 'appearance of a regular discursive practice for which photography is the desired object'. His question, then, is not who invented photography and when, but rather 'at what moment in history did the discursive *desire* to photograph emerge and begin to insistently manifest itself?' (Batchen, 1991: 15).

In the last two decades of the eighteenth century, Batchen finds increasing evidence of a desire that might be called photographic, a desire that is 'figured in the fields of literature, philosophy, and aesthetic criticism'. In particular, he locates this in the period from 1790 to 1839, prior to the existence of the actual technology of photography (Batchen, 1991: 16-17). This desire is the imperative that produces, or rather actualises, the technology of photography. It is this period that we would in the first instance call photography's "virtual". It is real yet not actual: it is virtual.

Batchen has been able to perform this Foucauldian archaeology on photography in order to locate this discursive desire because he already knows what the object is: this is the object called "photography". Prior to 1839, however, it could not be called photography: prior to 1839 we could not refer to an object called photography, we could only call it, as Batchen does, from our position post-1839, "that-which-would-become photography". What is at stake during the period 1790-1839, then, is photography's coming-to-presence.

And this coming to presence was by no means a certain matter. If we were to be placed in that period, struggling to manifest this desire to photograph without yet knowing what that object would be, this desire would be oriented towards something that would be yet to come; something that causes us to reach or project ahead of ourselves, projecting towards (yet

without reaching) that particular future which would become photography. For photography, in the *present* of the period from 1790-1839, the essence of photography would be the future-past of this present: that is, not quite the future as such but preceding it and yet still being ahead of the present. The region that this describes is *between* the *present* and the particular *future* that will become photography. This, following Deleuze's virtual, accords with Massumi's definition of the virtual as the 'future-past of the present: a thing's destiny and condition of existence'.

The virtuality that belongs to photography can be seen here as that which generates its actuality – the particular instances of its technical apparatus and attendant practices. This is the sense in which photography can be seen to precede itself – an exemplary instance of the thesis of this paper, a new medium in advance of itself. However, the determination of the technics of photography emerges through something (the virtual) that initially appears to be indeterminate. To see how this is not so, we will need to draw out a more sophisticated sense of Deleuze's virtual than this preliminary determination, via Massumi, allows.

Deleuze's concept of the virtual has been developed primarily from readings of Bergson, and is elaborated primarily in Deleuze's *Bergsonism* (Deleuze, 1991) and in *Difference and Repetition* (Deleuze, 1994). In *Difference and Repetition* we find that Deleuze is aware of the confusion that is generated around the concept of the virtual. This confusion precedes, if not computing itself, at least the discourses around computing and notions of virtual reality in the cyber-literature: the original French edition of *Difference and Repetition* (*Différence et Répétition*) was published by Presses Universitaires de France in 1968. Deleuze points directly towards this confusion: he writes 'We have ceaselessly invoked the virtual. In so doing, have we not fallen into the vagueness of a notion closer to the undetermined than to the determinations of difference?' (Deleuze, 1994: 208).

It is precisely this vagueness, however, that Deleuze wished to avoid in relation to the virtual. To this point in his discourse, he says, 'We opposed the virtual and the real', and he has done this, he says, because he could not have been more precise beforehand. At this point he states that this terminology "must be corrected". He is now explicit in his determination of the virtual: 'The virtual is opposed not to the real but to the actual. *The virtual is fully real in so far as it is virtual*' (Deleuze, 1994: 208). But of what does this reality of the virtual consist? For Deleuze, the reality of the virtual 'must be defined as strictly part of the real object – as though the object had one part of itself in the virtual into which it plunged as though into an objective dimension' (Deleuze, 1994: 209). And this reality of the virtual consists

of the differential elements and relations along with the singular points which correspond to them. The reality of the virtual is structure. We must avoid giving the elements and relations which form a structure an actuality which they do not have, and withdrawing from them a reality which they have. We have seen that a double process of reciprocal determination and complete determination defined that reality: far from being undetermined, the virtual is completely determined. (Deleuze, 1994: 209)

For Deleuze, we must note that there are two parts to difference so that when the virtual content of an Idea (such as "that-which-would-become photography") is actualised, there are in fact two determinations. The determination of the virtual *content* of an Idea ("that-which-would-become photography") he calls "differentiation"; while the actualisation of that virtuality into "species and distinguished parts" (technologies, discourses etc.) is called "differentiation" (Deleuze, 1994: 207). Differentiation of species or parts is always carried out in relation to a differentiated problem (or the differentiated conditions of a problem). (This double movement is found in later Deleuze in the operation of the abstract machine.) For Deleuze, the aspect of difference that is differentiation equates to actualisation. Differentiation is not the inverse of differentiation but, rather, is an original process: 'differentiation expresses the actualisation of this virtual'. Deleuze designates differentiation as the second part of difference but, 'in order to designate the integrity or integrality of the object', he says, we require the 'complex notion of differentiation' (Deleuze, 1994: 209). This complex notion is the double articulation in which every object 'is double without it being the case that the two halves resemble one another, one being a virtual image and the other an actual image. They are unequal odd halves' (Deleuze, 1994: 209-210). The only danger in all this, Deleuze says, is that the virtual could be confused with the possible, which would in turn suggest that the virtual and actual resemble each other. However, Deleuze distinguishes the virtual and the possible in three ways.

Firstly, the possible is opposed to the real, and the possible is thereby subject to a process of "realisation". 'By contrast, the virtual is not opposed to the real; it possesses a full reality by itself. The process it undergoes is that of actualisation' (Deleuze, 1994: 211). For Deleuze, this terminology is not a "verbal dispute", but, rather, 'a question of existence itself'. Whenever the

question of existence arises in terms of the possible and the real we are forced to 'conceive of existence as brute eruption, a pure act or leap which always occurs behind our backs and is subject to a law of all or nothing' since, he says, there can be no difference between the existent and the non-existent if the non-existent is already possible. The virtual, however, is 'the characteristic state of Ideas: it is on the basis of its reality that existence is produced, in accordance with a time and a space that is immanent in the Idea' (Deleuze, 1994: 211).

Deleuze secondly distinguishes the virtual and the possible by the fact that the latter refers to 'the form of identity in the concept' while the virtual designates 'a pure multiplicity in the Idea which radically excludes the identical as a prior condition' (Deleuze, 1994: 211-212). The third way in which Deleuze distinguishes them is that, in terms of the possible's possibility of "realisation", the possible 'is understood as an image of the real, while the real is supposed to resemble the possible'. This is what he calls the defect of the possible: that in fact it is produced after the fact – 'as retroactively fabricated in the image of what resembles it' (Deleuze, 1994: 212).

As opposed to the realisation of the possible, the crucial point about the actualisation of the virtual is that it always occurs by 'difference, divergence or differentiation' (Deleuze, 1994: 212). Actualisation, for Deleuze, breaks with both resemblance as a process and with identity as a principle. Actualisation (or differentiation) is 'always a genuine creation' that is not limited by, nor does it result from, 'any limitation of a pre-existing possibility'. He writes that for 'a potential or virtual object, to be actualised is to create divergent lines which correspond to – without resembling – a virtual multiplicity' (Deleuze, 1994: 212).

And it is in this sense, and for these reasons, that the notion of the virtual breaks with a representational model. It is not about resemblance, identity, simulation or representation. It is, rather, about creation within the real. It is difference and repetition in the virtual which 'ground the movement of actualisation, of differentiation as creation. They are thereby substituted for the identity and the resemblance of the possible, which only inspires a pseudo-movement, the false movement of realisation understood as abstract limitation' (Deleuze, 1994: 212).

The mistake that is often made in areas such as new media studies is precisely this confusion of the virtual and the possible. This then leads to the virtual, rather than the possible, being placed in opposition to the real. This mistake cannot be over-emphasised, it is crucial – because the effect of this mistake is that the virtual is accommodated to the order of simulation and representation and therefore loses its reality. In this accommodation, we lose the principle of operation of the virtual – the virtual, in effect, loses its virtue. Deleuze is very specific about the magnitude of the effects of this mistake in that 'Any hesitation between the virtual and the possible, the order of the Idea and the order of the concept, is disastrous, since it abolishes the reality of the virtual' (Deleuze, 1994: 212).

We can demonstrate now, in terms of Deleuze's concept of difference, how the virtual can be reduced to the possible which, in this view, means that the virtual (which is now merely the possible) is not real and therefore must be "realised". In this view, technology "realises" the possible. This view therefore overlooks the reality of the virtual as such. In this view, technology comes to stand in for realisation. Also in this view, as a result of the erasure of the reality of the virtual, the actual, and the creativity of the process of actualisation, are bracketed out. It is often from within this view of technology – as that which realises the possible – that the celebration of the digital, the idea that something new – something technically determined – is being produced, arises. But, as we have found in Deleuze, the identity and resemblance of the possible 'only inspires a pseudo-movement'.

Deleuze's concept of the virtual, then, describes an unsettled region, a zone of potential, that nonetheless contains the real material or content, and above all the idea, of what, for example, will become photography. "That-which-would-become photography" becomes photography through the struggles (indeed a struggle for a language which would be adequate to the task) within culture to manifest this desire for some kind of imaging practice. In order to do this, this desire continually refers beyond the present by attempting to grasp something that is not yet. The virtual in this sense describes a movement towards (in Heidegger's terms, this is a projecting, a throwing of existence ahead of itself) the object that is in the process of coming to presence. In the instance of photography, this is the coming to presence of the idea of photography, manifesting as Batchen demonstrates, as this discursive desire to photograph.

In general, we find that the notion of the virtual is inherent in the concept of technology as such, in its essence. The virtual is essential to technology's activity as a mode of revealing. Technology, as such, *is* virtual. What the essence of technology generates, as specific desires struggle for form, language and expression, are *actual* technologies. This is what happens in the case of photography. The virtual which inheres in photography, of course, does not end in

1839, but continues and subsists within and as the idea of photography. This subsistence of the virtual within photography is essential to photography's continued existence – there must always be a photography-to-come. We recall from Deleuze that when the virtual content of an idea is actualised there are two determinations: "differentiation", the actualisation of that virtuality into 'species and distinguished parts', led to specific technologies and discourses (the "advances" in photography – new cameras, new techniques, new film, the digital etc.). The determination of the virtual content ("differentiation"), however, folds back into the virtual to become part of future actualisations towards that-which-photography-will-become. This demonstrates the necessity for the continuous iterative structure of the virtual-actual circuit. It is this virtual of photography through its continuous process of *actualisation* or *becoming*, that generates the specific technologies, *and* all that might become "new" for the photography-to-come.

In this way, through the concept of the virtual, we can approach the emergence of "new" (media) technologies in terms of the discursive desires they are attempting to manifest. We can look within the *present* social world for desires that are struggling for form and expression: that is, to examine the virtuality of the future to come. Much of my own work has been in this area and, specifically, has been oriented towards something that can be designated or determined as a "post-print" age. That is, that we can find such discursive desires implicit (folded-in) and complicit (folded-with) with and within the current social world which concern a desire for another *kind* of textual model as the textual model of the age of print begins to overflow its limit.

The print-based textual system has always presented an infrastructure that consists of a two-dimensional surface to which it sutures a subject in a face-to-face relationship – the requirement is for a certain kind of text, a certain kind of subject, and a certain kind of relationship between them – a highly prescribed and circumscribed textual infrastructure. What would constitute a post-print age?

The kind of difference that is at stake here concerns Deleuze's notion of the cultural image of thought where each era thinks itself by producing its particular image of thought. This image of thought is what Deleuze and Guattari call the plane of immanence which is

not a concept that is or can be thought but rather the image of thought, the image thought gives itself of what it means to think, to make use of thought, to find one's bearings in thought. (Deleuze and Guattari, 1994: 37)

The notion of the post-print concerns a shift in this sense: that what we are moving towards, or perhaps what is moving towards us, is a textual system concerned with movement and three dimensionality. We see the gestures towards this with current multimedia/new media presenting *simulated* three dimensionality on print-age screens and monitors.

What we would need in order to think this further would be an instance which manifests this desire, a series of actualisations which would fold back into the virtual. We can find this instance in the notion of the hologram. The hologram provides us with an image of thought which can account for desires which are insistently pushing at the limits of our current textual model. The hologram can be seen as achieving a kind of pre-eminent form that this imaging and imagining takes. We see this in similar areas to those in which Batchen located the desire for the kind of imaging that was to become photography. Holography, as a practice, was considered during the 1960s as a kind of three dimensional photography. It achieved prominence during the 1970s as a result of the new age cosmology that became known as the Holographic Paradigm, predicated primarily on the work of neurosurgeon, Karl Pribram, and physicist, David Bohm. [4] It became prominent in Cyberpunk fiction, especially in the work of William Gibson whose first published story was *Fragments of a Hologram Rose* in 1977 (Gibson, 1988). [5] This text is particularly interesting in this context in that it prefigures a holographic society as a 'shift away from the Lascaux/Gutenberg tradition' (Gibson, 1988: 56-57). The holographic is worked in various ways through many of Gibson's texts with perhaps the most sophisticated rendering in *Idoru* (Gibson, 1996) where there is a sustained exploration and engagement with the textuality of the holographic. Also in popular culture there have been the holodecks of *Star Trek*, both in 'The Next Generation' and 'Voyager' series, and especially the holographic Doctor in the 'Voyager' series. Projection has particular significance in relation to the hologram. In the optical physics of holography, the hologram is literally (a) projection. For the holographic Doctor, his projection is his ontology, his approaching-Dasein.

These cultural practices/artefacts are all indicators of a desire for a three dimensional textuality. This desire is also evident in the substantial technological investments going towards actualising holographic technologies. This investment is in part because the hologram is not merely a benign image – it in fact has real physical properties, and therefore interactive potential. A hologram of a magnifying glass for example really does magnify objects placed



behind it. For these same reasons we find that holographic elements are being used in telescopes for astronomy, and the US military uses holographic elements in some of its "smart bombs". The United States military research laboratories have been developing a photo-refractive crystal which they claim will allow them to produce holographic field manuals – that is, three dimensional motion holography to demonstrate the use of sophisticated military technologies in the field. We've seen this kind of use prefigured in popular culture already: the holographic video of Princess Leia in *Star Wars* for example. There is also research into the development of holographic computing interfaces, especially in connection with voice recognition technology.

The hologram, in this sense, is more than just a transitory phenomenon. It appears rather as a figure which is attempting to manifest an image of thought appropriate to the era that we are projecting ourselves towards. Such an image of thought has radical implications. What we will find is something beyond representational thinking or, rather, something that precedes it. What will be disrupted is the whole representational structure of the age of print: its texts, its subjects, and the relations between them. The crucial point about the hologram is not the thing itself, the technical instance of a holographic image, nor even its properties, although these all contribute significantly to what it is. The crucial point about the hologram, rather, is that the trope of the hologram is brought into the domain of writing – as an aspect of virtuality, a culture of writing-to-come.

For new media studies, and for those amongst the various disciplines that come to bear on this field of new media in terms of a more critical and theoretical new media studies, we are still struggling for language(s), practice(s) and way(s) of thinking that are "yet-to-come". What new media is in this sense, is still virtual, and its current diverse and collective instantiations can be seen as partial actualisations, instances of what might be for the technologies, practices and ways of thinking that we can name as "that-which-new media studies-will-become". It is in this sense that new media studies is not defined by an object of study but, rather, by its virtuality. This concept of virtuality, I suggest, needs to be addressed as a necessary and productive engagement with culture and (new media) technologies. This is precisely what Derrida points us towards in 'The Deconstruction of Actuality', he says:

Virtuality now reaches right into the structure of the eventual event and imprints itself there; it affects both the time and the space of images, discourses, and "news" or "information" – in fact everything which connects us to actuality, to the unappeasable reality of its supposed present. In order to "think their time", philosophers today need to attend to the implications and effects of this virtual time – both to the new technical uses to which it can be put, and to how they echo and recall some far more ancient possibilities (Derrida, 1994: 29-30).

### Author's Biography

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### Notes

[1] "Arrival" and "event" should be thought here in the senses given by Derrida:

An arrival must be absolutely different: the other that I expect to be unexpected, that I do not await. The expectation of an arrival is a non-expectation; it lacks what philosophy calls a horizon of expectation, through which knowledge anticipates the future and deadens it in advance. If I am sure that something will happen, then it will not be an event. (Derrida, 1994b: 33)

The event is what does not allow itself to be subsumed under any other concept, not even that of being. (Derrida, 1994b: 32)

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[2] A change in *tone* would involve a different, almost bodily stance towards the object(s) of study. Tone is a question of voicing for Derrida, and particularly of the non-discursive voice. Derrida articulates tone in terms of the notion of the "to-come", asserting that the word "come", its semantics, or the concept of the "to-come" are not what counts in this regard. Crucially,

what counts is:

that the thought of "to come" or the event itself depended on the uttering [prolifération], on the performative call of "come", and that this is not exhausted by its meaning. Addressing the other, I say, the "coming" to the other. I say "come" but I mean an event that is not to be confused with the word "come" as it is said in language. It is something that can be replaced by a sign, by an 'Ah', by a cry, that means "come". It is not itself a full presence; it is a differential, that is to say, it is relayed through the tone and the gradations or gaps of tonality. (Derrida, 1994a: 21)

The question of writing for Derrida always concerns the differentiality of tone, 'since tone is never present to itself', and changes in tone, and hence always consists in pluralising the tone. It is this pluralising of tone, he says, which does not allow him 'to be confined to a single interlocutor or a single moment' (Derrida, 1994a: 22). The crucial effect of this differentiality of tone is spatialisation – 'a dispersion of voices, of tones that space themselves, that automatically spatialize themselves'. Derrida says:

And this effect of spatialization – in my texts as well as others' texts – sometimes scares them even more than do spatial works themselves, because even spatial works that should produce this effect still give the impression of a kind of gathering [rassemblement]. We can say the work is there, it's a terrible thing, it's unbearable, it's menacing, but in fact it's within a frame, or it's made of stone, or it's a film that begins and ends; there is a simulacrum of gathering and thus the possibility of mastery, the possibility of protection for spectator or addressee. But there are types of texts that don't end or begin, or disperse their voices, which say different things, and which as a result hinder this gathering. One can listen but can't manage to objectify the thing. (Derrida, 1994a: 21)

A change in tone, then, would enable new media studies to resist the "simulacrum of gathering" which would close off a field such that it becomes an object of study which then resists the possibility of embracing radical difference to the paradigm so constituted. And this change of tone is oriented towards the difference that is imbricated within the notion of the "to-come".

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[3] Dasein is not a mentalist or representationalist category. Rather, from Okrent (1988) and McHoul's (1998) pragmaticist readings of Heidegger, Dasein is an eminently direct and practical mode of being in the world which by no means depends on the centrality of consciousness or any other capacity for self-representation.

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[4] A comprehensive account of the Holographic Paradigm can be gained from the work of Bohm (1980), Pribram (1969), Talbot (1996), and Wilber (1985).

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[5] 'Fragments of a Hologram Rose' was first published in 1977. Bruce Stirling notes in the preface that it was also Gibson's first published story (Gibson, 1988: 10).

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