## THE SENSE OF TECHNOLOGY IN POSTMODERN POETRY

## Interview with Brian McHale – Tampere, Finland, 23/04/99

BM = Brian McHale, ME = Markku Eskelinen, RK = Raine Koskimaa

ME: How would you define postmodernist poetry?

BM: My definition is entirely indexical and instrumental so far, that is, I don't think it submits to the kind of definition that I generated for postmodernist fiction. It is a much more diverse phenomenon, and it is more like the convergence of phenomena which have quite different origins, towards a sort of centre, rather than (in my sense, anyway) of postmodernist fiction which was a sort of a collective development, a collective crossing of a certain line. Instead it is as though there were these practises of poetry quite unrelated to each other in their origins, gradually converging, overlapping, or, coming into relation with each other over time. So, it looks quite different. And it may well be that calling it postmodern is not the most profitable thing. Calling fiction postmodern had at least a strategic use, in that it would allow you to set up comparisons with modernism. I am not sure that this is necessarily the most interesting thing you might do with poetry. In fact, I was just joking yesterday – and it suddenly sounded less like a joke – that maybe, since my book on postmodernist poetry is so long in getting finished, by the time I finish it, it would be approriate to tag this "premillenial poetry" instead of "postmodernist." So mine would the first postmillennial book about premillennial poetry. Now, if you thought about it that way, as premillennial poetry, that would be a much more heterogeneous sort of category.

RK: Would it be then that if postmodernist fiction was more like a genre, then postmodern poetry is more epochal?

BM: Maybe so. Though neither of them is exactly like either of those things. They are not exactly genres, and not exactly a period style.

ME: How do you take into account the technological diversity of poetry – think about Jackson MacLow's notations, or Eduardo Kac's holograms, or, Melo-Castro's video poetry?

BM: I begin to take that into account even though my own education in poetry starts really from poetry on the page – but of course that is partly an illusion anyway, because a lot of poetry is bimedial, a lot of it is related to oral performance of different kinds, a lot of it is related to visual practices of different kinds, so you can not really stick with the printed page poem for very long, or if you do you just ignore its other dimensions. And then there is technology in a broader sense, the sense of poetry itself as a technology, poetry as technique, which is extremely relevant for a lot of these poets – the sense of the poem as a kind of machine product, even when the machine is a virtual machine, or when it lies somewhere on a spectrum from virtual machines to real machines. So MacLow, apart from anything else, apart his other intermedial practises, practises a kind of machine poetry, where certain areas of decision-making have been turned over to a method which operates almost independently of the poet, or the poet is kind of an operator of the method, rather than in the traditional sense the source of the poem.

ME: What about the operations of the reader or user, say the user functions as described by Espen Aarseth? Are we still talking about the same issue? The computer is, after all, much more than just an author's tool ....

BM: Right, I think so, and I think again we can arrange those on a spectrum of machines. Near the middle of the spectrum lie text machines that are literally operated by the reader, as in Raymond Queneau's *Cent Mille Milliards de Poèmes*, where in fact you make the poem by manipulating pages in order to generate all those thousands of sonnets. And in one direction on this spectrum lie the literal machines, the ones that you have to use in order to read the poem at all as in Jim Rosenberg's poetry, but then the opposite end of the spectrum shades off, since in a sense – this is a cliché – all poetry requires heavy investment by the reader in producing the

poem, even more than is required when reading fiction. So that the degree of interactivity is always high, anyway, from the outset with poetry, even in the most traditional kind of poem. There is strictly a sliding scale up to the place where the poem is in fact assembled by the reader. So these two things, that is, the poet-operated machine and reader-operated machine, are interrelated but also semi-autonomous. We can imagine all kinds of taxonomies which would match up with the various possibilities on the two scales. Though I don't know how profitable that would be ....

RK: You mentioned the sense of technology in poetry; on the other hand the poets often seem as quite a traditionalist breed – are there among the postmodern poets those who don't want to have anything to do with technology?

BM: Yes, of course. And of course one of the tendencies throughout 20<sup>th</sup> century poetry is resistance toward modernity, which includes resistance to technology, and a sort of neo-pastoralist return to hand made and artifactual procedures. That reaction is part of the picture and in a certain way the strength of that reaction is a measure of the importance of the technological alternative. So yes, we have Gary Snyder's poetics of return to primitive practices and oral based poetry and so on, as a reaction. Or Allen Ginsberg, in a sense, though on the other hand we need to think about Ginsberg driving around America with his tape recorder running as the medium of poetry, and then his use of typewriter to generate a look on the page for the poems produced by the medium of the tape recorder .... So it is not that simple a reaction or negation. That is machine mediated poetry as well. And of course Ginsberg was associated intimately and collaboratively with William Burroughs, and Burroughs was extremely interested in technologically mediated writing practices, from cutting up to tape practices and film practices. That was not alien to Ginsberg either, so what is interesting is how these things coexist – the extreme of antitechnological neo-pastoralism and a certain hybridity, almost a hybrid of poet and machine, almost a cyborg.

ME: Do you see any differences in relation to machines with respect to modernism and postmodernism, be that relation positive or negative?

BM: This is one of the reasons why I am not completely satisfied with the term "postmodern poetry", because we can extract strands of modernist

practice that seem to be perfectly compatible with this later postmodernist practice. Though maybe that is the way literary history goes – that is, there are no watersheds that are complete ...

ME: So do you still find the term postmodern useful at all, after all these decades of misuse?

BM: If we go back to the early 20th century we can easily locate all of those technology driven practices, things that depend upon printing practice, things that depend upon mass media models. From that point of view all we see is continuity: then as now, as the new media come on line the poets rise to the occasion and exploit them or adapt to them. And then equally there is the anti-modernist reaction, the resistance to technology and the return to traditional hand crafted sorts of poetry – that also persists in the postmodern. "There is no easy way to say, this marks the division, even less so than in the case of fiction, I think.

RK: What do you think about Espen Aarseth's theory of cybertextuality? I find it quite useful in the way it is independent of the medium – you can talk about cybertextuality in print texts, or, in digital texts as well.

BM: It is really attractive, and I have even asked my students to read his book this year. It has the power of hindsight, in the sense that now is revealed what was truly the case all along. Because we are used to thinking in terms of the new technology, this provides a lens through which we can view the old low-tech practices. And that has a certain legitimacy, but its risk is that it produces an illusion of progressivism, as though we had been working always towards the ideal technological platform for this kind of practise, and now we've finally got it. Well, nobody who was previously writing cybertextually in print was thinking in terms of the inadequacy of the current platform and how badly we need a new platform, so the sense of progressive development toward the more perfect platform has got to be a sort of illusion.

RK: On the other hand, if you think about George P. Landow's writings, for example, the tone is very much like "we had this poststructuralist and deconstructivist theory and now finally we have the technology to fulfill their promises ..."

BM: Right, it was the sort of "we were all frustrated, we could only wish

we had this medium, and now we've got it" talk. That kind of narrative is sure to get you in trouble and embarrass you before long, because the one thing you know about the current new technologies is that they are likely to be ephemeral. This is almost the only thing we can be sure of: that what we have got now is not what we are going to have.

ME: Which brings to my mind Bruce Sterling's Dead Media Project ...

BM: Exactly!

ME: On the other hand, it is easy to see that hyper and cybertexts have already created wholly new kinds of epistemological and ontological problems, differing from those you described in *Postmodernist Fiction*. Also, they have automatised some of the phenomena described there. With poetry it is harder to detect comparable development, as the poets in general have been technologically more diverse than fiction authors who mostly have limited themselves strictly to the print page. In poetry we must acknowledge video art, Fluxus, as well as John Cage ...

BM: And presumably we can just keep pushing that back – that is, poetry's insertion into performance and into 3D practises, hologrammic in fact, has quite a long history. A case would be something like 17th century court masque for which Ben Johnson among others wrote librettos, and much of his poetry exists for court masque, which was a spectacle requiring the highest technologies of the moment, and the collaboration of multiple artists, scene designers, architects, actors, singers, musicians ... to project this sort of poetic space. In fact we could work up analogies with cyberspacial poetry in lot of ways. Masque is a spectacle projected specifically for the king to see; the perspective lines in a court masque converge on the place where the king sits. Everyone else's view is slightly worse, depending on how he or she sat from that place where the perspective lines converged. The performance depended in a certain way on elaborate machines; it was really technology driven. So this is a way of unfolding poetry into 3D space, using 17th century technology. From there to the practices you were just talking about seems to me a continuity, not a discontinuity. Fluxus is sort of a deliberately shabby version of that, the poor version of that! Not meant for the king – the democratic version ... We could think of all of those places where poetry is oriented to performances or any of those cross media situations, and then we have not discontinuity but a continuous series of texts, with Wagner as an intermediate step ...

ME: Well, where do you yourself fit in in this picture?

BM: I am not that interested in the historical line, in this case. I am taking the more artificial approach of being principally interested in the generations of poets since the WW2, and their most obvious precursors in the first part of the 20th century. That shapes the corpus, rather than a poetic principle shaping it. And I am more interested in the sort of simultaneous diversity and overlaps among those various practices in those generations, including some that approach the traditional, and some that are much further out. Because one cannot be quite so sure about what should be called traditional anymore in poetry. One knows what is institutional – there is institutional poetry, but that is not quite the same thing. That has to do with publishing venues and things like that, but if you are talking about practice then untraditional things and traditional things have more in common. I am now talking about the American context, and especially about the poetry of James Merrill, who is often regarded as an extreme traditionalist, but his most ambitious poem, The Changing Light at Sandover, is in effect a cybertextual poem in that it was generated by machine practice. He claimed that most of it, the bulk of the text, was dictated to him on a ouija board, that he and his partner David Jackson manipulated the ouija board and the text was, letter by letter, dictated to him. Any way you look at it, however you want to explain what happened, that is a machine aided practice, and what the machine does is unfold an alternative space, which is an entire map in multiple dimensions, of the other world – an alternate Dante! This other world is entirely virtual – nobody ever enters it from the real world of the poem; the other world is in fact unfolded only when we read the ouija transcripts. So it is precisely like computer memory: it occupies no real space in the world of Changing Light; when you boot it up and access it, there is this other, virtual space. So is this traditional or not traditional?

ME: From this we can nicely go to our next question – how do you like Jacques Roubaud's definition of Oulipo not as a modernist or postmodernist, but a traditionalist movement?

BM: I understand that – he perhaps thought he was being paradoxical but actually only for some would that be paradoxical. Because, after all, from the idea of being dictated to, to the idea of being dependent on techniques which access a voice that is not your own, this is entirely traditional poetic

ideology. The ideology has been depleted over time – the modern world does not invest very much in that ideology – but in earlier times it was actually a matter of faith that the poet spoke from someplace else, that the poem was dictated to him and he used his formal techniques to access those other subjectivities. So Roubaud is technically correct! Here, in my sense of postmodernist practice, the machine mediated poems are juxtaposed right up against new versions of inspired poetry, the traditional notion of inspired poetry – but updated, as in the case of poetry like Hannah Weiner's, an American poet who claimed literally to see words in the air, or printed on people or on objects. She was clearly a borderline psychotic, but she was also a great poet, and the medium was these other voices which were dictated from somewhere to her. That seems to me to be technically a nearneighbour to machine poetry composition. Where the machine is located, exactly, is the only difference ...

RK: Transcendental machines ...

ME: Archetypal poet ...

BM: Jack Spicer, the American poet who was one of the hinge figures between the earlier European avantgardists and postmodern American avantgardists, used to talk about taking notation from Mars – radio messages from Mars, maybe as a figure of speech ... But a very useful figure of speech because there is a sense in which building machines or building programs running on machines to aid you to make poetry is like taking dictation from Mars...

RK: Oulipo seems to be an important common denominator of postmodernist fiction and poetry – does it still have influence on poets?

BM: The problem is it's reception is staggered depending upon where you are. Simply the phenomenon of translation and availability makes Oulipo novel in different parts of the world long after the Oulipo writers have died or disbanded, so in fact there is an awful lot of Oulipo that was not visible in the United States until the past ten or fifteen years. So Oulipo becomes freshly relevant in some quarters of the United States.

RK: Maybe the time was right just now?

BM: Possibly – although I think it is more accidental than that; there are simply these time lags that have more to do with institutions and trans-

lations and publishers and so on ... But certainly, for instance, Georges Perec becomes a major figure quite late, on the point of view of the United States, whereas he was already recognised fifteen or twenty years before in Europe. And I presume those sorts of staggered effects happen in both directions. Just a few years ago a few more Perec texts were translated – but of course Perec is a problematic case as some of his texts are almost literally untranslatable!

RK: Untranslatable by definition ... Do you include Perec in your book on postmodern poetry?

BM: I include Oulipo, but Perec LOOKS more like a prose writer... I consider him a prose writer, but the Oulipo practise in general blurs that distinction pretty thoroughly. I am certainly interested in them, and they get included. More than most other European schools they have an obvious relevance to the sorts of American practice that I am mainly talking about

RK: How about Jim Rosenberg, how do you place him in the field of contemporary poetry? To me there seem to be two quite distinct levels in his poetry, the technical level of the interface, and the level of the poetic text, and there is not necessarily always that clear a connection between these two levels...

BM: I am willing to give him the benefit of the doubt, to a certain extent. I suspect – and he has partly confirmed this to me – that both levels are machine mediated, in the sense that on the one level there is the obvious interface where you must operate the machine just in order to see the poem at all, or to see it the way it is meant to be seen (because I have seen lately an anthology that prints a page of Rosenberg's poetry, one of his superimposed texts, but this printed page, though it is more or less interesting as an image, is not actually the poem – for that, you have to operate the machine). But I also understand from Rosenberg that the text itself is generated in part by mechanical means, though he is not very forthcoming on what those means are, exactly. Even if he had not said so, I think one suspects it, reading the poems. So there is at least a kind of general analogy between the machine mediation at the interface, and the machine generation, so that we might say that one becomes a figure for the other. Because we know very well it is a mechanical text in the sense that you need to get access through a machine, we suspect that this is some kind of a model for how the poem was produced. I suppose that the machine that produces the poem is quite different than the machine we use to read the poem, so it can only be an analogy or a metaphor. But our experience of it is like our experience of other machine generated texts, which is of Rosenberg being a kind of middleman for this language. Maybe he assembles a repertoire of materials and then operates some procedures for selecting among those materials and arranging them; we use the one level in order to give us a working analogy for the other level. I don't think it is more intimate than that.

RK: He is certainly a prominent figure in the hypertext community – is he acknowledged also as a poet?

BM: The fact that he appears in this anthology *Poems for the Millennium*, *Vol. 2*, edited by Pierre Joris and Jerome Rothenberg (University of California Press) – there is a little section on ... I guess they call it Hypertext poetry, with various crossmedial examples, including this page from Jim Rosenberg. That is a kind of legitimation, though not coming from anything like the center of the institution, as the *Poems for the Millennium* is by definition meant to be experimental avantgarde poetry. But it is some kind of endorsement, some kind of legitimation, anyway. I dont think he is going to appear in the teaching anthologies in American universities any time soon.

RK: What about John Cayley's poetry, then?

BM: I only know some of it – and it is so various that to know some of it does not necessarily tell you anything about what he generally does. But I am aware of some of his machine accessed and machine generated poems. He makes some of the connections more explicit, in the sense that he transparently has a kind of Buddhist attitude about the poem, the sense of non-intervention, of being a middleman. I think that is a general attitude, but he has given it a kind of explicitness that you do not always find – which makes it an interesting bridge. You find this also in John Cage, of course. It is surprising that this sort of Buddhist non-interventionist sense is so widespread, including even pastoralist and anti-technological movements.

ME: On the other hand Cayley's *Book Unbound* gives more powerful means of intervention to the reader ...

BM: Right – but the intervention by the reader is something else ...

ME: There are a couple of things closely related to this. Most of the rhetoric surrounding hyper and cybertexts is totally saturated by the Western concepts like linearity – if we started from some other cultural contexts which are not as tightly bound to produce progressive development, a big portion of the new technology and the rhetoric around it would be very different. A Buddhist attitude, for example, could open up a more multicultural space in relation to technology and its rhetoric. Another thing is that, following John Cayley, we could claim that writing has always been digital, ever since the invention of the alphabet. Still, I am inclined to think that the subject positions of both the author and the reader are different when receiving messages from some other world, as compared to a situation where both are using computer.

BM: I guess the argument would be also true when you are interacting with virtual machines as well – when you are interacting with the virtual machine called the sonnet, for instance. This returns us to the argument about the permanence of the cybertextual possibilities throughout the history. At all times poetry has involved a certain amount of compromising of the poet's subjectivity, at least – this is a mild way of putting it – a kind of middle ground between the poet and the formal machine of the poem. Self expression is a kind of fiction, in any case...

ME: But it is shared fiction, our community has shared that kind of fiction – but when users or readers get more and more aware of these machine modulated possibilities something must happen to these still widely accepted myths of self expression. It is hard to avoid thinking about Heidegger here ...

BM: In other words, we do not have a contract anymore. I think that is true not just of technology based poetry, but poetry in general. The consensus about poetry is pretty much dissolved. In any case, the poet has to construct a sort of fictional consensus and hope that somebody is going to join it. So it is not a special problem for machine mediated poetry ...

ME: I wasn't implying that either.

RK: Could you name some prominent postmodern poets?

BM: We talked already about Oulipo, and we must keep that in the collection. Among the North American poets that I am interested in there are figures like Edward Dorn, who wrote the long poem Gunslinger; James Merrill whom I already mentioned too; there are the poets of the New York school – John Ashbery is the most conspicuous, but the other figures are also important in this context – Kenneth Koch, James Schuyler. There are above all the poets of the L=A=N=G=U=A=G=E group: Charles Bernstein, especially, as the manifesto writer of this school, and people like Barrett Watten, Bob Perelman, and Lyn Hejinian; Susan Howe, who is a sort of fellow traveller, a marginal figure relative to that school, but quite important in her own right. Those kinds of poets seem to be occupying the center of this field, and then further out we can find a whole range of other figures related in various ways to them. I am very interested in a poet called Armand Schwerner, who died recently. A very interesting writer and a great loss – his death means that his on-going poem *The Tablets* is in effect finished now, since there is no way now for it to be continued. And this had become an increasingly interesting project as the years went on. Schwerner in his last years had been using a computer to generate new fonts to create new pictographs, allegedly ancient pictographs that, according to the fiction of the poem, have been discovered in the Middle East and are now being translated. He was using the new technology to generate the illusion of an ancient technology, closing the technological loop. He produced poems that are, in fact, essays about translation theory, in which the poetry is embedded. The Tablets acquired an entire new dimension in the last years of Schwerner's life, in the last two Tablets (there may be a third one I have not seen). This is a poem that stands right at the intersection between visual poetries, machine poetries, and much more traditional senses of dictated, irrational, shamanistic poetries. Schwerner was partly associated with the ethnopoetics movement that sought to recapture poetry's use in shamanistic technologies. He stands really at the intersection of many of the movements, but from the point of view of schools of poetry, Armand Schwerner is nowhere, he is in outer space somewhere ... a very interesting figure!

RK: Any European poets?

BM: Well, I read British poets quite a lot, and there is the interesting phenomenon of their version of language poetry, a school around Jeremy Prynne at Cambridge, and others in London proper. On the continent Oulipo stands really on its own. There are various movements of concrete and postconcrete poetry on the continent which belong here in various contexts, and Fluxus in its European phases. There are more canonical poets who can be recruited to this, if we can loosen the grip the canon has on them, people like Edmund Jabès and Paul Celan, who can be rethought as belonging more to these configurations than to the configurations they've been kept in. Then before long we reach the eastern boundary of my knowledge, and I begin to fade out ... I think there is also a southern boundary of my knowledge because I cannot think of any relevant Italian or Spanish authors ...

RK: How about South America, then? They have the strong tradition of concrete poetry ...

BM: Well, the concrete school in general belongs in the picture as well – the Campos brothers, for example.

RK: What kind of authors do you think are interested in experimenting with the hypermedia?

BM: Strangely enough, the people who are moving into hypertext media are more traditionalist writers – they really come close to a modernist aesthetics ...

RK: Michael Joyce...

BM: Exactly, or Stuart Moulthrop.

ME: About Moulthrop and Joyce – one thing that has been bothering us is this hype around hypertext, and the way people are comparing these new ways of writing to 19<sup>th</sup> century Victorian novels or Aristotelian drama theory. Nobody seems to have read for example your books on postmodernist fiction, or, even basic narratology, which should be the minimum required to see the possibilities inherent here. We are interested in this silly way of advertising hypertext – we try to frame the means which the hypertext community is using to hide away all signs of an alternative tradition ...

BM: Once you've described the situation accurately, you've pretty much done the analysis of it: this is all about marketing. You have to bear in mind that the compartmentalisation in these things, especially in the United States, is extreme. So that people who do writing, do not read that kind

of theory. You have to bear in mind that narratology, actually, never succeeded in this sense in the United States. Not very many academics became interested in it, not very many people taught it, so not very many people learned it, so it is not anything like a shared knowledge base. Given that situation, the compartmentalisation cannot be that surprising. In addition, there is the compartmentalisation where the practitioners on the one hand and on the other hand the critics and theoreticians are completely cut off from each other, and there is no institutional ground on which they would meet – the institutions are all working in the direction of heightening the compartmentalisation. Writers may teach in the universities, but they teach in writing programs in which they do NOT teach criticism, do NOT teach the past, even past writers, they do not talk to critics and theoreticians – all of this contributes to the compartmentalised approach. And I suppose the marketing people, whoever they might be, make the essential decisions about how hypertext is supposed to be presented; they are thinking of appealing to people who are essentially technology oriented, not literature oriented.

ME: But this holds true also of people like Janet Murray, George P. Landow, Jay David Bolter...

BM: Yes indeed. I cannot speak for most of them, but in Landow's case probably his intellectual history explains that; he began as a Victorianist and he really worked on Victorian poetry, so he was not that interested in narratological issues in a professional way. Victorian poetry and essayists were his specialty. His professional equipment did not particularly include narratology and when he made the change-over to the new materials, he did not acquire that as a part of the new equipment.

ME: It is annoying to see how some people try to block out a large part of the possibilities, as they clearly do not really know the experimental writing of the 20<sup>th</sup> century.

BM: Everything these days is being blamed on the Cold War, but I suppose it deserves part of the blame for this too; the Cold War moment in North America involved heavy editing of early 20<sup>th</sup> century cultural history, not editing out the avantgarde in particular, though that was one of the side effects. It certainly edited out the Left, but the Left is very often the avantgarde in American context. There is an excellent book by Cary

Nelson, *Repression and Recovery*, in which he talks about the writing of poetry in the United States between the wars and recovers whole ranges, whole schools and groups of poets who were Left avangardists of various kinds, of many kinds. That's the point: there was immense variety; you might legitimately have expected propagandistic poetry, but in fact there was a whole spectrum of things including print experimentation and book making art – in other words, there were American versions of all the things that were in the European avantgarde, and even native hybrids. But all that got edited out of the story by institutionalised academic literary history, in concert with Cold War ideological revisionism.

ME: I very much like your *Postmodernist Fiction*, especially because of its almost "handbook of tricks" approach. I am interested to hear if you have later found new devices, writers, or practises, which were not included in that book?

RK: You could make *Postmodernist Fiction 2.0*, following Landow...

BM: It really COULD be rewritten. Among others, Oulipo does not figure in that book, I think, hardly at all. I was criticised for not including as many women writers as I could have, and that is probably true. But I think the criticism is a little unfair, in the sense that some of the writers that I am accused of ignoring were not actually available to me at the time of writing. But certainly if I was rewriting the book, Kathy Acker would figure very conspicuously. She was one that I had not really even seen at the time I wrote the book. It is hard to think.... There are so many younger writers, the whole thing has moved on to a second generation and that would complicate it, just because of the variety of precedents and the models they have been drawing on to make new combinations, so the new part would have to be very long to account for all that. I suppose I would have to make way even for "Avant-Pop," if there is such a thing.

ME: It would be interesting to hear if something really new has appeared since the 80's. When I talked about your handbook-like approach, by the way, I did not mean that as an insult. (BM: No, I took it rather as a compliment.) If we think, for example, of the generations inside postmodernism: we have the Borgesian idea of the forking paths, which for him was just an idea, of which Cortazar, Coover, Queneau, and Fournel then made kind of updated versions, more complicated and more non-symmetrical versions;

if we think of generations in this sense it would be tempting to try and follow their development ... By the way, your book was extremely useful for me-I've tried to write against it, to do something different than what was described there, to find some loopholes in it ...

BM: That is very good to hear – that makes me feel better about the book. That gives it a dimension it did not need to have. It was not actually addressed to you, in a certain sense – I was not thinking in terms of its usefulness to writers; I think I should keep my hands off of that, but if you could use it that way, that is fine!

ME: I think many other people have found your *Postmodernist Fiction* very heuristic, I guess Espen Aarseth too... On the other hand, many of the devices discussed there have already been automatised ...

BM: I suppose that must be the case. One way that the second edition could go would be to describe which devices have been automatised and are no longer available for innovation. Though that would be extremely risky talk – as soon as you say that, somebody will prove you wrong. I suppose that is why Robert Coover developed a theoretical interest in hypertext, though conspicuously he never moved over himself to practise it – but he must have had the sense that precisely the things that he was most identified with as procedures were the ones that were nearing their limit, that there was only a certain amount more that you could do with them, and I suppose he had the sense that the next move that would open a new range of possibilities would have to be a change of medium ...

RK: On the other hand we have cases like Raymond Federman, who finished with typographical experiments because computers made them too easy.

BM: That is true, and that explains – to return to where we were a moment ago – why some of the younger experimental writers stick with the print medium. They have the sense that there is still some resistance in print to the sorts of things they want to do, that there is a kind of useful resistance in the material, that the materiality of typography and the page is still something useful to push against. Whereas when you move into hypertextual forms, suddenly it can seem that there is not enough resistance, that possibly too many things are possible – there's not enough material to push against; it is all just electrons.

ME: On the other hand, what about the temporal dimension? Many of the hypertext authors, including Coover, are strongly bound to models of print books, and in a certain sense they still operate according to the norms of print – the temporality in their work is pseudo-time as in print fiction. Using Aarseth's terminology, the dynamics of these texts is static, and they are built on temporally non-changing signs. Access to some lexias may be occasionally delayed, but that is all. We could possibly already talk about the 'second generation of hypertext fiction' with works like Stuart Moulthrop's *Hegirascope*, which sets limits to the reader's reaction times. To me this refers to wholly new, and mostly still unused, possibilities for temporal manipulation in a medium, which by definition is capable of transforming anything into anything else.

BM: That is interesting, and I suppose you are right, those are mainly unexploited potentials.

ME: You can control and restrict the temporal availability and accessibility of lexias very precisely – to my knowledge Stuart Moulthrop is the first hyperfiction author who started exploring these almost endless possibilities.

BM: In a way I have always identified that as more a modernist preoccupation, and for that reason I probably have not paid enough attention. Because, after all, the manipulation of experienced time relative to fictional time is a primary modernist device: the expansion of the experienced time of reading, vis-a-vis the time of fictional world, or conversely its contraction, or in any case, its manipulation. I suppose I have not looked at that enough in postmodernist practise, and I suppose I have not thought about it very much, as something that the new media could develop. Certainly not too many people have done very much with it yet.

ME: The discourse is so strongly focussed on spatiality, and everything even remotely related to temporality is rejected as outdated modernist practise.

BM: For sure, all the quasi-technical terms in hypertext are spatial figures – all those pages and links and sites and the rest of it, are all spatial. It sounds like something is being repressed ...

RK: Naturally William Gibson's *Agrippa* was an early example of temporal manipulation.

BM: Right, and actually that is the only example that sprang to mind.

RK: I have been very surprised that nothing followed, in the field of cyberpunk – you might imagine that those authors would have been interested in this new medium ...

BM: Again, I suppose that there are institutional forces at work – these cyberpunks are after all science fiction writers and the marketing system is fixed for a certain kind of product, and they have all basically returned to those old marketing systems, even Gibson who had earned himself some freedom of movement. This is why, after all, poetry is published by small presses, and it is the only way to secure any freedom of movement institutionally, as far as the publishing institution is concerned. So cyberpunk writers were very quickly called to order, returned to their lot.

RK: Of course there have been quite a lot of computer game versions of science fiction novels.

BM: And I guess that is where those energies went to. That becomes a sort of shadowy double to cyberpunk fiction, this entire range of games that are based on it. And for that matter, film and television ... Which brings me to – has *The Matrix* opened in Europe yet? You must be on the lookout for it ....