

From Spatial Hypertext to Temporally Cybertext: Interview with Markku Eskelinen and Raine Koskimaa

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Abstract

Markku Eskelinen and Raine Koskimaa are the editors of Cybertext Yearbook 2000, published by the Research Center for Contemporary Culture, University of Jyväskylä. Eskelinen is an independent scholar and experimental writer of ergodic literature, interactive drama, critical essays and cybertext fiction (his cybertext fiction Interface 3 will be published in October 2001: Provsoft, Helsinki). Koskimaa is a member of the Literary Advisory Board for the Electronic Literature Organization and works as an assistant professor at the IT University of Copenhagen in the field of digital textuality (his doctoral thesis "Digital Literature: From Text to Hypertext and Beyond" is available [online](#)). Roberto Simanowski talked with Markku and Raine about the yearbook, the "new wave of hypertext fiction", the distinctions between narratives and games and the misunderstandings in the early hypertext theory.

CyberText Yearbook and digital Studies

RS: Markku and Raine, you are the editors of the first volume of a yearbook devoted to the new aesthetic, literary and textual objects in new media. How did this project start and what exactly is its focus?

RK: For some time we felt this nagging feeling that there was a lack of publishing forum dedicated for the new kinds of texts, taking full advantage of the digital form. Traditional literary journals either don't recognise this emergent field at all, or they only have articles dealing with hypertext and hypernovel, leaving most of the current phenomena in the field of digital textuality aside. The journals devoted to digital aesthetics and communication, on the other hand, tend to focus on the audio-visual, or multimedial, forgetting the textual aspect as outdated, or maybe just not sexy enough.

More concretely, we had been to several international conferences, which had included some very interesting papers, but no proceedings. Especially the Digital Arts and Culture conferences had had lots of papers we felt very not simply interesting, but outright important - papers that should be put out in one or another edited publication (most of the conference papers being, after all, available through conference web sites).

Gradually we settled with the yearbook format, which gives us an opportunity to build something over a longer period of time, but won't take too much of our time, as we are doing this on the side of our daytime jobs. And most importantly, we believe that it is be possible to find ground breaking papers just enough to fill one volume a year.

So now we are doing the Cybertext Yearbook, first volume came out a few months late, but the editing of the second volume is already in full swing and we have a very interesting line-up of authors for it. The format of the yearbook may change or expand at some point, we have some plans for a digital publication too etc., but whatever the format, the aim will still be to create - with the mix of scholarly articles, interviews, and technical papers - a broad forum for cybertext discussion, in which practitioners, developers, designers, users, critics, and scholars may participate.

RS: It is striking that the volume presents numerous contributions from Scandinavia and United States, one from Belgium, Slovenia, even Uruguay, but not a single one from France, Italy or the German-speaking countries. This may partly be due to the fact that the Yearbook is published in Scandinavia. However, it raises the question whether there is a difference in the acceptance of this new phenomenon as a research topic in the United States and Scandinavia, on the one hand, and the other European countries on the other. Is this so?

ME: It may be true but it's also very hard for us to tell, as we are best aware of what happens in Scandinavia and The United States. The easy explanation would be that cybertext theory spread from Norway to other Scandinavian countries and to the English-speaking world in the latter half of the 1990's. So we began from where we already were so to speak. The first Cybertext Yearbook is very much based on contributions from people we met at the series of Digital Art and Culture conferences. As you know, these conferences don't have proceedings so it was kind of easy to ask people to write. Actually, the contributors of the first yearbook have their own diverse roots at least in 9 countries: Australia, Belgium, Canada, Finland, Norway, Slovenia, the U.K., Uruguay and the U.S., which I think is pretty decent considering the fact there are only 11 articles and interviews.

We are certainly not for exclusions based on nationalities, even though there are definitely things we don't want in the yearbook like hypertext newcomers taking that handicapped theory too seriously or ill informed hypermedia enthusiasts claiming that you can't do anything interesting any more with mere text. We know to some

degree the traditions of oulipian and procedural writing in France and Italy and elsewhere like the Alamo, alire and such and will try to establish contact with these in the future. Considering what Calvino and many other members of the OuLiPo wrote already in the 60's, it's very hard to believe these phenomena are not accepted as research topics there, but again I don't know for sure. Sometimes it seems Germany is lagging a bit behind, but maybe we have just been unlucky and seen too many people approvingly copying Landow or Murray, but you are the one who is in the position to know. You could and should tell us.

RS: That reminds me of the story of how Raine hit upon the topic of his doctoral dissertation thesis, which has now been written. He was in Berlin in 1996, when he read an article in a city magazine about Softmoderne, a symposium where, among others, Michael Joyces presented his "Afternoon" and Robert Coover talked about the end of books. Germany wasn't lagging behind then but was informing tourists from other countries about interesting topics for their research. Since then, Germany neglected its own research efforts and succumbed more or less to American 'colonialisation' of the topic, as Christoph Rauwald reports in *dichtung-digital* December 1999. And one and a half years later, the tables are now turned. There are a couple of dissertations on this topic (for details and abstracts see research section in *dichtung-digital*) and especially the one by Anja Rau addresses Landow's, Bolter's and other scholars' shortcomings as regards interactivity, intertextuality and the death of the author, and the forthcoming dissertation by Stephan Posombka, one of the organizers of Softmoderne, will certainly be just as important. Taking these studies as well as the first academic conferences and digital aesthetics related research programs (see section Events and Practice in *dichtung-digital*) into account, there is hope that a German research community will be able to make its mark, maybe even in one of *Cybertext Yearbook* next issues.

ME: I think that's very likely to happen, although I think we are not going to devote many pages to the all too obvious shortcomings of the early or later hypertext theory. It would feel like flogging a dead horse especially after the publication of *Cybertext*. We are also very interested to know what goes on outside Europe and the U.S., in Brazil, India, Japan, or Russia to name only the most obvious horizons. And this brings us back to the complicated acceptance issue. At the present moment you are talking to two thirds of Finnish cybertext scholars, the third one earns his living in the private sector now. So I wouldn't say it's an accepted research topic even in Finland despite our advanced technological infrastructure and semi-Scandinavian educational system, but just a barely tolerated one. To return your interesting and amusing anecdote of the German situation, in my own case it all started in 1988 in an interview where I claimed that writers should start exploiting the fact that on the computer screen the signifiers don't have to be permanent - after that it took almost ten years for me to find an established theoretical framework

where to articulate that kind of ideas in detail, or to put it in other words, where to turn my turned down applications for funding into theory.

Despite and after these typically Finnish basket case histories we do it anyway so I don't think it's so much about traditional and institutional approval at all or as yet, although when it comes to that I think especially Norway and perhaps Denmark are and will stay well ahead of all others at least for a while. In what comes to the U.S. it might be more accepted there than anywhere else, but sometimes it also seems that it's that for all the wrong, e-commercial reasons. It's tempting to speculate that the conceptual weakness in average American hypertext and new media theory, and I don't mean the superb technical writing, is based on market driven demand for utmost simplification and applicability. But it's really hard to tell, as the studies of textual phenomena are not considered to be very sexy in terms of funding anywhere, which is terribly shortsighted of course. Luckily, we are not in it for the money.

Cybertext Theory and Aesthetical Preferences

RS: I refrain from joining the speculation, but I want to turn to the American concept of hypertext. This concept is explicitly addressed in the "CyberText Yearbook", which adopts Espen Aarseth's term from his 1997 Ph.D. thesis "Cybertext: Perspectives on Ergodic Literature", arguing against the "imperialistic classification" of calling all electronic texts hypertext. As stated on the book jacket, the articles in this Yearbook take their cue from Aarseth's definition of cybertextuality. "The cybertext theory," we read, "may not solve all the problems and riddles in the rapidly expanding field of digital textuality, but it is the most heuristic and reliable point of departure so far." Why is cybertext superior to hypertext and what problems does the new theory solve?

ME: First of all, cybertext theory offers a fresh and unified perspective to all textuality by taking as one of its points of departure a seriously understudied dimension of the textual medium and the functional differences in it. That's something the prevalent semiotic theories have not taken into account, and therefore they can't be applied as such to the studies of networked and programmable media. Approaching the unique material duality of cybernetic sign production, cybertext theory defines texts as concrete machines consisting of three interplaying parts: the medium, the operator and the strings of signs. These strings of signs are then divided into scriptons and textons, the former being those presented to the reader or user, and the latter those that exist in the text. The mechanism that generates or reveals scriptons from textons is subdivided further into seven dimensions through which every text can be described and classified.

The model is empirical and it doesn't contain hypothetical elements, as all the values these dimensions can have are already at work in existing textual objects. However, at the same time the possible combinations of these values result in nearly 600 media positions into which every text can be situated based on how its medium works. Of these functional and material possibilities the history of print literature has been able to utilize maybe 2 or 3 %, and very print like hypertextuality a little less. To me this insight is of great heuristic value, and it is also the reason why cybertext theory can reliably describe and study and also respect the enormous existing diversity in the field of digital textuality including MUDs, adventure games, text generators, conversation programs, and hypertext fiction. These studies of the textual medium will also give us a reliable position where to begin discussing between traditions, media and practices, the not-so-hidden agenda behind this series of cybertext yearbooks.

Especially the fact that hypertext is just a subset of cybertexts seems to be annoying to many, as it is capable of putting an end to the print versus digital hype, and preventing neat generalisations, colonisations and superficial forms of remediation and comparative media studies (comparisons without knowing in depth what to compare). Cybertext theory also brings to the fore what it calls ergodic literature, where the user has to do non-trivial work in order to be able to traverse the text. Regarding literature, where there are also other than interpretative riddles and gaps traditional literary values cannot be applied with a good conscience any more, they resulted from engagements with other kind of textual objects. This is crucial, as too often the ambition of hypertext people was and is to confirm the existing literary values and just add hypertext fiction and poetry on top of them. In addition, the specifications of this ergodic literature, most of all the different user functions, give us much more precise ways to deal with and study what is now designated by the buzzword interactivity. Maybe I should stop here, as I know I can continue for tens of pages more.

RS: Let's continue on this line for a bit. You mention that people follow existing literary standards when reading hyperfiction. Larry McCaffery, judge for the Electronic Literature Organisation [fiction award 2001](#), for instance, writes: And when all else failed, I always had my equivalent of magnetic north to guide me -- all that nebulous but weighty stuff that the phrase 'high literary quality' once used to refer to. For me, that meant I was consciously seeking out fiction that somehow managed to grab my attention and kept it, that amazed or amused or bewildered or disturbed me, and above all that moved me in some way." It shouldn't be surprising that McCaffery supported Caitlin Fisher's [These Waves of Girls](#), a work that tells a story, albeit a multilinear and multimedial one, instead of Talan Memmott's cryptifictional hyper-assemblage [Lexia to Perplexia](#) or Paul Chan's performance with letters [Alternumerics](#). Does McCaffery speak to the expectations of a majority unwilling to break with certain literary and/or narratological conventions? I also

wonder whether literary standards are a matter of the medium (linear text vs. cybertext) or of aesthetical preference, which in both media range from the more traditional to the more avantgarde.

ME: I can't speak for Larry McCaffery, and I refrain from speculations. You should ask him. It's obvious to me literary standards can't and should not be independent of the medium, but I have to admit there are scholars who are not willing to recognize that. Generally speaking, I think the current frenzy of seeing or finding narratives everywhere is a serious disorder in aesthetic pattern recognition. In what comes to actual cybertexts I think we should know a lot more than we do at the present moment to start messing up with value judgements. If we just keep projecting traditional aesthetical preferences, be they traditional or avant-garde in whatever heterogeneous sense, we are not necessarily learning anything worth passing on. To be honest, I don't know which is worse: that incompetent scholars pay attention to innovative works or if they don't. At least Memmot's "Lexia and Periplexia" has already generated articles that make this dilemma very visible. In the next yearbook we'll try our best to save Noah Wardrip-Fruin's The Impermanence Agent from that kind of fate.

New Wave of Hypertext Fiction and Temporality of Cybertext

RS: Raine, your contribution discusses the Stuart Moulthrop's 'classical hyperfiction' "Victory Garden" from 1991. In your DAC 01 presentation you discuss new web fictions being published in 2000 and speak of a "new wave of hypertext fiction". What characterizes this new wave, how does the current hypertext fiction differ from classical hyperfiction?

RK: To start with the fundamental difference, new hypertext fiction tends to be web based, instead of stand-alone programs. This already changes the nature of hypertext fiction significantly, as it becomes a part of the World Wide Web. Of course there has been web fiction around for some time already, as authors like Michael Joyce, Stuart Moulthrop, and Shelley Jackson all have been experimenting with on-line writing too. But there has been a sense of disconnectedness from the surrounding environment, like the texts hadn't really found their place in the Internet. With the "new wave" of hypertext fiction the works seem to be gone native in the net, and there is a fruitful feedback loop between the texts and contexts (in some cases it works in a very concrete way, in other cases on the interpretational level).

Michael Joyce's The Sonatas of Saint Francis is certainly a remote island in the World Wide Web, as its navigation system and language do not confirm to the

common web practises at all. At the same time, however, it gains significance as a subtle critique of those practises, which, in turn, strengthens the effect of the strongly local sensitive navigation system in the work, as opposed to the highly abstract navigation in the WWW, or the effect of the playful and poetic language.

M. D. Coverley's The Book of Going Forth by Day, fuses ancient Egyptian hieroglyphic practices with browser functions, creating a visual and functional environment, which is simultaneously highly unique, but intuitively easy to understand and use. Another thing, which is interesting in this work, is that it is written on-line, that is, the author composes the work directly on the net, so that readers can follow the creation of the work in real time.

Then we have works like Nick Montfort's and William Gillespie's The Ed Report, which recycles the hoax genre (website containing 'official' documents), or, in totally different direction Talan Memmot's "Lexia to Perplexia," which makes original, textual use of Flash-like visuals, etc.

So the new hypertext fiction mainly is written for the web, and it is aware of its own on-line existence.

RS: In your "(Introduction to) Cybertext Narratology" you, Markku, point out that "there still doesn't exist any reasonable study or survey about how much the order in which the nodes are actually read affects the concepts and comprehensions of the (hyper)textual whole". You complain the "hype of non- or multilinearity in average hypertext theory" and refer to print authors as Alan Robbe-Grillet and Robert Coover, how "have long ago shown us that narrative can proceed in an aporetic order and destroying possible causalities along the way." It is important to remind ourselves that non-chronological and inconsistent narration has shown up in writing long before the arrival of hypertext. However, the difference to hypertext is that in printed text (with the exception of printed hypertext, of course) everything is set up in linear fashion, and the author controls the way the reader encounters her well-designed 'chaos'. In hypertext the author lacks this control. Raymond Queneau did not live long enough to read all of his 100 trillion sonets; Michael Joyce probably never walked all of Afternoon's possible routes. The author, one could say, doesn't really know her text. But what is the pay off for the reader? To question the reader's free navigation seems to question the aesthetics of hyperfiction themselves. What is much-hyped non sequential writing all about 10 years on?

ME: Generally speaking I think that you've read "Afternoon" when you have read all its nodes/lexias (then its up to your interpretation how to combine the information you have) and that people coming from mainstream traditions tend to exaggerate the impact of the many possible routes compared to those who are well read into more experimental traditions. The self-evident difference between Michael Joyce's "Afternoon" and postmodernist fiction such as Coover's or Robbe-Grillet's is Joyce's use of conditional links, controlled access and explorative user function. But we

can't be sure of the relative importance of these factors as there are no actual or competent studies (and there are of course remarkable differences in this between hypertext fictions), and that's the very trivial point I'm trying to make in that sentence. In addition, as the general idea of my Cybertext narratology is to discuss narrative and textual possibilities beyond the rigid hypertext paradigm, I'm very much against an amateurish ht-discussion too much stuck or even obsessed with seeing order/linearity as the only relevant temporal dimension.

Temporality is poorly understood and even more pathetically theorized in hypertext circles for at least two fundamental reasons. Firstly, because most advocates of literary hypertext are surprisingly not familiar with sophisticated literary theories of time (and narrative time in particular), they tend to reinvent parts of that wheel with homebred concepts instead of being able to transform them to suit the study of interesting textual objects such as Stuart Moulthrop's web fictions. Secondly, and as cybertext theory is able to show, classic hypertexts are very print like with their static scriptons and intransient time, which actually helps to explain the fierceness of hype contrasting print to the digital. Every material signifier is permanent there, there's absolutely no play with different durational values; so it's like that post neutron bomb heaven where nothing ever happens. Obviously, this comment says nothing about the aesthetic value of those works that I happen to like. Recently I finished an article with Raine, a serious parody of and a balancing addition or supplement to Story Space, discussing narrative time in some 15 registers, traditional or cybertextual, like order, frequency, speed, duration, reading time per node, total reading time, revisiting, rereading, vanishing speed, simultaneity, permanence, occurrence, reception time, changes, settings and totality. Just to make clear what should have been obvious for a very long time, that there actually are temporal alternatives to the metaphysics of explicit links, and its usual counterpart, the Pavlovian school of interactivity.

In what comes to author's knowledge, as a writer of hypertext and cybertext fiction, I must say I think you are mistaken when you claim that authors don't know their texts. Obviously, it's trivially true to every text and author, and scholar and reader too, if we think about de Man's blindness and insight, but I don't think you meant that. There are multiple connections in and between the lexia, or the bits and pieces of your text and only a very small part of these relations are and can be shown by conditional or explicit links. And secondly, as a writer, with or without collaboration, I design user's possibilities to use the system, and write the limits to these possibilities too. So what's the problem? If I manufacture a standard set of dice I know that when you throw it the result is somewhere between one and six. And actually I can control this functional or operational or ergodic dimension better than possible interpretations of my text. What I especially like to do is in my so-called creative writing is to sabotage the ready-made meanings readers project everywhere by this ergodic system allowing me to make temporal changes

undermining the predictable points of identification. So this whole control theme gets enormously more dialogic, complex and interesting when we are past the petty troubles of navigating hypertext scouts.

RS: The shift in attention from link structure to node behaviour, as you and Raine describe in this article, seems to aim a quite different concept. The traditional hypertext theory stresses the multiperspectivity of the various navigation options, the keyword being "content matters." As we all know, if the dice comes up 1 after three successive 6's or 2's, it does. The concept of temporally dynamic navigation-narratology beyond navigation, as you term it in *CyberText Yearbook* - gives much more control than ever to the author and ensures, to stay within the picture, that after three 2's, the reader always gets 4. In this case, the game is all in the author's hand. And while we're on the topic of games. Your DAC 01 presentation is entitled "The Gaming Situation" and stresses the difference between gaming and dramatic-narrative situations. Is this a reaction to those approaches that consider adventure games as narratives? What about the qualification that game users live the story, while remaining aware of the telling?

ME: Let me first quote two things from my paper just to clarify what I think and said. "The dominant user function in literature, theatre and film is interpretative, but in games it is the configurative one. To generalize: in art we might have to configure in order to be able to interpret whereas in games we have to interpret in order to be able to configure, and proceed from the beginning to the winning or some other situation." And another, I'm sorry for this narcissistic fit: "according to the famous statement of Christian Metz 'one of the functions of narrative is to invent one time scheme in terms of another time scheme'. Contrary to this, in games there's only one necessary time scheme: the movement from the beginning to the winning or some other situation. In cases where another time scheme is invented, it is not as important as the first one." I guess this qualifies as a reaction.

To me games are not interactive narratives, procedural stories or remediated cinema. When playing, I'm manipulating temporal, spatial, causal and functional properties and relations of whatever events and existents I'm allowed to manipulate as equipment, according to formal rules, and that's not a narrative or a story, or if it is, please tell me the story of Tetris and how you live it. It's rather curious or revealing that all the classics of Western game scholarship, let's say from Huizinga and Caillois to Avedon and Sutton-Smith, tried to study games as games without defining them as narratives. So should we believe that suddenly, by the advent of computer games, games turned into narratives overnight? Perhaps something happened in the marketing departments instead.

I'm far from being alone in this, to the contrary. There are many outstanding scholars who study games and gaming environments from heuristic new perspectives without colonising them by the already existing disciplines and

predatory theory formations. I'm thinking here of Espen Aarseth, Gonzalo Frasca, Jesper Juul, Torill Mortensen and Ragnhild Tronstad in particular, and I'm sure there are and will be countless others. Actually I know this to be the case because I'm supposed to know as one of the editors of *Game Studies*, the world's first academic journal of computer game studies (the first issue of which will soon be online at [LIENHYPERTEXTE](#)).

To say something more about reactions, there are people to whom all this seems to be both psychologically intolerable and professionally threatening; at the recent DAC and elsewhere I have had the pleasure to witness very surprising and disturbing reactions to studying computer games as games. To take only one example, N Katherine Hayles seems to believe that the game scholars or ludologists, including me, want to kill literature. That's quite an accusation coming from such a newcomer to hypertext lit, but what can I say: to err is human, but not to study games must be truly post-human.

Death of the Author and Digital Literature / Art

RS: Another example for erring is the declaration of the death of author in hyperfiction, inspired by Barthes' und Foucault's proclamation of the author's death or disappearance in printed literature. Today, faced with the author's continuing power and the reader's obligation to follow prefabricated links, some theorists say that Barthes was premature. Isn't there a huge misreading behind both the former claim that hypertext fulfils the postmodern theory about the death of the author and the latter about the current return of the author? I always understood Barthes and Foucault's questioning of the author's possession of her thoughts as a shift from idealistic subject- to structure-oriented philosophy. Isn't the author still trapped in structures or discourses, which determine her ideas, regardless whether she has control over the order they appear?

RK: Yes, I couldn't more heartily agree with you. Unfortunately, this is just one of the many misunderstandings in the early - but still influential - hypertext theory. It goes to the same category of errors as putting an equation mark between intertextuality and hyperlinks. Of course, the hypertext theorists are not the only ones to blame, as Foucault's and Barthes' notions of the death of the author have been widely misread, so that they are understood in much more concrete way than actually meant - just like you say, it is a question of the structural power fields and discourses, inside which an author works, never as an independent agent, but always tied to the discursive practices available to her. Now one can be of any opinion if this is an accurate description of the social context in which we are and write our texts, but it should be quite obvious that a mere technique like hypertext hasn't changed these

power structures in any way. Thus, Barthes' claim is as true now than it was thirty years ago.

Another thing, then, is that hypertext author has more power over certain structural principles governing her work. Especially the temporal dimension is now controllable (at least potentially) in totally different fashion than with traditional text. I say 'potentially', as so far there are no suitable tools for authors, with which to easily produce temporally structured texts. So even here the author's power is subordinated to her ability (and access) to use specialized software and programming.

And this is exactly the topic we are concentrating at the moment - developing an authoring tool, which would give a whole range of cybertextual mechanisms easily for use to any author, without requiring specialised programming skills.

RS: Last question. Authors of hyperfiction or cybertext often come from the field of writing, whereas authors of digital art usually have a background in performance, visual and conceptual art. However, in the digital realm, where words, images, sound and performance easily mingle, it seems hard to maintain these traditional categories. Hypertext has become hypermedia, the link has married with Shockwave and Flash, and former authors of books like Mark Amerika are included in listings of net art. Does it still make any sense to draw a distinction between digital literature and digital art?

RK: It does make as much sense now, than it has always made. The textual medium has its own characteristics, it is suited better to some tasks than others, and I firmly believe that there are such aspects in textual medium, which simply cannot be reduced to other mediums. But of course it is true that today we have a lot of works, which blend and fuse textual with other media - let's call them hypermedia for the lack of better word. With regards to these works, with each individual work it usually does not make sense to try and classify them according to just one of the several constituent mediums. One of the main problems lies in the extensive use of 'digital' as a definer - expressions like digital literature, or digital art, doesn't really say anything significant about the work at hand, it simply states the blatant fact that this particular work - for one reason or other - is primarily presented in digital form. To go back to literature, there definitely are a lot of new writing forms, which use the textual medium as the dominant one, and whose functions differ in their own ways significantly from traditional literature, but which still quite apparently belong to the historical trajectory of 'literature'. You only need to read the [judge's comments](#) about the ELO Poetry Prize winner John Cayley's "Windsound" work to see this, or reviews of digital texts in Dichtung Digital, and so on - the cybertextual aspect of these works is clearly recognised and appreciated, but in unison with their distinctly literary values.

RS: I actually agree. I myself tend to take narration as one of the textual medium's own characteristics; though here we obviously get in trouble with film studies. As regards the ELO award, I refer to the fiction section again, which has shown that the recipe to succeed was telling a story, in hypertextual manier and with images and sound, but still a story. The other final contributions, expect Shelley Jackson's "Patchwork Girl", all are more or less performances with text and remind me on conceptual art. Perhaps it is not a question of how much text is involved (in comparison to images) but to what extent it is employed to serve as text, that means to create a narrative world behind letters rather than serving as icon or picture, stressing its own materiality.

Well, we'll see. Thank both of you for the though- and pointful answers.