WEAPONS OF THE DECONSTRUCTIVE MASSES (WDM): WHATEVER ELECTRONIC LITERATURE MAY OR MAY NOT MEAN

John Cayley
Brown University

Weapons of the Deconstructive Masses. In the midst of a desperate, necessary call for change, it might be best to get this all over with quickly; to admit that, «There aren’t any», and desist from any threat or preparation to invade a sovereign field of cultural production where intellectual democracy is always already safe.

When I began to prepare this short essay, it was going to be by way of those critiques which ask, «Does it matter what we call it?» Of course it matters, or makes meaning, in the sense that words resonate and cannot be prevented from doing so. Nonetheless, that linguistic signs derive signification from locations within structures of differences and as a function of manifold contexts of usage; that their material specificities are arbitrary: – these facts are not contradicted by the revisionings of poststructuralism. Neither is poststructuralism

---

1 This paper was originally prepared as a presentation for: ‘Visionary Landscapes’: Electronic Literature Organization Conference, Thursday, May 29-Sunday, June 1, 2008, Vancouver, Washington, Sponsored by Washington State University Vancouver and The Electronic Literature Organization. The date of the conference partly explains the allusion in the first paragraph. A number of colleagues and friends have read this paper since it was first presented. I would like to thank Roberto Simanowski and Aden Evens for particularly detailed and helpful comments. All contentious opinions, errors, and misapprehensions remain my own.
any kind of reliable ally for poetic law-makers who, like Ezra Pound, seek to establish ‘proper names’ for things, ‘true names,’ AMERA 2, a human-native tendency that he also translated from Chinese culture where it remains equally conservative, command-expressive, and poetically exacting, and also every bit as profoundly constraining and cultural-absolutist as it would be in some Poundian West. I mean to say that, within the systems and structures of language, names are put forward and are used, and they come to signify what they signify, to mean what they mean. Deconstruction can’t do anything about this except to play in the slippages and gesture towards ruptures and anomalies, making différance without necessarily making any difference.

Bizarrely, the etymological and associative play of deconstruction is formally and, I would argue, significantly and affectively resonant with the same play that one finds in — as the epicentric example — Pound’s later ‘ideogrammic’ work. In The Cantos Pound creates poetic ideograms from shards and fragments of transcultural, translingual etymology and association in order to establish the ‘sincerity’ of true names, with «... the sun’s lance coming to rest on the precise spot verbally.» Derrida performs in precisely the same way, but so as to question, within writing, within the discourse of philosophy, the possibility that writing can ever produce any kind of ‘proper’ signification.

All this is simply to give you some idea of where I might have been and, to a certain extent, still am coming from. But more importantly, this preamble rhymes with my final paragraphs, where we are again confronted with a disturbing contradiction between literary

2 Confucius (= Kong Fuzi), Confucius: The Great Digest, the Unwobbling Pivot, the Analects, trans. Ezra Pound (New York: New Directions, 1969) 20. The quoted text is Pound’s ideogrammic gloss for the character cheng (Wade-Giles: ch’eng) often translated as ‘sincerity.’ See also: The Cantos, LXXVI, 468/474.
nostalgia or longing for what I later call ‘persistent form,’ and cultral inclinations which are formless or polymorphically and transmedially associative beyond anything we have yet encountered. I will still briefly take up the question of whether ‘electronic literature’ is a proper name for the field in which many of us are now engaged, as both practitioners and critics, but I will go on to address at least two other matters which, for me, follow on from these issues of naming but which are, I believe, of greater moment. I want to try and write about some of the strategies and/or tactics that we, as a cultural collective – institution even – may wish to consider when delineating our relations with both literary and art practice, including critical and pedagogic practice. Finally, I would like to address some of the broader cultural and intellectual changes that I see taking place, specifically those that are highlighted by these considerations of naming and of cultural strategy.

NAMING
As a matter of historical fact – and not only in the United States – ‘electronic literature’ has emerged as a preferred term, one now destined to survive even my own attempts at deconstruction, especially since the publication of N. Katherine Hayles watershed, digestible, CD-equipped, all-in-one critical review, come constructive textbook, come seminal polemic, come new theoretical framework: *Electronic Literature: New Horizons for the Literary* (Hayles, 2008b).

Thus, whereas we never had ‘steam literature,’ or ‘electric literature,’ or ‘telephonic’ or ‘televisual literature’ – at least not of any cultural moment or persistence – we have already had ‘electronic literature’ for a remarkably long time, especially given the hyperhistory of new media development. If, by electronic literature we mean practices of writing in networked and programmable media – what I have always tended to call it – then we are likely to have an ‘elec-
tronic literature’ for some time to come. However we will have to bury the material-metaphoric implications of ‘electronic,’ precisely because the use of this adjective misdirects our critical and theoretical attentions. Writing in networked and, especially, programmable media weans us off even the traditional attachments of literature to particular forms of material cultural support: all the predominant and authoritative cultural formations that cluster around paper and printing and ‘the book.’ We are not out to replace one privileged material cultural support for another and so we must metaphorically bury ‘electronic’ and must do so in the full critical awareness that, over a much longer period, a number of similar literary qualifiers indicating other material cultural supports were buried long before it. Literature has never been, for any of us, just ‘literature.’ Without needing this ever to be said, it has been predominantly, successively, concurrently ‘oral literature’ or ‘manuscript literature’ or ‘book literature,’ and so on. Recently, Hayles and other theorists, notably Alan Liu, are turning to a notion of ‘the literary,’ perhaps driven in part by unconscious or unacknowledged anxieties that literature may never be able to slough off the privileges entailed by some form of contingent material support (Liu, 2004). For Hayles ‘the literary’ is something like the potential articulation of symbolic feedback loops within complex, aesthetically motivated structures that ‘intermediate’ human and non-human cognizers and agencies, themselves emergently self-organized in ‘dynamic heterarchies.’ Her theoretical framework provides a necessary revisioning of our brave new world and looks towards ‘the literary’ as one way to embrace and articulate this vision, while acknowledging that the resulting ‘electronic literature’ may be at a loss for words let alone paper to write them on.3 For

3 A representative quote: «Electronic literature extends the traditional functions of print literature in creating recursive feedback loops between explicit articulation, conscious thought,
Liu, since the advent of the graphic browser, culture generally and literature in particular, is already long since swamped, overlooked and downplayed by the ‘cool’ detachment that disregards a committed, materially supported poiesis. It’s hard to be cool about making things, especially poetic things, especially poetry. It’s even harder to be cool when reading poetry itself (as opposed to the cool theory that may envelop or disguise some of it), privately and particularly in public. Literature is uncool; while ‘the literary’ has, at least, an outside chance of looking good and trading up. In the world of poetry, for example, while literature skulks in the academy, you can apply ‘the literary’ to everything from rap, to spoken word, to open mic, to conceptual poetics, to ‘epoetry,’ whatever any of these may or may not mean.

Ultimately then, our problem and focus will prove to be not so much concerned with the qualifications of its various qualifiers, such as ‘electronic,’ but with literature itself. Rather than attempting to identify the specificities of a certain variety of literature or the literary, we must turn to questions – this is precisely what Hayles does in her book – of how the aesthetic viability (or not) of this newly mediated literary practice recasts literature itself and how this impacts on artistic culture broadly addressed. Liu’s approach contrasts tellingly. Hayles accepts, more or less as a given, that there is a viable electronic literature and that we are (therefore) obliged to address its specificities and challenges. Liu is radically uncertain about the position of literature and the literary in what he sees as the now predominant, overarching ‘culture of information.’ In this – our contemporary – culture he discovers ‘cool’ as a (perhaps the) prime and embodied sensorimotor knowledge. ... While print literature also operates in this way, electronic literature performs the additional function of entwining human ways of knowing with machine cognitions.» (Hayles, 2008b: 135). For ‘dynamic heterarchies’ see: Hayles, 2008b: 44 ff, and Hayles 2008a.
aesthetic operator. As a backdrop to my argument, I’m required to knit together a number of citations from Liu’s book that will provide a somewhat troubling delineation of this term in his insightful usage. ‘Cool’ information troubles literature and seems to render it ‘uncool’ in proportion to its redefinition culture itself. «Cool is the aporia of information. In whatever form and on whatever scale (...), cool is information designed to resist information – not so much noise in the information theory sense as information fed back into its own signal to create a standing interference pattern, a paradox pattern. Structured as information designed to resist information, cool is the paradoxical ‘gesture’ by which an ethos of the unknown struggles to arise in the midst of knowledge work.» (179) «What is the future of the literary when the true aestheticism unbound of knowledge work – as seen on innumerable Web pages – is ‘cool’? Cool is the techno-informatic vanishing point of contemporary aesthetics, psychology, morality, politics, spirituality, and everything. No more beauty, sublimity, tragedy, grace, or evil: only cool or not cool.» (3) But ‘cool,’ for Liu, also indicates an aporia that might paradoxically provide a solution to his aesthetic aporia. «What transitional aesthetics can bridge the rift between class-based and classless aesthetics, between a ‘distinction’ of literature that is now dying and its resurrection in a new body or form? Or, in a less utopian voice, what aesthetics can represent itself to itself as transitional in this manner? My argument is that the answer inheres in the avowed aesthetics of contemporary knowledge workers: ‘cool.’» (400, n8) The problem remains (more on this below) that he cannot see how the contemporary artistic practice of literature, even an electronic or digital literature, can become a part of this process of aesthetic transformation in, shall we say, a theoretically unified way.

Before proceeding, we must also be a little more clear about how we qualify those literary practices that currently bear the epithet
‘electronic.’ Unsurprisingly, this hinges on some understanding of the methods and properties of artistic practice itself, especially those we may characterize as ‘literary.’ In so far as artists identify as literary – without further qualifier – a distinct, established tradition of practice and criticism is able to examine their explicit claims as well as those that remain implicit in the work. In so far as artists engage in more novel practices of language art-making and in so far as they appear to share such practices with others, the designation of these practices becomes a matter of negotiation. While resisting the potential overdetermination of past concepts and forms, we do have to find appropriate, and necessarily abstracted, abbreviated phrases for processes and things that, even now, we do not yet entirely comprehend.

Both ‘electronic literature’ and the all but insignificantly preferable alternative ‘digital literature’ imply that there is a ‘variety,’ a ‘branch,’ a ‘faction,’ or, perhaps even a ‘genre’ of ‘literature’ (problematic in itself, since Flaubert and long before new media, according to Barthes in Writing Degree Zero) that is distinguished by the characteristics of the material from which it is made or the media in which it is realized, rather than the procedures of its generation. Both terms tend to substantiate literary production, to highlight the (finished) product (that always already has a past, a history), rather than (a continuing, emerging, developing) practice. For some years I have tried to make a point of highlighting practice by using the slightly roundabout phrase ‘writing in networked and programmable media.’ As a matter of pedagogic pragmatism I now also encourage

4  I am happy to see that this phrase has now been taken up quite widely in the literature, not least in Hayles’ new book (op. cit.) and, for example, in the recent collection of essays, Peter Gendolla and Jörgen Schäfer, eds., The Aesthetics of Net Literature: Writing, Reading and Playing in Programmable Media (Bielefeld: Transcript, 2007). The phrase can also be shortened to ‘writing in programmable media’ since programming enables network. The mark of an explicit relationship with practices of coding will continue to enrich and to specify our literary
the shorter ‘writing digital media,’ the WDM of my title, a phrase in which there also hovers a cloud of pronouns and less-articulate possible relationships between writing and digital media: writing [in] digital media; writing [for] digital media; writing [transitive] digital media. But this is, as I say, pragmatism, part of what is a necessarily collective approach within which terms will continue to emerge and fade away along with ‘electronic writing’ or ‘electronic literature.’ In these latter terms the reference to material support will become invisible, folded into the designation as programmable electronics – gradually, steadily, then exponentially – become ubiquitous. The material and metaphoric overtones will simply die. We should be more concerned, as we will see, with what may or may not die with them.

THE LITERARY
I want to return now to the problem of ‘the literary’ and its critique in networked and programmable media, to the question of culturally, historically established forms and how these interrelate with writing digital media. Here, ‘writing,’ as opposed to ‘literature,’ allows me to link forward to a demonstration of how – as I see it – underlying, practices in these media, but it is not yet clear to me that programmability and processing give rise to all their distinguishing characteristics, or, for that matter, operate significantly or affectively in every example of those practices to which we turn our attention. Programming enables the network but cultural production on the net does not always practice coding and neither does every instance of writing in digital media. As a term, ‘writing digital media’ attempts an abbreviated reference to this situation by encapsulating the conjunction of networked and programmable media, without specifying the precise grammar that underlies this conjunction. I am also anxious to note, in passing, that I consider coding to be a distinct cultural practice, distinct, that is from writing, for example. For this and contrasting views, see the recent NSF workshop on ‘Codework’ organized by Charles (Sandy) Baldwin at West Virginia University. Position papers from this workshop, including one of my own on this question, are online at http://clc.wvu.edu/projects/codework_workshop/codework_position_papers, and will be published in due course.
persistent, perhaps even necessarily persistent, forms determine art practices as literary.5

It is fascinating, if disturbing, to witness the parallel retreat from ‘literature’ to ‘the literary’ in two of our most important critics. Hayes recovers ‘the literary’ and establishes ‘electronic literature’ as an elaborate function of the cyborgization of posthuman cultures. It is as if ‘writing’ will provide an aesthetic and cognitive proving ground for an inevitable technological reconfiguration of culture and society generally. Liu, all but overwhelmed by ‘cool’ new media art, admits to being at a loss: «I think literature will indeed have a place in a new-media world otherwise dominated by the design, visual, and musical arts. But what the eventual nature and position of literature will be among the convergent data streams of the future is something I do not yet know how to theorize.» (Liu 389) This is, dateline c. 2001 AD, the final epilogic position of a self-identified literary scholar after 500-odd pages of highly engaged, closely argued examination of contemporary cultural production in fields closely allied to our own. Both approaches make it difficult—two times harder—for me to

5 In email communication, Aden Evens has pointed out that my use of ‘form’ as in ‘persistent form’ differs from a stricter usage that would more closely ally the term with abstract form or, for example, the ‘concepts’ underlying conceptual art, whereas my persistent form is—I acknowledge this and the point is brought into my argument explicitly below—implicated with particular (literary) material cultural manifestations, particular media that are able to bear particular forms without, however, determining ‘content’ or its significance and affect. I agree that these distinctions require some elaboration beyond the scope of this essay. Evens writes, «... form is what the concept determines, whereas materiality manifests this form but also exceeds it. In ‘traditional’ artworks, this excess is precisely what makes the work great. That is, the formal is what can be fully captured by the digital, it is what gets preserved as ‘information.’» (email communication, August 4, 2008) My persistent form is not precisely this excess but it would enable such excess to survive the work and its concept. I believe that the final paragraphs of Terry Harpold’s interesting extended gloss on ‘hypertext’ (Harpold 2003) refer to these deep problems of form in the practices of writing (in) digital media—of form in inherited vs. programmable media, I might say.
put forward a theory of my own and still find appropriate recent support or authority. What you get and what follows, is a practitioner’s view, with some ties to critical and theoretical writings that I have found necessary or useful.

Earlier above, I pointed out that, within traditional discourse, ‘literature’ has no need to specify its material cultural supports. These are assumed. We still live and breathe and write within the culture of the book. The usages of ‘writing,’ I argue, allow a similar adherence to preferred, persistent form, while remaining actively open to the emergence of new forms. This is one of the arguments that makes us prefer, for example, the term ‘writing digital media’ to ‘electronic literature.’ The former preserves formal values while allowing that they will only ever be a function of cultural practice. They can be assumed, but they are not necessarily inherited, as of proper(ty) right(s).

But whence the implicit formal conservatism of ‘writing?’ There is ‘always already’ so much – perhaps endless – evidence of nostalgia for the forms of literary material culture, emanating even from the pens (sic) of the most sophisticated and prescient critics. Not long before Liu was becoming literally overwhelmed by new media cool in a manner that remains both cool and relevant, Derrida was also speculating on writing and the ‘the book to come’ in a way that may belie any sense that his theory and critique predates and so has less relevance to a literary or linguistic philosophy of new media. In 1996, Derrida points out that, «[i]t was well before computers that I risked the most refractory texts in relation to the norms of linear writings. It would be easier for me now to do this work of dislocation or typographic invention – of graftings, insertions, cuttings, and pastings.» Thus, it was more or less at the precise moment that hypertext was visibly instantiating poststructuralist thinking on the web, that Derrida went on to say, «I’m not very interested in that any more
from that point of view and in that form. That was theorized and that was done – then. The path was broken experimentally for these new typographies long ago, and today it has become ordinary. So we must invent other ‘disorders,’ ones that are more discreet, less self-congratulatory and exhibitionist, and this time contemporary with the computer.” (Derrida 2005c: 25). In the late 1990s Derrida maintains his adherence to a practice of avant-garde, deconstructivist literary ‘disorder’ – exceeding nonlinear hypertext – while, at the same time, reimagining the book in terms of irreducible cultural fantasy, where the end of the book may also be something quite opposite: «These are two fantasmatic limits of the book to come, two extreme, final, eschatic figures of the end of the book, the end as death, or the end as telos or achievement. We must take seriously these two fantasies; what’s more they are what makes writing and reading happen. They remain as irreducible as the two big ideas of the book, of the book both as the unit of a material support in the world, and as the unity of a work or unit of discourse (a book in the book).» (Derrida, 2005b: 15). The two ends together – death and the achievement of writing – are what make writing and reading happen. Writing isn’t writing without an end, without death. In another article of roughly the same period, important for our discussion, Derrida confesses his ultimate attachment to media remarkably similar to Ted Nelson’s permascroll6 – a ‘paper emulator’ if ever there was one, as Derrida

6 Nelson’s conception of the ‘permascroll’ was introduced after the last revision of Theodor Holm Nelson, Literary Machines 93.1 (Sausalito: Mindful Press, 1993). As such it does not seem to be often discussed. A definition, with related terms can be found here: Tuomas J. Lukka, Gzigzag Glossary, 2002, Website, Available: http://www.nongnu.org/gzz/gl/gl-ns4.html, August 2008. The permascroll is the sequential record of all significant textual (or literary) events. A text would simply be a set of references to ‘spans’ of the permascroll (which would clearly not be sequential). As here, for Derrida, this kind of totalizing structure designed to record the minutest discrete details of everything that can be recorded (begging the most significant of questions, namely: ‘What is the minutest discrete detail of everything?’) is a
makes clear, «... when I dream of an absolute memory ... my imagination continues to project this archive on paper. Not on a screen ... but on a strip of paper. A multimedia band, with phrases, letters, sound, and images: it’s everything, and it would keep an impression of everything. A unique specimen from which copies would be taken. Without me even having to lift my little finger. I wouldn’t write but everything would get written down, by itself, right on the strip.» (Derrida, 2005a: 65). Derrida’s nostalgic attachment to a scroll of paper may appear uncool, but this vision of his own multimedia permascroll – «On paperless paper» (Derrida, 2005a) – is also deeply cool («information designed to resist information» (Liu, 2004: 179); paper imagined to resist paper). Derrida sees clearly that writing (and reading) is the key, writing as the record of what we are, or, rather, what we will have been after we are gone. For a culture to acknowledge our existence, to register and archive whatever it is we will have been, there must be some way for us to write ourselves, some arbitrary material cultural support, a cultural practice of inscription, and a cultural fantasy of successful inscription to drive the whole machine. These will all be historically determined, of necessity. A paper scroll may not be the ultimate medium, but B.S. (Before the Kurzweillian Singularity), a person from Derrida’s and our own age must believe that writing on paper will always, at least, be legible.

I’m using Derrida to reinforce and authorize our sense that there is an important, ‘irreducible’ relationship between writing and his-

potential apotheosis of literature, but one that also destroys literature by foreclosing precisely the kinds of development in culture and cultural production that we are addressing. It allows that literature might end, but in an ultimate sense on which ‘the book,’ by contrast, does not insist. I have touched on the permascroll before in John Cayley, «Time Code Language: New Media Poetics and Programmed Signification», New Media Poetics: Contexts, Techno-texts, and Theories, eds. Adalaide Morris and Thomas Swiss (Cambridge: MIT Press, 2006), 307-333.
torically determined material culture. I use Derrida, in particular, in order to establish this relationship as one that will be appreciated as both critically and theoretically sophisticated and as allied with innovative, experimental, and emergent cultural formations. But now I need to put forward a proposition concerning the relationship between writing and persistent form which seems to me compelling and consonant with that between writing and material culture, but which is not, in any way that is obvious to me, a necessary consequence of this or any other immediate relation. Rather it is a consequence of language, of the specifically human form of symbolic manipulation and interaction. I propose that, because the practices of language are universal to, if not definitive of, the human, *more than in the case of symbolic manipulation in other media*, they require historically persistent forms in order be able to yield their significance and affect, the meanings and the aesthetic values, with which they may be inscribed. Language cannot be writing, *a fortiori* literary writing, without a form that persists beyond some simple act of artifactual conception. My proposition might be regarded as one of those truisms – no information without form – but I think it gains some traction if the comparative part of the proposition – ‘*more than in the case of other media*’ – is conceded as something with which we can work. In plainer words what I’m proposing could be recast as claiming: because *everyone* uses language, because *everyone* writes, we need more in the way of agreed persistent form to help us decide *what part* of all the language and writing that is produced has appreciable meaning and/or beauty. ‘More,’ that is, than in the case of practices of symbolic expression in other media which may be technically specialized and subject to explicit disciplines and so, somewhat paradoxically, better able to cope with formless essays by recognized practitioners of, for example, painting, music, sound art, visual and conceptual art, performance, and so on. To answer my
question above, «Whence the implicit formal conservatism of ‘writing?’» It has to be formally conservative because everyone writes, not just writers.

WHAT’S THE DIFFERENCING?
The above argument implies that even, or perhaps, especially in new media, for us to be able to find and recognize ‘the literary,’ we will have to be able to find and recognize persistent forms, literary forms, forms of writing, which will then allow us to appreciate ‘the literary’ in ‘electronic literature.’ I am not going to shy away from this conclusion, a contentious conclusion that is based on what? — on corroborative evidence concerning the ‘end of the book,’ on my consonant but fundamentally ungrounded proposition concerning language and form, and also, of course, on the present aporia of ‘the literary’ in new media art practice. In this penultimate section, I aim to briefly examine some properties and methods of new media’s literary aporia; to give some examples of how artists respond to this aporia when and if they are driven to produce language-driven new media art (call it what you will: electronic literature or writing digital media); and to consider whether, in the ‘end,’ this aporia is nothing of the sort, whether it might be the case that what for us seems to be a problem of ‘the literary’ will be resolved or dissolved in fundamental transformations of culture that are, precisely, correspondent with the ‘end of the book,’ its closing achievement.

This is how Alan Liu spells out the aporia, the situation, as he sees it, not only of ‘the literary,’ but of the ‘creative arts,’ in the one place in his book where he explicitly addresses electronic literature: «What is the function of the creative arts in a world of perpetually ‘innovative’ information and knowledge work? Of course, the multifariousness of the forms, media, practices, and views of the contemporary creative arts (including literature) is remarkable. ... one need
only scan the voluminous *Directory* of resources on the Electronic Literature Organization’s Web site or listen in on the organization’s conferences and online events to appreciate the multiplicity of ways in which creative writers are using digital media to try out new genres, writing processes, and publishing methods. No adequate account of such variety can be rendered here. Nor can there be adequate discussion of the other, seemingly paradoxical side of the equation: that despite its splendid variety, so much of contemporary art and literature has a similar look and feel descended from the collages and cut-ups of the modernist avant-garde – for example, assemblage, pastiche, sampling, hypertext, appropriation, mixing, creolization, or, to cite one of the dominant metaphors of recent literary history as well as hypertext fiction, ‘patchwork.’ As I have said, it is all mutation, remixing, and destruction.” (Liu, 2004: 323).

What Liu, as a literary scholar after all, does not so much consider is any existing difference in the cultural critical appreciation of this purported aesthetic aporia when we compare responses to it in the world, for example, of visual art – broadly conceived – with those in the world of literary art – equally broadly conceived. Liu’s ultimate discomfiture with ‘cool’ does not obtain as strongly in the world of art. It has long been the case – and Liu’s evocation of ‘the modernist avant-garde’ as our most recent pioneering exemplars of an aesthetics of destructive creativity suggests as much – that art can be cool without ceasing to be art, without losing its way through to some assured sense of what should be considered artistic. When art encountered radical innovation, scholars and critics were not driven to retreat from ‘art’ *per se* and recast their responses in terms of a troubled conception of the ‘the artistic.’ Even today ‘electronic arts,’ ‘ars electronica’ gives me, for one, less pause than ‘electronic literature.’ It seems precisely to be the point that Liu’s struggle with cool is a problem for literature and literary culture. Liu cannot the-
orize a place for literature in the culture of cool. Hayles requires the literary to survive and prosper by forging cultural links with intelligent cyborgs and machines. I would like to suggest that literature both requires and generates historical and material cultural form to operate and that this necessity renders it uncomfortable within a culture that is predicated on continual, arbitrary, contingent formal innovation.

I am not, in this, saying that literature should be comfortable, nor that it should steer clear of the rampant formal innovation that programmable media make ever more possible and inevitable. Quite the contrary, as is evidenced in my own practice, teaching, and in some of the examples I will examine here. I am simply suggesting that for ‘the literary’ to be active as an aesthetic or interpretative framework in the course of our critical and theoretical engagements with language-driven digital media, then we must take account of a historical relationship to material cultural form which is different from the corresponding relationship in respect to other artistic practices. To bolster this claim and before moving on to examples of practice and further final thoughts on culture, I make three hasty references. Firstly, I refer back to my brief discussion of Derrida’s and our own nostalgia for the book, for paper, for formal signs of the support on which we will always be able to have inscribed our selves, especially after we are gone. This is a familiar affective concern, bringing together the universal human drive to write (by which I mean inscribe in any form, from speech to projection in social networks) and the universal human address to mortality calling for a lasting monument of some kind. Those of us who will not live forever seem to be strongly driven to have written something, anything, and the drive for this to be in some form that will continue to be read is also strong. Secondly, my call for the literary to acknowledge its special relationship and to practice in acknowledged relationship with historically established,
material cultural form, corresponds with Liu’s proposed resuscitation of ‘cool’ in that, for him, cool artistic practice is culturally, aesthetically engaged when it manifests an informed historical critique as a function of its destructive creativity. Finally, consider how different the practical engagement of visual and related arts with new media formal innovation has been and will be. Conceptual art is crucial here. Conceptual art is the art that comes closest in its techniques to the algorithmic expressive processing that drives digitally mediated cultural production. In this art, the underlying concept is, fundamentally, the form. Its material cultural realization may be important for the work’s affect and significance, but at least since the ‘modernist avant-garde’ as invoked by Liu, material culturally, any form will do, in that any form might record the concept equally well. Any further meaning and beauty of the work’s form becomes contingent without damage to its concept. The material form simply adds to or subtracts from the ultimate significance of the work. My point is that, for ‘the literary’ the situation is different. The literary form is already necessarily, by definition, symbolic. It is constituted as such. Its form cannot be entirely separated from whatever concept drives the work. It cannot be entirely contingent. There is far less ‘free play’ in the formal realization of a literary work, be it mediated digitally or in any other manifestation. Hence the paucity of literary form in ‘Art & Language’ and related conceptualism. Any literary aesthetic within Art & Language is – typically – slight, and exhausted in the realization of the work. Its visual, material form is contingent, like

7 «Instantaneous, simultaneous, and on-demand information is the engine of the postindustrial ‘now’ submitting history to creative destruction, and it is the destruction of this eternal ‘now’ or self-evident presence of information, therefore, that will have the most critical and aesthetic potential. Strong art will be about the ‘destruction of destruction’ or, put another way, the recognition of the destructiveness in creation.» (Liu, 2004: 8-9). See also, Liu, chapter 11, passim.
that of other conceptual art, but its scant relationship to literary form further minimizes its aesthetic and constrains its materiality to, for example, legibility. Is Jenny Holzer literary? We will have reason to refer to her work again shortly.

INSTITUTIONS FOR THE FUTURE? (OF THE BOOK, OF LITERATURE)

I want to give some examples, of work that can undoubtedly be regarded as writing digital media and which displays and engages properties and methods which concern us and Liu and Hayles. I will examine three works, all by graduate students of Brown University and RISD (the Rhode Island School of Design). Only one of the graduates could be considered a ‘card-carrying’ writer in and of digital media. This is Justin Katko, the current Electronic Writing MFA fellow at Brown. The others are graduates in Modern Culture and Media at Brown, and at the Digital+Media graduate program at RISD. These students, along with thirteen others, including a number of Computer Science graduates and undergraduates, attended a course taught by Daniel C. Howe on Advanced Programming for Digital Art and Literature. The course had two main threads: to introduce Processing and Java to digital writers and artists for the advancement of their programming skills, and to introduce digital artistic and digital literary practices to interested coders. The course was a run-away success and produced a good deal of work, some of which, as we will see, would bear serious consideration as possible candidates for inclusion into the corpus if not the canon of ‘electronic literature.’ This statement would be, out of context, quite extraordinary – and this is one of the points I’d like to make – and yet it is, I believe, sustainable and also gives some clues to our predicament.
Expressive programming, in digital art practice generally, is taking off and there is now a huge body of work and experience – more work than commensurate critique I suspect. Much of this work is highly technical and demanding of skill and specialist knowledge in, at least, the realms of programming and visual representation. The extremes of formal diversity and innovation are tempered by the disciplines that underpin the making of this work. I cite these practices as examples of how, in contradistinction with digital ‘literary’ endeavors, essays in new media expressive programming affords its critics ways to deal with open form, and to valorize certain approaches over others. The critic may still not be able to say what’s good in the work, but he or she should be able to tell whether it is ‘trivial’ or not, as expressive programming.

However, Howe’s course was not primarily concerned with the predominant forms of expressive programming. In line with his own interests, the course was language and literature driven. Students were obliged to make work that engaged with linguistic structures and ‘literary’ concerns although admittedly, these latter were only as seriously engaged as we engage them now – only as seriously engaged as they are, for example, engaged by Alan Liu’s bewilderment. The remarkable fact is that this bewilderment did not seem to obtain or to obtain in the same way for this diverse set of students. They were all relatively happy to produce Markov-chained text generators and Flarf-poetic Google hacks and language-driven data-mining mapping art and sound poetry machines and Shakespeare modula-

---

8 I am sometimes using the phrase ‘expressive programming’ here and this is because of my focus on works that are explicitly coded as a aspect of their production, but I am thinking of and alluding to the more general term ‘expressive processing’ which is the subject of an important monograph: Noah Wardrip-Fruin, *Expressive Processing: Digital Fictions, Computer Games, and Software Studies* (Cambridge: MIT Press, 2009).
tor-remixers. They were all cool and they were all, at the very least, producing some sort of encounter with ‘the literary.’

So now, at last, I’m going to introduce you to what I consider to be either or both the coolest of the cool or the most literary of the literary. I start with the most literary and end with the coolest, for reasons that I hope will become clear.

The first piece is *Mémoire involontaire No. 1* by A. Braxton Soderman [Fig. 1]. Soderman’s piece is fairly straightforward. It has a supply text/display text structure. The supply text is a closely composed well-written record of a childhood memory. There is no inte-

---

9 We might consider, in passing, how this ‘ease’ and ‘facility’ (and ‘cool’) in relation to literary projects that previously demand special ‘effort’ on the part of both writer and reader may one day alter our reading of the pioneering criticism of writing in digital media. Espen Aarseth subtitled his much-cited *Cybertext*, ‘perspectives on ergodic literature’ and suggested that the special effort required of readers who address writing in these media was a better indication of its specificities than, for example, non-linearity. But what happens when such effort becomes less than that required to turn a page or use an index? (cf. Aarseth 1997).

ractivity or transaction with the reader. The text displays itself on the screen for reading but it is subject to continual modulation by careful coded processes of word replacement. Engagement with the piece is intended to be intermittent or – as Soderman has demonstrated live – performative, with readings from the changing text in public. Soderman (in email correspondence) references an ambient poetics put forward by Brian Kim Stefans and myself in various both critical and creative works. The word replacements which activate the piece are elaborately coded. Synonyms for the piece’s full words are sourced live using WordNet, and the replacements are carefully parsed and integrated with the text as seamlessly as possible, in a manner that makes a significant gesture towards a notion of natural language representation. Generally speaking, the brief paragraph remains uncannily readable (not just legible) despite the replacements and it still bears the marks of good literary writing including the sense of the preservation of its (necessarily non-existent) ‘original’ memory-image. One point of the piece is, precisely, that this memory-image was never originally in some one particular form of words, not even after the ‘first’ verbal formulation was composed. Apart from the text and the replacements, the piece is also overlaid with relatively subtle audio and visual correlatives that are designed and coded so as to inflect and enrich the relations between memory-image and text.

I am citing this as the most literary of my examples, but it is also the piece in which digital manipulation most directly engages with writing. It is not (only) Soderman’s writing (as composition of the supply text) which renders the piece literary, the writing produced by and represented in the piece itself, as process, demonstrates an important relation between memory and its inscribed representation.

In Soderman’s piece this encounter remains literary in its significance and affect, because of digital media and not despite digital media.

Justin Katko and Clement Valla’s *Yelling at a Wall: Textron Eat Shreds* is driven by Katko’s powerful lyric voice, both literally and in terms of the literary [Fig. 2].\(^\text{12}\) Katko records his part-improvised recital in a public architectural amphitheatre, divided by a minor roadway, opposite the banal-minor-league-gigantic edifice of Textron’s world headquarters. Katko and Valla capture and tile an electronic image of the edifice and then produce a visualizer that is responsive to the verbal waveforms, disrupting the tiles of the headquarters’ image in manner that both corresponds to a visual representation of the sound waves, and generates a metaphoric image of the disruption that is fervently inscribed in Katko’s lyrics. Katko later also takes his recital and feeds it through a bespoke, Max/MSP-coded modulator which further mimes the self-consciously disruptive aesthetic in disjunctive sound and this processed sound is, in turn, fed back into the visualizer. Katko and Valla produce a complex multimedia instru-

ment, driven ultimately by lyric address, and tailored to a particular site of intervention.

It’s a rich and effective piece containing a library of forms and formal figures, most of which—such as visualization, remix and feedback—are precisely representative of the overwhelming diversity of cool forms which troubles Liu. Unlike in Soderman’s piece the literary is not inscribe as coding, as new form. Rather a recognized literary form, lyric address (however strident), provides over-arching structure for the piece. It is thus highly literary and properly literary, as piece of digital art, but is less literary as a piece of writing digital media since its literary qualities are not so much a function of the system as a generative whole.

I think that a piece like Katko and Valla’s is more consonant with what we expect to find touted and troubled as ‘electronic literature,’ those works in which multimedia representation—or, if Hayles is right, intelligent machinic re-imagining by subconscious cognitive processes with a hankering for literary recognition—is allied with an aesthetic that is language driven. Pieces like Soderman’s in which the literary mechanisms are integral to the whole of the writing are still scarce. Multimedia representation enhanced by expressive processing is typical and typically both encapsulates and seduces the literary in digital media. It’s there, but it is overwhelmed and consumed by its new media hostess.13 We see something cool but we stop reading it or imagining that it might be singing to us, or spinning a tale,

13 The trope of consumption—where new media artworks are seen to consume their own literary (corporal) substance—has recently been put forward by Christopher Funkhouser in a paper that goes so far as to cast it in terms of cannibalism (cf. Funkhouser 2007) Roberto Simanowski develops this critical approach as one aspect of his analysis of digital aesthetics, especially the fate of literature in digital art practice where he, to simplify, sees this consumption as reducing, at least in terms of the literary, the significance and affect of works identified as digital literature (cf. Simanowski, 2010).
or addressing our verbal memories, or, god forbid, imagining itself as a closing book that we have read and that reads us.

Now, the Katko and Valla piece is what we expect to find but, as culture shifts, Caleb Larsen’s variety of language-driven work is likely to be even more widely propagated than Katko/Valla and it is, especially if we end up conceding that it is in some way literary, even more troubling for literature than cool representation. You might well say that it’s cool, but it’s not.

Figure 3. Caleb Larsen’s Whose Life is it Anyway? (2008), screenshot. © Caleb Larsen. Reproduced with permission.

Larsen’s Whose Life is it Anyway? is simple [Fig. 3]. It’s a text generator for Twitter. Twitter is a personalized text-based (news) feed. You subscribe and make a site/identity for yourself; you update this site at indeterminate intervals with short texts that describe what you are doing, thinking, feeling, whatever. Other subscribers can follow your Twitter and stay updated with your updates. You can do all this by mobile phone using an easy light-weight bridge between the developed and developing world’s currently preferred all-but-

-ubiquitous communication devices and the Net. I promised another mention of Jenny Holzer. Holzer twitters, and you can easily imagine in what manner.¹⁵ You don’t have to subscribe. As she will have said, «THERE IS NO POINT IN READING ANYTHING THAT YOU KNOW WILL HAVE BEEN WRITTEN».

Larsen’s Twitter is a little different. Responding to another common trope of the information age, his twitter assists with the oft-lamented lack of time that information society engenders. We can program these devices of social projection to project ourselves for us. Larsen’s twitter is a crafted grammar of plausible (for Larsen) actions, thoughts, feelings, whatever. His databases, algorithms and grammars, along with a variety of triggers, now tell him and everyone else what he is doing and thinking without his having to spend or waste time on this demanding projection of himself for his ‘followers.’ It’s clever, it’s a critique of current and developing mores and it’s ‘cool,’ we say. It’s undoubtedly language-driven – as used to be true of the net generally – but is it literary? Here, Liu’s analysis may help since, as Liu would say, a ‘yes’ answer is only really possible if Larsen’s piece is critical and it becomes stronger as art in so far as it is destructive, in the sense of undermining a social practice that is the subject of its critique. Stronger as ‘art’ I said and it is easier to see the piece as digital art than as writing digital media, and this is, I believe at least in part for the reasons I’ve identified. There is no historical form for twittering, no past literature of twitter. To know whether twitter is literary or not is difficult for this reason at least.

Whose Life is it Anyway? gives us other deeper cause for concern, I believe, and this has profound literary and cultural implications. Before taking on this cause in brief in conclusion and perhaps also to give my final remarks a little more context I want to comment

¹⁵ http://twitter.com/jennyholzer.
on the quality of these three pieces as electronic literature. It seems to me likely that they all would have attracted considerable interest and attention if they had been produced early in the hyperhistory of the field. I have just given them a degree of attention that they undoubtedly deserve. They are pieces produced by younger artists in an academic context but in many respects they hold up well, as they should, if we take into account their status as essays towards something more finished, critically, relative to pieces that have been anthologized and rendered exemplary. This kind of phenomenon is, of course, to be expected in a still emergent field but here I think it is also the mark of a shift in culture towards the more generalized acceptance of expressive processing, even in the realm of the literary where, as I have tried to show, expressive processing’s still arguably corrosive relationship with historically persistent form creates special difficulties for poiesis. Nonetheless, these are only three of many interesting pieces that were produced in the course of a single semester. This experience is now (finally) being multiplied in other related courses at Brown and beyond. There will soon be a lot of cool electronic literature, a contradiction in terms in most cases, but not in all. Work that is irreducibly literary will, I suggest, insist on persistent form and the rest will quietly merge with cool digital art.

In my closing words, the words with which I will most closely leave you after I interrupt this address, I want to take the opportunity to indulge in some cultural critical speculation, some even less academically grounded and referenced thinking. I hope you will bear with me. There will be some bases to what I will try to briefly express, some evidence, but much of this will be a function of my personal experience. The pedagogic anecdotes which I have just related, the three exemplary pieces on which I have just commented, and, especially, Larsen’s *Whose Life is it Anyway?* are starting points. There is also my recent experience of moving from the United Kingdom where
my work was not in the academy and where my engagement with culture as reconfigured by younger prosumers was filtered through generational difference along with whatever pop culture happened to be accessible to me. The situation in Europe is different. Moving to the United States and teaching at a university has impressed me with the degree to which what Liu calls knowledge work, but let’s just call it culture, has changed and is continuing to change at a furious pace. Young intellectuals, young knowledge workers – and there could be an argument for saying that this means all younger people (and there could be an argument for saying that this means everyone, as ‘youth’ destroys the possibility of ‘age’) – read and write differently now. I use those verbs advisedly. In so far as they are outmoded they are all the more indicative of how culture is changing. If, that is, we read these words – ‘read’ and ‘write’ – as our chief methods of culture.

At this point it is still true, I believe, that ‘read’ and ‘write’ and whatever it is that we create or interpret which bears some relation to ‘the literary,’ despite the fact that it will in almost every case be mediated by a programmaton (computer), is still created and interpreted «with a view» to the final printing on paper, whether or not this takes place.» (Derrida 2005a, 46, emphasis in the original). And in so far as art and music, for example, require articulated interpretation in some form, this statement also applies to all cultural production including everything not otherwise embraced by ‘the literary.’ The deep attachment to writing on paper – to a grammatology which has inhabited a long persistent material cultural world – has already definitely passed over to writing ‘with a view’ to paper, and this is a major reconfiguration (one, for example, that is transforming the mediation of academic authority as we are all only too well aware). However, as others have pointed out, the book and its tropes are easily represented, easily remediated, within the culture to come, and books and paper will survive as physical objects, material supports,
for at least a generation or two. The book will end with precisely the ambiguity that Derrida anticipated: it will close and it will achieve its apotheosis.

I am more concerned with the way in which this literal, this literary achievement impacts on questions of subjectivity, privacy, the unconscious, and interiority. As critics and theorists, including Derrida, have pointed out, there are strong links between what is articulable in relation to these questions and language, and between language and its culturally privileged material supports – currently still, we claim: a view to books and paper. It is of course less clear where we locate any possible engine of cultural change: does embodied language determine subjectivity or does en-worlded subjectivity determine the culture of embodied language? Moreover, if we now entertain the notion of other-intelligence/subjectivities emerging in amongst posthuman cyborg cognizers, might these become a distinct motor of change, as Hayles would be likely to argue?

To this last question I believe that we are now required to answer in the affirmative. Larsen’s Twittering may be cool; it might be dismissed as too cool for academic critique, but taken together with other manifest cultural reconfigurations, it can also be seen as highly indicative. It is integral with and a window onto the massively (popular and creatively) destructive worlds of social networking. There, or rather, here, we no longer project Sherry Turkle-style psychosocially transformative avatars; these networked, programmatically mediated social networks ‘R US’ – they are making us what we are. Ultimately, they are transparent; at most they can be only what Derrida calls, ‘a secret with no mystery.’

16 «I know how to make it work (more or less) but I don’t know how it works. So I don’t know, I know less than ever, ‘who it is’ who goes there. Not knowing, in this case, is a distinctive trait, one that does not apply with pens or with typewriters either. With pens and typewriters, you think you know how it works, how ‘it responds.’ Whereas, with computers, even if people
I slipped the adjective ‘destructive’ into the phrase ‘massively... destructive worlds of social networking.’ This was a reference to Liu’s ‘destructive creativity’ and also an acrostic, rhetorical allusion to my title, Destructive of what? The literary sensibilities of the person addressing you now are corrosively challenged by social networking’s inscriptions of private thought and feeling, by inscriptions of what I would normally consider to be reserved for interiority. Larsen’s Twitter piece takes this on and his title makes this clear, Whose Life is it Anyway? Whereas I cannot divorce my sense of interiority – you cannot know my thoughts and neither of us can know my unconscious (although, admittedly (and recursive-unknowingly) you may be my unconscious) – from the embodied language of a lingering persistent culture – you and I can only write books of poetry that record whatever can be articulated of what we feel and know is inside us – ever younger minds may have machinic familiars and mediators who will help them to remove any mystery from their secrets. When that happens, the ‘electronic’ will be long dead and literature will die.

REFERENCES
CAYLEY, John (2006), «Time Code Language: New Media Poetics and Programmed Signification», New Media Poetics: Contexts, Technotexts, and...


ABSTRACT
An attempt to hasten the death of the ‘electronic’ in ‘electronic literature’ – to re-cognize it as a dead metaphor – becomes an agonistic meditation on my generation’s anticipation of the death of literature itself, with ‘the literary,’ potentially, waiting in the wings.

Keywords: electronic literature, writing, digital media.

RESUMO
Uma tentativa de apressar a morte de ‘eletrónica’ em ‘literatura eletrónica’ – reconhecê-la como uma metáfora morta – toma a forma de uma meditação agonística sobre a antecipação da morte da literatura na minha geração, com o ‘literário’, potencialmente, à espera de entrar em cena.

Palavras-chave: literatura eletrónica, escrita, média digitais.