Look down go down

"A Vision for the Digital Humanities in Ireland: Where do we go from here?"
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I have been asked for "a 15-minute 'vision' presentation" on how I see the digital humanities developing in Ireland. I hope you will forgive me for preferring "desire" to that Bush-whacked term "vision" and, as a serial ex-patriot, for speaking to the international rather than the national situation. Otherwise I will do what I've been told.

In April 2008 I gave a talk for the Trinity Long Room Hub Lecture Series in which I referred to a lecture delivered in Dublin the year before I was born: physicist Erwin Schrödinger's "What is life?" I dwelt on the relevance of the question he raised to questions we should ourselves be raising – not about life on either of the scales to which the sciences pay most attention, the large or the small, but in between, where we live out our research lives. I want to use him again now, but only to repeat what I said about his intellectual and moral courage. Faced as a specialist in the highly specialised field of theoretical physics, faced with a great problem it could not touch – how life itself might be understood physically – he saw no other alternative than that "some of us should venture to embark on a synthesis of facts and theories, albeit with second-hand and incomplete knowledge of some of them – and at the risk of making fools of ourselves" (1967/1943: 1). I want to advance Schrödinger as an exemplar of academic courage, the courage to venture beyond comfortable and secure knowledge of one's field, to see how far into thin air, like the American cartoon figure Wily E. Coyote, one might be able to get before tumbling down.

Contemplate Schrödinger's daring, and then consider our kind, which seems to me not just risk-adverse but mostly asleep to the risks and therefore to the intellectual opportunities our work excitingly offers us. My desire for the digital humanities is for us to wake up, finding courage and risking openly to make fools of ourselves in order that we may know more than is already known.

Another way of putting the matter comes from another theoretical physicist, John Ziman. In 1972 he began a BBC Radio broadcast by declaring that real research "is very like play... [an] unguided, personal activity... drawing unsuspected imaginative forces from the inner being, and deeply satisfying." He allowed it may not be quite nonsense to say that research is performed for the sake of professional recognition – "impact", as we have been schooled to say and to calculate; that, yes, in a sense the

researcher is a creature of economic and social forces and so tends to go where they push. But, Ziman argued, both explanations of how research happens are "totally irrelevant to the psychology of the researcher"; they simply do not "explain the passion with which this strange activity is pursued" (1981/1972: 3). As novelist Peter Matthiessen said of a very different situation, the true researcher, when he or she is actually doing research, is at play in the fields of knowledge. So my desire is for a digital humanities conformant not to this or that standard of whatever but observant of the proverbial Hebrew injunction to "do what you do only out of love". Could there be anything riskier than that?

I know, this sounds romantic if not wholly foolish. Philosophers of science have certainly regarded motivations and creative processes irrelevant to science. Indeed, why should the psychology of the researcher matter? What difference does it make? None or little in the short-term if products of research are its point. The effectiveness of the birth-control pill, for example, remains the same whatever the man who invented it may say about his conscious motivations. Our situation is different. However much we may talk about deliverables, and actually have to deliver them, our primary business – I fear we forget it – is creating and fostering a new culture of research that as it develops puts quite unusual demands on our social arrangements and those involved in them. We must attract and retain people to help build this new culture, which in its blending of technical with traditional scholarly modes of work puts stress on notions of status and interpersonal relations as well as what we consider research actually to be. And because all of what we do takes place within institutions of higher education – can we recall what that is? – we must attract and retain students, especially PhD students. In my experience they (bless them!) are idealists, so our attractive power comes from exhibiting the ideals of research. Students mostly look to us to discover what a digital humanist is. So *our* motivations matter very much indeed, and in a highly pragmatic sense, one that even has results which can be calculated.

Our motivations matter personally because they are, quite literally, what keep us going. We are in this respect (I very much hope) no different from the American working men and women whom oral historian Studs Terkel interviewed in his wonderful book, *Working: People talk about what they do all day and how they feel about what they do*. We also want, as he said of them, "daily meaning as well as daily bread... recognition as well as cash... astonishment rather than torpor; in short... a sort of life rather than a Monday through Friday sort of dying" (2004/1972: xi).

What I fear most of all for us is not the cuts to funding, which holding to our purpose we can survive, but the loss of that purpose through complicity in the industrialisation of the digital humanities. What I fear is that we find ourselves in Charlie Chaplin's place in *Modern Times* (1936), on some production-line, making widgets for a purpose over which we have no say and which we are likely to have

forgotten. Such a fate we cannot survive. Instead of a research practice it means a typing pool sort of dying that produces step-'n-fetchit facilitators who are safe from all risk by conforming to the bureaucrat's template of knowledge-work. What I fear most to see is us conformant to such a sort of dying even before it is imposed – rushing to conform, longing for the chains. My desire, as urgent as any revolutionary's, is for a field populated by brilliant, courageous and ferociously non-conformist intellectual adventurers who live to find things out, who live to play in the sunlit fields of knowledge.

Let me give you an example of a problem such adventurers might take on. But first an explanation of "problem".

In 1900 the German mathematician David Hilbert delivered a lecture in Paris in which he laid out the problems he thought mathematics might deal with in the coming century. Before getting to them he said what he thought were the general criteria which mark a good one. He demanded first clarity and ease of comprehension, but then went on to say that such a problem "should be difficult in order to entice us, yet not completely inaccessible, lest it mock at our efforts" (2000/1900: 407). I respect Hilbert enormously. He is our intellectual great grandfather, for it was he who articulated the *Entscheidungsproblem*, the "decision problem", the negative solution to which Turing found in 1936 with his imagined machine. But I beg to differ from Hilbert's notion of a good problem, or at least beg that we not exclude the impossibly difficult kind, which reminds us even as it mocks at our efforts that there is no end to what is to be done – and, because we have imagined it, to what we ourselves can do.

So here is the problem.

In his very short short-story, "Popular Mechanics", collected in *What We Talk About When We Talk About Love* (1996/1981), Raymond Carver describes the final moments of a man leaving his wife. He tries to take a framed picture of their baby from the bedroom, but she snatches it away. Then, on his way out, he says, "I want the baby". His wife, who is holding the child firmly in her arms, resists his attempt to take it, there is a struggle and feeling the baby slip out of his grasp "he pulled back very hard. In this manner," Carver writes, "the issue was decided" (1996/1981: 105). I won't ask whether you spot the biblical allusion (in the work of a writer whose magnificiently spare prose, cut to the bone, seldom alludes). Rather I ask what sort of computing system might, and – here is the essential bit – how that system would relate to the scholar reading Carver's fiction. What's essential here is that the finding of the alluded text be a trigger, *not an answer*, and then that which has been triggered itself a further trigger, and so forth, and so on.

From a technical point of view this is already a hard problem, but when we turn from the mechanics to consider the place and role of computing in literary hermeneutics then other difficulties, moral and intellectual, surface. One fling at problems of this sort was taken by Jerome McGann and Johanna Drucker some years ago in the Ivanhoe Game. They ran aground on the shallows of artificial intelligence as then was. But what's relevant here is that their dissatisfaction with the state of the computing art and the way forward they envisioned were already being discussed thirty years earlier. In 1973, for example, the operations researcher Michael Thompson had asked in the journal *Leonardo* essentially the same question McGann and Drucker were later to explore – "what are the special capabilities of the man-machine combination" for creative purposes? (Thompson 1974: 227). *Mutatis mutandis* he advanced the same "exciting idea" as they did: real-time, "almost instantaneous" conversation with the machine, with "the possibility of improvisations, as if on a musical instrument".

Historically research along those lines in the humanities and arts, once a current topic, seems to have gone nowhere. The early professional literature of computing in the humanities in fact yields a harvest that is quite disappointing in view of the excitement, wild ideas and great initial successes elsewhere. Yes, as a Belgian demographer once said, "God has chosen to give the easy problems to the physicists" (Wunsch 1995), but still what stings is the lack even of curiosity, made even sharper by the occasional exhortation to think (quite literally) out of the box researchers had made for themselves. The fate of the majority specialism of text-analysis was effectively pronounced by Rosanne Potter in 1989: "literary computing", she wrote, "... has not been rejected, but rather neglected" by mainstream critics (1989: xvi), who couldn't have cared less. Hers is only one complaint of neglect out of a long litany from the late 1960s to the present day. So what went wrong?

Technological incapability accounts for much, much less than we might think. Early experiments by creative artists and engineers with electro-mechanical, biological and computational systems, such as Gordon Pask's "maverick machines", Edward Ihnatowicz's *Senser* and the exhibits at *Cybernetic Serendipity* in 1968,[1] demonstrated to an astonishing degree how much could be done, or approximated, or imagined with bits of this and that. Theoretically inclined artists, such as Roy Ascott, were from the mid 1960s explaining the reach and importance of these bold gestures. One wonders: had text-analytic scholars been at *Cybernetic Serendipity* in London, or at *New Tendencies* in Zagreb, or at other such events of that time, would they have seen anything memorable? Alas (I know from one of us who was there) no. Why not is a compelling historiographical question.

[1] See esp. Brown et al 2008 for a survey of activities and of individual contributors, esp. Reichardt 2008; Husbands et al 2008, esp Bird and Di Paolo on Gordon Pask.

Why should we care about what the artists were doing? I care, because their wild ventures open up possibilities for a future that answers to our current predicaments and that now, with our better kit, better computer science and changed theoretical environment, have a chance to flower.

It's safe to say that text-analytic practice was crippled by mismatch with the theoretical orientation of the arts and humanities throughout the latter half of the 20th Century. Critical theory took off in quite another direction at about the same time as computing entered the scene, perhaps in reaction to it, perhaps for other reasons.[2] So did linguistics, with Chomsky. The remedy suggested by the scholars whom Potter surveyed in her 1991 retrospective on literary computing was "more theory to guide empirical studies" (1991: 403), but this misses the point. The problem was, and is, not a matter of quantity but of kind. The problem was, and is, no language in which to formulate adequate theory. "We are reduced to insinuating theories because we lack the power to state them", Clifford Geertz said when he agonized over the state of anthropology in 1973 (24). But then he went immediately on to invent the language of "thick description". What is our language?

My desire is for courageous scholars strong enough in mind and bold enough in spirit to turn from more immediately rewarding things to help in the struggle for an adequate language. My desire is for more of us to be less pleased with shrink-wrapped answers so that we can begin to ask the questions we most need. My desire is for fewer definitions and less energy spent, as the artist-programmer Harold Cohen remarked, getting ourselves onto the supermarket shelves, properly labelled in bright, attractive packaging so that knowledge-shoppers will put us in their trollies.

Works cited

Brown, Paul, Charlie Gere, Nicholas Lambert and Catherine Mason. 2008. *White Heat Cold Logic: British Computer Art 1980-1980.* Cambridge MA: MIT Press.

Carver, Raymond. 1996/1981. *What we talk about when we talk about love*. London: The Harvill Press.

Geertz, Clifford. 1973. "Thick Description: Toward an Interpretive Theory of Culture". *The Interpretation of Culture: Selected Essays*. 3-30. New York: Basic Books.

Hilbert, David. 2000/1900. "Mathematical Problems". *Bulletin of the American Mathematical Society* 37.4: 407-36; rpt. from *Bulletin of the American Mathematical Society* 8 (1902): 437-79, trans. Mary Winston Newson from "Mathematische Probleme. Vortrag, gehalten auf dem internationalen Mathematike-Congress zu Paris 1900". Göttingen: *Göttinger Nachrichten* (1900): 253-97.

[2] Kenny 1992: 9-10, quoting Robert Connor, speculates that scholars fled from "the relentless advance of technological rigour" into "the more abstract, intuitive, and ideological branches of the humanities". I suspect a less causal explanation would prove far richer and more interesting.

Husbands, Philip, Owen Holland and Michael Wheeler, eds. 2008. *The Mechanical Mind in History*. Cambridge MA: Bradford Book, MIT Press.

Kenny, Anthony. 1992. "Computers and the humanities". The Ninth British Library Research Lecture. London: The British Library.

Potter, Rosanne, ed. 1989. *Literary Computing and Literary Criticism: Theoretical and Practical Essays on Theme and Rhetoric*. Philadelphia: University of Pennsylvania Press.

---. 1991. "Statistical Analysis of Literature: A Retrospective on *Computers and the Humanities*, 1966-1990." *Computers and the Humanities* 25: 401-29.

Reichardt, Jasia. 2008. "In the Beginning..." In Brown et al. 2008: 71-81.

Schrödinger, Erwin. 1967/1943. *What is Life? The Physical Aspect of the Living Cell* with *Mind and Matter* & *Autobiographical Sketches*. Cambridge: Cambridge University Press.

Terkel, Studs. 2004/1972. *Working: People talk about what they do all day and how they feel about what they do*. New York: The New Press.

Thompson, Michael. 1974. "Intelligent Computers and Visual Artists". *Leonardo* 7.3: 227-34.

Wunsch, Guillaume. 1995. "God has chosen to give the easy problems to the physicists, or why demographers need theory". European Population Conference, Milano, 4-8 September 1995. United Nations Population Information Network (POPIN). www.un.org/popin/confcon/milan/plen6.html (20 March 2011).

Ziman, John. 1981/1972. "Puzzles, Problems and Enigmas". In *Puzzles, Problems and Enigmas: Occasional pieces on the human aspects of science*. 1-8. Cambridge: Cambridge University Press.