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Trading Stories: an Oral History Conversation between Geoffrey Rockwell and Julianne Nyhan

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Abstract

This extended interview with Geoffrey Rockwell was carried out via Skype on the 28th April 2012. He narrates that he had been aware of computing developments when growing up in Italy but it was in college in the late 1970s that he took formal training in computing. He bought his first computer, an Apple II clone, after graduation when he was working as a teacher in the Middle East. Throughout the interview he reflects on the various computers he has used and how the mouse that he used with an early Macintosh instinctively appealed to him. By the mid-1980s he was attending graduate school in the University of Toronto and was accepted on to the Apple Research Partnership Programme, which enabled him to be embedded in the central University of Toronto Computing Services; he went on to hold a full time position there. Also taking a PhD in Philosophy, he spent many lunch times talking with John Bradley. This resulted in the building of text analysis tools and their application to Hume's *Dialogues Concerning Natural Religion*, as well as some of the earliest, if not the earliest, conference paper on visualisation in the digital humanities community. He reflects on the wide range of influences that shaped and inspired his early work in the field, for example, the Research Computing Group at the University of Toronto and their work in visual programming environments. In 1994 he applied, and was hired at McMaster University to what he believes was the first job openly advertised as a humanities computing position in Canada. After exploring the opposition to computing that he encountered he reflects that the image of the underdog has perhaps become a foundational myth of digital humanities and questions whether it is still a useful one.

Preamble

Dr. Geoffrey Martin Rockwell is a Professor of Philosophy and Humanities Computing at the University of Alberta, Canada. He received a B.A. in Philosophy from Haverford College, an M.A. and Ph.D. in Philosophy from the University of Toronto and worked at the University of Toronto as a Senior Instructional Technology Specialist. From 1994 to 2008 he was at McMaster University where he was the Director of the Humanities Media and Computing Centre (1994–2004) and he led the development of an undergraduate Multimedia program funded through the Ontario Access To Opportunities Program. He has published and presented papers in the area of philosophical dialogue, textual visualization and analysis, humanities computing, instructional technology, computer games and multimedia. He is the project leader for the CFI (Canada Foundation for Innovation) funded project TAPoR, a Text Analysis Portal for Research, which has developed a text tool portal for researchers who work with electronic texts and he organized a SSHRC funded conference, The Face of Text in 2004. He has published a book "Defining Dialogue: From Socrates to the Internet" with Humanity Books. More information is available at http://geoffreyrockwell.com/.

[1]

Rockwell closes the interview by discussing the way that some digital humanists have tended to depict themselves as "underdogs"; he asks whether this is necessarily true and whether such narratives continue to serve us well. In the introductory article published in *Literary and Linguistic Computing* we have discussed this issue a little further and interpreted it in the context of the complex interrelationship that exists between myth and history. In order to explore this issue further we hope to carry out oral history interviews with members of the traditional humanities community who were sceptical about computing and its role in the humanities, in addition to interviewing further members of the digital humanities community. We hope this approach will enable us to gather a rich and wide ranging body of reflections that it may be possible to set within the wider comparative context of the history of disciplinary formation in the twentieth century.

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Click for the accompanying audio interview.

Interview

Julianne Nyhan	What are your earliest memories of encountering computing technology?

Geoffrey Rockwell	I remember in high school being aware, you know, reading about it and being sort of vaguely aware what it ... I must have been reading about Bill Gates and Microsoft and stuff like that, being aware that this is something that is going on in North America. I should say I grew up in Italy, so when I was in high school there weren't a lot of computers around. When I got to college was when I first encountered computers and I took a computer science course, or an introduction to computing course. I think, if I remember correctly, in either my freshman or maybe sophomore year, I had a roommate, or there was somebody on the floor, who had an Apple II. I went to university in '77, so I'm guessing it was '78 or '79 or something like that when there was somebody who had an Apple II, which impressed me. I took a year out of college so it was really, I guess, my fourth year, I took a year studying in India, but it was my second to the last year, when I took this computer science course and from there on in I actually used, I got access to the lab and I hated typing so much that I used the computing facilities. Even after I'd taken the course, I continued to use them to write my papers. So I was hanging out in the lab late at night with various other people who were using, or those of us who were word processing, were using a Pascal editor. [The lab] had a dot matrix printer and I think it had a daisy wheel.

	So I was sort of hanging out in that culture, then my first job a couple of years after I graduated was as a teacher in the Middle East. I was teaching in an American school in Kuwait and at that point I bought myself a computer — and it was an Apple II clone. Kuwait didn't have copyright laws or if it had them it didn't observe them, and so you were able to buy these Korean clones of Apple IIs and I have a very vivid memory because [of] my first computer. That night, as I was playing around with it, figuring it out — tell me if I'm going on too long — there was a thunder strike and my computer went blank and I spent a couple of hours trying to get it back online and of course the way you are when you don't know a lot about computing, I figured that I'd done something stupid, of course, the thunder had fried part of the mother board so I had to take it back and pay more money and then I started programming. At that point I was teaching at this American school - I was partly hired to teach ESL so I started to write little programmes, drill and kill-type programmes. The high school was well funded, it had a little Apple II lab and I started to bring my students in to use them to try to do some pedagogical stuff with the computer lab. One of the teachers, I guess he was a science teacher, taught computing and he ran a class for the teachers and I actually, I believe I got credit from the University of Washington, or something like that, as like an extension class that he ran. I didn't really care about the credit but he ran this course on computing where he taught Pascal. I'd learned Pascal at university but I sort of re-learned it and that's when I really took off and I started writing a lot of little programmes for my students and a lot of little programmes for myself.

	I also remember very vividly, this was, I taught from '82-'85, I remember very, very vividly when the first Macintoshes came in and I and a friend who were into computers, we trundled down to the Apple Store in Kuwait City and we sat down and played around with this first Macintosh and it immediately appealed to me and immediately didn't appeal to this friend of mine. You know it was like right there, I was a Mac person, he was a PC person, even though I didn't have a Mac, I just, the moment I started playing with Mac Paint I was sold.

Nyhan	Why did it appeal to you?

Rockwell

I guess because I'd always done a certain amount of arts. Also, it just appealed because it was a completely different way of viewing computing. Instead of doing everything, you know, on the Apple II where everything was sort of a command line, unless I fired off an application of some sort, it was all essentially a calligraphic screen, I didn't have colour or anything, well maybe I had colour, but it was all essentially a calligraphic screen and all of a sudden I was seeing a graphical screen. By calligraphic screen, I mean a screen that the computer thinks of as a series of characters, you know 72 characters by so many characters. And it just paints, it sort of addresses the characters on the screen, so that even if I had some little games that would sometimes do graphics they were doing them essentially using — a little bit like ASCII art — punctuation and characters from the character set. But with the Macintosh, all of a sudden it was a completely different interface and the mouse, it appealed to me intuitively. I just found myself really enjoying Mac Paint and playing around with it, and of course I was just there in the vendors.

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I didn't get a Mac until I went to graduate school in '85. So, after I finished teaching, saved up some money, got married, went to graduate school, bought a Mac, well, actually I bought a PC because that was the sensible thing to do. It was a Zenith, Zenith (IBM) clone with a 40 MB hard drive or something like that and somebody pirated WordStar or something like that for me, because that was the sensible thing for a philosophy graduate student to do. So I got it home, looked at it for a couple of days and said "eh, this is just not me." I convinced this friend of my wife's to drive it all back, I paid the restocking fee, paid extra money and left with a 512e which was the second Macintosh after the 128 came out with the 512, sorry, it was the third one, the 512E had the double density disk drive. So, I spent more money, didn't have a hard drive but I was happy, and just to sort of wrap it all up, a year or so later or whatever, I wandered into Willard McCarty's office (I was then at the University of Toronto and Willard was the Assistant Director of the Centre for Computing in the Humanities (CCH)) and I was obviously by now quite into computing and trying to find a community. I found through the bulletin boards a sort of community in Toronto but that wasn't quite the right community, I hung out a certain amount, I guess, on some of the bulletin boards. I had gone over a couple of times to CCH and was hanging out a little bit there but because I was a Mac user, at that time Willard and Ian, Willard especially, was convinced, and we joke about this sometimes because he has just switched to Macintoshes after decades, but he was at the time convinced that the Mac and graphical user interfaces were toys and so the two of us used to razz each other a certain amount.

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Anyway, so I was over visiting him, visiting his office and he said, "oh, you know, there's an Apple programme for graduate students that's starting up" and he sent me off, gave me the information and I applied and it was called the Apple Research Partnership Programme, or ARPP. In effect this involved Apple paying for mostly graduate students, I think at some other universities it might have been senior undergrads, but at UT it was all graduate students. So they paid for graduate students to be embedded in Computing Services as sort of evangelist trainers and support people and this was a godsend for me, in a number of ways. First of all, it meant that I had the choice of being paid like an RA-ship, just money, or I could be paid in equipment. If you got, I don't know, $10 an hour in money, if you actually calculate it out, the equipment you got was worth twice as much, so I could start feeding my computer habit. Secondly, it embedded me right in Computing Services not CCH, not the Centre of Computing in the Humanities, but the unit that actually, you know, the central university computing unit, so I had an office, I shared an office right in the middle of these guys. This was right when the internet was happening, right when the shift from mainframes to, at least at the University of Toronto, I was in the Microcomputer Support Unit, you know — I was probably in the unit that had the largest number of smart people who understood internet computing in all of Canada, and I could hang out there all the time I wanted to and then I was sort of put in charge of, I did a lot of training, and I would meet and I would work with various Faculty members and stuff like that, so that's sort of really the way I took off.

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| Nyhan | That's about the early '90s roughly is it? | 12 |

| Rockwell | No, this is like I'm guessing '86, '87. Well, I went to UT in '85; in '86 or '87 I started as an Apple Research Partner and it was a very interesting programme. This was back in the days when computing companies had a lot of money, when there were big margins on personal computers, so Apple, for example, gave a Macintosh lab to the University of Toronto Computing Services and one of the things I did was to run training in that lab on Macintoshes, design it and run courses. So they gave an entire lab, nowadays Apple doesn't do that sort of stuff. They were funding these Apple Research Partners across Canada; it was a Canadian programme. There may have been an equivalent one down in the States. They brought us together; they brought us together for conferences. I went for one conference to Vancouver, in the conference centre right on the bay there, and you know, they were handing out beautiful sweatshirts and hoodies, it was a time when Apple and IBM were, the profit margins on micro-computers were sufficiently high that they were really aggressively supporting them into universities. A big part of my job was, I became the HyperCard expert, and in '89 I actually got hired by Computing Services because I was embedded, they saw me and got to know me, and I actually took on a full-time job as a text and presentation specialist, I was working under John Bradley in Computing Services. So I got that job and by then, that was my second year of the PhD. I was a really bad graduate student because I loved computers so much, so I didn't have a lot of funding so I took on a full-time job in Computing Services. I need to stress that this is different from what Willard [McCarty] did, Willard was in CCH, John Bradley and I were in the central Computing Services, [actually called UTCS for University of Toronto Computing Services]. | 13 |

| Nyhan | Could you say a little bit more about the differences between those two centres? And about how that affected the type of work that you did? | 14 |

| Rockwell | So CCH reported to the Dean of Arts and Science, which was the big faculty. A lot of universities had faculties that were approximately the same size, at the University of Toronto there was one mega faculty, Arts and Science, so all the sciences, all the humanities, social sciences and stuff like that, and then there was a bunch of little faculties, well, little, you know, engineering, medicine, social work, some of them were really dinky — Information Studies. So anyway, CCH was set up as an academic unit, it had a research function. I was part of the University of Toronto Computing Services, which had at various times reported to a Vice President Information Technology or something or other ... The unit I worked for had, for example, the big administrative mainframes, you know, people's grades, people's pay cheques and stuff like that. They ran the network, they, in fact, ran a lot of the internet in Canada because they ran O-Net. UT, being one of the biggest universities, was one of the major ones involved in the Ontario networks which in turn were, Ontario was the largest and was to some extent the richest province in Canada, so to some extent they were involved. Part of that group was the e-networking people, both the people on the internet working, internets, and the people doing local area networks and this was a time when local area networks were coming in and UT was a pig to network because it was all these old buildings and it was really hard to network and then we had a VP who decided, I'm wandering off topic here, but he decided that the sensible thing to do would be to put fibre to the desktop. | 15 |

| | Now how did this affect me, because by 1990 or 91, I was actually involved with Instructional Technology, so I was like a project manager. If I was trying to bring a lab into the Department of Economics, I would have to go over to the networking people and figure out what it would cost to put in a local area network in some room in some old building and the moment the VP decided that we should put fibre, even though nobody was using fibre, that we should put fibre because this was the forward-looking thing, all of a sudden it doubled or tripled the | 16 |

cost of every drop, so then we were trying to figure out all sorts of workarounds for this rule and it's all like that because I couldn't go back to the people in Economics and say "Ah, guess what, we'll set up a little lab in this spare room that you thought was going to cost, I don't know, $10,000, it's going to cost $50,000 because we have all these rules about how you've got to do it and stuff. " So that was a lot of what my job was, trying to negotiate between these different groups, the networking people, the server people, the microcomputer support people, the people who installed stuff, and stuff like that.

| | So, going back to your original questions, CCH was an academic unit, we were a service unit. [My first job was as a Text Specialist supporting Word Perfect, Nota Bene and Word]. Secretaries around the campus, if something was going wrong, they would try to get local support but if they couldn't, they called me. I knew Word Perfect 5.1 by heart. I could actually problem solve without turning on my computer, I knew the keyboard strokes so well, so I was like, "press F7, now tell me what you're seeing, now do this, blah blah blah." And so we were supporting a service mandate, we weren't really supposed to do research ourselves but the fact that I was a graduate student and I obviously sort of pushed the envelope a little bit. The leadership was pretty enlightened, I had John Bradley as my direct supervisor and even the people above him were pretty enlightened, so if I got a paper accepted at ACH/ALLC, you know, they would send me to one conference a year, and if I got a paper accepted at ACH/ALLC, they would send me to that. So they didn't mind my doing semi-academic stuff but as one senior person put it, we were not to initiate projects, that was the fundamental difference in some ways between staff and academic. CCH could initiate projects, in fact CCH got into trouble and the reason it got shut down ... CCH, which was a leading unit at the time, along with Oxford and, you know, Susan Hockey was at Princeton at CETH. Toronto, CETH and Oxford were the three major units, at least in the English-speaking world, and overnight CCH got shut down — why? Because they were doing their own stuff and then the Dean, when there were cutbacks, the Dean sort of asked the various Chairs, you know, is this unit supporting you? And they said, no, it's not doing much for us because it's off doing its own stuff. It's not building labs for us. I was building labs for the Italian Department. CCH was, you know, producing journals and running conferences and doing cool stuff. So that was the fundamental difference, and over and over again I would get told not to initiate things, so I've learned to be really good at what I call "tail wagging the dog" — I wasn't allowed to start anything but I could chat with a Prof and tell him, "Oh you know what, it'd be really cool if you tried the following..." I know at least a Prof that got major back trouble because he listened to me and then he got involved in this super big project, got super stressed out and ... | 17 |

| **Nyhan** | So in your day job you were doing a huge amount of infrastructural work almost, infrastructural computer planning. Was your PhD was a pure philosophy PhD still at this moment? | 18 |

| **Rockwell** | My thesis was, was fairly pure but inevitably I was doing a certain amount of humanities computing on the side, in the sense of, I was using, John Bradley and I decided to, at a certain point, to use our lunch hours to start talking about text analysis. So we began to, you know, the way our cubicles were set up, I could sort of roll my chair into his cubicle, and we'd bring out our lunches and we started a process of imagining what could be done with text analysis and building tools and trying it. And so, because my thesis was on philosophical dialogue we began to do a series of experiments on dialogues, mostly Hume's *Dialogues Concerning Natural Religion*. We gave what I think was the first paper on visualisation in the sort of digital humanities community, there were some people at Waterloo who did visualisation and actually coined the word "text visualisation" before us but they were computer scientists working on the OED, [Raymond 1993], they weren't really presenting to the humanities but I'm trying to remember where it was. I can find the name of the paper — but the paper, I think we were presenting on the SIMWEB project, which may sort of be | 19 |

running somewhere; no, it's probably down now because it was running at McMaster's SIMWEB was built on TACTweb. So, John Bradley and I ported, we ported ... let me just pause a second here ... I was probably, by the time we gave the paper about SIMWEB, I was probably by then an academic but anyway, we started work looking at stuff, it took a while before we gave papers on this, I can send you or if you look at my website, let me see ... [Among the earlier publications and presentations see, for example, [Rockwell and Bradley 1998], [Rockwell et al. 1999], [Bradley and Rockwell 1994], [Bradley and Rockwell 1994].]

On my website, www.geoffreyrockwell.com, there is a page of publications and you'll see a bunch of publications about visualisation, in fact, if I go into my CV I can find the oral papers that we were giving. When I started I was doing text technologies but I got moved into being an instructional technology specialist. The Instructional Technology Group was brought together with the Research Computing Group, who were really the supercomputer folks. They were doing stuff on SGIs and visualisation and so John Bradley and I were sort of next door to people who were playing with these pipe and flow visual programming environments like API and Silicon Graphics had one called Explorer. So, we started imagining what it would be like to use visualisation, not just for visualisation of data, and the SIMWEB project was one of the really cool visualisation systems that we built and on the web that sort of worked, we did a lot of visualisation stuff on our own computers. But the other thing that interested us was visualising the process of the logic of research because that's in effect what visual programming is, you're not visualising necessarily the results, you're visualising, "well I take the text, I do this to it and then I pipe the results over to something that does this to it". The outcome could be, you know, could be a Key word in context (KWIC), a list of words, or, you know, a number — 42 — but the pipeline and the Eye ConTact paper, which is still up on CHWP [*Computing in the Humanities Working Papers*], sort of came out of that work. We ended up prototyping a visual programming environment for text analysis, so there were these two strands to visualisation. Getting back to your question, we were almost always operating on philosophical texts, so that's how I was sort of bringing the two of them together. We also, in the Paris conference in '94, we were also playing around with the idea of what I call the epidemiology of ideas. So, my thesis was on dialogue, I began to ask the question, you know, when you're writing a thesis on something all of a sudden the whole world looks like it's about that thing, I began to see dialogue everywhere, I'd be walking along and literally — I'm sure it's a cognitive thing that my mind was trained to see that particular pattern of shapes of letters — but I could spot the word dialogue on the spine of a book like 100 feet away in a bookstore, or something like that. So, we began to ask the question, you know, how can you tell, it seemed to me that dialogue had become hotter and hotter as a sort of concept or as a pattern of interaction, so then I started asking how can I actually test this. So John and I began to, we began to do stuff that people are doing a lot of now but we went through the University of Toronto card catalogue year by year, gathering all the references that had the word dialogue in the title and then we also did a bunch of control words like "Plato" and "Hume" and some other control words and stuff like that. We also went through the *Philosopher's Index* year by year searching each year, downloading all the abstracts that had the word dialogue in the title or the abstract and so on. And then we began to do what today people would I guess call data mining. We were trying to see if there were any correlations and we presented that paper in '94, I believe it was '94, at the Paris conference in '94. So that again was how in some sense my own PhD work in philosophy became content for these experiments that John and I were doing together — sort of at lunchtime and sometimes it dribbled over.

| Nyhan | Your earliest encounters with what we now call digital humanities — were they primarily through CCH or were you also aware of others and around what time, when did you start having some sort of sense of a field or discipline emerging? |

| Rockwell | Well, I had a sense in '85 once I connected with CCH, I had a sense. I mean, here is this big |

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powerful centre with these important people, you know, Willard [McCarty] would talk to me. Ian [Lancashire] was, you know, I was a graduate student, Ian was too important or I just didn't have cause to run into him and Willard was always very willing to chat and to argue and to tease me about Macintoshes and stuff like that. And later on when he started running that non-credit graduate course, I both took it and I actually did some talks to it. That was part of my sense of the community, the other part of my sense of the community, once I was embedded in UTCS, even when I was just an ARPP person, I was hanging out a lot with John Bradley, who was the lead programmer on TACT, so he was actually very closely connected to CCH, even though he was working for Computing Services. He had been going to some of the local conferences and stuff like that. So I guess I was aware that there was this thing and in 1987, when *Humanist* was started, I think I subscribed within the year, you know, maybe it wasn't '87, it was '88 or something like that, I subscribed to *Humanist*. I would say the moment that most brought the sense of community to me was in 1989 when the joint ACH/ALLC conference was held at the University of Toronto. So by that time, I don't think I was yet working for Computing Services but anyway, this big conference comes to town, it was the first joint conference, it was, someone like Ian or Willard would know the numbers, but it was the biggest DH conference for a long time, you know, maybe the recent one in Maryland had more people, or at Stanford had more people, but there was a buzz to it. There was an exhibit hall and I had been doing a lot of work in HyperCard and I was one of the exhibitors, I was actually sitting right next to, what's his name from TUSTEP, who, he did not understand a damn thing I did and I didn't understand a damn thing he did. It was like two completely different worlds, but to be part of the exhibit. And I was next to Elli Mylonas, showing off the early days of Perseus, when it ran on HyperCard and they wrote extensions that searched the *TLG* [*Thesaurus Linguae Graecae*] and the two of us hit it off, the two of us were the two HyperCard hackers. What is the name of the guy who did TUSTEP?

Nyhan	Wilhelm Ott?	23
Rockwell	Yeah, he did not approve of the Macintosh and the Graphical User Interface, that's probably unfair, you have to remember, being a Mac user up until some point in the '90s, you felt like you were some radical under attack or something like that and we certainly collected stories of how people misunderstood the innovation and so on like that. But anyway, I remember Wilhelm, I actually kick myself because there were times during the exhibit when Wilhelm and I'd be sitting there and nobody wanted to, the exhibit was like a big poster session if you will, and we had our computers there and nobody would be talking with us, and I kick myself for not using that time to get Wilhelm to sort of explain things better to me but of course at that time I was convinced that the PC was passé and anything Wilhelm Ott could be doing with TUSTEP, you know, sure it may have some cool features but it'll be even better on the Mac anyway soon. And I think he had this feeling of, this Mac is a toy, it's a distraction and the sooner we cauterise that wound the better. But you know, Ted Nelson came to talk ... there was this brilliant young Japanese Studies graduate student, who was doing these really cool HyperCard stats for teaching Japanese; she actually ended up connecting with Apple and some of her things got commercially published — Nikki Yokokura. Anyway, Ted Nelson came to town and gave a talk. I went to his talk, I feel guilty that I didn't go to, Northrop Frye talked at that conference and I didn't go to his talk. Oh, George Landow! So the other thing that made me feel part of the community, George Landow was supposed to, you see the week before there were workshops, he was supposed to teach a workshop on hypertext and he had some family issues, personal issues whatever, he bailed. So at the last moment they asked me to teach the hypertext workshop, which I taught at the Mac Lab in Computing Services and I basically taught HyperCard and hypertext. So that, in some ways, because of George Landow not being able to make that thing, I was sort of instantly turned into the hypertext expert for the conference, or at least for the University of Toronto. So I guess that conference was an important one, I think that's probably, after that is when I started going to more and more conferences. I've been to most of the DH conferences, I've	24

probably missed three or four when children were being born, or you know, important things like that, but from about '89 I've been going semi-regularly to the DH conferences and giving papers.

| Nyhan | And what about when you made the move then to an academic position, can you tell me a bit about that? | 25 |

| Rockwell | So McMaster University, which is in Hamilton Ontario, which is sort of down the lake from Toronto, they advertised a position, it was a two-year position convertible to tenure track. It was, as far as I can tell, it was the first job openly advertised as a humanities computing position. You know, it wasn't an English position with some computing thrown in, or something like that. It was advertised as a humanities computing position and at this point, so this was in '94, and at this point the — I was getting close to finishing my PhD, not that close, but close enough; I had basically been pursuing my PhD since I started working at UTCS, I was basically doing it in the evenings and stuff like that — and anyway, I applied and I got the job. I left UTCS early and didn't start at McMaster until beginning of August and I spent May, June, July madly trying to write my PhD thesis and then into something like November, and I defended in December. It was made very clear to me that if I did not get my PhD by the end of the first year of my academic appointment it would not be converted to tenure track and it would not continue. And I took, to some extent, I took a cut in pay, you know, the starting salary for an academic was, by then I was a senior project manager and the pay at UT was pretty good; I took a cut in pay and it was a bit of a gamble because it wasn't clear it'd be turned into tenure track and one thing or another but it paid off. I defended December 23rd and that would have been, I guess, 1994, yes, so I started on August 1st 1994, so by December I defended, they converted it to tenure track and the next year they convened some sort of committee, converted it to tenure track and the position. | 26 |

| | I should go back and say, the other thing about the position was I was basically, it was an academic position but I had to take over what eventually became known as the Humanities Computing and Media Labs. They had had, under Sam Cioran, who was actually someone very important at least in Canadian history in some ways, he was very local but very important, he had slowly turned the language labs of the Faculty of Humanities at McMaster into computing labs. He had partly done that because he had produced a whole series of language software, the first in the mcBookmaster series, which ran on DOS PCs and were sort of drill and kill floppy disk-based ones. When I say produced, you know, he would do the Russian but he was building, he was actually building a language learning platform and then he would work with the fellow modern languages instructors and place a year or two years with Italian, Spanish, Portuguese, blah blah blah — and they published them or did deals with publishers and then he did a whole CD-ROM series, a little bit like the Robin Winters ones [1], so an audio CD-ROM and a floppy disc. So he had taken the language labs and turned them into a sort of computing and language labs and then I think he got into a spat with the Dean, or he just got tired of that, so when he said, "ok, well, I'll stop, I'm going to stop directing this." That's when they created the position and so I got hired into a position and for 10 years I directed the Humanities, Media and Computing labs at McMaster. And by the end I think we had, so the Humanities, Media and Computing labs were sort of like a mixture between Computing Services at the University of Toronto and CCH. We had both an academic director, namely me, so we had a bit of an academic mission but we also had a service mission. My staff fixed the Dean's computer; we made sure the networking worked right; we ran the labs that were open to all Humanities students; we still ran, instead of having language labs we actually switched to little boom boxes so that students could sign out the same tapes — there were still some teachers in the '90s that really liked the audio cassettes that they had learned to teach with, and so we'd give them boom boxes and | 27 |

students could sign them out and we didn't have to suck up loads of space with that. I don't know how much you want to know about the McMaster thing.

| Nyhan | What I might do is, there's two more questions that I want to ask you, then maybe if you agree we could do one more interview in a couple of months? The first question is do you have a sense (say around 1994-ish when you'd been hired to your first academic post, that's right isn't it) of how people in the Humanities who weren't using computing viewed it or what their opinion was of that kind of research and approach? | 28 |

| Rockwell | I have a sense but I'm probably not ... So I was hired to essentially be an advocate. One of the things I was hired to do was to introduce courses. So, initially I was not in a department, I was Assistant to the Dean, in my capacity as directing a unit, I was Assistant to the Dean. I sat on the Dean's Advisory Council, so one sense of things was sitting for 10 years on the Dean's advisory council and having Chairs snipe at me. So that's one thing, but more importantly, I had to introduce, starting the first year, I had to design three courses which I would teach, and then bring them to Faculty Council. So, it was like most universities, there are a series of committees you had to take things through and especially when I hit Faculty Council. The first time round I brought in three courses; then we brought in some funding and I had to bring nine courses through. In the early years, taking courses through, you would hit Faculty Council and that's when shit would hit — that's when people would get up and go, you know, "I don't understand why we are running computing classes, this is like 'Pencils in the Humanities,' " that's one comment I remember hearing, you know, that this had no intellectual substance and if there is a need for these courses, it should be done by Computer Science. There was a sort of Trojan horse concern and you have to remember that what people say in Faculty Council isn't necessarily what they're thinking. Some of these people, including myself, at Faculty Councils play a really interesting tactical game, you know; this is a big meeting, any faculty member can come, run by Robert's Rules of Order. I distinctly got the feeling that there was a class of people for whom this was seen as a Trojan horse. The Humanities were under attack, people felt that back then and, you know, and now the Humanities were not even the Humanities. I got working with the Dean, we got base funding first and designed a multimedia programme and then later a communication studies programme and that's when there was really serious concern that the Faculty was going to cease being a, you know, all the students would be taking multimedia and communication studies and the traditional departments would wither away. We mitigated that partly, when we were running the multimedia programme we brought it in as a combined honours, you could only do multimedia if you combined it with another Humanities degree, you could not do it alone. I should say the other side of it, so that was one type of response, you know, the Trojan horse corrupting the Humanities. | 29 |

| | A second type of response was "you guys are intellectually lightweight." I can remember one way that that manifested itself was through hiring. Because we were not a department until 2005, whenever we hired a tenure track Prof we got into this, and this happened even when they were hiring me, we got into this situation where we would have a wide ad, we might bring three candidates to campus; one might have a PhD in English, one might have an MFA in sculpture, you know, one might be a film studies person or something like that. Even after we had chosen who our favourite candidate was, then there was the question of whether or not the department that they would naturally fit in would host, and Chairs, especially English, would inevitably tell me that, you know, "you may think this guy is interesting because he can programme, but I gotta tell you, intellectually he's a lightweight." And there was this funny, I actually witnessed this two years ago in a European country when I was part of a hiring, I was an external hirer, the intellectual argument that, I think it's actually more a European thing nowadays, it's sort of disappeared from North America, or nobody tries it on me in North America anyway, but this argument that there's some elusive quality of a true intellectual, which these people in digital humanities are lacking — there's | 30 |

just something a little bit smelly and [traditional] about that. And you push people on this, like well what do you mean by not intellectual, are they not publishing, do they not read? "No, it's just, you know, it's something about the magnitude of their thinking, you know, there thinking too small, they don't see, they're not a public intellectual, " or something like that. Anyway, so that response was a kind of second strain, the sort of, you guys might be good at sharpening pencils but you're intellectually lightweights.

The third type of argument that we got, I had the third type of argument, now I'm trying to remember what it was. I'm going to switch to something else. The other thing that needs to be acknowledged is (the problem also went away at McMaster) so, you know, I was hired in 1994, I was bringing courses forward, I was sitting on the Dean's... Oh, the third one was just blatant sarcasm and ignorance, I can remember, this was fairly late in the process, a Chair, you know, I was talking at the Dean's advisory [committee] about the multimedia programme or something like that, and this Chair joins us, "What is this multimedia stuff anyway?" You know, he was literally completely unembarrassed, so he'd just sort of be sarcastic and nasty about it without understanding it at all and this was the sort of attitude we got, I think there was a class of older Profs who just literally felt: "I'm too old to understand this" and, you know, sometimes that could mean that they'd be quite supportive — "I'm too old to understand this, I was before the computer generation, you know, I wish I could know about this and I respect your knowledge but I don't get it at all. " So that's a positive spin on it, but there were also people going "I don't understand it, it must be bullshit," you know: "[t]his isn't the good old stuff; we used to do philology" ; you've spent time in Germany, you know, philology is sort of gone in North America but in Europe and Italy, philology is still the heartland, you know, "we want to get back to that" . But I need to say that this also went away. | 31

But we need to acknowledge the way, you know, I had these careful dancing, they weren't dog fights — the Chairs of English were always too smart to dog fight me and I was too smart to dog fight them — but this, you know, careful circling and it was really more about power, it wasn't really about the digital humanities. It was about, I represented the thin, cutting edge of something that was soaking up money, getting Faculty positions when they were not and they were seeing themselves cut, getting money, getting labs and so on. And I have to admit that, you know, initially I got a lot of antagonism and then at a certain point the antagonism went away and we began to get a lot of collaboration and in fact I can remember when the Chair of English, this person who had fought me over the years, he had been Chair for, off and on, more or less the same time that I had been Director, he said in the meeting at some point, I think in response to someone else "Initially I was very worried about this but now I think it's a good thing." We need to also acknowledge, not just that there were changes, at least within the university I was at, there were changes in attitude and a growing interest and recognition of what was happening. In fact, one of the things that strikes me the most is how quickly it changed from something I had to fight to explain and I was ... It seemed like overnight there was no longer a battle, it was just accepted: "Oh yeah, of course, multimedia, that's whoever they are and that's fine, they do and they do new media" and it was like the opposition disappeared overnight. | 32

Nyhan | Does that concern you in any sense, that the opposition has disappeared? | 33

Rockwell | It doesn't concern me that the opposition has disappeared. What concerns me more is that within digital humanities we are still trading stories, we're still acting as if we're the underdog and we're not. | 34

Nyhan | This was going to be my next question — exactly, so that sense of, I think it's fair to say, a very clear idea of the underdog, that the Digital Humanities can be damaging and being | 35

united as outsiders, that's really important to the identity and development of digital humanities, what would you make of that comment?

| Rockwell | I think that one's very important and I think a lot of people still were, myself included, a lot of us went through decades of feeling like an underdog and some people being treated, genuinely being treated abysmally. I was never treated badly because of this, people told me, "oh, if you get into computing, you'll never get an academic job" — but in the end I got an academic job because I was in computing and I probably would not have got as good an academic job as a philosopher. I would have ended up in Northern British Colombia or something like that. So where was I going with this? So, the sort of philosopher of history and science, Giambattista Vico, his New Science is about the birth of institutions and the thing I always find interesting about it; I once gave a paper at, Ray [Siemens] organised a conference at Victoria back in the early years when he was still at Malaspina University College (now the University of Vancouver Island) and I gave a paper in which I sort of mentioned this idea. | 36 |

So Vico talks about how the creation of any new institution is usually done at the expense of other ones, there is usually some crime against your parents. I mean Vico is writing in the 18th century, he doesn't know Freud, so doesn't call it Oedipal but it is, to be honest. He's talking about, the examples he gives is Romulus killing Remus because Remus has stepped over a line in the sand that is the walls of the future City of Rome. So the question I always ask myself is, you know, what crimes have we committed in creating this new type of institution, this new discipline? Who have we mistreated? Who have we pushed aside? What have we pushed aside? And I guess the other side of it is, how can we avoid, how can we avoid some of the birthing problems that happens with new disciplines. The other major one that, you know, you can see it in Game Studies, is the Empire building, all of a sudden there's money and then all of a sudden everyone wants to draw the lines in the sand and say, "Well, you're not a digital humanist unless you're in here with me," and so we go from being a very open, accepting, you know, anyone at the early conferences that I went to, anyone who could make their way to Hungary got their paper accepted. And now, we're having all these spats about what is in and what is out and what sort of papers should be accepted and what shouldn't be accepted and, you know, are we doing Game Studies, or is a separate field. And I guess we had some of those spats around hypertext or something like that, but by and large, we were so desperate for any friends whatsoever, and I think that was a good thing, I think there was an openness, perhaps there was a lack of rigour, but there was an openness and how can we pursue that openness and that willingness and that tolerance for new ideas now that we're being perceived as successful and maybe it's tempting to close down, to decide who's in and who's out, who gets the money, who doesn't get the money and stuff like that. That was a bit of a wandering answer ...   37

The two dangers that we face, well I think we need to be conscious of what has been pushed aside. We need to be conscious of the stories we told ourselves, and whether those stories are stories and not necessarily true. It's not necessarily the case that we were persecuted. It may be that we had to tell those stories and now we need to start telling different stories. We need to be careful about the switch to empire building, that's the wrong term but I think the sociologists of discipline coined that I think, there's a stage where all of a sudden you get into power and then when you get into power, you just continue to replicate many of the patterns of whoever it was that was in power before and you begin to exclude people, just like you felt excluded, and so we've got to be very careful not to become the sort of people we used to warn people about. Ask me more questions on this subject I have sort of wandered off topic here...   38

| Nyhan | I don't want you to feel like I'm pumping you for information the first time I talk to you. This is | 39 |

the end of the first interview with Geoffrey Rockwell.

Notes

[1]Beethoven's 9th Symphony (which was originally an audio CD and floppy with software to control the audio)

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