MEDIA AND ARCHAEOLOGY



Media|Archaeology

Sam and I have been talking about his thoughts on media and archaeology, and about the Metamedia lab for a few months now – I have pulled together some of the highlights.

The main point is about setting up a dialogue between Sam’s world of information science and software design, and mine of archaeology and material culture.

An idea for Traumwerk

Traumwerk is our wiki.

Monday 11 Nov 2002

Sam to Michael

BTW – I had another idea for all this: do some kind of text analysis on each entry you type in to try to find 'matching' entries in some sense, richer than just matching on single words. The idea being to have the system spot people who are talking about related things or things from the same point of view, and bring them together automatically. Some of this might just come out of the organization of the data itself, but I have a suspicion that there are more interesting ways to look at the text coming in and correlate it.

This might be a bit for this abstract as well – the idea that this is a framework for exploring different ways of correlating information and communication, and mapping that correlation on to either a topology or a community, or both. In fact, an interesting 'meta-community' idea would be to allow some kind of programming of the 'correlation engine', so a community of developers could use this tool to explore even more creative kinds of correlation. Like…image recognition correlation, lexical analysis of the text entered to discover 'readability' and thus connect people at like levels, etc.

One other idea that comes to my fevered brain sitting here is that we should try to connect this to the larger world somehow – maybe the pages can be used to do intelligent google queries and import data (an example – the lists feature google has could be used to look for and complete lists of ideas being developed within the community, and to develop links between the various lists identified). I like this a lot, because it means you can turn this system loose, tell it to restrict to your domain when looking at google, and it will organize your data for you as you add data. Lots of leverage for the entering of your data…this is a cool idea.

New media?

Thursday 27 March 2003

Sam to Michael

Another thing I thought about on the way home…for ‘old’ media, we had sets of rules about how to build documents (sentence, paragraph, etc). Many of these rules have cultural impact (“how do I interpret this painting?”) some are practical (“what the hell is this newspaper article about?”). The new media need new rules for and new techniques for discovering the rules – this is an aspect of the study of this center. For example, imagine a living document meant to act as a resource for, say, doctors. It’s not enough to just make it a rich document, you also have to have an idea in the structure of the document of the validity of the information, timeliness, reputation of the doctor, etc. The structure of the medium and the tools to create it would need to reflect this. You’d want a theory of documents to fall back on when designing this (middle layer), and some methodology to test, build and refine it (bottom layer).

Michael to Sam

Right.

What your are thinking through is a theory less of media and more of what has come to be called discourse (in a Foucauldian rather a than common sense notion), with discourse subsuming different media, but including performatives, communities, hierarchies, gatekeepers, archives, rhetorics, and a whole lot more.

The difference – taking on digital implications from an insiders/designers view.

Sam to Michael

I suppose that's true. I thought that a major theme of your work was that the line between discourse and media is blurred, at best.

Michael to Sam

As we were saying yesterday – the old notions of media are quite outmoded – so yes a blurring, but also both terms need radical rethinking (the key is the need for detailed theorising of the relation between media, events (temporality, process), and clients/communities/networks/cultures.

Sam to Michael

Agreed.

We are going to need some new words.

Here's a question for you – is the internet a test bed for new document types, as we discussed yesterday, or is it, itself, simply a single new form of media? In other words, is a chat group analogous to a paragraph, or to television?

And here's another thought about a form that has evolved out of the structure of a new media – the emoticon – the smiley. A classic example of how the parameters of a meduim (the lack of emotional bandwidth of email coupled with the low cost and latency) lead to a need (the ability to communicate emotional content) and an emergent standard form (particularly fascinating is that the form was emergent – there's probably a Ph.D. or two in just analyzing how networked groups develop document standards in new media without centralization – you could do this for all kinds of new media – newsgroups, comments in source code, blogs, etc).

Monday 31 Mar 2003

Sam to Michael

An article today in Salon ? it isn't really about what we've been talking about, but the first page of it muses on some modern digital effects. A good quote:

"Now it seems that the project of science is not primarily to represent the natural world with language but to reconfigure the natural world as language, so that it can be composed, transformed, and manipulated in the ways our minds are equipped to operate upon knowledge itself. "

Another good quote:

"The computer is seen in quantitative terms, as a large dose of the exact ideas brought about by the print revolution three centuries ago. "

Michael to Sam

When we talked the other day about semiotics meeting information science we raised a whole load of baggage about the nature of language, its paradigmatic status and what it has to do with communication (information etc etc) – there have been a few books that have brought critical theory together with information/cognitive science, but all are very much theory.



Sam Schillace (2009)

Sam to Michael

We don’t have to get stuck on anything raised in that conversation. I think we’re undergoing a new round of finding a common language to discuss our concerns. Think of that as the seed crystal…I would like to get to a charter for the meta-media lab sooner rather than later, but it ought to be the right one.

New discourse?

Tuesday 1 April 2003

Sam to Michael

You said something yesterday about “now we’re getting into a theory of discourse”. It stuck with me as being wrong somehow, but I couldn’t put my finger on it. Now I have it:

Before modern technology, there was “discourse” and there were “documents”. This division represented a choice between two tradeoffs. Either you could have immediate, fluid connection with someone, without any recording of the conversation (a play or lecture, for example, is only recorded in one direction, conversations etc are not recorded at all), or recorded conversation that was not fluid or alive (a book, cultural discourse in the form of a painting, etc).

Now you can pick any of (recorded, not recorded) and (fluid, static) in any medium you want (and mix and match – kids today can record your lectures, render them into text via speech recognition, and make all kinds of manipulations on that – fluid, but also preserved, searchable, linkable, etc). In fact, the idea of the eigenvectors paper is that you have even more choices beyond that (and, I’m realizing as I write this that we must also believe that these choices will continue to subdivide forever, according to our charter).

So that idea (the blurring of the distinction between document and discourse) is in the ‘middle’ layer of the MML. It’s not the whole layer, it’s just one specific theoretical instantiation of the more general abstract idea that “more computational power is makes a qualitative difference in the practice of all the arts and sciences” (our most abstract charter), in a specific field of knowledge, discourse.

And Traumwerk is a specific practical implementation of that middle piece of theory – a deliberate exploration of the connection between document and discourse, in a living setting, with an eye towards the changes and effects that occur as the parameters are changed (oh, and here’s another one for the future: when we get enough power in the programming language, the parameterization of the tramwerk will become self-referential: the participants will be able to make changes to the

configuration as part of their discourse. We could actually do some of this now in a more hard-coded way, e.g. links to a chat room, online meeting, etc, but it would be fun to explore this idea further).

So that's our conversation by the fountain, rehashed.

(BTW, I like "Computational Semiotics" better than "Semiotics in the information age").

Michael to Sam

This is one of those issues of vocabulary of our different fields – we are actually in precisely the same space and I agree with everything you are saying here – I was using discourse in a technical sense – so when I say we are getting into a theory of discourse, it is one that is making just these points about materiality, form, relationality, institutionalization and more.

The concept of discourse, in this specialized sense, I think, offers a way of bridging social sciences/humanities/cognitive science/information science.

And the very neat thing, is, as you say, that the likes of Traumwerk is both based on such thinking (about discourse), but also allows refinement of the thinking

in its use and development.

I have a section about discourse in one or more of my books, but I can’t remember where!

Sam to Michael

Ah, I understand now. I’m sure this will be a challenge going forward…actually, one of the things the Metamedia lab can do, possibly, is develop this kind of rigorous language that the disparate disciplines can use to communicate…who knows?

Media and archaeology (and social evolution)

Wednesday 7 May 2003

Sam to Michael

So…I’ve been reading your nemesis, “Guns, Germs and Steel”. Jared Diamond makes an argument that I’ve heard before, and I’m sure you have, about the reasons behind the rise of societies. But, this time I’m seeing it in the context of the MML, and there’s perhaps an interesting conclusion to it now.

The story about why we have centralized societies goes basically like this: we shift from hunter-gatherer to food production basically because of accidental selection of domesticable species. Food production means more frequent birth schedules and thus denser populations, which means more food production, etc. When the group is clan size or below (couple of hundred people), everyone knows everyone, and the societies are typically egalitarian. But as soon as the group gets big enough to have strangers in it, you begin to need central authorities to manage conflicts, etc. These authorities eventually get selected for the ones who tell the most compelling stories about why they are in power (i.e. religions), advantage their clan appropriately, etc. Eventually this autocatalytic cycle carries you up to the size of states. This is why all successful societies are centralized, have some kind of religion, etc.

I think the *new* conclusion to see in this is that the original problem (getting strangers to communicate and be organized) is basically one of, you guessed it, communications medium bandwidth. In other words, early societies never had enough bandwidth to effectively communicate and self organize past a few hundred people, so they had to invent heuristics (religions and laws) and implement them (churches, courts) to function.

But…and here's the cool thing…we are now beginning to have that bandwidth. A trivial example: consider the communication that happens in a chat room (bunch of people who've never seen each other, don't even know where they live, communicating about a shared topic) from the perspective of a primitive society – it's absolutely fantastic, and we take it utterly for granted because it's now 'easy'. So now, we can communicate in large communities (web pages, news groups, slashdot, google, automatic trading networks, etc, etc) without having central organization. In fact, this kind of self organization is one of the more exciting things going on right now.

I firmly believe that we now have a literally unprecedented ability to communicate, record, and organize ourselves without central control, and that we are just at the very beginning of figuring out how to use this, largely because we're just mired in old habits. Someone will figure out new ways of being a community and a society that are more effective (see the Bruce Sterling story "Manki Neko" for example) and all of a sudden things will change. It will seem obvious in retrospect when it happens.

So this is cool, I think. It connects the media work to your archaeological work, but from a different angle – instead of seeing archeology as a media event or document, this is more an archeological view of media and how it impacts (or could impact) physical and social culture.

If you want to be really grandiose, you could say that we want to embark on the new realm of non-physical archeology in the digital domain – examining the digital artifacts of communication to understand the underlying virtual communities. That would be an almost literal mapping of archeology onto the digital age, except that I think you are contemporary with what the society being examined, and may even look ahead of it and affect it.

Michael to Sam

Origins of farming? Actually it wasn't really like this at all – the old distinction between h/g and agriculture has been overdrawn – it is much more of a continuum – this is where Diamond is still very nineteenth century in his thinking. (And notice his realtor's view of history – all that matters is location, location, location.)

But this does not detract from the comments you make about bandwidth.

Sam to Michael

Ah, I should have know I was bringing coals to Newcastle. This makes sense. This notion of self-organization is, for me, the really interesting issue.

Michael to Sam

I actually think that some early communities were large AND self-organizing – we do have examples of egalitarian communities with extensive range and the capacity to organize large labor forces (early farmers in the Near East and Europe).

Sam to Michael

This is very interesting. I'd like to understand more about these communities, and why they failed. Perhaps bandwidth isn't the whole picture – there's always a strong element of natural selection and effectiveness. So, yet another way to look at the modern era is with a biological analog: a new biosphere has been opened up by the internet and we are just beginning to try to exploit it. It may or may not be the case that some organizational strategy more fit will arise from the new configuration of the biosphere ("mediasphere"), we have to wait and see.

I wrote the following – What do you think of it?

I firmly believe that we now have a literally unprecedented ability to communicate, record, and organize ourselves without central control, and that we are just at the very beginning of figuring out how to use this, largely because we're just mired in old habits. Someone will figure out new ways of being a community and a society that are more effective (see the Bruce Sterling story "Manki Neko" for example) and all of a sudden things will change. It will seem obvious in retrospect when it happens.

Michael to Sam

Maybe unprecedented, I would emphasize the 'mired in old habits'.

Sam to Michael

I think the cheapness and low latency of distance communication is unprecedented, literally, and also the ease of recording and searching old communications (think

“oral traditions” – this is an important task for all societies). The massive, cheap availability of all these is unprecendented, and I make the claim that this quantitative change will in fact turn out to be qualitative.

And what about the following:

So this is cool, I think. It connects the media work to your architectural work, but from a different angle – instead of seeing archeology as a media event or document, this is more an archeological view of media and how it impacts (or could impact) physical and social culture.

Michael to Sam

Right – an archaeological view of media – media with history and legacy.

And a material view of media – in that media have material form and effect.

And in fact media are not ‘media’ per se (coming between, mediating units that are given, a posteriori, primacy), but are intimate aspects of the socio-cultural fabric – media as modes of (socio-cultural) engagement.

Sam to Michael

Yes. I like this a lot, actually. I had been looking for this connection.

And this?

If you want to be really grandiose, you could say that we want to embark on the new realm of non-physical archeology in the digital domain – examining the digital artifacts of communication to understand the underlying virtual communities. That would be an almost literal mapping of archeology onto the digital age, except that I think you are contemporary with what the society being examined, and may even look ahead of it and affect it.

Michael to Sam

Well I'm right with you here – you're beginning to see the archaeological everywhere! – and yes, as the MATTER of information science.

Sam to Michael

An interesting way to put it.

I've never heard of anyone make this connection, actually. Basically, archaeology is active and vital in the digital age, and may, in fact have connections to a more proactive (instead of observational) science, due to the changing nature of the media forms it's examining (i.e. the digital forms are fast and malleable enough that you can do archaeology in 'realtime' instead of thousands of years in the future. This becomes some kind of engineering discipline that is active instead of

passive). Writing this up might be one of our medium term goals – we might think of the projects we do in the lab in terms of generating good material to expose this thesis.

We should have a sit down one of these days.



Metamedia Lab, Stanford – April 2006 – Lynn Hershman Leeson, Sandro Kop, Tilda Swinton, Henry Lowood, Sam Schillace, Henrik Bennetsen

The fitness of new media

Sunday 11 May 2003

Sam to Michael

I want to get back down to more practical ideas, if we can. Or at least brainstorm some.

An interesting aside, first: I read a quote today in the Merc about how people

spend time doing things like being in a chat room instead of being out of the house, and that, while most people think this is not good, it's hard to stop. I think this is an interesting phenomenon, the chatroom media (in this example) is being selected for in some sense. This fits in, to some degree, with our earlier conversation about fitness of the new media and the concurrent changes.

Here's some ideas on pragmatism: I want to actively design a new media form. I would like to actually work through the eigenvectors idea a bit, in terms of contemporary examples of successful new media, specifically look at how they interact with different tasks and situations, and design some media that is more interesting. A specific example – I think that email is successful because it fills a 'situational niche' in people's lives – that is, it's the right combination of behaviors (latent, asychronous, recorded, easy) to fill a role for certain kinds of communication. The role was always there (or normal human behavior always afforded this kind of media), it used to be filled by other media (e.g. letters), and those are now being displaced by email.

So…I want to design some communication tools that are well integrated with these kinds of user needs – a concrete example is a wiki/blog that is integrated well with email and instant messaging. Integrating rich media (images, voice, ink, etc) is in there too…the goal would be to create a genuinely new form of media or community or site that is more compelling to work with. We can do this within the Traumwerk project, I think.

Why email is useful

Thursday 5 Jun 2003

Sam to Steve (snewman@speakeasy.net) and Michael

Just an interesting thought – I sometimes use email as a reminder system, kind of like a mercury line. Example – I have an issue with the help stuff I'm working on. I need Claudia to answer it, so I send her an email…and forget about the issue, assuming I'll hear back from her. In essence, the email has a tiny bit of workflow built into it – the system emergently 'knows' that a message is active (it's sitting in someone's mailbox), with very little unnatural intervention from the

users other than replying to each other, and (unless the humans decide otherwise) the message will continue to propagate until it's resolved. A very nice extension of my brain – a piece of 'living' data that will come back to me with very little intervention on the part of any of the people involved.

I think this is probably part of what's so appealing about email, that it's a tiny, tiny step in the direction of software that's able to understand the context of human interaction and help out (it doesn't help out much – it just remembers the sender(s) of the mail, contents, helps you store it in a natural queue to deal with, will deal with moving it back with all this information intact, etc). There's probably a very good bit of thinking/research to be done here to expand this ability. E.g. what other kinds of context can we capture through the structure of a communications medium. I'd love to see something like email that can 'understand' the nature of things like unfinished thoughts, groups of related ideas, etc. This is probably a good place to start thinking about some kind of system that integrates documents with communications like email or IM – there's probably a way to structure the system so it 'knows' when a piece of information should be stored in a particular online document, when it should be cross-referenced, etc.

Food for thought.

Steve to Sam

Yup. Lots of people work like this.

I tend to leave messages in my outbox until I've gotten a reply or otherwise know that the issue has been resolved. I wish I had a better way to track such things.

To experiment with this, I think step 1 is to create a system that has access to all of your email traffic,

and as much other data as possible (maybe it’s integrated with a Wiki). Then start iteratively adding features. Arguably, to be able to do any good, the system should *be* your email client (replacing your current client). That’s a significant first step to cross, but it is tempting to try to cross it.