MEDIA EIGENVECTORS – METAMEDIA NOTES

Sam and I have been working on some ideas – in that space between archaeology, media studies, information science and software engineering.

Here they are in draft (and written jointly in Hydra)

Aims

to discuss and describe media in the abstract, that is as distinct from technical and material properties

to develop a set of terms and methodologies for proactive design of media forms – tools for ‘product design’

These terms will also function as components of a history of media and of (media) design.

Premise and timeliness – media in the light of the digital

Design is here seen as heterogeneous engineering (that is not presupposing any particular definitions of materiality, virtuality, the technical or the cultural)

The aims imply an analysis of the components of product design today in a digital world – creativity, collaboration, research, analysis, styles, and with the digital

involving an erosion of conventional distance between ‘the real’ and ‘the virtual’.

The digitization of media removes artifacts from ‘material’ culture. This allows a more rigorous and abstract analysis of media forms and a more deliberate construction of them for specific tasks. The goal is to put forward a set of well-defined terms and methods for doing this analysis and construction.

Alternate way of expressing this: the digitization of media replaces the media artifacts of material culture with different artifacts of digital culture.

See also the Metamedia Lab discussion document

Definition of medium

A medium is a formalized method for conveying a specific kind of information to specific participants. The manner in which this happens is subject to control and negotiation. Usually there has to be some agreement over encoding and decryption. Historically the notion of medium has been intimately associated with and constrained by material and technology, e.g. paint, paper, etc. And also certain institutional forms that controlled the technology. Now it’s becoming less constrained because of the increasing digital nature of communication.

Conventional terms/definitions/components

Media Studies are well established as a branch of cultural studies. Topic – cultural production.

NB also theme of creativity – creating in a cultural sphere

And here culture is often oppposed to material infrastructures in that it is seen to consist of ideas, values, images/representations.

Components of such a cultural studies

technology – eg TV
tools as extensions of the person and the group
material form – paint, film, paper
rules and norms

qualifications for entry
archives/storage
gatekeepers
organisational architectures – TV studio, movie studio
groups, communities, producers, consumers, institutions, organizations
relations of cultural production
power relations – access, control
ideology critique – mass media as ideological state apparatuses

semiotics – communication – signifier-signified-referent
narratology and applications of literary theory/cultural theory

media history

Eigenvectors – media components/parameters

Latency

The delay from changing information to it's being consumed by other participants. E.g. IM is extremely low latency, email has this weird asymmetric latency – it's fast to respond but may be slow to read. Newspapers are very slow. Blogs are very fast. Most digital media has low latency. Except eg digital layout for conventional print media.

People notice latency.

Latency is often relative to expectations within the task at hand. A 10 second delay in the context of IM is noticeable and annoying, but in the context of web publishing, is nothing. Hydra is another good example of this.

Persistence

How robust the medium is, how long the data persist without active maintence. Email is fairly persistent, IM is not. Documents are mostly about persistence.

issue here of materiality and curation – in relation to archives
matter here of the archaeology of media

Redundancy

Persistence is related to redundancy. Digitization gives us the choice of how much redundancy we want, and this is an economic choice and we always choose the short-term most economically efficient path. So, we tend to have very ephemeral digital media, because there's no (economically acceptable) way to choose robustness.

Richness

Raw email text may not be very rich – is very flat – a haiku may be very rich – layout may increase the richness of text

NB McLuhan's hot and cold media

Complexity

In an information sense this is related to entropy (how much disorder is there?) eg a string of digits is non-entropic because it can be easily compressed – compression is about finding non-entropy/order – and high entropy looks like random noise

Digital media are more complex – they are more entropic – more difficult to compress

Encryption – compression is related to encryption (the encrypted form looks highly entropic)

a painting therefore doesn't look very complex – eg digitally curating the Mona Lisa might result in a high res compressed file of 10MB – but this is not very redundant

One-to-many-ness

A broadcast factor (1-1, M-M, etc)

Computational accessability

Text vs video vs paint vs XML – eg trying to create semantic webs – semantic computation as a project that ignores (usually) the sociology, the culture

a new factor is available computing power – Google has lots of computing power

Structure/formalism

Programming language, HTML, vs raw text, etc – the degree to which it is parsable (and is therefore computationally accessible) Structure and CA, are often at odds with people. This can be solved, and is more and more, with additional computation. eg Google. Or, my 'mood indicator' on my email program, etc.

Lots to think about here with respect to grammar and formal anaylsis.

Temporal structure

The ability to capture, index, retrieve data over time.

– synchronous communication/concurrence – also NB speech and text

Transactional costs

– go down across the board with computation and digitization. E.g. painting with oil vs painting with Painter Pro. wet plaster v Epson printer – NB the sociology of this and matters of democratization/ status/prestige goods/media) WWW has low transactional costs v TV (with its studios, licenses, organizations)

Compatibility/social context

eg everyone uses Word, and hates it.
Also known as network effects.

We need some vectors with more social/political implications – control, accessibility, hierarchy.

and in heterogeneous engineering the iconography is embedded in the painting – there is always the specific location of the painting that is part of its being

NB cross linkages
persistence/robustness/archive – related to complexity, entropy

Examples, with their vectors

– email
– Hydra
– blogs
– video
– instant messaging
– google
– newsgroups

Analytical methodologies

Notes

is the term medium now obsolete?

event engineering – this is partly what the new ‘media’ do

and ‘media’ are now so evidently about social/cultural groups making themselves via things/interactions/information transfers – as they always were

what does it mean now to invent a new ‘medium’?
eg – is a blog a medium?