Visualising the VIRTUAL CONCOURSE

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Synopsis: the emergence of virtual learning environments has revealed short-comings in the fundamental assumptions made about learning itself, chief amongst which has been the failure to base models on learning as a socially structured activity. The same can be said of the translation of research and enterprise practices into virtual environments. Expert solutions have been proposed that address technical refinements or information delivery models of learning and that do not answer the questions being asked by users, and their need to operate in communities of practice. The VIRTUAL CONCOURSE is an Innovation concept that unites researchers and product developers in the pursuit of a long term goal, and that enables the development and application of partial solutions to the needs of a wide range of clients who share a similar long term and evolving goal. The concept begins with user perceptions and requirements and embraces, like a Portuguese man-of-war, a colony of agents who work on processing and digesting the information that the concept draws into contention. This model is non-judgemental about participants, but provides a 'platform for change' (Beer, 1975) on which people can engage at their own pace, and in the company of peers.

Context:

The drive to convergence between universities (Marginson 2000) is exacerbated by the notion that online engagement in learning is about the 'massification' (Scott 1998) of education, a concept that seems to derive from scenario planning from the early 90s. Typically this envisaged individuals, from their terminals anywhere in the world, enrolling in programs offered by providers from anywhere in the world. These included universities, consortiums of universities, on-line

universities with networks of learning centres, and major media players. The driver was seen to be costs to consumer (NextEd). This despite evidence of massive consumer resistance to this form of learning, and drop out rates of 80% or more even within the supportive confines of training programs offered within large corporations. (See LvS E-learning roundtable 2002). Corporate style "enterprise-systems" that purport to enable institutions to engage in this mass market seem to be predicated on this assumption, though there is little to go on in terms of observable result. Teaching and Learning strategies, especially in the USA, seem to have been driven by a fear of the consequences of this new competition and predicated on the attempt to position traditional institutions in this new competition by building on the traditional relationship between academic and student. However, 30 years of attempting to modify and enhance the learning experience of students through modifying the behaviour of academics have had no discernible effect (Angelo 1999[1]). What does seem to have an effect is a concentration on modelling desirable learner behaviour.

Those providers who have begun after some decades of failure to succeed in online education have come to realise that their role is not to deal with individual learners, beaming curriculum at them in increasingly sophisticated and increasingly amenable ways, but to create virtual learning communities in which students interact with each other around a topic. (Medeserve etc LvS 2002) It is also evident that there is no such things as a generic, one size fits all, learning community or community of practice in research or enterprise. Disciplines proceed by their own public behaviours, and acculturation to modes of discourse is as much what the learning is about as it is about curriculum. The Boyer emphasis on 'scholarship' is about enhancing the learning experience of students by returning academics to their roles as scholars, and removing them from their roles as managers of curriculum. (Boyer 1990,1996) The focus on learning

[1]Why is it that the vast majority of well-intentioned change efforts seem to result in little or no long-term improvement in student learning? Most academic

communities and their rituals is at the core of the production of knowledge (Zimmerli 1989, Collins 2000). These are all drivers that combat massification, or at least provide an account of why strategies based on this concept, and on convergence, fail. Learning communities inhabit 'mental space' that is generated by universal human capabilities (Human Givens 2003) but that is differentiated by the unfolding of those capabilities in different environments. The cultural capital embedded in 'mental space' is formed in two ways (Bowling Alone 2000)– it can be 'provincial' in the sense that a set of local actualities unite people of widely differing talent and class, or it can be 'metropolitan' in the sense that people from widely differing provinces share professional understandings that have an international currency (Zimmerli 1989). The interaction between these two forms of mental space is an essential in successful learning, research and practice. (van Schaik Province and Metropolis 1996). For example, the concept of the Creative Class (Florida 2002) is posited on the concentration in cities of people with metropolitan attitudes, but their desire to be in those cities is driven by their wish to be engaged with desirable provincial qualities. Prospective learners/researchers/practitioners begin with the need to establish their own discipline specific metropolitan identity before they have the confidence to embrace their provincial context, or explore other metropolitan mental space (see work on Bachelor of Design at RMIT). In mental space people co-inhabit realms defined by preferences in fashion, style, taste, partnering and pastime. The diversity of constructed environments is increasingly understood and studied. What the virtual information environment confronts us with now is the increasing variety of modes of operating behaviour that exists within any given diverse mental space collective that we can identify. **The challenge of helping people to develop or find communities of practice appropriate to their goals in learning, research and enterprise drives the virtual concourse concept**.

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development models in the past have stressed changing what the teacher does, rather than understanding and changing what the students do.

Desirable learner/researcher/enterprise behaviour can in part be defined by understanding the ritual structures within any given mode of discourse or practice (van Schaik, L Practice of Practice 2003). User centred design and indeed the entire rhetoric of student centred learning and integrated scholarship insists on a focus on what individuals need. The VIRTUAL CONCOURSE emerged from a scenario (LvS Asymptote and Drome 2000) that predicated a ritual context. This scenario was used as the basis of the Interface Studio (Kovac and Alfano 2002/3) in which the research began with advanced architecture students describing in three dimensions and in real time, the learning environment of their university in the way in which it was communicated to them. Working with faculty handbooks, and guides to the RMIT Distributed Learning System, Interface Studio mapped a bleak administration-driven model of education. No evidence of any structured formation of learning communities, or educational interaction was perceived. The journey to an award is envisaged as a tunnel of a length determined by the credit points needed in order to satisfy the requirements for the award. Challenged about the availability of choice in the system, students added some branching tubes to the Tunnel, all of which reverted to the same end point – the end of the tunnel.

Asked what they would wish for, they described an open ended concourse in which they could first establish themselves as individuals with an expressed identity, where they could get to know others and could form into learning groups focussed on common or contrasting interests. People in different stages of life, they suggested, or from different communities (the students came from Australia, SE Asia, Europe and the USA) will seek out the assertion of identity through joining with ‘people-like-us’ or they will seek the exhilaration of difference (one of the impellers of travel.) The students proposed a way of populating the concourse with booths in which students could display their interests, in study, in music, in places and objects, friends and family. How such interests are identified and communicated and identified is an ongoing research focus for the Virtual Concourse. Ethnography is the research mode. Originally directed towards other

cultures but in the 1930s turned to self-examination in Britain (Mass Observation 1986), it has embraced various processes of self-reflection, the need for which was graphically demonstrated in the work of Duvignaud, who showed that the changes that took place in a study of modernisation in a north African oasis took place chiefly in the ethnographers themselves, (Duvignaud 1970). The hidden imperialism embedded in the study of others has been well explored (Said 1993.) The approaches envisaged for the virtual concourse provide individuals and groups with the tools to describe themselves. The methods mentioned above will support the toolkit, as will techniques suited to other disciplines and frames of mind. For example, artist Ed Ruscha (1967) pioneered the use of deadpan photography of urban infrastructure to reveal the specific poetic difference in a place. The mental space of the Milanese was studied through an extensive sampling process in the early 1970s when the magazine In Pui surveyed the spatial, object and urban preferences of thousands of citizens, producing a dossier of images and comments that demarcates an undeniable provincial 'sense of place'. In 2003 Actar published a transect through the practices and spaces of a group of design professionals, creating a dossier of the mental space of an offshoot of that metropolitan group studying 100 designers in a rich description[2] (Geertz, predicated perhaps on the work of Aragan and Benjamin in studying the arcades of Paris). Discoveries already made (Medeserve in LvS E-Learning Roundtable 2002) suggest a service to browsers that helps them to identify and communicate their 'mental space' in such a way that they can open themselves to and find potential partners in enterprise. Such embedded

[2] Believing, with Max Weber, that man is an animal suspended in webs of significance he himself has spun, I take culture to be those webs, and the analysis of it to be therefore not an experimental science in search of law but an interpretative one in search of meaning. The culture of a people is an ensemble of texts, themselves ensembles, which the anthropologist strains to read over the shoulders of those to whom they properly belong. Quoted in TLS Jan 12th 2001 by Lurman TH, pp3-4

behaviour is difficult for people to discern in themselves – much of it has been laid down in childhood in rituals that pass from generation to generation over centuries (Opie 1963). Such ritual templates evolve over millennia, and people need help to discover the relationship between their behaviour, their inherited patterns and those that they have forged from experience (Sheldrake 2003). Ethnography in this sense can help individuals characterise their own mental space and identify that of others, and these services need to be deployed in the virtual concourse.

On this concourse Interface Studio positioned descriptions of the learning experience available within a faculty, with easy portals to concourses devoted to the students of offerings of other faculties. These were depicted as numerical vanes, coded to faculty handbooks. They could be depictions of learning experiences, research or commercial opportunities. They could be described using the multivalent fly-through information tools being developed in SIAL. They could be DLS “enacted” courseware that students can browse and enter in any way that they choose. But they could also be traditional curriculum and pre-requisite defined offerings. Crucial to the concept however, is that they exist here to be browsed through, and learned about experientially before a commitment needs to be made.

Once in a learning group, Interface included a very wide series of options for feedback on the progress of the group, feedback accessible to the group, but also to anyone with access to the concourse. This feedback modelled the learning experience and the interactive quality of the groups. Measures they mentioned included social indicators like gender balance, technical indicators like grade point average, but they could include any mappable indicator from emotional indicators that could depict the warmth or otherwise of the interactions in the group to knowledge generation successes. A subsequent group of students (Semester Two 2004) have explored and proposed a series of

sophisticated tracking feedback processes that enable a group to understand and exploit its interactions. Some of these relate to the necessary give and take of Conversation Theory (Pask in Glanville, 1995) the earliest mapping of knowledge generation through interaction. Others are information sharing and clustering processes. These processes all relate to the behaviour modification possibilities that are available from self-monitoring alpha or beta waves in the brain…

There are issues of ritual behaviours in the virtual concourse. Traditional enrolment processes export the moment of choice up the experience continuum, and choice is exercised as withdrawal after several weeks of effort expended. The aim of the concourse is to bring choice forward, such that engagement is made after choice has been exercised through careful matching of expectation and offering. Because the focus is on user behaviour, not on provider behaviour, feedback is the prime driver here. (As Sean Kelly – an independent researcher who is trailing a group self-management system in the Virtual Concourse -points out, this is similar to the basis of the success of Ebay, in which one third of the information given about a vendor is feedback from previous customers about their performance as a vendor. Vendors vie for five star ranking.) The only requirement for participation by a provider of a learning experience, a research opportunity or a commercial venture is that the feedback from participating groups is available to all players… Issues of trust building are a research focus (Giddings 1990, Gibbs 1999, Singh 2001).

Significantly, the system in play does not stop and start in the traditional cycles. It is ongoing, always open, always available. Self-paced learning becomes meaningful. The unexamined restrictive practices (LvS Tallberg 2000) that shackle learning in traditional environments are questioned. Students on the concourses are simultaneously within learning groups and seeking out future contacts and future learning opportunities. This simultaneity is an important feature of the model. Learning opportunities are presented within the concourse

as numbered vanes. Here the course guides are displayed, but students seek much 'warmer' information than these provide. Much of the conversation on the concourse is about the nature of the learning that any given number leads to. (Students in Architecture have published 'form guides' on the learning experiences that their tutors nurture.) With the focus on the student interactions on the concourse, the descriptions of the learning experiences on offer is potentially open, and need not be driven by the imperatives of T&L rhetoric. Mode one delivery can coexist with mode two interactive environments. Students can sample and choose. The evolution or improvement of what is on offer will be strongly influenced by the preferences that they exercise in the concourse.

The description above emerged from a Socratic questioning of several groups of students who worked on the Interface Studios run in response to the A+D scenario by Tom Kovac and Jose Alfano in 2002/3. They were delighted with the interpretation that I made and have described above, and eager to continue with work on aspects of the potential system. The empowerment of students when they discover that they can indeed contribute to the way in which they learn if their behaviour is what is driving the model is significant. However, where students do take such initiative and to extraordinary effect, the traditional focus on staff can mean that their experience is down played as "what you have to do because the institution / sector has been robbed of funding. We used to do this for you, now you have to do it yourself… see LvS Ingenius 2002)

Since then this model has been developed with researchers in various fields – SIAL, I-cubed, Smart Internet CRC, User Centred Design group, and its development is proceeding in partnership with various external partners who have expertise in learning community formation, systems tools development and design of real and virtual space. Two real clients help to drive the process – Business Online and LAB 3000. (See Steering committee in footnote.) A third client is the Research and Innovation Design Research cluster at RMIT. This opens the concept to the design of a virtual concourse for researchers whose

'jargon' (Academic Instincts) includes the term 'design' – whether the practice of design is held in common or not. Papers on the specific briefs for each of these clients are in preparation.

Description of the over-arching Innovation Project, the containing 'sac' of the VIRTUAL CONCOURSE:

Seen from the outside that VIRTUAL CONCOURSE resembles a Portuguese man-of-war, a large complex colonial hydrozoan having an aerial float or sac-like body and long tentacles. The sac is the overarching idea that brings together the researches of individuals and laboratories. It enables those who join the colony to cooperate and collaborate on the evaluation of user needs, the development of design briefs, the design of rituals and system tools and the synergistic development of the overall design. It is not an enterprise system. It seeks out the 'weak' or unexpected connections between the research and practice of the individuals who find in the idea ways of combining their efforts to evolve better interactions between participants and would be participants in well-defined domains of knowledge. It services the needs of real clients (RMIT Business Online, LAB 3000…) who need to extend tentacles out into the world in order to attract players to their domains.

The VIRTUAL CONCOURSE idea currently encompasses and connects three major streams of thinking about new learning environments:

- Work on user requirements, conscious or embedded in ritualised public behaviours, described in several layers of engagement.
- Design briefs that relate those needs to a model that links users and providers at each layer
- Systems tools that enable self management, group interaction, and system management at each layer

The idea places certain research findings at its core

- That learners seek meaningful interactions with their peers (Interface Studio)
- That the formation of communities of learners within ritual frameworks appropriate to their discipline is the necessary initial service that a provider must offer (Medeserve)
- That information technology makes the pursuit of such goals in virtual environments possible,
- That such virtual environments need to be related to a real environment

Description of the layers of user requirement/ritualised behaviour:

Description of the brief:

- L1. Tentacles into the world. Potential participants find their way to participation through various cold calls: attending searching the web, Open Days, attending conferences, going to exhibitions, reading professional or specialist journals.
- L2. When their attention is aroused they commence a 'hot pursuit' that can include visiting an actual site in order to get a 'feel' for the place – is it a place for them? Here they may well encounter help desks, receptionists, casual and informal interchanges. They will seek information about that which interests them.
- L3. In the VIRTUAL CONCOURSE model, that sampling can continue in the virtual space of a domain concourse.
- L4. The outcome is an enrolment, a membership subscription, or any formal engagement with services offered. Such commitment may be personal, and consist of placing information in the information shells that line the concourse so as to enable other like-minded people to find you, and it involves searching the concourse for people with like-interests. It may also include establishing a promotional presence of the concourse that is a gateway to a description of a learning experience that is on offer, a research opportunity, a commercial

opportunity, a service function that may be used or a portal to another domain.

- L5. Interactive engagement in the concourse follows. This may give rise to another level of engagement, with a group, in a learning experience, a research project or a commercial project.
- L6. The quality of the interactions of the group can be monitored according to set or self-established criteria, such that the group have control over the quality of their interaction, can observe it, call up action re-plays, and improve.
- L7. Every participant can observe their participation in the concourse and learn from that feedback. The managers of each VIRTUAL CONCOURSE domain can monitor the performance of the system, and engage in continuous improvement.

User evaluation is conducted at all levels.

Description of the system tools for each layer:

- L1. University/org websites, foresight conferences, Open Days, Exhibitions, Information sessions, etc
- L2. The "place to be" effect needs to be established. There has to be a real place that has a poetic sparkle, that captures the attention of the imagination. The HUB at RMIT is such a place. The Digital Design foresight conference foregrounded a café with broadband and easy access as a model. Help desks, OPS, any and all front-door opportunities need to be available. These could be distributed like the RMIT Learning Centres in Vietnam and China. They need to provide a sense of the 'mothership', a core of values expressed through space and the regimes of care that surround it. Working in the upper levels of Building 1 I regularly meet lost people who are trying to assess what RMIT would be like as a place to study in by getting a feel for the place. Usually I have re-directed them to Building 108. These are canny customers, in search of high-level management learning, and they are sniffing out what

we are like from how we behave in space. Here our partners are Property Services. We are working with T&L on a forum for staff to present their experiments in the innovative use of space in learning and research. (Dr Alison Brown, R O-J) The systems that interface between help desks and students are being studied by Business IT and Media Studies groups (Wendy Palmer)

- L3. The VIRTUAL CONCOURSE we are developing is one in which that sussing out is assisted by qualities that are not present in virtual environments. That si why we argue that these concourses are 'bounded' and related to actual places. How we behave in these concourses, the regimes of care we offer, these are what will attract or repel browsers. The Interface studios continue this research into the poetics of real and virtual space. We are investigating dating software as a readily available system for students to populate this level with their personas.
- L4. Here there are many partial solutions that are being explored. DLS adoption of "enacted" will enable academics to depict the learning experiences that they are offering in an interactive browsing mode. #D information systems emerging from SIAL offer a powerful browsing environment.
- L5. A software system that links e-mail, sms, and the web is being trialed for the self-management of groups, but also with access for help desks who can disseminate incident news to relevant groups of students when, for example a staff member is ill, and be sure that the students can then organise themselves after they have the information. The hugely diverse circumstances of students who come together in learning groups means that this kind of situation is a major problem for the relationships between administration and students.
- L6. Interface studio has proposed a number of tools for feedback, and this is an area in which a major research effort is needed. The work in SIAL on the "wiki" may be one route to explore. So is the enormous progress in immersive environments made by I-cubed.

- L7. User evaluation and feedback is an integral part of the positive ritualisation of the concourse. Without this, self-deprecation becomes the norm, and it is a highly contagious and demoralising disease. When staff look at a photograph of a researcher standing on a shiny floor, and argue that such a clean floor could not be in the university, the 'regimes of care' are showing.

Next steps:

The steering committee for this Portuguese man-of war is working on a series of collaborative ventures so as to further the progress of the project.

- The ongoing development of the operating software, including a curate-able visual information capability
- The design of 'The Melbourne Pavilion: a real and virtual space"
- A publication describing the successive generations of investigation into the virtual concourse conducted by RMIT Architecture students.

Conclusion:

The concept is what unites the different players in the pursuit of the improvements that are needed in all of the component parts. Some of these are driven by the specific needs, others benefit from the research opportunities that individual researchers will see in linkages in the idea that may not yet be apparent.

BIBLIOGRAPHY

- Angelo, Thomas. School for New Learning, DePaul University, Chicago, USA, Doing academic development as though we valued learning most: transformative guidelines from research and practice. HERDSA Annual Conference, Melbourne 12-15 July 1999 pp 1-11

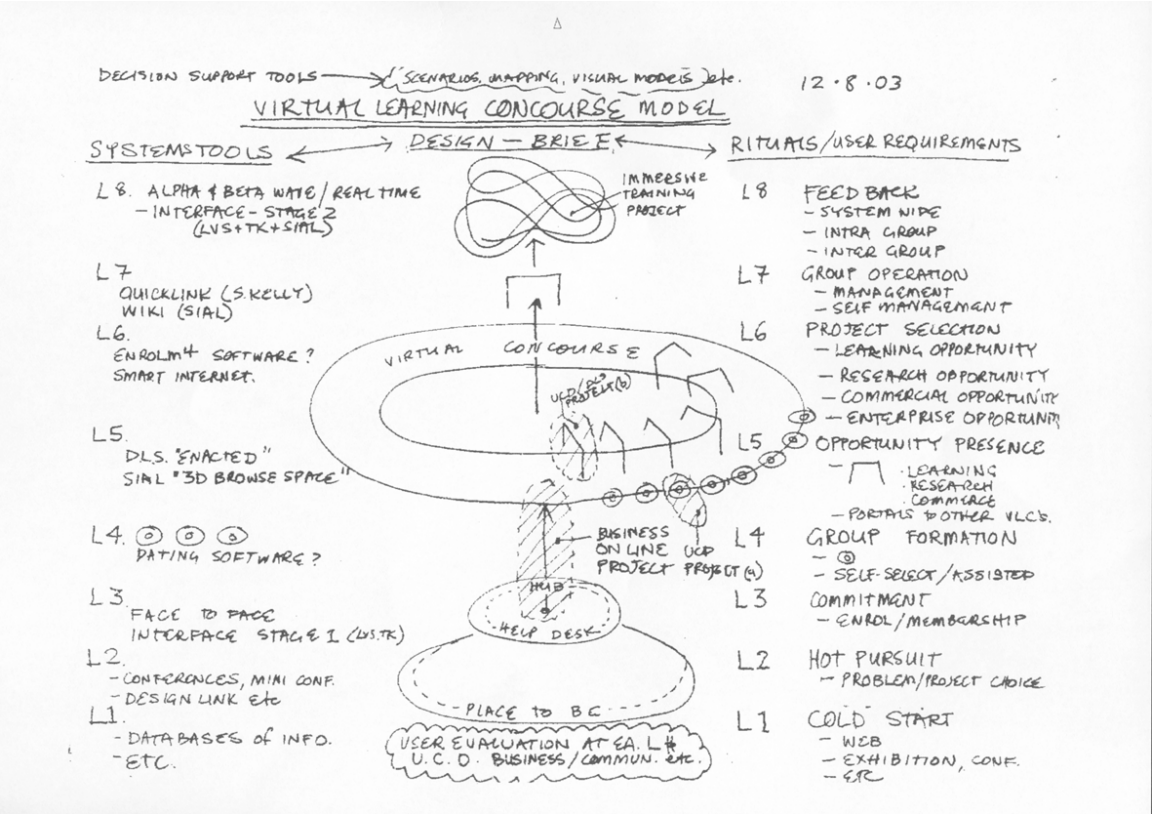
- Beer, Stafford (1975). Platform for Change. Wiley. London, N.Y, Sydney,
- Beer, von Foerster, Price and and others (1995). In Gordon Pask: A Festschrift. Glanville, Ranulph (Ed.) Systems Research. Thesis Publishers.
- Ernest L. Boyer (1990). Scholarship Reconsidered. Priorities of the Professoriate. The Carnegie Foundation for the Advancement of Teaching.
- Ernest L. Boyer, Lee D. Mitgang (1996). Building Community. A new future for Architecture Education and Practice. The Carnegie Foundation for the Advancement of Teaching.
- Collins, Randall (2000). The Sociology of Philosophies. A Global Theory of Intellectual Change. Harvard University Press. Camb. Mass.
- Duvignaud, Jean (1970). Change at Shebika. Report from a North African Village. Pantheon Books. New York
- Florida, Richard (2002). The Rise of the Creative Class. and how it is transforming work, leisure, community and everyday life. Basic Books.
- Garber, Marjorie (2001). Academic Instincts. Princeton UP.
- Gausa, Manuel, Guerra, Carles, Guerro, Manuel (2003). Prat, Ramon, Tetas, Anna, Pay, Carles (Ed.) Barcelona Lab. Actar. Barcelona
- Geertz, Clifford (2001). Available Light. Anthropological Reflections on Philosophical Subjects. Princeton University Press.
- Gibbs, Paul. (1999) Edexcel Foundation, Losing Trust in Higher Education? A marketing problem or solution, 10th Annual Symposium for the Marketing of Higher Education, 2.11.99 New Orleans.
- Giddings, Anthony (1990). The Consequences of Modernity. Polity Press. Harrison, Tom, Madge, Charles, Intro: Calder, Angus (1986). Britain - by Mass - Observation. Britain - by Mass - Observation. Cresset Library. London
- Griffin, J & Tyrrell, I. (2003) Human Givens: a new approach to emotional health and clear thinking. Human Givens, Chalvington East Sussex
- Marginson, S & Considine, M (2000) The Enterprise University: Power, Governance and Reinvention in Australia. Oakleigh, Victoria, Cambridge University Press.

- Opie, Iona, Opie, Peter (1963). Children Games in Street and Playground. Clarendon Press. Oxford
- Ugo la Pietra (1973). L'uso del'oggetto : per un comportamento creativo nei processi di reappropriazone dell'ambiente. In De Angeli, Floriano (Ed.) Progettare In Piu. Jabik Editori. Milan 1, 1 (Oct/Nov)
- Ugo la Pietra (1973/4). L'uso della citta: per un comportamento creativo nei processi di reappropriazone dell'ambiente. In De Angeli, Floriano (Ed.) Progettare In Piu. Jabik Editori. Milan 1, 2 (Dec/Jan)
- Ugo la Pietra (1974). La guida alternativa alla citta di Milano: per un comportamento creativo nei processi di reappropriazone dell'ambiente. In De Angeli, Floriano (Ed.) Progettare In Piu. Jabik Editori. Milan 1, 3 (Jun/Sep (1974)
- Robert D. Putnam (2000). Bowling Alone. The Collapse and Revival of American Community. Touchstone. NY
- Said, Edward W. (1993). Culture and Imperialism. Chatto and Windus. London
- Scott, Peter (Ed.) (1998) Massification, Internationalisation and Globalisation in The Globalisation of Higher Education, SRHE (Society for Research in Higher Education) and Open University Press, Phil., PA
- Sheldrake, Rupert (2003). The Sense of Being Stared At. and other aspects of the extended mind. Hutchinson.
- Singh, S. (2001) Studying the User, A Matter of Perspective. In Media International Australia, Feb, pp 113-128
- van Schaik, L Asymptote and Drome
- van Schaik, L Tallberg 2001
- van Schaik, Leon (1996). Province and Metropolis in Architectural Associations: The Idea of the City. Middleton, Robin (Ed.) Architectural Association. London
- van Schaik, L E-Learning Roundtable 2002 RMIT

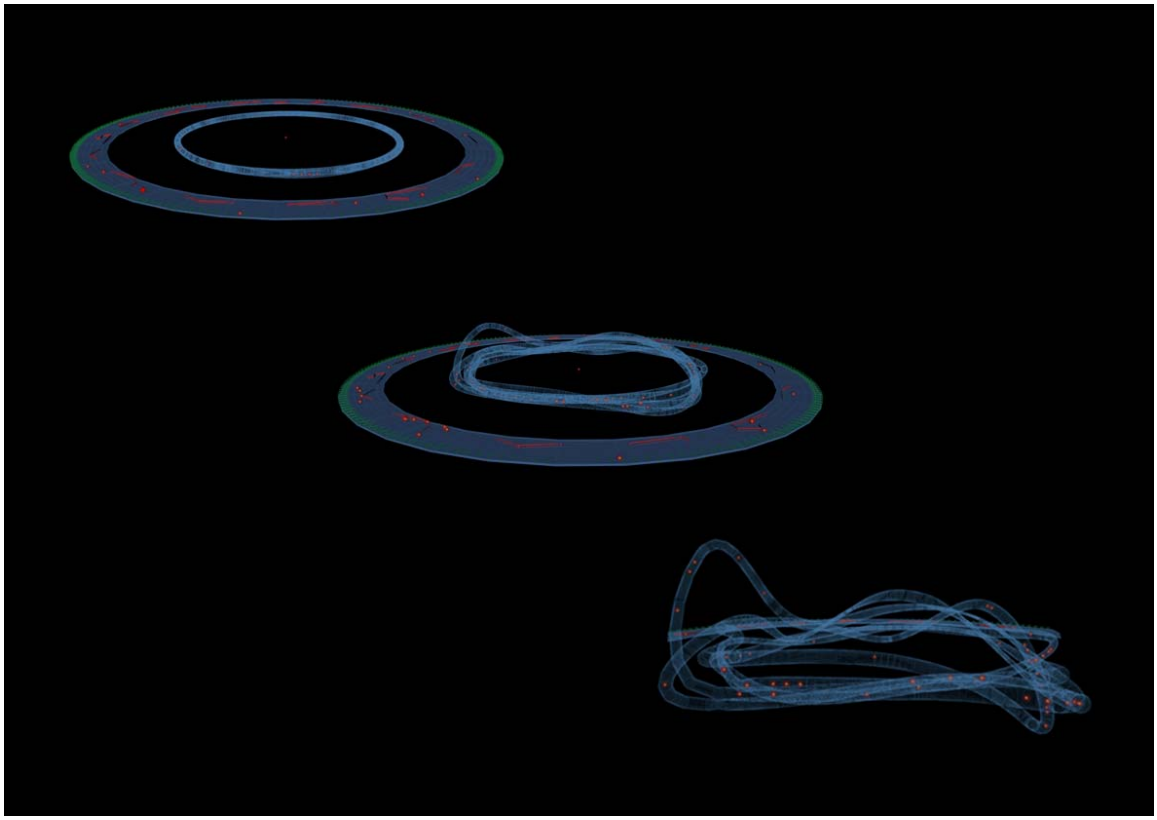
- van Schaik, L (2003). The Practice of Practice: research in the medium of design. RMIT Press.
- Zimmerli W, The Principles of a Non-Principle Orientated Ethics Paper RMIT 1989

ILLUSTRATIONS:

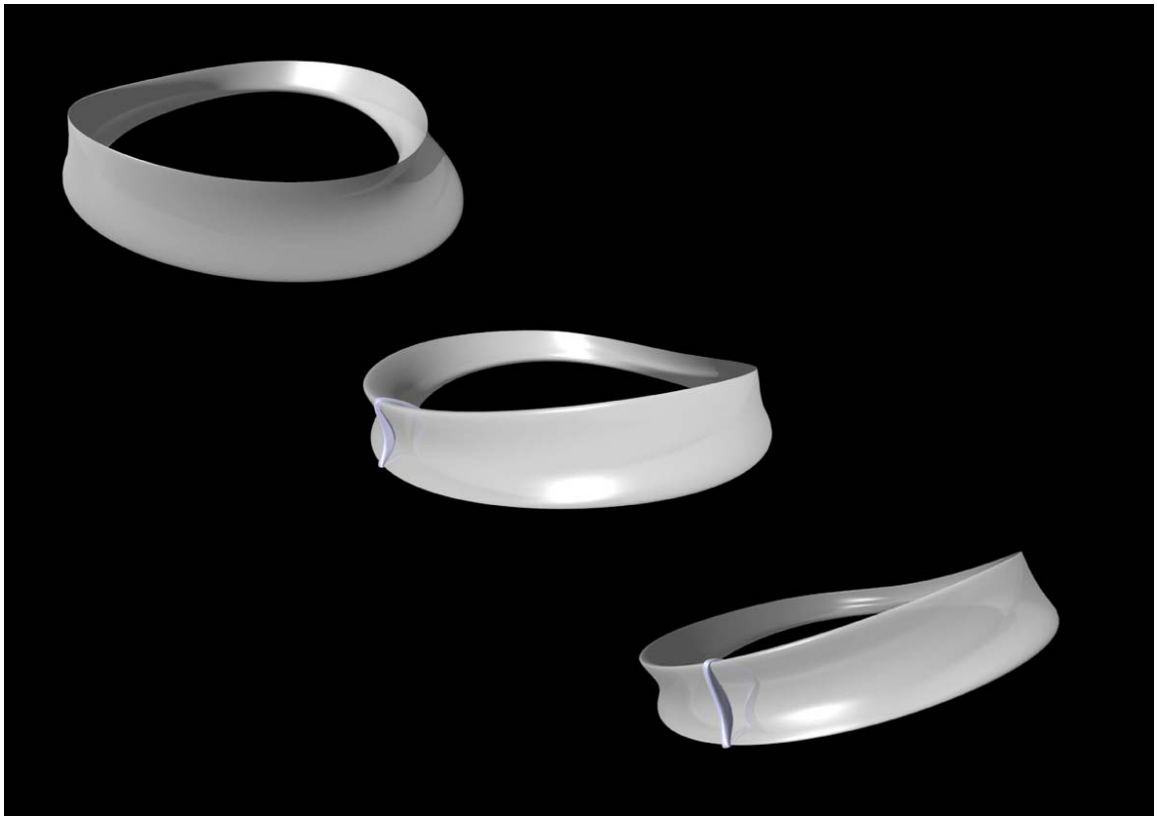
1. Concept Diagram by Leon van Schaik



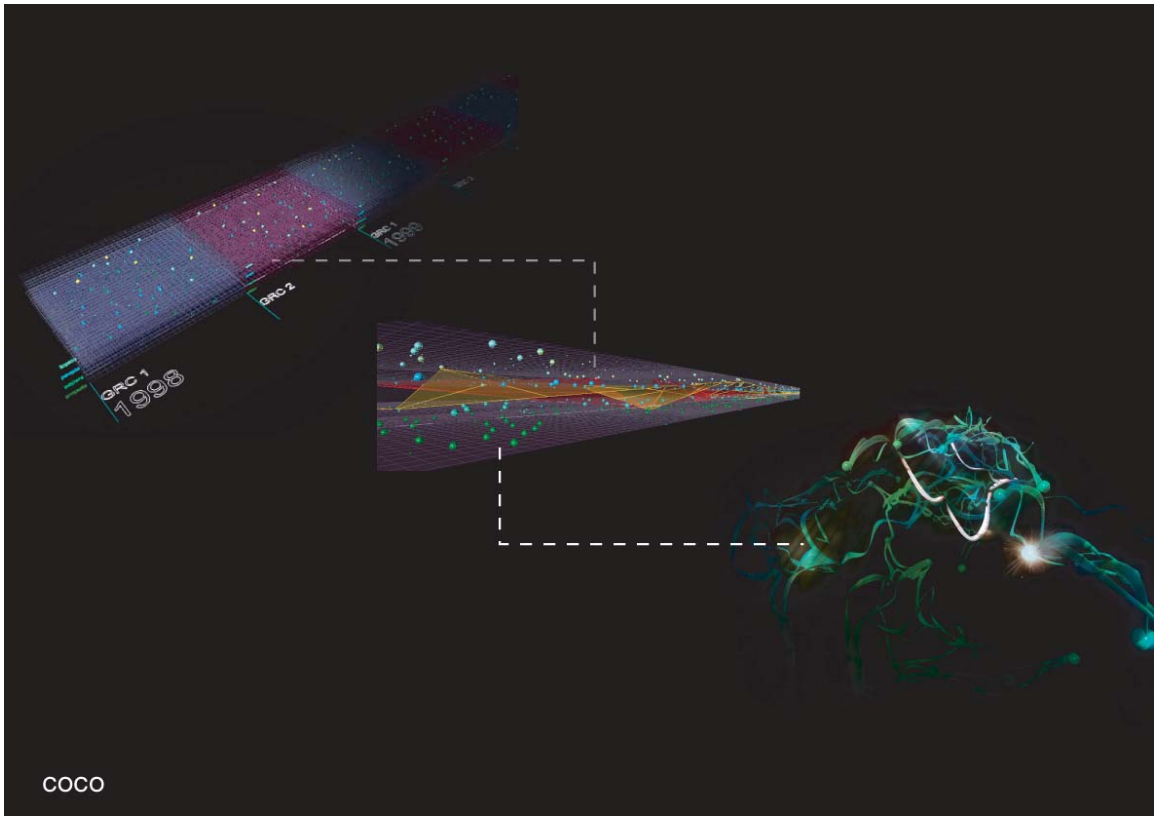
2. MODEL ONE (2004/2) see CD (with Jose Alfano as co-tutor) Jono Podborsek, Roger Schmidt. This model is an almost literal animation of the concept diagram, Illustration 1



3. MODEL TWO (2005/1) see CD Bertrand Lai, Alvin Low, Luke Waldron, Eric Werner. Model two expanded the diagnostic function at the centre of Model One, greatly extending our awareness of how the data generated by the operating system (Quick-links) during its first trials as the basis of the concourse could be visualised by the learning community concerned. Illustration 2



4. MODEL THREE (2005/2) see CD. (Alvin Low) Amy Banks-Smith, Edmund Carter, Hadden Daley, Ben Sheridan. Model Three fully articulates the diagnostic visualisations through all of the levels of contact in the life of a community of learning, modelled on the biannual Graduate Research Conference in the School of Architecture and Design at RMIT, treating it as if it were supported by the operating system (Quick-links). There is also an investigation into ‘what Quick-links looks like’ as an architectural environment. Illustration 3



NB Attached CDs best viewed on QuickTime player.

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