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## **Towards a culture of networked practices in a knowledge and learning intensive society**

### **1. Introduction**

The pressure to innovate permeates through all kinds of organizations and institutions. Thereby innovation is often equated with necessary reforms that were often dismissed or simply neglected due to institutional idleness and complacency. Benchmarking and evaluation of individual, administrative and organizational performances have gained fresh momentum by e-policies on interoperable and standardized indicators, which are in permanent flux and in an endless spiral of information data harvesting, control and exploitation. What has long been considered an institutional, governmental or national agenda has now been put forward into a public discussion, yet with sometimes wrong and erroneous premises. Outsourcing and diversification of predominantly service-based supply on demand, for example, were one of the first steps towards liberalization of hitherto closed, because they were publicly financed, bodies. Although the cost-benefit ratio did not always meet the expectations of the policy-makers and their management in place, partly due to the fact that those small enterprises made their profit gains through low-cost and less skilled employees, an unstoppable process of deregulation has come into being until this very day. In terms of university reformation processes, clustering and fusions emerged all around Europe; regardless of the motivations behind them, whether they originated from a supplementary, location-based or financial-driven approach, these steps clearly marked out a new era of putting universities in the context of a competitive higher education marketplace.

Global competitiveness and economic pressure affect the majority of universities and shrinking student populations in many countries around the world, which has made the contest even tougher. Subsequently, the European higher educational landscape has become increasingly attractive to a vast community of Asian students, who seem to enjoy our cultural diversity and of course the increasing number of study offers taught in English around Europe. That is, incidentally, for several reasons an alarming signal to the US, whose recruitment policy has been specifically concentrating on the Asian market. Europe is now considered a real competitor – at least from the US perspective. A European brain drain formerly concentrating on US universities and research centers is now flowing into an incredibly fast-growing and booming Asian knowledge society (for example Singapore, Malaysia, South Korea and China) that pursue an offensive headhunting policy to attract the brightest researchers from around the world.

It is thus of no surprise that Europe has come under pressure. The European mission statement is clear that the community must achieve a world quality reference. Innovation is the key to growth, competitiveness and thus social well-being in the 21st century (cf. <http://eit.europa.eu/>).

The fundamental shift from prevalently state-financed and historically grown institutions to national and international cooperating organizations, to dynamic and economically-driven clusters of highly specialized or wide-ranging study programs, came along with several university reforms, which, in brief, granted the higher

educational institutions a more autonomous status. Without going into details now, the fact is that an avalanche of never before seen chances permeated the educational landscape across Europe, and created in its aftermath a heterogeneous mixture of privately- and/or state-financed institutions in the European tertiary education sector.

In retrospect, and by narrowing down the actual focus of my explorations on changing educational policy, new learning cultures and internationalization, one can undoubtedly assign a major impulse to the many education and training programs of the European Commission, currently subsumed under a single umbrella called the Lifelong Learning Program. From the many initiatives within Erasmus/Socrates emerged several international curriculum developments leading to Master and PhD programs, networks, intensive programs and course module developments, which evidently had an impact on mobility, placements, research and teaching exchanges that not least changed some institutional organizational and operational manner.

This included a more transparent and service-based policy for incoming foreign exchange students and to a certain degree (still improvable), an open and predominantly English-taught policy across Europe. Although language diversity and skills are key on the LLP agenda, the common practice conveys a rather different picture, mostly because international cooperation among universities, study programs, faculties etc. overly pursues a low common denominator of commitments and investments, except for high-end research in accordance with valuable spin-offs.

By approaching, for example, the newly emerged landscape of international MA programs that emerged out of Commission-founded curriculum development projects, I would like to discuss within this specific framework some aspects relating to formal and informal networking practices among students, academics and experts that are based on my own experiences as the head of the international MA program ePedagogy Design – Visual Knowledge Building. (<http://epedagogydesign.uiah.fi>) Creating novel forms of cross-disciplinary studies potentially bears some risks in losing control over consistent development, research, distinction and validation among the disciplines within the framework of a highly competitive knowledge economy that continuously proliferates regulation over educational policy. Inevitably a dichotomy occurs in the economic validation within scientific disciplines in higher education, whether they would fulfill the new challenges of a global knowledge economy or lose terrain.

Although the disciplines that constitute this interdisciplinary MA program are closely related, academic traditions, learning cultures, etc. between different countries vary significantly. In that respect the interdisciplinary approach envisages to encompass training and development of soft-skills as well. Thus a student's eligibility criteria stresses among others:

- Social communicative competence;
- Contextual abilities in visual knowledge building;
- Curiosity, openness and basic knowledge in electronic media and informal educational processes;
- Openness to socio-cultural diversity;
- Disposition to challenge the ongoing paradigm shift in the knowledge society;
- Flexibility and attendance to work and practice in collaborative environments.

Finally, I want to bring out in this essay some of the interdependent programmatic and practical aspects of the concept of lifelong learning, its current and foreseeable effects

on higher education policy at macro and micro level, and some examples of networked practices coming from the aforementioned study program.

## **2. Lifelong learning—an unfinished project of modernity?**

The concept of lifelong learning pursues the concept of the “unfinished project of modernity” (cf. Habermas, 1980), which, in short, has led to a postmodern notion of endless interpretative “freeplay” where there is no longer any place for values of the Enlightenment such as truth, reason and critique. This incompleteness bears a striking analogy to the permanent software crisis that has come into its fourth decade.

The adherent crisis is less ecologically determined, as software technology creates abstract objects that cannot be put into ecological categories. In software development rationalization is a key instrument, not only for the safety of knowledge, but also to guarantee efficiency of intelligent data processes. Its rapid development and diffusion thus repeated the process of socio-economic modernization in a condensed course of events, and it seems that no other technology has reached a similar status of becoming *the* synonym of cultural modernity. Software development is also a technique of rational control, and it reflects the desire for modernity in favor of rational discernment and controllability of natural, intellectual and social processes.

It emerged from a science which relies on the strictest form of rationality, mathematical provability. René Descartes declared in his early tractatus *Regulae* (1628/29) mathematics as the only reliable basis for science. Like no other philosopher, he anticipated the methodology, thinking and functioning of this discipline. Yet, what differentiates mathematical formal logic from software is that scientists apply mathematical models to explore and understand the laws of nature or science, whereas software reconstructs “reality”. Evidently, this has roots back to a deep-seated misconception, because software engineering ignores that the role of mathematics in programming is not the one of a “world model”, but a formal description of meanings and intentions. In that such descriptions cannot be verified, like models through experiments, but can only be accepted or rejected through communication, from a mathematical and scientific perspective, an insurmountable verification gap occurs.

This gap is from the position of mathematical rationality so severe that these meaning and intention descriptions will be either displaced through new programming techniques or formalization aids, or simply, in the absence of competences, be expelled from the main problem areas.

The consequences are system-imminent “bugs” in operating systems, which mostly occur through adoption of source code from older operating systems and their implementation into new programming environments. In short, the accelerating speed of software and its driving players from either proprietary or open-source-based applications has transmuted our society into “a live (live-coverage) society that has no future and no past, since it has no extension and no duration, a society intensely present here and there at once—in other words, telepresent to the whole world”. (Virilio, 1997: 25)

Undoubtedly this parallels the shift from industrial to postindustrial societies, a shift that Beck (1986) so providently elaborated in his book “Risikogesellschaft”, in which he stated, “Individualization means market dependency throughout all dimensions of life style...”, and further that “the institutional influences on each individual biography mean that regulations in the educational and occupational system along

with the social safeguards are directly intertwined with the people's phases of life (ibid. 221 ff). In Beck's terms, individualization means: institutionalization, institutional character, and thus the potentiality of politics to design our CVs and our life.

More than twenty years later, it appears that Beck's thorough, elaborated and forecasted predicaments of a society that was just about to undergo a tremendous shift from an industrial into a postindustrial, service-based knowledge society has entirely come into existence, and to which Antony Giddens (1996) attributed predominately decontextualized, abstract forms of societal institutions, has gained bitter actuality along with the collapse of today's global economy. In this regard, new questions will necessarily emerge about the size and scope of collateral damage, which in turn must lead to readjustments in political and socio-economic architecture in the near future. One could now argue that the concept of lifelong learning holds an even stronger argument to deal with the many imponderabilities (to come); yet if several service-based and industrial sectors break down, and unemployment and social tensions increase, it remains rather a speculative and vague agenda to fulfill its promises with regard to destabilizing markets and economic prosperity.

Earlier, I refer to some of the definitions of LLP; some of the presuppositions leading to the LLP concept need to be further elaborated. Thereby the individual disposition to flexibly and adaptively react to accelerating changes in a multi-dimensional way, from family to work, in part driven by strong and often remote global forces, has become a kind of buzzword for justifying neoliberal policy. To this adheres an increasing diversity and fragmentation of experiences and institutions and a greater willingness to tolerate deregulating measures and direct or indirect influences of speculative market instruments, which, in fact, eradicated the social market economy. This has led to changing identities and dislocation of private and professional lives, loss of social bonds, fragmentation and vulnerability of loyalties and aspirations. On the other hand, a much greater emphasis has been put upon consumption and its pleasures, but has also created a new participatory, inventive and creative networking culture in which the consumer acts as the producer and vice versa. More choices in life have necessarily created new demands, which in return have unleashed a lifestyle economy that prioritizes the fulfillment of almost every thinkable individual desire, not least triggered by an overarching delusiveness and pluralism of popular culture. High speed data connections, ubiquitous computing, and externalization of information and knowledge resources into globally connected databases have created a gigantic accumulation of digital information and knowledge: in the nineteenth century, it took about fifty years to double the world's knowledge, whereas today, the base of knowledge doubles in less than one year. Apparently, ICT permeates through our life like no other technology before; yet it has also opened up an ever-increasing gap between the "Haves" and the "Have-Nots" (cf. Youtube video, *Globalization: The Haves and Have Nots*) in terms of access to these technologies on a global scale, and the ambiguity of lustful connectivity and an uncanny suspicion of control and surveillance. And, most pertinent, the widening of key social divisions will become even stronger and experienced in the areas of income, employment, housing, health and education, including access to information; i.e. evidence of the growth of social exclusion, despair and hopelessness, resulting from the impact of unemployment, proliferates more and more.

When the European version of the LLP concept was first introduced at the Bologna follow-up meeting in Prague in 2001, essential elements of the European *Higher Education Area* were outlined. Firstly, Lifelong Learning should comprise all phases of learning, from pre-school to post-retirement, and should also cover the broad spectrum of formal, non-formal and informal learning. Secondly, the implementation of this idea would be facilitated by bringing together education and vocational education in central aspects of different policies such as education, youth, employment and research. Thirdly, a lifelong learning framework would be needed to enable each individual to choose among learning environments, jobs, regions and countries in order to improve knowledge, skills and competencies and to apply appropriately. Another important aspect outlined relates to a coherent system of credits that would allow the evaluation and recognition of diplomas and certificates acquired at school, at university, and in the framework of work-based learning. In this way, the transfer of qualifications between schools, universities and the world of work could be ensured...

### **3. Vulnerabilities in a future learning intensive society**

From the perspective of creating an operational lifelong learning framework towards creative and flexible learning spaces, fundamental changes must take place to meet anticipated scenarios, for example the shift from hitherto predominantly technocratic, hierarchical and exclusive approaches to education and skill achievement to ubiquitous forms of equal access to both institutional and informal information and knowledge bases. This would include personalized digital spaces where each individual learner can start building up a comprehensive lifelong track record of learning goals and achievements independent of time, location and access device. What would this mean in practice, specifically if we think about the consequences of lifelogging...? A system that records and signals what people know, what they have learned, what they aspire to learn or not, at particular times and in particular places, is prone to permanent surveillance and control.

The idea of “a memory of life” is not something new, yet many of these technological promises are equated with human habits of collecting and archiving during their lifetime: for example the interoperable data exchange between passive and active digital self-surveillance has led to several erroneous conclusions. One of the false assumptions is that technology can help us to share experiences. If we store memory bits in external databases, we assume that other people can participate in our perception of the world.

As there is there is no unfiltered, objective perception of the world possible, the lifelogger establishes his/her individual context during data capture in comparison with his/her own cognitive and affective map of the world that cannot be executed several times. Consequently, the captured material only provides the external context and excludes the internal context. It is nevertheless the inner world model that permits us to interpret and evaluate the sources based on comparison with existing memory structures.

We know that information and control are closely related concepts within systems theory (like cybernetics). Ideas can be extracted and can exist independently of people, in a computer, for example. As a result, information and its processing can exist in a disembodied form. Accordingly, the meaning (content) of information is set apart as irrelevant to the determination of its value in terms of quantitative measures. But cybernetics is also about “purposiveness, goals, information flows, decision-

making control processes and feedback (properly defined) at all levels of living systems.“ (cf. Corning, 1995)

This brings us back to the fundamental discernment that information from the standpoint of information sciences is defined by its existence as a bit—in Bateson’s formulation, “a difference that makes a difference”. We can go even further, arguing that information is the “energy” in the system that functions within the control processes of a network economy. In corporate culture information and communication is conceived as an element of control within a complex system of hierarchical order and manipulative control mechanisms. Control of information and communication equates with control of code, leading again to fundamental questions: “Who is the owner of the code, where is it stored, and what are the consequences of misuse?”

Crowdsourcing is a good example of how malleable the principles of open source and exchange culture become (“you contribute something in order to get something better in return”), not least triggered by leveraging the mass communication and collaboration enabled by Web 2.0 technologies to make profit at the expense of each individual contributor. Thus principles of open dialogue and shared networking cannot be separated from the ideologically-driven market mechanism. What has originally been conceived as economy of scale where there is no exchange of commodities but immaterial value has only recently been distorted by the announcement that the Bertelsmann publishing house, part of the multinational Random House group, is to print a German version of Wikipedia. This commercially-driven act torpedoes the main principles of a participatory online encyclopedia in multiple ways: a) a voluntarily co-authored, open and dynamic web-based knowledge repository cannot be transferred into static print media; b) open content is free for everyone, whereas the printed version is not; c) a book version is limited in size, scalability, prevalence, distribution and (closed) format; d) the argument that a printed version would reach the poor and non-connected does not hold true in the specific case of a German version (and I rather doubt this would be true for other countries with a high number of illiterate people); e) even though the GNU Free Documentation License allows commercial reuse, there is a profound difference between generating new business models on the basis of keeping the source code open and selling a book product that is genuinely non-modifiable. From this example we can learn how exploitable “gift culture” is, and how subtly market mechanisms are cloaked in the name and symbols of common wealth.

It is important to understand that the meaning of technology is not inherent in the technology but arises from how technology is used. Apparently the meaningful use of everyday technology requires contextual and organizational as much as spatial/physical skills, as well as competences in shaping action and in providing people with the means to interpret and understand action. Whether it concerns human-human or human-machine communication, meaning of action accrues from interaction. Temporal context is also involved insofar as novel forms of expressions and strategies of encoding and decoding multimodal information (e.g. chatting, teleporting in Second Life, short messaging etc.) gain their meaning and intelligibility from being interpreted as part of a larger pattern of activities. This suggests that the meaning of the use of technology is in permanent flux and thus prone to readjustments in order to be able to support the communication of meaning through it, within a community of practice. (cf. Sonvilla-Weiss, 2008)

#### **4. Networked practices of today's social media networker**

People connect globally by means of social networking tools. The social networkers of today hold accounts in several social networks such as *Facebook*, *Twitter*, *Myspace*, *Studivz*, *Xing*, and *StayFriends*; they twitter with their *iPhone*, stream life video messages on seismic, inform their community via blog entries and publish videos on *Youtube*. However, this is not good enough by half: it takes them *ping.fm* (which actualizes all your accounts with a single message) to manage their content overdose. They will not omit *Tweetdeck*, as this desktop application allows them to quickly overview and select messages coming from several social media applications at the same time. Last but not least the *RSS-reader* keeps their *Blog/website* updates in a structured reading mode. Seeing the bigger picture of the so-called media hype that evolved through the networking practices of social media is not the point: "Getting there is not what you want," "Being there is what you want." The traditional definition of the "user" thus loses its hitherto determinative character of information consumption and application usage.

A new species, the social networker has come into being. He/she is a multitasking information producer and manager, a multimedia artist and a homepage designer, an actor and a director of self-made videos, an editor and an author of his/her blog, a moderator and an administrator of a forum, to name only a few of the aforementioned characteristics. Classical media, newspapers, magazines, TV stations, radio, books, e-mail providers, and telephone vendors, for example, are losing terrain and audience. Their information, service and entertainment dominance is about to crumble. Each new Internet start-up catches new users exactly at the place where they want them to be, and giving them the appropriate tools at hand with which they can best express their own creativity, further diminishing the number of users, buyers, and subscribers of classical media. Information chunks hit the digital nerds via Twitter in almost real time, and it is the user who decides.

They select and publish their own information and put it straight from other networkers' flows directly into their own communities. These forms of interaction require personal communication skills and competences to judge information for its relevance and added value by sharing it with others. Meanwhile music videos gain greater popularity on *Youtube* than on TV channels. That is no surprise, because, amongst others, movies and serials can be streamed or downloaded with no annoying disturbances of TV ads. Various kinds of blogs provide a comprehensive and multifaceted information spectrum than any other medium has done previously. *ICQ*, *Skype*, *Ventrilo* and many other applications take over the job of classic telephony.

Social networks are the new homeland, bazaars of the avatars, e-life cinemas, pivots of the networking generations and their "profile maps" displaying places, actions, contacts, news, their own creative stuff, preferences, ideas, recommendations, and critiques. But what are the social components in this? Perhaps one could attribute to social networks and their actors the unifying desideratum to share and communicate with others information and experiences, to participate in collaboratively arranged projects and initiatives, and to support each other by solving a problem, or simply to gain fresh and inspiring input. Out of this new communities of interests and practices

emerge, new friends appear on the contact lists and, as a consequence, several new subnetworks come into being.

A major activity of these communities is then developing the skills, procedures and attitudes needed for people to jointly create through their diversity. These democratic tools, the diversity and independence of opinions, the decentralization and aggregation of information and experiences, hold a notion of hope that the community's thinking can at least develop into some sort of collective social system.

### 5. How can these practices be transformed into educational contexts?

The example of *Bloom's taxonomy* demonstrates well how an originally conceived, classical behaviorist model can be further developed and adjusted for the purpose of collaborative learning in a networked culture. Bloom identified six levels within the cognitive domain, from the simple recall or recognition of facts, as the lowest level, through increasingly more complex and abstract mental levels, to the highest order, which is classified as evaluation.

In the 1990's, a former student of Bloom, Lorin Anderson, revised Bloom's taxonomy and later, it became once again revised as digital taxonomy by Andrew Church. Key to this is the use of verbs rather than nouns for each of the categories and a rearrangement of the sequence within the taxonomy. These verbs describe many of the activities, actions, processes and objectives that teachers undertake in their daily classroom practice. However, they do not address the newer objectives, processes and actions presented by the emergence and integration of social media tools into teaching and learning practices.

<b>Bloom's revised taxonomy</b>					
Remembering	Understanding	Applying	Analyzing	Evaluating	Creating
<b>Digital taxonomy</b>					
Social Bookmarking, Searching, Highlighting	Blog Journaling, Twittering, Categorizing, Commenting, Annotating	Uploading, Sharing, Hacking, Editing, Playing	Linking, Mashing, Validating, Tagging, Cracking	Posting, Commenting, Moderating, Testing	Programming, Podcasting, Videocasting, Blogging, Filming

Translating one of these practices into systematic order, it would appear like this: (cf. Churches 2009: 14)

<b>Social Bookmarking</b>	
<b>Bloom's Taxonomic Level</b>	Remembering, Understanding
<b>Key words</b>	Identifying, Retrieving, Naming, Locating, Finding, Bookmarking
<b>Introduction</b>	This activity is about examining the process of recording and remembering key sites and URL's. The activity is in its simplest form at the <b>Remembering</b> level but as the students add detail, explanations and structure it advances into <b>Understanding</b> .

<b>Level 1</b>	The user adds a site to a Bookmarks Toolbar or adds a URL to a social bookmarking site.
<b>Level 2</b>	The user adds a site to Bookmarks. The bookmarks are organized into folders, folders are appropriately named, or the user adds the URL to a social bookmarking site.
<b>Level 3</b>	The user adds a URL to a social bookmarking site. The student adds comments or Tags. There is some limited filtering on the basis of validity (attempting validation). The comments or notes are simple. The user shares the bookmark with all members of their network.

What has been demonstrated here is just one example of a newly emerged social networking practice that can be transformed into media literacy. Likewise, all other activities, actions, processes and objectives can be similarly structured and applied in specific learning contexts.

## 6. Challenges

How can these expectations meet the challenges in learning and teaching contexts? The following are proposals based on applied research.

### – Modularization

This is to increase the system's responsiveness to changing skill needs. Modules in audiovisual, media-technological, cognitive and communicative areas are easier to revise and update than full courses. The pedagogical changes implied are to encourage more student-centered, self-regulated, participative and active learning. Modules can be defined based on projects or tasks to encourage learning and to develop "transferable skills" such as personal autonomy, responsibility, decision-making and the ability to exercise initiative. A modular structure is used to support independent study and individual student needs. This should be thought of and realized as a revocable, temporally limited structure within adaptive learning processes.

### – Projects

Project work emphasizes explorative learning and research-based design in knowledge-building communities and organizations supported by socio-cognitive as well as technological dynamics. As for socio-cognitive dynamics, community knowledge and collective responsibility equally foster individual achievements and contributions to shared, top-level goals of the organization.

Democratizing knowledge means that diversity and divisional differences represented in any organization do not lead to separations along knowledge have/have-not or innovator/non-innovator lines. In order to achieve symmetry in knowledge advancement, expertise is distributed within and between communities. To give knowledge is to get knowledge. Early acquaintance with such technological, theoretical and communicative complexity advances thinking and acting in cooperative design processes.

### – Field Practice

The dynamics of knowledge creation and distribution alongside the side-effects of neoliberal labor policy require critical and creative thinking more than ever before.

Internships in diverse scientific, economic, artistic, public and administrative working fields offer the possibility of learning and knowledge transfer in some of the professional areas with which teachers and learners are less familiar. In fact, new technologies require a much broader spectrum of competences, skills and knowledge such as social communicative competences, contextual abilities, flexibility and attendance to work and practice in collaborative environments, a disposition to challenge the ongoing paradigm shift in the knowledge society, an openness to socio-cultural diversity, a wide range of ICT skills through work or study, and practical and theoretical skills in media and visual literacy. The need for such experts is not confined to any of the cultural segments.

#### – Tools

How strongly do social software tools impact on current practices in e-learning in general, and second, what are the implications for the student's mode of interaction (social factor), aesthetics (interface culture) and techniques (interoperability)? Some of my findings derive from actual research on learning ecology and multiple reality constructions, which reciprocally both affect and are affected by multiple facets in socio-economic and culturally encoded concepts of living. One of these aspects relates to competitiveness in a global job market, which is in fact the driving force behind the concept of lifelong learning and the prevailing motivation of our students to continuously qualify. Interestingly, yet not surprisingly, connectivity has expanded into fluid forms of networking on the basis of immaterial value exchange. Shared spaces where people can communicate, exchange and aggregate information, co-author and co-create areas of common interest, need flexible and adjustable arrangements in our study approach over distance. Some of the key problems we have identified include the limitations of interactions with structured tools; another confinement relates to interface design, communication and learning tools.

Learning Management Systems are suitable when content and information provision is key to the learning strategy; however, when interactions and connections are in the foreground then social tools are required. As an alternative to conventional tools we are now testing how modular tools can expand functionality; to what extent social tools encourage individual expression and connect learners and content; how synchronous tools can be integrated; and how learner-centered tools encourage learning ecology. The types of tools suggested include Blogs, Wikis, Virtual Worlds, social tools, networking tools, collaborative spaces, and connection-making protocols (RSS and Atom). But how do these alternatives provide the learner with control of the type of content explored, and how do they explore to effectively meet their learning goals?

#### – Student requirements

The core infrastructure of the international study program contains a group Blog where students feed-in study and research topic relevant information. In addition, group work over a distance in an international setting relating to project work topics is either organized in Blogs or in password-protected communities, which allow flexible information aggregation and dynamic knowledge construction. Spontaneous and organized one-to-one, one-to-many or many-to-many conversations are conducted over the Internet (e.g. via Skype). Photo and video sharing tools, podcasts and virtual world habitats are like-minded modes of expression. Especially in international and multilingual user groups it is interesting to see how local interests and cultural

idiosyncrasies can be refashioned and re-contextualized in the predominantly English speaking communities.

A tendency towards social networking tools (*StudiVZ* and *Facebook*) can be observed as community-specific phenomena. It seems that the study and online communities originally conceived as an integral part of either proprietary or open-source-based Learning Management Systems can no longer support adequate preconditions that would serve the users' need to either randomly or purposefully connect, share and communicate for different occasions at the same time, and they are thus becoming obsolete. This means the community with which I am connected and potentially could be connected in future by means of social networking tools continuously expands and converges into software clusters stimulating multitasking and proposing living in (on) the net. Smart mobile technologies that would create another dimension of spatiotemporal relationships between connected users have not yet achieved similar Asian (especially Japanese) standards.

Immediacy and spontaneous action and reaction, open discourse and dialogue, are prerequisites in creative learning processes. What might be inspiring in a group discussion during a seminar or workshop does not necessarily lead to similar experiences in communication processes through virtual technologies. The lack of physical co-presence in online interaction, and the demands placed on us by others to be responsive and participatory, can be summed up as issues of self-presentation and the negotiation of presence availability. One of the unique challenges of self-presentation in mediated environments deals with the presentation of intention and sincerity, or authenticity. Meta-level communication plays an important part in helping us to convey our authenticity, but it also permits us irony, parody and other self-referential communication. Considering nonlinguistic aspects such as facial and physical gestures it becomes apparent that we do not always say what we mean: *Friendster* (a social networking service) involves "fakesters" or "pretendsters", meaning that many members introduce fake profiles.

Some of the viable solutions developed thus far have been to encourage members to get to know each other in semi-public contexts such as discussions and listings, where community expectations can serve as a check on credibility (e.g. Wikis).

– Dialogue:

The most prevalent communication tools split into synchronous Internet telephony (*VoIP*) and asynchronous e-mail communication. As the combination of both means of communication allows for sincerity, privacy and efficiency according to the topics of discussion, other means such as public posts on Blogs or Message Boards are pre-selected information meant to engage a wider audience through open dialogue.

Mentors and experts joining in during project work, international seminars, online discussions and courses are usually acquainted with specific communication tools, means and methods. Learning processes that have been originally organized and structured at moderated expert forums based on a knowledge-building process between students, docents, experts, and tutors have gradually shifted into the blogosphere and social bookmarking (*del.icio.us*) for the purpose of extending one's own network and sharing knowledge. In addition, podcasts and videocasts are becoming increasingly important documentations for student-centered learning, nevertheless involving a rather time-consuming editing approach.

– Content:

Content sharing and co-creation coevally takes place in open, accessible and restricted online environments. However, course content, which is prone to copyright and other licenses such as Creative Commons, will be mainly delivered in restricted areas. In that respect we can make a distinction between dynamic and cooperatively generated forms of knowledge aggregation through publicly accessible Wikis or Blogs, and restricted areas of online course modules, which are shared and organized entirely between enrolled students and docents. The key question is how both forms, dynamic “on-the-fly” creation of contents and elaborated course modules containing clear assessment, assignment and evaluation criteria, impact reciprocally and beneficially on content creation as such.

The specific constellation of the international MA program in the form of a jointly developed curriculum originally intended course delivery and access via local and university-specific open-source-based LMS or proprietary solutions. This changed during the project lifetime and activities as the course contents and resources became increasingly dispersed parallel to project working groups’ specific media usage. The mixed media structure of connected but independent tools, means and methods resembles the study organization, structure and objectives inasmuch as the pedagogical principles pursue Deleuze’s thinking— a society based on rhizome-like networks.

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