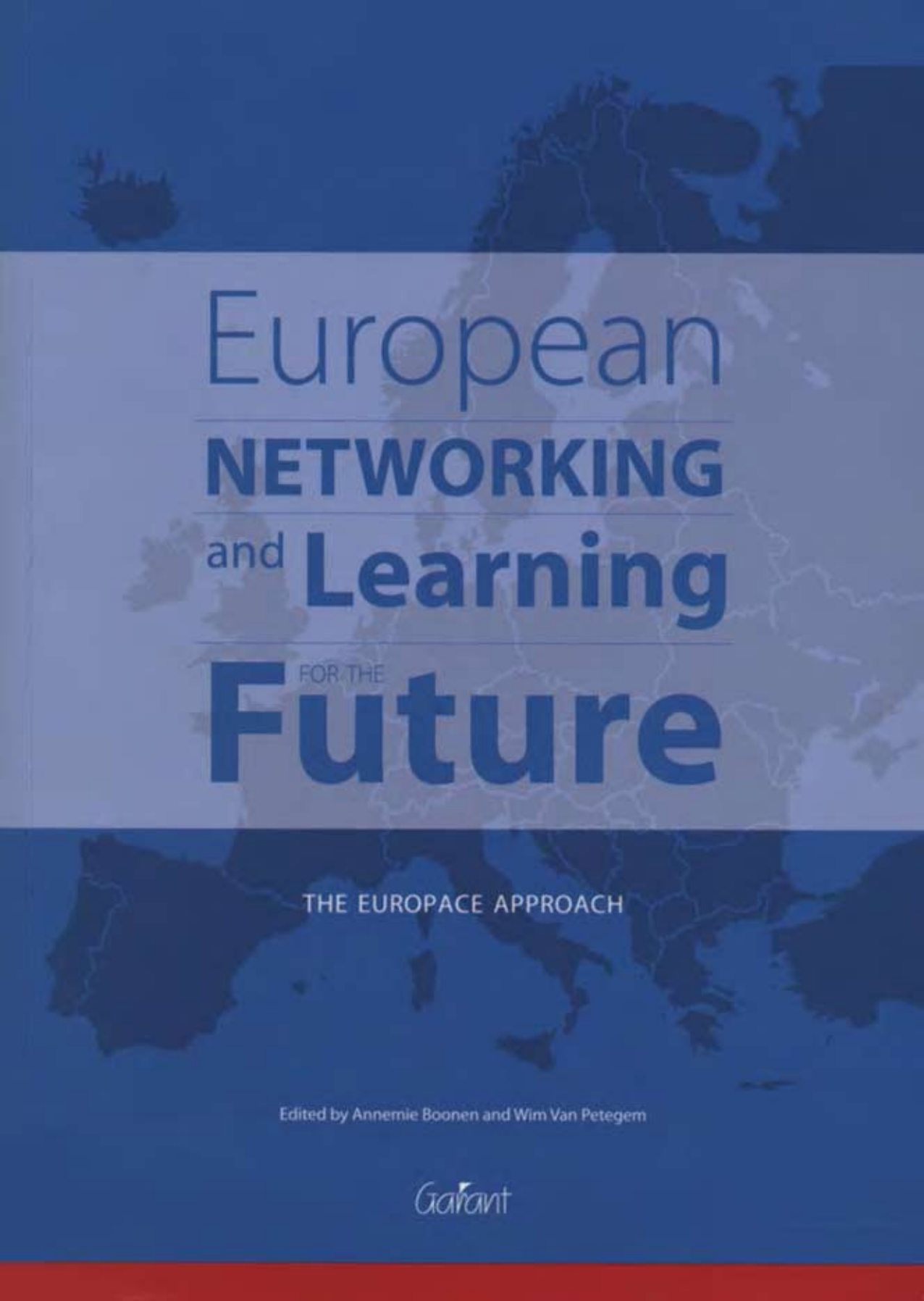

European NETWORKING and Learning FOR THE Future

THE EUROPACE APPROACH

Edited by Annemie Boonen and Wim Van Petegem

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The European Ph.D. on Social Representations and Communication: Integrating Virtual and Physical Mobility via the European Ph.D. Web-Auditorium.

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Introduction: training early stage researchers in a *network society*

'The rise of network society' (2000), the multivolume book by sociologist Manuel Castells, described by *The Economist* as the "first significant philosopher of cyberspace" was a milestone in beginning to understand the *network society* phenomenon that has grown exponentially with the new forms of communication, cooperation and interaction supported by the Internet. His approach stems from the conviction that "we have extended a truly multicultural, interdependent world which can only be understood and changed from a plural perspective that brings together cultural identity, global networking and multidimensional politics."[39]

Unlike the mass media of the McLuhan Galaxy, CMC networks have the technologically and culturally embedded properties of interactivity and individualisation. Networks constitute the new social morphology of our societies and the diffusion of networking logic substantially modifies the operation and outcomes in process and production, experience, power and culture.[40] The networking logic induces a social determination of a higher level than that of the specific social interests expressed through the networks: "The 'power of the flows' takes precedence over the 'flows of power'. Presence or absence in the network and the dynamics of each network vis-à-vis others are a critical source of domination and change."[41]

Even at the distance of seven years, Castells' comments about the role of the Internet in the development of new communities and their virtual and/or real nature still ring true:

"They are communities, but not physical ones, and they do not follow the same patterns of communication and interaction as physical communities do. But they are not 'unreal'; they work in a different plane of reality. They are interpersonal social networks; most of them based on weak ties, highly diversified and specialized, still able to generate reciprocity and support by the dynamics of sustained interaction. As Wellman puts it, they are not imitations of other forms of life, they have their own dynamics: the Net is the Net. They transcend distance, at low cost, they are usually of asynchronous nature, they combine the fast dissemination of mass media with the pervasiveness of personal communication, and they allow multiple memberships in partial communities. Besides, they do not exist in isolation of other forms of sociability."[42]

39 Castells, M. *The Rise of Network Society*, Volume I, 27.
40 Barret, E. *Sociomedia;* Abruzzese, *Dall'argilla alle reti;* Cairncross, *The death of distance;* Lievrouw, "The social shaping"; Kiesler, S. *Culture of the Internet;* Mantovani, "Social context" and Van Dijk, J. *The network society.*
41 Castells, M. *The Rise of Network Society*, Volume I, 501.
42 Castells, M. *The Rise of Network Society*, Volume I, 389.

Looking beyond the controversial aspects of the issue[43], one can nevertheless agree with Castells that the socio-cultural patterns of the new multi-media systems as a 'symbolic' environment are strongly related to the increasing social stratification among users. Not only will the choice of multimedia be restricted to those with the time and money for access, and to countries and regions with enough market potential, but also cultural/educational differences will be decisive in using interaction to the advantage of each user. Information about what to look for and the knowledge how to use the message will be essential to truly experience a system different from standard customised mass media. Thus, the multi-media world will be populated by two essentially distinct populations: the *interacting* and the *interacted*, meaning those who are able to select their multidirectional circuits of communication, and those who are provided with a restricted number of pre-packaged choices. And who is what will be largely determined by class, race, gender and country.[44]

Today, as academics we are supposed to be very familiar with the new technologies. For decades, the use of e-mail has been a daily tool for exchange in the scientific community as compared to its later introduction in other work/organisational settings and home use. The Internet has become an irreplaceable tool for information retrieval, exchange and discussion, for economic transactions, and for locating individuals, organisations and institutions.[45] Again, according to Castells, "*the most important feature of multimedia* is that they capture within their domain most cultural expressions, in all their diversity. Their advent is tantamount to ending the separation, and even the distinction, between audio-visual media and printed media, popular culture and learned culture, entertainment and information, education and persuasion."[46] Taking into account the 'glocalised' (both global and local) scenario of knowledge production and diffusion, training early stage researchers in a *network society* is heavily dependent on the ability to keep lines of modern communication open, providing opportunities for interaction and learning, both in terms of physical presence and access to information and expertise at a distance.[47] Before the advent of the Internet and distance learning technologies, such networks and training programmes would have been extremely difficult to manage, if not impossible. To take full advantage of the opportunities afforded by modern communication technologies, one also has to look beyond merely distance learning courses and incorporate these tools as a way to more effectively manage the network itself and provide supervision and a broader range of expertise for research training than would otherwise be possible. Innovative practices should be adopted for teaching, tutoring and co-tutoring, network management, etc., as well as for flexibility in open distance learning.

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43 Clay, R. "Linking up online"; de Rosa, "Giocare ad auto-battezzarsi in internet"; Jankowski, "Creating Community"; Shields, *Cultures of the Internet*; Van Dijk, "The reality of virtual community"; Wellman, "Netsurfers".

44 Castells, M. *The Rise of Network Society*, Volume I, 402.

45 Baym, N. "The emergence"; Beaudouin, "Consitution"; Flichy, P. *L'imaginaire*; Lévy, P. *Cybercultura*; Matzat, U. *The social embeddedness of Academic*; Negroponte, *Essere digitali*.

46 Castells, M. *The Rise of Network Society*, Volume I, 403.

47 Mantovani, G. "Social context in HCI"; Riva, G. et al. *Towards Cyberpsychology*; Trentin, G. *Insegnare e apprendere in rete*..

Linking worldwide doctoral research trainees at home via a web-auditorium: the innovative didactic formula of the European Ph.D. on Social Representations and Communication.

The European Ph.D. on Social Representations and Communication[48] was built on the foundation of a pre-existing network of 13 European universities in 8 European countries coordinated by the University of Rome 'Sapienza' (Italy). Participating universities currently include in Austria the University of Vienna and the University of Linz, in France the École des Hautes Études en Sciences Sociales E.H.E.S.S. of Paris, the University Paris 5 and the University of Provence Marseille I, in Portugal the Instituto Politecnico de Lisboa, in Romania the University Alexandru Ioan Cuza, Iasi, in Spain the University of Basque Country and the University of Valencia, in Switzerland the University of Geneva and Lausanne, in the United Kingdom the London School of Economics and Political Sciences and the University of Cambridge. It is integrated into a wider scientific community, or 'network of networks' that spans the inter-disciplinary themes of social psychology and communications. One of the Euro Ph.D.'s goals was to devise and adopt an organisational formula capable of overcoming the notable differences in the organisation of doctoral programmes within the EU via a systematic search for intellectual synergies among eminent scholars, professors, specialised researchers and research trainees located in different centres of excellence that are part of the didactic infrastructure of the Euro Ph.D.'s partner universities.[49]

Since its start-up in 1996, several activities have come out of the Euro Ph.D., recognised in 2000 as Marie Curie Multipartner Organisation site by the E.C.-DG Research: the So.Re.Com.THEmatic NETwork of Networks[50], a prestigious series of regularly held international summer schools and lab meetings[51] and the state of the art European Ph.D. on S.R. & C. Research Centre and Multimedia Lab. Relying on advanced networking technologies, the Euro Ph.D. has constructed a *virtual campus* via a wide range of highly-developed online systems and resources including databases, virtual laboratories, internet/web-based conferencing systems, a comprehensive on-line bibliographic inventory, meta-analyses of literature in the field, and advanced search and information processing tools. The installation of appropriate infrastructure and dedicated facilities at the coordinating university and all network universities, including a common web site that enables linkage between international physical and virtual mobility (access to a dedicated Portal and web-auditorium interactive system) and the development of innovative practices for teaching, tutoring and co-tutoring, network management, etc., has given the European Ph.D. enormous flexibility in moving between face-to-face and open distance learning contexts.

The new media, and particularly the Internet, have shown how flexible collective and individual interaction has now become and how standard forms of mass communications have become outdated. By applying these new communication technologies in the course of developing

48 European Ph.D. on Social Representations and Communication Homepage: <http://www.europhd.eu>.
49 de Rosa, A. "An idea that became an Institution" and de Rosa, "Quality assurance in Higher Education".
50 So.Re.Com THEmatic NETwork Homepage: <http://www.europhd.eu/SoReComTHEmaticNETwork>.
51 International Lab Meetings Homepage: <http://www.europhd.eu/IntLabMeetings>.

its programme, the Euro Ph.D. transformed a traditional academic community of experts into a worldwide community of scholars on Social Representations and Communication that can work closely together without the barriers created by distance and time. Integrating virtual and physical mobility provides unlimited opportunities for the advancement of this scientific community and guarantees young researchers from all around the world the opportunity to learn and grow as channels of communication are established faster and wider across continents, research is disseminated more rapidly and efficiently, and literature and information on methodological approaches is easily shared.[52]

The So.Re.Com. THEmatic NETwork is not limited to academic participants and has international partners in the corporate world including Marratech AB, among others specialised in developing e-learning and e-communicative tools. Cooperation with EuroPACE developed over the past ten years via participation in various projects approved by the European Commission within the framework of actions promoted by DG-Education and Culture for e-learning, telematic support for international networking and towards the building of a Virtual University in Europe. Since 1996, the coordinating University of the European Ph.D. has been invited to participate in the VirtUE project (Virtual University Europe), coordinated by EuroPACE 2000. Funded by the EU under the Trans-European Telecommunications Networks- Integrated Services Digital Network (TEN-ISDN) action, it promoted the integration of Euro-ISDN based services into open distance learning activities in the pilot European Ph.D. Other joint activities were the cEVU Project (collaborative European Virtual University, 2002-2004) coordinated by EuroPACE and funded under the eLearning initiative of the European Commission – DG for Education and Culture and the REVE project (2004-2005) coordinated by EuroPACE and funded by the European Commission – DG Education and Culture. In addition, participation in e-learning projects continued within the framework of the European e-COMPETENCE project (2004-2005), coordinated by the University of Dortmund (Germany) and funded under the eLearning initiative of the European Commission – DG Education and Culture.[53]

Teaching Strategy: international networking, multiple supervisions, structured physical and virtual mobility, integrated training and evaluation system as added values of the European Ph.D.

The European Ph.D. on Social Representations and Communication offers a progressive educational curriculum for training early stage researchers through research inspired by the Social Representations Theory and Communication studies. Although it has a special focus on social psychology and media studies, it attracts a worldwide scientific community from many social science disciplines. Created to foster internationalisation of training and research standards under the Erasmus-Socrates programmes and coordinated by the University of Rome Sapienza, it has developed European standards based on joint criteria for candidate selection, training of participants from different nationalities, research training

52 de Rosa, A.S. "Social Representation and Communication".

53 de Rosa, A.S. "Quality Assurance in Higher Education", de Rosa, "Assessement tools created for the on-line tutoring" and de Rosa, A.S. "Social Representation and Communication".

in an international environment, intensive didactic 'stages' in multilingual and multicultural settings, adoption of a specifically designed schema of structured training, language policy and format for Ph.D. dissertations, evaluation of the entire training process and quality system, and formal recognition of the degree and award of a joint diploma.

The general teaching/learning strategy of the Euro Ph.D. is focussed on research training inspired by the historical, theoretical and methodological aspects linked to the Social Representations Theory. This includes both fieldwork, experimental, qualitative and quantitative multi-methodological research designs and applications, and current comparative European research projects. The training plan incorporates educational strategies that are both face-to-face and on-line, integrating international physical and virtual mobility.[54] The didactic structure within this overall strategy is a highly innovative system of *open distance learning* combined with individual and collective physical mobility. Tutors have online access to research trainees' work and are thus able to make didactic use of the website and monitor research trainees' progress quickly and directly.[55] Because of the distinctly integrated and joint character of this international doctorate, a common web platform was created for the European Ph.D. on S.R.&C. This platform acts both as an information and training tool. Besides the e-learning and distance learning, this platform offers doctoral candidates a personalised and protected space for organising their research reports at different stages (initial, intermediate and final) with confidential joint access granted to the three international tutors, the coordinator and the program director. The personalised space provided to each doctoral candidate interfaces with the tutors' personalised spaces for the use of joint evaluative tools and individualised monitoring of research reports produced and works to make the tutoring and co-tutoring process more efficient than traditional asynchronous communication tools, such as e-mail. Other training tools mounted on this platform concern meta-theoretical training, the use of the web-auditorium, access to educational video streaming, scientific materials and downloadable key lectures, etc.

The programme also provides structured international mobility of both research trainees and teaching staff at the individual and collective levels. Individual research trainees are required to relocate abroad for at least six months to work in two different European countries and two different research centres at host institutions with which their tutors are associated and from whom they receive individual tutoring and co-tutoring for their research work. Collective mobility involves all research trainees enrolled in the programme and tutors from all the partner universities and is achieved during intensive stages, like the International Summer Schools, or the face-to-face sessions of International Lab meetings (intensive 10 day winter and spring sessions). In addition, to provide for the improvement of cross-fertilisation of ideas and research practices between research trainees with different levels of expertise and coming from different institution and research centres, leading scientists and experts from outside the network are invited to teach and a limited number of post-doctorate researchers and research

54 de Rosa, A.S. "Assessment tools created for the on-line tutoring".
55 de Rosa, A.S. "Structured 'physical' and 'virtual' mobility".

trainees from around the world enrolled in other doctoral programmes in related scientific fields are admitted as participants.

The end result is that Euro Ph.D. research trainees are involved in an interlocking system of virtual and physical mobility that allows for considerable flexibility in catering to students' research needs while at the same time guaranteeing individual tutoring and interactive learning[56]. They are offered a broader range of international expertise for their research than would be possible at the national level. Briefly outlined, the Ph.D. program includes:

An intensive preliminary stage of bibliographic training which is conducted face-to-face and virtually by the national tutor at the home institution and by tutors from network universities. The online database and its related specialised virtual library on the Euro Ph.D. website are also crucial tools in this stage of training. Research trainees are also trained using distance leaning technology by the Scientific Coordinator in meta-theoretical analysis of the bibliographic material in their own subject area. Therefore the contribution of each research trainee assists in mapping out a complete, fully researched bibliography for social representations and communication.

The Multi-media and open distance learning system, which provides multi-media CD-ROM, multi-point video-conferences via European Ph.D. web auditorium and access to distance learning courses on the Internet, such as advanced methodological and theoretical training, forum discussions, video-chats and access to other multimedia educational products that have been developed by the doctorate's network. It is also possible to consult and download publications using the specialised Virtual Library on Social Representations and Communication, as well as the full bibliographic and meta-analysed inventory of works on Social Representations and Communication. The Euro Ph.D. has its own dedicated portal that works both as a tool for disseminating information and for advanced on-line research training. Technical support for this open distance learning system is provided by Marratech AB, a partner in the So.Re.Com.NETwork whose services will be discussed later in this article.

Tutoring and co-tutoring of research development. Besides individual and group face-to-face tutoring, all partner universities provide research trainees with access to the didactic area of the European Ph.D. on S.R. & C. website which includes tutoring and co-tutoring on-line, forum discussions, the European Ph.D. web auditorium, and e-mail. Research trainees are required to be in continuous contact with their three tutors located in three different European countries. Tutors have on-line access to research trainees' work, and are thus able to monitor research trainees' progress quickly and directly.

Obligatory 6-month stages in two partner institutions in two European countries other than where the research trainee is based. This is a way to insure individual physical mobility and to insure that the research trainee works directly with the two "foreign" tutors. It provides important complementary educational experiences and creates synergy within the network.

56 Ibid.

The intensive high-level didactic stage (International Summer School) that is part of the programme's required collective physical mobility of both research trainees and professors from inside and outside the European PhD network. Initially, the summer school was rotated between various network universities but since being identified as a 'best practice' in 1999 and the acquisition of a dedicated infrastructure, it is held at the co-ordinating University of Rome 'Sapienza'.

Seminars and advanced courses (International Lab Meetings) in which all participant universities are involved via physical mobility of professors and exchanges with experts.

The three annual Lab Meetings and the annual International Summer School all boast innovative training methods, combining face-to-face interaction in a variety of training situations (workshops, lectures, presentations) with mediated virtual interaction (internet forum discussion, web-videoconferencing, streaming videos on the web) as well as disseminating the proceedings long after the meetings. The meetings include sessions on international research management that are very valuable for researchers' career development and promote ongoing web forum discussions on knowledge acquired, later practical applications and online feedback from guest experts. From 2004 on, the location of the European Ph.D. International Lab Meetings was shifted to the state-of the-art Research Centre and Multimedia Lab of the Euro Ph.D. on S.R. & C. in the centre of Rome. This way, advanced training courses have easy access to videoconferencing via Internet, as well as other facilities for distant virtual meetings and experiments (such as the web auditorium). Any new or special equipment needed for these events can be integrated more easily at the lab, rather than trying to do so in a temporary setting not specifically designed for that purpose.

Finally, it should be mentioned that non-academic specialists, organisations and commercial enterprises participating in the So.Re.Com.THEmatic NETwork have easy access to the wide range of learning resources produced by this 'network of networks'. Due to the expanding level of complexity, the thematic network actively engages external experts (along with scientists from within the network) in its Core Executive Committee which brings into the network the viewpoints and expertise of representatives of governmental and international political organisations, as well as industries dedicated to communications and technological innovation.

European Ph.D. web auditorium

In his article that advises students how they can make the most of videoconferencing for distance education, Ben Plumpton makes some interesting and crucial points. Quoting a student from The Open University UK, conferencing "takes the distance out of distance learning."[57]

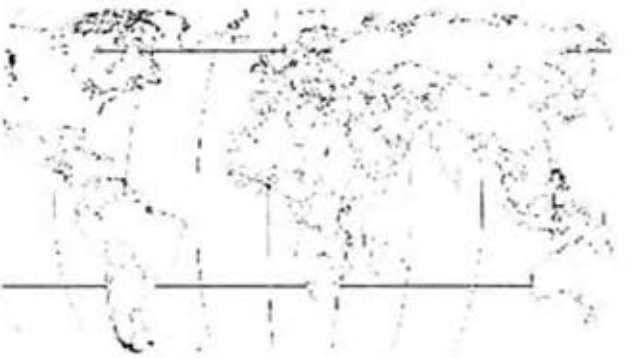
In fact, without the benefit of modern conferencing technologies, developing a programme with the scope and quality of the Euro Ph.D. would be greatly complicated both logistically,

57 Plumpton, B. *How students can make conferencing work.*

and most definitely, financially. Given the size of the Euro Ph.D. network and its geographical distribution, its success was predicated on the structured use of innovative training methods, combining face-to-face interaction with mediated virtual interaction such as internet forum discussion, web-videoconferencing, streaming videos, etc. This is especially important in allowing for long-term dissemination of proceedings held at the Euro Ph.D.'s annual scientific events, which helps to promote post-event forum discussions and consolidate knowledge acquired. Not to be ignored is the great financial benefit acquired by using this type of innovative system. By integrating face-to-face and virtual training sessions, some of the funds that would otherwise go to travel and accommodation expenses can instead be utilised for scientific and important infrastructure projects.

The provider of videoconferencing services for the Euro Ph.D. Web Auditorium is Marratech AB (recently acquired by Google), a leading web conferencing provider based in Sweden that develops and markets software to enable remote groups and individuals to collaborate and interact via the Internet. Marratech is also a partner in the SOcial REpresentations and COMmunication THEmatic NETwork (SoReComTheNet) and works extensively with universities, colleges and educational institutions around the world. Their technology has assisted the Euro Ph.D. to achieve its dream of education on a global scale, reaching research trainees from India to Brazil, from Indonesia to Mexico and from all around the globe (see graphs below) who log in on their home PCs rather that having to deal with the complex lab equipment needed for traditional videoconferences. The web auditorium feature permits large, remote audiences to attend lectures and presentations via their own PCs running on Mac, Windows or Linux.

Research trainee virtual mobility flow: 9 editions of the International Lab Meetings.
Students having attended Lab Meeting 1-9: Albania 3, Argentina 6, Australia 4, Belgium 1, Brazil 18, Bulgaria 6, Canada 2, Chile 3, Czech Republic 8, France 40, Germany 7, Greece 5, Hungary 5, India 3, Indonesia 13, Italy 101, Lebanon 4, Mexico 11, Moldavia 5, New Zealand 1, Nigeria 2, Norway 2, Poland 15, Portugal 4, Romania 33, Serbia 2, Slovakia 10, Spain 1, Sweden 4, Tunesia 1, Ukraine 3, United Kingdom 1, United States 4. Total 328.



Teaching staff virtual mobility flow: 9 editions of the International Lab Meetings.
Professors having attended Lab Meetings 1-9: Austria 1, Brazil 2, France 9, Germany 2, Israel 2, Italy 14, Latvia 1, Portugal 1, Romania 1, Spain 4, Switzerland 1, Sweden 6, United Kingdom 3, United States 1. Total 48.

Research trainee physical mobility flow: 13 editions of the International Summer Schools.
Argentina 5, Albania 1, Australia 3, Austria 14, Belgium 3, Bosnia 1, Brazil 15, Bulgaria 5, Canada 8, Chilean 1, Colombia 1, Czech 11, Estonia 6, Finland 20, France 51, German 7, Greece 12, Guatemala 1, Hungary 15, Indian 1, Indonesian 5, Israel 1, Italian 144, Lebanese 1, Mexican 4, Moldavian 2, Netherlands 2, New Zealand 1, Nigeria 1, Poland 15, Portugal 50, Romania 19, Russia 3, Serbia 1, Slovakia 9, Spain 14, Sweden 6, Switzerland 7, Tunisia 1, Turkey 1, Ukraine 2, United Kingdom 15, USA 7, Venezuela 1. Total 493.

Teaching staff physical mobility flow: 13 editions of the International Summer Schools.
Austria 6, Brazil 2, Finland 12, France 38, Germany 1, Israel 5, Italy 21, Portugal 19, Romania 1, Spain 14, Sweden 1, Switzerland 5, United Kingdom 22, USA 3.

As Plumpton correctly points out, this is a new way of learning and to be effective requires new strategies and training for both the professors and the research trainees involved. For this reason each session of the European Ph.D. International Lab Meetings includes two pilot tests before the events start aimed at verifying and assessing in advance the technical abilities of each participant and provides two full days of basic and advanced training on the use of Marratech's programmes. This includes an interactive test of skills for the participants. Experience shows that after these sessions, participants, including senior professors unfamiliar with new technologies, are quickly able to actively participate in the event. Their presence visually, in text chat, their voices and videos and their interactive use of the whiteboard is warmly welcomed by all participants physically present at the lab.

Indeed, the whiteboard allows interactive use not only among participants from in and outside the lab, but is highly functional for sharing applications and software. For example, this allows us to hold advanced training sessions and collaborative learning on statistical packages by using data files provided by each participant. It is also very interesting to use the whiteboard's share screen both for the participants' presentations (they start by locating themselves on the globe with an arrow and fill in whatever they believe best represents their identities) and for the collective evaluation of the event, by writing comments and suggestions on the shared screen. (As an example, see the screen shots below).

Each session is recorded in its entirety, from the videos to the interactive whiteboard, to allow future reuse of the didactic sessions and their dissemination by streaming.

Details regarding the scientific programmes of each International Lab Meeting, the list of participants, the list of professors and experts, the scientific and didactic material, the technical information, the graphs, the application forms and the questionnaire for evaluations, etc. are available on the web at: <http://www.europhd.eu/IntLabMeetings>.

Figure 1 – A screenshot from the participants' presentations

The training strategy of the Euro Ph.D. is focused on *learning by doing* and in addition to research in social psychology, providing research trainees with general research and career skills such as modern presentation techniques, conference presentation, workshop organisation, design and organisation of academic work, research team management, and management

of statistical software, large bibliographies and international databases, etc. Development of both core and wider employment related skills is driven by the goal of making the training of researchers of greater relevance for a wider variety of careers both in and outside academia than in the past, and to make it internationally and globally more attractive. As each network university site has special expertise in a particular methodological approach to research in social representations, the research trainees are exposed to a variety of complementary methodological approaches. The European Ph.D. Teaching Staff, composed of the professors, researchers and tutors at partner universities, are involved in all aspects of didactic and scientific activities and are all committed to the programme's training goals.

Research trainees participate in scientific activities either individually or in small and medium sized teams and in different contexts (such as presenting their research progress during International Lab Meetings and International Summer Schools, using the web auditorium, organising small seminars, participating in international conferences, taking advanced training courses for different statistical software packages, writing joint papers, participating in European projects and international networking, cooperating in meta-theoretical analysis of the specialised literature on Social Representations and Communication, managing a large bibliographic inventory, contributing to the construction of a specialised virtual library, etc.).

Putting to full use the opportunities created by new communication technologies can have an innovating effect on the administration and management of human and technical resources of academic institutions. As well as the obvious cultural/linguistic benefits, the physical and virtual mobility of students and researchers made possible by the European PhD on Social Representations and Communication International Lab Meetings has enabled them to reflect on and refine their own research approaches, benefiting the quality and scope of their work.

In concluding this article, despite all the advantages, unfortunately only a few networks have been able to integrate open distance learning and virtual mobility with intensive 'stages' of physical mobility in a systematic way. Resistance to adopting innovative didactic strategies involving collaborative e-learning is still diffuse, especially in some disciplinary fields.[58] There are famous institutions and well respected communities of scientists who are reluctant to develop e-competence.[59] Along with a few others, the European Ph.D. on Social Representations and Communication network can function as a model for aspiring networks of similar types and needs to be encouraged and further developed. Cross-national research teams working in different cultural settings can also augment and enhance the already growing 'internationalisation' of higher education institutes and research centres, help identify 'poles of excellence' and extend the impact of ICT on cooperative research across borders. For Europe, in particular, by contributing to the diversity of experience acquired by the young researchers and doctoral candidates that participate in such programmes, they are able to play a crucial role in the 'internationalisation' of European higher education institutions and research centres that are training the European social science researchers of the future.

58 de Rosa "An idea that became an institution".
59 de Rosa, "Social Representation and Communication".