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NETWORKED HUMANITIES: ART HISTORY IN THE WEB

AN INTRODUCTION TO THE CONFERENCE

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Originally thought of as a journey into art history practices and mechanisms of analysis from their conception to the advent of the digital era, this ESF/COST conference shifted towards even more challenging shores by gravitating around the multifaceted concept of *network*.

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While the initial proposal put forward by ESF and COST aimed at exploring the more or less significant novelty of the digital medium in all the phenomena of relevance to art history, its appointed chair – Hubertus Kohle – and programme committee thought well of enlarging the perspective, so as to see how much of what we call ›art history‹ can be challenged, stimulated, changed by the emergence, creation and manipulation of networks on the web. This was done by addressing all the facets of art history: as a humanities discipline (encompassing scholarly communication, research methods and didactics); as an interface between the scholarly community and the public at large (through the culture heritage sector and cultural industry); and as practice engaged with art works.

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Through the contribution of speakers from diversified backgrounds and interests, the topic in question emerged in all its complexity, but also in an unexpected ›interconnectiveness‹ across problems, solutions, experiments and reflections. This was facilitated by the open continuous dialogue at the conference and which hopefully the summary below is able to exemplify.

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Beyond the research agenda in which they could be inscribed and taken on, the themes treated at the conference – spanning from the evolution of the scholarly publishing communication model towards an open framework, to the meaning of knowledge as linking between information and resources – also called for the attention of ESF as well as COST

members' strategic planning, for instance as far as the development of digital-augmented infrastructures were concerned.

Networks and networked content: scholarly communication

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On the one hand, within various humanities disciplines – history, art history and Islamic studies to name but a few examples highlighted at the conference – some national initiatives that go beyond retro-digitisation produce online journals that are valuable efforts attempting to supersede the print model: they embed various qualities, starting from the scholarly value guaranteed by thorough peer review to include multilingual and translation services, long term availability and therefore citability, as well as innovative fruition aspects in their spatial layout and visibility of content. On the other hand, though, as far as academic assessment is concerned, these journals do not seem to hold much prestige in the relevant research community nor have they an impact factor recognised by current national evaluation schemes. Furthermore, it is rather difficult for new ›born digital‹ journals to position themselves as recognised venues for interested readerships and discussions[1] and, especially in art history, it is also rather daunting to face the thorny issues related to image rights, a factor which is mainly neglected by current open access policies.

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To add to the drawbacks, the opportunities offered by the digital medium, such as collaborative writing, are not generally exploited in the currently available models of electronic publishing. It seems that besides the introduction of some innovative features, the fruition of these publications tends to remain at the level of ›passive‹ consumption making such journals mere substitutes of their print counterparts or predecessors. In this respect, it is interesting to note that what emerged at the conference is that certain uses of the technology itself contribute to blocking rather than nurturing innovation. For instance, the lifecycle of electronic journals is often based on a very conservative publication model enforced by a centralising *Content Management System* (CMS).

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Nevertheless, the evidence of a somewhat promising generational gap in the academic community of art historians with respect to the interaction with the digital medium emerged from some of the studies presented by the speakers and from the atmosphere at the conference itself. For instance, early career researchers do not seem to hold great reservation towards electronic publishing and seem to be willing to embrace collaborative

working models. Of all the detrimental digital divides (west/east, rich/poor, passive/active), the generational one could be an opportunity for change.

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For these reasons, new experimental models are being set up such as *recensio.net* presented by Gudrun Gersmann, where a more equal (if compared to the vertical model of academic publishing) communication process based on the Web 2.0 principles and facilities is tested to overtake an epistemologically unchallenging co-existence of the electronic publications with the old tradition of print publications. Such fluid publishing models put in question the nature of publications themselves as stable objects as well as the roles of the relevant ›players‹ (e.g. who is ›allowed‹ to publish and review?). The former is not only because the articles are not fixed items in themselves, but also because the content of a single web resource might in actual fact be the result of the aggregation of content coming from multiple journals. In conclusion, as Gudrun Gersmann put it, while a peer-review process is needed to launch a new academic journal on the web, one also might want to set up a mechanism to exclude or change it and therefore innovate.

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While the academic publishing upcoming evolution in academic publishing is very much linked to how the scholars themselves will shape and perceive the digital medium and engage with the creation of networks of content, the support of open access e-journals could arguably remain in the remit of research funding organisations or research institutions.

Networks and networked content: social knowledge

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The idea that the technology – intended here as technical infrastructures – is not necessarily neutrally ›applied‹ and that its use and architecture can bring about certain privileged structures was also raised – for instance, in the talks by Bernd Kulawik and by Martin Warnke – in relation to the Web which, as a network, encompasses more important and more marginal nodes. Its growth creates unevenness. In parallel with the discussion on new modes of publications, the networked model of the global e-infrastructure of the future would be the one that would still include privileged points but without necessarily attributing more authority to them. The latter would indeed represent a step towards making knowledge more ›democratic‹ and sharable, but as Martin Raspe and Georg Schelbert noted – would also be perceived as a threat for scholarly practices: who guarantees reliability and authority? How would the personalisation of knowledge, the visibility of the individual scholar, the allure of

discovery be preserved? Although this tension would probably persist in forms that might not always encourage new developments, it could also be a stimulus to change the academic culture into one that is more process than product-oriented, where mistakes and ambiguities have their value.

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Being one of the major topics of the conference, papers and discussions on Web 2.0 and social networking focused very much around the benefits and limits of the social web.

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Collaborative forms of engagement within a digitally-augmented Web 2.0 environment could constitute an aesthetic expression/experience in itself and be interesting for art historians as a departure for aesthetic reflections, as Tara Zepel pointed out in her talk and as Sabina Baciu exemplified with her study of social portraits (for example those used in Facebook), though as contextualised within the history of portraiture.

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At the same time, from the point of view of museums and art collections, the social web could be an opportunity to overcome the limits of digital reproductions[2] as well as the drawbacks related to the vastness and heterogeneity of their collections, which are too big to browse in their entirety on the net and too difficult to single out in terms of discoveries of new objects within rigidly prescribed search-only interfaces. The social tagging set up within the Steve project (http://steve.museum/) has, for instance, been used by the *Indianapolis Museum of Art Online Collection* to encourage users' browsing based on the experience associated with an object rather than on the abstract and possibly unintuitive classification and search of a specific item. For the curatorial approach this might become a stimulus to shift from the item-based cataloguing schemes to relationship-based narratives where connections across objects and parts of objects become prominent over isolated sets of metadata. Analysis of social tagging experiments, such as the one presented by Laura Commare, are indeed informative ethnographic projects in themselves, where the expert knowledge is compared with and challenged by the social knowledge. Taking the topic even further to identify new area studies in general – e.g. analysing the kind of information people disseminate about themselves on the web – a whole range of digital ethnography opens up,[3] as extensively discussed in Stacey Koosel's talk.

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In line with the mission of the cultural heritage sector to do outreach and generate global participation, as Robert Stein explained, the hope is that a combination of approaches – social tagging and scholarly/curatorial descriptions – can inform each other and ultimately offer a better service to the public. Distributed networks of multiple collections – including the data sharing amongst cross-institutional archives, the connection and integration of resources beyond the remit of art history only – are also becoming a reality with clear protocols of access and control of ownership. Carl Hogsden and Alexandra Reynolds exemplified this with the *Artefacts of Encounter* (http://maa.cam.ac.uk/aofe/) and *Eadweard Muybridge: Defining Modernities* (http://www.eadweardmuybridge.co.uk/) projects respectively. As Heikki Hanka claimed, these kinds of collaborative experimental attitudes are, however, not always endorsed – some art history national projects in Europe have been dismantled due to unresolved copyright issues – nor are they easy to put in place due to the lack of infrastructural support.

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The digital age is impinged upon by pre-digital ideology and practices, despite the fact that beautifully written principles – such as the *OECD Principles and Guidelines for Access to Research Data from Public Funding* – are formally endorsed by many public funding institutions. At the European level it is expected that the public funding institutions provide the relevant infrastructures for scholarly resource to be created and maintained.

Networks and networked content: semantic shift

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While socially attractive and epistemologically challenging, Web 2.0 practices produce an abundance of weakly structured data that calls for a shift from the social to the semantic web. As Patrick Danowski noted in his skilfully built set of slides made of images and slogans, the social web grows much quicker than what search engines like Google can actually index; ›sudden‹ connections are continuously established (see the examples of personalised social bookmarking and ranking web services such as www.delicious.com/ and http://www.sharetivity.com/). To this end, the very informative presentation on text mining by Ira Assent revealed the complexities behind the current technical solutions in use to detect meaningful associations and patterns, to disambiguate the vast amount of digital content. One wonders, however, whether a thorough study of the application of such algorithms in the humanities has been performed: patterns in texts are more valuable than predictions, but uniqueness is equally crucial in humanities scholarship.

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The talk by Chanda Carey presented using the *Personal Brain* software (http://www.thebrain.com/) was in itself experimenting with a semantically networked mode of delivering an academic paper which, in our opinion, resulted in a cognitively challenging presentation for the speaker and for the audience, with both having to orienteer in branches of infinite connections in search of a narrative to follow.

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Within the semantic strand of the conference, it was stated that semantic enhancement can guarantee continuation and improvement of pre-existing resources by integrating them together. The creation of formalised ontologies and tools to explore and exploit the relationships embedded in networks was raised as a necessary step to make networked content valuable for research purposes. As Martin Raspe and Georg Schelbert put it, a wealth of scholarly content is buried in text! Muruca (http://www.muruca.org) was presented by Michele Barbera – involved in the COST Action on *Open Scholarly Communities on the Web* – as an example of an open source semantic annotation application that makes use of domain-specific ontologies. Within the Muruca framework, the project on Anton Franesco Doni (an Italian literati of the 16th century) for instance, describes illustrations present in his works by adopting the Iconclass[4] ontology. Issues such as the meaning of negations, contradictions, vanishing and ambiguous references are not trivial to tackle when creating or extracting semantic knowledge. However, it is within specific domains and communities that consensus around the use of certain conceptual models can emerge and be fruitful for focused research initiatives. Nevertheless, it is possibly the inferential power of ontologies that is still not exploited enough in the current initiatives dealing with the development of ontologies; as Günther Görz stated, there is no semantics without reasoning.

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In any case, however exciting the technical possibilities might be and are, it remains to be seen whether humanities scholars will be put in the conditions of being able to understand and manipulate its potential.

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The refinement of semantic technology could indeed be of assistance to humanities scholars engaged for centuries in comparing phenomena, creating connections and interpreting relationships. Multiple research cultures will be able to influence and benefit from such technological advances if adequate collaborative infrastructures – where dialogue and fruitful

interaction between traditional and innovative methods can take place – together with adequate research evaluation schemes are put in place and sustained.

Playing with history and art: how serious can it get?

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If semantic web initiatives developed by scholars could potentially encourage re-use and re-mix of content in new and unanticipated ways beyond academic circles, it is the cultural industry sector that has attracted the mass involvement of the wider and youngest public so far. Despite being not necessarily very experimental, virtual reality games attract young minds galore. The challenge is: could games be modelled to make users experience the boundaries between tangible and intangible, between facts and fictions, between archaeologically conflicting interpretations? Could a new culture that plays creatively with history and the past emerge? It is such questions that the speaker Erik Champion addressed both at the conference and in his recent book on *Playing with the Past* and that Ryan Egel-Andrews also tackled by interpreting visualisation as a kind of reading, where no claims on accuracy should be made. On a similar note, Gennaro Oliveira introduced the term ›historiomediography‹: the teaching, writing and comprehension of history as media »through the simultaneous use of verbal, visual and sonorous languages« as a way to engage with the past, create a sense of familiarity with technology while, at the same time, fostering critical thinking and a polyphonic rather than monophonic vision of history.

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Similarly, but at the level of art history discourse and cognitive primitives, the experiments Gerhard Nauta presented go towards revolutionising the methodology of art history as a discipline. It is a fact that art historians ›look‹ at the whole image of, let's say, a painting but ›talk‹ about its parts only. In Nauta's works with his students, by tagging images with images (what he calls ›visual tags‹), the discourse is shifted from verbal descriptions of art works – the traditional methodology – to the visual mode of associating formal qualities to an image (in relation to 3-D modelling for art history, it is interesting to note that Ryan Egel-Andrews also defined his experiments as a way to embody interpretative arguments without recurring to textual descriptions). This is a process that seems to open an interesting channel for discussing, amongst other things, visual similarities across art works. Tracing image interrelationships, but this time relying only on direct image associations is also the aim of the Meta-Image software (http://www.meta-image.de) presented by Martin Warnke and currently being developed for release.

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While the lesson could be to experience art and engage with it in anyway that suits one best, what emerged from the talk by Francesca Gallo is that the analysis of artistic practices on the web reveals a rather disorientating landscape where both artists and audiences seem to appear fragmented. Experiments vary from the interaction between science, art and technology (see http://www.boredomresearch.net/) to the hybridation of geographical software and artistic performance (see for example http://www.streetwithaview.com/), to the combination of internet data and photography (see *The Fifth Day* project by Carlo Zanni: http://www.the5fifthday.com/).

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Possibly in an effort to capture these dynamic productions, museums are also dedicating special collections or web space to art that engages with »the use of new media, sound and performance«[5].

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The experimental and creative aspects of engaging with the digital medium both within and beyond the academic environment should be encouraged for instance within research funding calls, so as to challenge certain disciplinary tools and knowledge but also to open them up to new contexts, being they didactic, cultural heritage or cultural industry related.

Author's profile:

Arianna Ciula graduated with BA (Hons) in Communication sciences (computational linguistics) at the University of Siena, Italy, in 2001. She received an MA in Applied Computing in the Humanities from King's College London in 2004 and was awarded her PhD in Manuscript and Book Studies from the University of Siena in 2005. As Research Associate at the Centre for Computing in the Humanities, King's College London, from 2003 to 2009, her primary responsibility was to support various kind of digital humanities research projects.
She is currently Science Officer for the Humanities at the European Science Foundation where her primary responsibilities include the supervision of instruments to fund collaborative research in the humanities and the coordination of strategic activities related to the works of the Standing Committee for the Humanities.
Her personal research interests focus on the modelling of scholarly digital resources related to primary sources. She lectured and published on humanities computing, in particular on

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1 This seems to be the experience, for instance, of RIHA, the *International Association for Research Institutes in the History of Art journal* (http://www.riha-journal.org/) presented by Regina Wenninger and Katarzyna Jagodzinska.

2 With respect to the comparison between physical and digital collections, it is interesting what Ales Vaupotic and Narvika Bovcon noted regarding decontextualisation of objects and the immateriality of the virtual environment: as they stated, decontextualisation has always being a problem also for physical archives and museums.

3 See for instance the articles and discussions at http://www.digitalidentitytheories.blogspot.com/.

4 For more details on Iconclass, see http://www.iconclass.nl/. CIDOC-CRM was also mentioned and used in some of the projects being presented: http://www.cidoc-crm.org/.

5 See for instance http://www.tate.org.uk/intermediaart/.