

**Advanced High Resolution Imaging Technology
for Conservation of Important artifacts in Libraries and Archives**

17-20 December 2014

City University of Hong Kong , Hong Kong

Speaker's bios & abstract

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Title of Lecture	New media—new problems. What will happen to all of these Masterworks of the Neolithic Age of Multimedia?	
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BIO

Harald Kraemer is a 'wanderer' between the worlds. He is Media-Design-Art Historian who is also working as a 'Gestalter' of online and offline hypermedia applications, as a 'Ausstellungsmacher' as well as system analyst for collection management systems and museums. He has studied Art History (PhD), Classical Archeology and History at the universities of Trier, Vienna and Witten/Herdecke as well as Museum Studies and Curatorship (Diploma) at the Institute of Cultural Sciences in Vienna.

H. Kraemer has written and published widely on the subject of media in museums, media design, documentation as well as contemporary art. For TRANSFUSIONEN he has edited and designed several books about contemporary art. As Associate Professor at School of Creative Media at City University of Hong Kong he is teaching 'Arts Management and Curatorship'. Currently he is working on the research project 'Multimedia Classics – Hypermedia Hermeneutics'.

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ABSTRACT

Today, online and offline applications are omnipresent in museums, as Christopher Richartz predicted in his visionary article of 1995: "The new information technology could force museums to comply, even if they try to resist; the standards of information transfer experienced by the general public will establish the visitor's expectations, so that the museum must comply in perpetuity" [1].

Hypermedia applications comprehend online and offline productions like LaserDisc, Photo- CD, CD-i, CD-ROM, DVD-ROM as well as kiosk systems and any kind of mobile technologies like handheld guides. The excitement around the rise of multimedia in the mid-1990s has now abated. Recent keywords are Transmedia and Augmented Reality. But is the thrill of multimedia really gone? Without the benefits of

multimedia—the strategies of how to combine different media, the dramaturgies that show how to narrate stories, the ideas about how to interact with the user, and the methods of joining different media in a systemic hyperlinked area—the modern world would look very different.

For more than 20 years, hypermedia applications have combined text, image, video, animation, and sound into a total work of art, a “Gesamtkunstwerk”[2]. Since the mid-1990s, CD-ROM has been the leading platform for storage and distribution of multimedia applications, whether they are dictionaries and lexicons, games, training systems, learning aids for schools, databases or digital collections, animated picture albums, or products for use in art history classes, museums, archives, and libraries. These Multimedia Classics, often produced for museums, are digital masterworks of applied art; in endless variations, these silver or gold discs serve as icons, signs, and symbols of and for our digital and digitized cultural heritage. But it is a pity that later generations will have no access to these marvelous disc classics. At the moment, most of the CD-ROMs are still readable, but it is only a matter of time before the aging of storage media and data formats, the demagnetization and dematerialization of the data, and/or advances in the next generation of computers will render today’s discs unusable [3].

The process of digitization seems to be an “antagonism,” as Robert Hauser has written [4]. Preserving digitalized data is one issue; transmitting it is another. Transmission may be the only way to save digital heritage. How to bridge this abyss between the preservation and interpretation of cultural and natural digitalized and born digital heritage on one side, and technological innovations on the other side, is the true challenge.

Hypermedia applications are hybrids. They are masterpieces of sampling information and cultural content, combining different strategies of dramaturgy, navigation, and design. Similar objective usages can therefore create completely different solutions. The results can look like a database, a 3D showroom, an interactive timetable, a comic novel, a talk show, a walk in the park, or a jogging avatar. Previous efforts to construct a typology for hypermedia applications—which are often a mixture of content and function—are condemned to failure because they have disregarded this variability and the many levels of value [5]. A simple classification cannot identify all terms and conditions. Lev Manovich has shown that descriptions and visualizations of a work of media art seldom give a concrete and characteristic presentation [6].

Why is it so difficult to describe and analyze hypermedia applications? Hypermedia is open, transient, interdisciplinary, process-related, discursive, and dependent on concept and context. It is digital, multimedia-based, and extended by the interactivity with its recipient, the user. Hypermedia is so diverse that it is in need of documentation, analysis, and methodology in an extensive sense. In this respect, hypermedia works are comparable with contemporary art works [7]. Methods derived from art history, media sciences, filmmaking, and musicology are needed to analyze hyperlinked masterworks according to standard criteria of narration, dramaturgy, navigation, and design. The challenge is to reinterpret our traditional understanding of information as well as our understanding of knowledge transfer.

As authors like P. Samis, K. Veltman and W. Schweibenz have shown are the various tools of interactive communication technologies changing the perceptions of the museum visitor and the strategies of museum communications [8]. One of the secrets of a successful hypermedia application is to know what kind of user prefers what kind of story, navigation, and design. Falk and Dierking have shown in “the museum as Gestalt” the complexity of personal, social, and physical context concerning the visitorexperience [9]. By testing diverse types of classification on 700 multimedia applications, H. Kraemer has analyzed the complex interplay between information architecture, interface design, navigation, and dramaturgy as well as the behavior of museum visitors and the user of hypermedia applications [10]. Even the philosophical

background or the motto behind the motivation is part of this structure. Thus the visitors, as well as the users, are differentiated into groups of interested observers, playful discoverers, and encyclopedists deliberately searching for information. This typology of user attitudes can also be applied to the form, the function, and the content.

What are the dramaturgies used to transfer the material into a statement of content and objectives? The strategies can be divided into the following main parts: informative, explorative, narrative, ludic, and educative. Some of the applications use only one strategy. Since the 1990ies most of the applications are dramaturgical hybrids and include diverse strategies. Transmedia storytelling or Transmedia narrative—buzzword of the last years—is a new form of telling a story across several platforms. Transmedia is an extension of Multimedia, because multiple platforms and formats using current digital technologies are involved and the visitor-user is becoming a co-author. As his/her own narrator the visitor-user gets more and more a participatory part of the cultural heritage. By creating his/her own stories the boundaries between the museum keeper of the information across the artefact and the visitor as a new form of interpreter are erased.

Another buzzword of the last years is Augmented Reality. Just as old as Multimedia, Augmented Reality—the rival of Virtual Reality—has experienced in the last years a Renaissance. Based on the development of mobile, data storage as well as GPS technologies this rediscovery promises us knowledge transfer in real time. Pilot projects like Google Glass, LandForm+ or Merchlar's mobile game "Get On Target" are showing the potential for applications in museums. Still the data transmission techniques and the currently available batteries are the main reasons for the limitations to conquer the "outernet".

A museum is rich in collected experiences of life. The visitor's preferences, his/her associations, and last but not least his/her own history lead him/her through the museum's contents. By re-using all their collected data and by using new forms of interactive communication like Transmedia and Augmented Reality, museums have the potential to be important transmitters. Museums "promote different modes and levels of interpretation by subtle juxtapositions of experience" [11] and are still institutions of enlightenment in the classic sense. Now more than ever museums may guide the user toward critical viewing, sensitization, and media competence. Only critical seeing is distinctive seeing. The museum of the twenty-first century will have to integrate up-to-date technologies to support and develop new forms of intelligent knowledge transfer but also to be a constructive counterpart to the deluge of reproduced mass media.

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