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Hybrid Ego
Towards a New Horizon of Hybrid Art

THE TURNING POINT—when Art and Science/Technology experience synesthesia

Here in the first decade of our new century, we are seeing a veritable cavalcade of different new categories in pop culture, media art and other cultural spheres. Japanese *anime* and *manga* have a 'cool' reputation throughout the world and computer games are part of the spectrum of "media arts," of which "media art" singular may well emerge as a genre in itself. Yet when thinking of the peak of the current digital contents that has been highly praised in media arts festivals and competitions internationally, we should not forget the experimental arts and sensory experiments behind it. In postwar Japan, avant-garde groups such as Experimental Workshop including Katsuhiro Yamaguchi in the '50s or the young members of the CTG (Computer Technique Group) in the '60s resemble the youth of the present day that fly out into the world, armed with media art. Also since the '80s, there have been Japanese winners and participants in the Prix Ars Electronica and the festival, e.g. Isao Tomita, Masanao Tone, Masaki Fujihata, Yoichiro Kawaguchi and others. From the '90s up till the present day, many members like Toshio Iwai, Maywa Denki, John Maeda, Ryota Kuwakubo and myself have learned from those pioneers who participated in the *Cybernetic Serendipity* and the *Fluorescent Chrysanthemum* show in the '6os, having experienced the Osaka Exposition or the Tsukuba Science Exposition visually during our childhood. Our generation, and even the generation of our students, may now be in the position to send out the next generation into the world.

The standard promotion of media arts started in 2001 and, several years prior to its enactment, the Agency for Cultural Affairs started to hold the Japan Media Arts Festival. Since 2001 this festival has been held in the Tokyo Metropolitan Museum of Photography, and when we celebrated its 10th anniversary in 2007 around 67,000 people visited the museum within nine days. In 2002, the Japanese Ministry of Education finally put media arts subjects *(anime, manga,* computer graphics, illustration and photography, etc.) on the curriculum for junior high and high school art classes. While this only a beginning, of course, to stop media art from just becoming a "has-been" instead of a true classic medium shared by all, media art needs to transform and be taken to the next level.

SPACEDRIFT—Ghost in the Self

The origin of Japanese media art goes back to long before the Edo period. In school in Japan, children learn about *Furo*—old magic lanterns, *Chōjū-giga*—caricatures of birds and beasts on 12th century picture scroll, *Hyakunin isshu*—one hundred poem-cards, *Netsuke*—miniature sculpture and *Karakuri ningyō*—mechanized puppets or automata as the origin of *Figure*—a statuette that represents a human or animal, media installations, games, *manga,* animation and robotics. So what do western people expect or think of Japanese media art? One way of looking at it is to observe the differences in the Japanese style—it tends towards different, nice, elaborate, beautiful, well-functioning and very smooth objects. But besides these aspects, what is new in the field of Japanese art and science/technology?

Alvaro Cassinelli *Khronos Projector;* Ars Electronica Center

The University of Tokyo (UT) was founded by the Meiji government in 1877 as the first national university. It was formerly known as the imperial university and is now widely acclaimed as one of the most prestigious, excellent schools in the whole country. The CAMPUS2008 exhibition and events present various projects, mainly from the three courses at the Graduate School of Interdisciplinary Information Studies (iii), the Graduate School of Information Science and at the Technology and Graduate School of Engineering. It is not the college/university of art participating, but the national university as a whole—a first in the history of Ars Electronica. Around 25 projects from each laboratory are exhibited here, showing a diverse range of research areas united by a common theme *Hybrid Ego,* as a kind of ego/self/figures altered and transformed by technology.

In addition to participation in the Prix Ars Electronica, the members of this group have taken part in many other international conferences, societies and competitions and have won many prizes. Besides established professors—e.g. from the laboratories of Tachi/Kawakami, Harashima/Naemura, Hirose/Tanikawa, Ikeuchi, Arakawa, Ishikawa/Komuro, Inaba, Igarashi, Mizukoshi and others—we have young media artists, Yasuhiro Suzuki from the *Globe Jungle Project,* Alvaro Cassinelli from the *Khronos Projector,* Junji Watanabe from the *Saccade-based Display,* Yasuaki Kakehi from the media products unit plaplax(with minim++), and Taro Suzuki from *Water Canvas.* These excellent talents have gathered as graduates and assistant professors to carry out wonderful projects with students. Some of these people from the University of Tokyo are connected to the Virtual Reality Society Japan special interest group for art and entertainment, and have also played an important role in the *Leading Edge Technology Showcase—for the artistic expressions of the future* exhibition, co-organized by the Japan Media Arts Festival. Dominique Chen, also from the university, in collaboration with device artist, Ryota Kuwakubo for the workshop at that time.

However, at UT, there is no special course/interfaculty of art. The iii course, which is represented in this exhibition, was established in 2000 and is integrative and interdisciplinary, combining those fields from both sides of the traditional divide between the Sciences (mathematical and natural sciences) and the Arts (social sciences and the humanities). Some of these students will be presenting the results of their research with works on display in the *iii exhibition.*

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Here is one example: the rich potential power of "Foresight Labs"—*Optical Camouflage* in CAMPUS2008 developed by Yoshida/Nii/Kawakami/Tachi, which has realized the imaginary technology that appeared in Shiro Masamune's animation movie *Ghost in the Shell* directed by Mamoru Oshii. This is the excellent result of a research project that realizes technology that foresees the possible future closely related to the sub-culture. Other research areas and studies like robotics, mixed reality/augmented reality, ubiquitous media, interface and sensing by UT focus on art methods to show their projects results.

The JST (Japan Science and Technology Agency) started 2 projects on the *foundation of technology supporting the creation of digital media contents:* the CREST (Core Research for Evolutional Science and Technology) research group and the independent research project PREST—a proposal-oriented research promotion program. Some students and researchers at the UT

are members of these projects and many excellent projects are taking place as a kind of "Hybrid Art" in this well-funded environment. Recently all museums/cultural venues were cut out of the budget and it is getting harder to finance such activities in media arts as it costs a lot. This research grant targets research that will create advanced and innovative expression techniques to support the production of works referred to as 'media art', which has made rapid progress due to the development of information science and technology and a novel basic technology. Professor Hiroshi Harashima is a research supervisor who set the strategic target to meet the social and economic needs of Japan. He is also a chairperson of the Art Division of the Japan Media Arts Festival.

In connection with this festival CG-ARTS have organized the *Student CG contest* for the past 13 years—a competition for young talents—and sent young students out into the international field. In our CAMPUS2008 exhibits this fruitful diversity from the past 3 years can be seen in *Animation Next—presented by CG-ARTS* at the theatre. Moreover, a series of workshops for festival visitors that brings together students from the Linz Art University and UT students will be held by a group of media literacy from UT. Members of *Media Exprimo,* an interdisciplinary CREST research project that aims to help enrich and sustain citizen media expression, will hold a workshop to link media arts to the general public from various places in the world. The active and creative exchange between both universities and the intersection by the festival participants will take place at the salon.

NEXT EGO /ALTERED EGO—looking out of the corner of the self

In such a situation, what is the possible outlook and mission for the future? I suggest that there are three kinds of possible future for media art—1) Making products as a multiple artwork, 2) Creating educational materials, 3) Digital Public Art.

One important project is CREST *Technology to Create Digital Public Art,* with Professor Michitaka Hirose as the project leader. Digital Public Art (DPA) has three keywords—"dimension extensity/physical presence/active participation." The Dimension Extensity group included Toshio IWAI as the project professor, while the other group includes Professor Kiyoharu AIZAWA and Associate Professor Takeshi NAEMURA as VR specialists. They run an ideal, interdisciplinary team consisting of media artists and engineers/scientists/researchers. Engineering course students can work together with media artists in such projects, greatly inspired by their imagination, and they have already started to develop their own style of synthesis between art and technology/science. On the other hand, Professor Yoichiro Kawaguchi has another CREST project about emotional CG display, bumpy screen and robotic sculptures. We are sure that in the near future this field will reveal a new horizon realized by the new, advanced ubiquitous technology for public spaces such as airports or city centers. Human beings will be able to share their perception with others, and the new technology will enlarge a person's ego/self from human-size to society-size. This new perception and supersize ego/self constitute the Next Ego/Self and the result of the transformation is the Hybrid Ego.

Here is another example: a global communications platform from Japan. The students are remarkably active in space art experiments in the International Space Station (ISS) and the Japanese Experiment Module "KIBO". Work started in the late '90s and the large-scale space environment facility will be opening shortly. Space art, in fact, i.e. artistic approaches to space by the Japan Aerospace Exploration Agency (JAXA), motivated and inspired artists and students of

the UT and the University of Tsukuba to carry out art experimentation and now we have started brainstorming for ideas on how to realize media art as a hybrid arts platform.

As for robotics—a very important theme for the next generation—if the internalized robot integrating body and technology epitomized one current form of Japanese expression, there might be an opposite extreme: new experiments towards an externalized technology. Media age corporeality is breaking out of its shell.

All of the projects by participants and students in CAMPUS2008 share a common underlying purpose: to create devices, interfaces and platforms for sharing information and collaboration. As President Hiroshi Komiyama pointed out, the university is trying to structure knowledge, to transform experience into knowledge that can be used by the whole of humanity, and to nurture individuals with a cosmopolitan outlook who are able to transmit that knowledge to the world. In this new dimension of Hybrid Art, art expression by itself does not exist and equally there is no technology without art—and now we are aware of the great importance of being able to structure knowledge and create expressive knowledge.

If an art/science evangelist such as Professor Itsuo Sakane, or media art curators such as ourselves are able to act as catalysts who bring together people who do not know each other from very different specialized areas, we can see that a lot of de-fragmentation is taking place. Then there appears the great force of imagination, which turns our methodical chaos into creative, structuring knowledge.

Now we are the witnesses who are attending the great transformation and the paradigm shift at Ars Electronica 2008, facing a new phase heading towards the next decade, establishing a new venue and platform. Thus we again suggest that the externalization of knowledge, concepts and perception is the way to explore the media art of the next generation. And media art is an extremely suitable medium of expression as an expressive literacy for the externalization of knowledge—the knowledge of leading-edge technologies, humanities, natural sciences and social sciences.

We would like to invite all visitors to CAMPUS2008 to view the future possibilities, rich resources of expression and studies of the Hybrid Ego/Self towards the new Hybrid Art field.