Pioneering Outputs in Aesthetics of Telecommunications:
The Case of Telecollaborative Projects by Kit Galloway and Sherrie Rabinowitz

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Abstract
Emerging information technologies have been redefining new strategies in art as well as in every aspect of life for more than thirty years. In the context of telecommunication art, the pioneering communication artists Kit Galloway and Sherrie Rabinowitz made such very influential contributions to the Telecommunications Aesthetics and Theories as interactivity, virtuality, visuality, collaboration, sharing and participatory networking strategies via multimedia electronic information Technologies as early as 1970s. This paper will examine Kit Galloway and Sherrie Rabinowitz’s pioneering telecollaborative Satellite Art Projects paving the way today’s telecommunication culture.

Keywords: Aesthetics of Telecommunications, Art and Technology, Telecollaborative Art

Introduction:
Since the last quarter of the 20th century, which we may call Information Age, the advances in telecommunication technologies and the widespread use of the internet have been providing virtual share and friendship for a global society through online worldwide communication systems. The interrelation of telecommunication systems has transformed the conventional discourses in art and communication as well as in many other fields. The immensity, transmission, interaction and simulation of creation and process in virtual environment and time through the interrelation of computing and telecommunication systems with information theories have transformed the conventional discourses in many fields and disciplines. For instance; emerging cyber technologies have led to the interaction and sharing strategies in aesthetics that moves with new information, communication and socialization theories along with practical contexts, enabling transmission of easily accessible data (text, images, and audio) to online networks, and social media sites in the virtual time and space. Those systems have also created new possibilities for the methods and theories of contemporary art strategies with creativity, participation and sharing aspects to unite the peoples of the world in creative communication while changing the conventional context of art as well as our lives.

Telecommunication systems have been redefining our traditional perception of the world with global online connection of participants from all over the world via online networks and social media. With the immersive participation of people from all over the planet, these digital network sites and online social media have been gaining so much importance and power that they promote a global culture for worldwide audience with new perception of cosmos via the participatory networks systems, which has transformed the Internet into an important data storage and sharing space.

These connections create cyber-network culture and interaction strategies thanks to their open-source capacity, dissemination, sharing and socializing features. With those features the information is becoming more democratised, and the world is getting smaller than ever. Many participants can take part in the same site at the same time sharing their ideas and creativity in an eternal time zone of digital network links (e-linkage) and simulation of the real environment/space in virtualcyberspace of virtuality and visuality.

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That network culture involves the geographical limitlessness of the cyberspace and the timelessness of the virtual universe with the transformation of the excessive rate of digital data (text, image, sound) functioning like electronic highway.

1. Technology-Based Art Strategies and New Art Forms

Technology-based multimedia art strategies have changed not only the conventional context of our perception but also the pursuits of praxis from production to process, transformation to transmission, consumption to sharing, exhibition to dissemination, observation to participation, style to strategy, place to cyberspace, reality to virtuality, and the highways to cyber networks.

Since the beginning of humanity, art has always been a very prominent communication medium for people by means of aesthetic experience shared by the interaction among artists, creations, and viewers. However, in the conventional praxis of art making and creation process, the tools or devices are used or manipulated by an artist while the viewer is only a passive receiver. With the emergence of advanced information technologies, the art execution has become a mutual interaction between the artist and the viewer with the possibility of collaborative and interactive input from both sides implementing the collective creation as a simulation of a global community.

The interaction among people in the virtual environment and time has resulted in the merging of poststructuralist strategies, which have led to the emergence of cross-inter- and multi-disciplinary activities such as "Collaboration, Participation, Interaction, Intervention, Hacking, Tactical Media" interwoven with multimedia strategies, theories, and new art forms (Tribe and Jana, 2007, pp. 12-20).

These interactive projects have focussed on human relations and enabled the simultaneous participation of many individuals. Technical features of various information media and telecommunication tools have been utilized to create an event that is rather closely related to the aesthetic and creative aspects of the tools and systems than materialistic dimensions of an object. These technology-based creative projects are mostly interactive events, designed to provide a creative experience shared in transmission technology while providing cyber network culture in cyberspace. Hence, new relationships discovered by people without any boundaries are thought to belong to the context of telecommunications art (Galloway and Rabinowitz, 1977).

2. ‘The Space without Geographical Boundaries’: Virtual Space

Kit Galloway and Sherrie Rabinowitz, the most prominent communication artists, have created technology-related telecollaborative events that are pioneering outputs in the history of telecommunications aesthetics. Starting with their meeting in 1975, Kit Galloway and Sherrie Rabinowitz developed a series of projects under a general topic “Aesthetic Research in Telecommunications” thanks to their interest in developing new and alternative structures for video as an interactive communication form from 1975 through 1977 (Durland, 1987, p.53). In his article Virtual Space: The Electronic Environments of Mobile Image, Gene Youngblood states that Kit Galloway and Sherrie Rabinowitz first introduced the concept of ‘Virtual Space’ between video space and real space in 1970s. They were collaborating in ‘Mobile Image’ while purposing a series of works that address the "emerging environment" of electronic telecommunications” (Youngblood, 1986, p.11).

The projects of Kit Galloway and Sherrie Rabinowitzes established new installation, demonstration, and performances strategies in Telecommunication Aesthetics to unite the peoples of the world in creative communication. They have met this challenge through a series of projects listed below as Telecollaborative Art Projects (Durland, 1987, p.58):

SATELLITE ARTS PROJECT '77 - “A performance space with no geographic boundaries”, ‘a composite-image as place”performing dance in virtual space’.

HOLE-IN-SPACE – 1980 – “invisible sculpture”, “Public Communication Sculpture”, “encountering in image space”.

ART-COM – 1982 “living in a composite-image space’, ‘life in virtual space”

ELECTRONIC CAFE’84 – “a multimedia communication network event”; networking the shared creative experience”
2.1 Performing Dance in a Composite Image Place

In 1977, they purposed three experiments exploring the aesthetics of satellite communications as Satellite Arts Project to NASA. Those satellite experiments were purposed as: I-Light Transition, II- Trans-Continental Choreography, and III - 3D Transport Exhibition(Galloway and Rabinowitz, 1977).

In 1977, they produced “Satellite Arts Project '77’-‘space without geographical boundaries’, establishing composite reality screens (as shown in Figure 1). They called ‘image as place,’ the world’s first interactive satellite dance performance between the two coasts the US (Paul, 2008, p.21).

![Figure 1: SATELLITE ARTS PROJECT '77, "A Space With No Geographical Boundaries" © Galloway & Rabinowitz. Retrieved from Art and Electronic Media](http://www.aether9.org/hist/sat_arts_project2.jpg) accessed 01.01.2018.

The project emerged as the issues of “Telecollaborative Arts” and “Virtual Place” that were not really addressed before. This project was carried out with the support of the Community Publishing Company and the National Art Fund in collaboration with Mobilus Dance Troupe at the Educational Television Centre in Melno Park, California, and NASA's Goddard Space Flight Centre in Maryland. That was the first project in which the dancers from the Pacific and Atlantic coasts of the US danced with each other (as shown in Figure 2)by using satellites to electronically combine people from different locations into the same real-time virtual space(Galloway and Rabinowitz, 1992, pp.255-263).

According to Gene Youngblood, Kit and Sherrie create context rather than content. An artist can enter the context they create and make content, which will now be empowered and revitalized in a way that it could never have been empowered without the context that these people set up. (Durland, 1987, p.53).
The main idea of the "satellite art project" was to create and develop new contexts, environments and criteria for an aesthetic / artistic research in "Telecollaborative Arts" by using performance / performing arts as a search for possibilities, limitations or technologies (Galloway and Rabinowitz, 1977).

The work enabled those performance artists to dance together (as shown in Figure 3) in the same live broadcast and watch themselves simultaneously in the same place but in different geographies 3000 miles apart. By seeing themselves, the dancers could stand next to each other, talk to each other, and act together. This would be a performance area without any geographical boundaries (Galloway and Rabinowitz, 1977).

Galloway and Rabinowitz focused on transmission delays over long distances where satellites were the only means of transmitting live TV-quality video across the ocean on a global scale. They attempted to define how these new ways of being around the world can really be supported and what methods they can create by performing a series of Telecollaborative dance, performance, and music projects (Youngblood, 1986, p.11).

Figure 3. Satellite Art Project’77, Virtual Venue of Compound Space and Dance View. The image of Mitsu in Maryland - with the white hat - was intermingling with his Californian dance friends, which allowed them to dance together in the same live image. © Galloway & Rabinowitz. Retrieved from http://www.ecafe.com/museum/history/sa_1.jpg accessed 01.01.2018.
2.2 Converging the Distance via Satellites

_Hole-in-Space_ was a Public Communication Sculpture performance that was carried out on November 11, 13 and 14, 1980 by Galloway and Rabinowitz. This was a two-way satellite transmission for two hours between New York and Los Angeles. The work seemed to be magical due to the interactive communication they had created. People walking past the Lincoln Centre for Performing Arts in New York and the Broadway Shopping Centre in Century City, Los Angeles had an amazing encounter with each other. Suddenly, life-size human images appeared on the screens in the two opposite coasts. The people could see, hear and speak to each other as if they were on the same pavement. Video cameras and rear-projection screens were placed in showcases in both cities (as shown in Figure 4), so that the public could communicate with each other through images and sound. No previous announcements were made and no notifications or posters or sponsor logos were placed in the neighbourhoods. There was no monitor for people to watch themselves, which would harm the nature of this sudden encounter (Durland, 1987, p.56).


The Hole-in-Space was easily spotted by those who suddenly encountered images on the screen in the street. The crowd entering in this time and space corridor could communicate with the other group in the other city, but neither group could see themselves (Popper, 1997, pp. 136-37). The project, which was also considered as a ‘public communication sculpture,’ was the precursor of net art (Wands, 2007, p.20). The Hole-in-Space, the mother of all video chats, showed that size and bandwidth matter in communicating presence and emotion (Center for Urban Intervention Research).

2.3 Experiencing in Composite Image Space

Another telecollaborative project via satellite performed by Galloway and Rabinowitz is ART-COM, a multi-disciplinary laboratory work conducted in 1982. This was a kind of research project to extend the possibilities of the “life in virtual space” from the image place to the virtual performance space (Younghblood, 1986, pp.9-20).

In this work, graduate students at Loyola Marymount University in Los Angeles used performance as a research method to interpret experiences they "experience" in composite image space (as shown in Figure 5). They also developed theatre sketches that imitate real-life situations to do everyday tasks in collaboration and solve problems together with friends from somewhere on the campus (Durland, 1987, p.56).

![Figure 5. ART-COM (Aesthetic Research In Telecommunications) 1982, Loyola Marymount University, Los Angeles,© Galloway & Rabinowitz. Retrieved from www.ecafe.com<http://www.ecafe.com/museum/history/artcom_2.jpg> accessed 01.05.2018.](http://www.ecafe.com/museum/history/artcom_2.jpg)

2.4 Networking the Shared Creative Experience
The other milestone of the collaborative telecommunicative art strategies was Electronic Cafe'84, one of the several seminal events of the 80’s heralding today’s internet cafes, cyber communication linkages, and virtual social networks sites (Galloway & Rabinowitz, 1992, pp.255-263).

In 1983, Kit Galloway and Sherrie Rabinowitz came up with the idea of a multimedia communication network event; which was commissioned for the Olympic Arts Festival in 1984 by the Los Angeles Contemporary Arts Museum (Wands, 2007, p. 27). The electronic café network proposed by the artists would be an important inquiry environment for the role of technology in the context of a new cultural interaction and the promotion of artistic collaboration and dialogue as antidotes to the Orwellian prophecy of 1984, thus freeing the world from Orwellian prophecy (Galloway & Rabinowitz, 1984). Their aim was to merge culturally diverse creative communities in the telecollaborative multi-media network by using telecommunication technologies. Focusing primarily on integration issue, the study would be a reproducible social model that integrates society, art, technology, and intercultural communication, and would provide a new and powerful context for cultural sharing and interaction (Youngblood, 1986). Galloway and Rabinowitz wanted to use L.A. as a model for a global cultural society (See the documentary of work 1977 on the artists ‘Web sites, “Electronic café International”, at http://www.ecafe.com). The Electronic Café Network would integrate community, art, technology, multimedia telecommunications, and cross-cultural communications. The technical mission was to define the basic requirements to facilitate a "creative conversation" between people even if they did not speak the same language (Durland, 1987, p.58).

It is important to quote their e-cafe manifesto to understand their challenge about this sensational attempt. In their e-cafe manifesto, they declare that ‘art has to be used as a catalyst for life. If technology would be used without any creative insights, it could destroy the future of humanity'.

For them, this project was a kind of ‘challenge for helping to rescue our future from the possible risks of technology’ (Galloway & Rabinowitz, 1984). “If the boundaries between art and life dissolve, it will be the result of artists migrating towards a new order of artmaking, abandoning the conventional standards and practices and

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becoming 'new practitioners' or systems integrators, who produce situations, contexts, and permanent environments or utilities". http://telematic.walkerart.org/timeline/timeline_ecafe.html

In an interview with *High Performance*, Kit Galloway talked about their aim and role as telecommunication artists: “We focus on the living event, not being too concerned with whether it's artlike or not. We don't produce artifacts, we produce living events that take place over a period of time, to facilitate a quality of human to human interaction” (Durland, 1987, p.58.) Kit Galloway and Sherrie Rabinowitz believed that their attempt was very instigating. Galloway said “restaurant owners gave up table space—table space, in Los Angeles, during the Olympics!—because they wanted to ‘do something for the community’. If this is instigation, please, may we have more?”(InfoWorld, September 10, 1984). http://www.medienkunstnetz.de/works/electronic-cafe-project/images/2/

The work was set up with the computer-based hybrid communication systems such as keyword searchable texts, pictorial databases, video conferencing, audio conferencing, real-time collaborative remote writing / drawing devices, and high resolution printers for visual output of “community memories” to be hanged on the wall for public viewing. These systems allowed for the co-writing of additional descriptions on video images and the display and sounding of any space or all of them in one space (Youngblood, 1986, pp.9-20).

The network was linked in four different restaurants in different parts of Los Angeles and the Los Angeles Museum of Contemporary Art for seven weeks during the 1984 Olympic Arts Festival. People at these five different locations exchanged drawings, photos, poems, and messages with the cafe goers at other locations via the video/computer/robot equipment setups. (Paul, 2008, p.21)


Electronic Cafe '84 Network covers: The Gumbo House, Crenshaw, CA, (South Central LA), Ana Maria Restaurant, (East LA), The 8th Street Restaurant, (Korea Town) LA, Gunter’s Cafe, (beach area) Venice, CA, The Museum of Contemporary Arts (MOCA), Downtown, LA (Galloway & Rabinowitz, 1992, pp.255-263). The Slow Scan TV set, electronic text signs, computer stations, printers, video cameras, screens, and sign boards were placed in each of the four locations and in the museum.

Cafe attendants performing in front of the cameras by drawing or writing poetry, shared / exchanged their drawings, photographs, poems and messages with other people through the installed video, information and telecommunication devices in the other four restaurants and museum (Galloway & Rabinowitz, 1992, pp.255-263).
The project created an art gallery without walls for social participation and communication (Youngblood, 1986, pp.9-20).

Cafés were the commercial places where the city’s flâneurs gathered since the 19th century. Therefore, Electronic Café by Kit Galloway and Sherrie Rabinowitz is very important in terms of multimedia, networks, and new communication strategies in the context of cultural theory, dialogue, interaction, participation, public art communication networks that bring the multi-dimensional information elements into a cafe environment.

Conclusion:

Today, four decades after their initial attempts, Satellite Art Projects are considered as the pioneering outputs of virtual culture, environment, time, and space through the Cyber Networks. In these works, the spectator could trace the planet through the satellite connections, which he could not have imagined how it could be seen from different dimension before.

Galloway and Rabinowitz believed that utilizing multimedia telecommunication technologies as new art forms and communication strategies would save the humanity from being captured in geographical boundaries while transforming our knowledge and ideas into creative products and innovative challenges for current and future benefit. Thus, Telecollaborative Art Projects of Kit Galloway and Sherrie Rabinowitz have laid an inspiring path for new trajectories to be discovered during the human odyssey of technology-related arts and communication culture. Their projects have also nourished new installation, demonstration, and performance strategies linking the virtuality/ visuality and simulation/ reality issues to rapid communication of ideas, experience, and images among the intellectually connected humans and machines with a view to create social and political impact.

References


