

# **Collaborative Research Networks and Grids for Dance Research in Japan**

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## **Abstract**

This paper is about the process of establishing a dance research network in Japan. In my report and presentation I will first share with you some background information.

In the West, there were several networked communities for dance research. However, none were established in Japan. For the last three years, I have worked to construct an interdisciplinary and networked community for dance research in Japan.

The Japanese Society for Dance Research was launched in 1975. However, because the Japanese education system viewed dance as either part of physical education or art, its autonomy in terms of a network was not considered.

As a solution, in 2000 I established an interdisciplinary dance research network in Japan that provided a website and discussion group. On the website there are archives of information including URLs, CFPs, and performance calendars. Since its start in 2000, I

have been managing the Japanese Society for Dance Research, as webmaster. I also established a digital environment for Japanese dance professionals and dance researchers, and have introduced digital products such as LabanWriter, as developed in Ohio University. In addition, I organized the Association for Dance and Performance Telematics, which helped Dance and Technologies Branch at Japanese Society of Dance Research. There will be three grids of research networks; Tokyo Area, Kyoto Area, and Tohoku Area, in 2004. The outcomes of these grids will appear next year, 2004, as Telematic Projects.

## **1. Introduction**

The Field, “Dance Research” was established from many fields. In dance research, there are sociology, anthropology, physical education and so on. There are so many disciplines and they are interconnected with each other. In addition, there are many professions in the field of dance research. These many professions lie in the same field, “Dance Research”. This inter-relationship reminds me of the following two examples. Rose Lee Goldberg, known for her study on “performance art”, said the field of performance consists of music, dance and art. These fields are interconnected. Ted Nelson proposed the concept, “Hypertext”. In his childhood, he played with water. By moving his hand in water, he felt the worlds interconnect. That was the beginning of concept, “Hypertext”.

In 95, Carl Wolz indicated the necessity of cross-cultural research networks and estimated computer-based research network in the field of dance research. (Wolz 1995). As Wolz indicated, we need to build up research grids in the field of dance research.

For years, there have not been any interdisciplinary networks in the field of dance research in Japan. In Western countries, there are several research communities on the Internet in this field. I had been constructing interdisciplinary networks. In 2000, I proposed an interdisciplinary research network as solution to the many sub-divisions in dance research, which is made from a website and a discussion group.

## **2. Digital Culture in Japan and Japanese Dance Research**

Japan lags behind other countries in Asia in the development of digital culture through networks. Singapore, Hong Kong, and Korea all have better environments. Why this should be so is not clear, since in other ways, Japan is a leader among Asian nations in digital culture. See, for example: "Cyber Atlas Internet How many online": ([http://www.nua.ie/surveys/how\\_many\\_online/index.html](http://www.nua.ie/surveys/how_many_online/index.html)).

In the Japanese digital culture, users like to use personal devices, such as cellular phones and Personal Digital Assistant (PDA). Japanese popular culture, such as Japanese animation, has a strong influence on other Asian countries. In the field of animation, computer graphics support the animation and they are very influential among Asian countries.

In the field of Dance Research, however, artists and researchers have not been interested in digital technologies for years and they did not connect with each other on the Internet until the beginning of this century. In contrast, in the field of music, artists and researchers have

been connected for years and have been developing computer music throughout that period of time. In digital art, the fields of computer music and computer graphics have likewise had a networked community for years in Japan, although also without a widespread network of associations.

While music is a clearly defined field and has had a four-hundred year history, dance is harder to define. While musicians have developed standardized notation for putting music into writing, dance has not met that challenge effectively. The attempts are notable. For example, Rudolf von Laban succeeded in inventing dance notation. But it is only recently, at the end of last century, that Laban Notation and the field, Notation Engineering, got connected to each other. It was only then that both fields of computer science and dance research were able to be reconciled.

These days, video dance is developing among young dancers. But the topic, "Dance and Technologies", is hard to develop. The technologies for dance were mostly imported from Western countries. Some famous video game companies, like Nintendo and SEGA, had original technologies in this field.

### **3. Constructing interdisciplinary network: Dance Mailing List/Japan-DanceQuest**

Since 2000, I have been developing and constructing a network as a volunteer, and since the establishment of an interdisciplinary network, other similar websites have also appeared. Moderating a network is not unlike editing a magazine. Moderations of these

websites, either paid or voluntary have a simple form-step process to follow:

1. Sending advertising messages
2. Making hyperlinks
3. Archiving information
4. Assuring free access

I was able to carry out these steps, checking the work of many fields with the support of search engines. With the support of free mail service, this work has been organized. In the 90's it was very difficult to manage computer systems for end-users. At the end of the 90's with the support of an advertising agency, some free services appeared. With this system, users can manage the discussion groups easily. Then I produced one webpage with very simple interface as a starting point. The URL is in the following.

Dance Mailing List/Japan DanceQuest: <http://web.sfc.keio.ac.jp/~yukihiko/danceml.html>  
(in Japanese).

#### **4. Data from the interdisciplinary network**

Now in the age of digital media, quantitative analysis of digital media is difficult and one important key to analyzing digital media is the traffic of messages. There are over 300 users in the interdisciplinary network. The users of the network are spread very wide, from Sado island (Japan's westernmost island) to the Northern Area. From outside Japan, users access the network from the United States, the United Kingdom, Germany, Hong Kong and Malaysia. Some dancers check the network to follow their company's tour overseas.

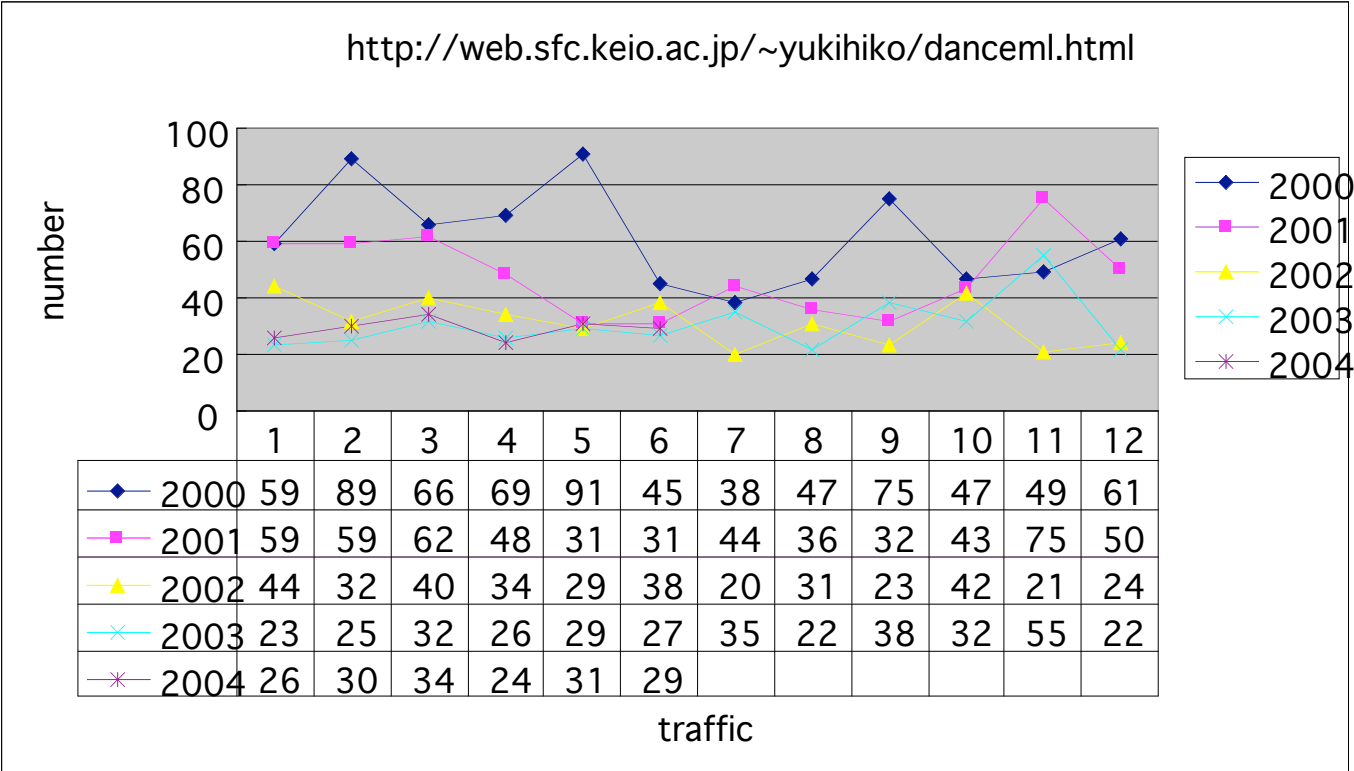


Table.1

The users of the interdisciplinary network come from different professions, especially dancers themselves, including star dancers, researchers, organizers and fans.

Table 1 below shows the activity on the network.

Traffic averages between two mails per day and one mail every other day. In discussion, each message elicits, on average, two to three replies. About 60% of all messages are announcements of workshops, lectures, and performances. Most of the professional dancers in this group belong to the field of contemporary dance, and sharing different information among different professions is important.

As a moderator, it is important to share and match information with the user's interests. A volunteer team was organized and began to support this network. The team tried to solve the problems in interdisciplinary networks. As one solution, the team produced Graphical User Interface (GUI) of the network. I was able to work full-time for the network because of their support.

"Volunteers" are essential to network communities. The origin of these ideas came from ARPAnet, the forerunner of the Internet, a legend of networking in last century. Now, Linux and Freeware are effective. And, as the form of organization, NPO and NGO are important.

In Dec 2001, the team set up that GUI interface to interdisciplinary network. Before the team set up that GUI interface to this network, the traffic was large. After setting GUI interface, the traffic became not so large, because many users found answers when they accessed GUI interface. Before Dec 2001, users got more than two mails a day. With GUI

Interface, user inquiries were halved.

Now there are over 300 users in this network. In addition, more users can access the information freely as they like from GUI Interface. There is about 100 hits a day. The log of this network provides one of the archives in the Japanese dance world. It is significant that information has been archived for more than three years now.

## **5. Benefits of an interdisciplinary network**

Since establishing this widespread network in the Japanese dance world, everyone who has an interest in dance has been able to access the website freely. Some editors and their publishers hope how to use and print information on network. Some editors hope to publish annual reports of the interdisciplinary network.

Other positive outcomes include the Martha Graham case and the petition for a grant for the Star Dancers Ballet. When the Martha Graham Contemporary Dance company was prevented from performing in March 2000, the Graham principal, Miki Orihara, and I released a petition on the Internet. The trouble occurred because of the problem of ownership of copyright of Graham's works. If the company could not hold the copyrights of Graham's works, the company could not dance Graham's works and Graham's work would be lost. At that time, there were not any official organizations or universities which supported the right of Graham to perform her own creations and to use the Graham technique in their teaching. There are several magazines and newspapers which came to Graham's aid in Western countries. But in Japan, only one newspaper wrote a very short



article and my support on the Internet was the single case of support.

The Ballet Dancer, Yoko Inomata, who dances in Star Dancers Ballet Company, wrote a petition for funding support for Star Dancers Ballet. Star Dancers Ballet Company took pains to fund-raise. Ms. Inomata proposed to write a petition for that. This would be the first case in Japan.

These two petitions had an impact on the Japanese dance world. Dancers began to write petitions and began to express themselves to solve the problem. In Japan, there is no dancers' union which we can inspect like the one in New York City. These occurrences demonstrate that dancers are now beginning to express their own rights and ideas on the Internet. Influenced in a large part by this new interest, the Japan Council of Performers' Organization began to start the following project.

A reader of the text of this interdisciplinary network, asked me to become involved in a mission, – “mission collaboration”. There is little information on protecting a performer's body, for example. In the network, there is a link list and information on dance medicine. They showed interest in my work and we have started to work to establish a real network and a digital environment to help prevent performers' bodily injury. In addition, the research and artist community created a data format in this field. It was necessary to arrange a data format for the human body. Since releasing a ‘Call For Participation’, researchers in many fields have gathered and begun to collaborate. Some of them are working in Robot Studies and are building a robot for the purposes of dance research.

From the point of view of Hypertext, we can share much information in many fields. Even in dance research, from text to motion captured body image, there are many kinds of information under many disciplines in the field of Dance Research. The original Hypertext project , “Project Xanadu”, can be found at: <http://www.xanadu.net/>.

In the tradition of Rudolf von Laban, dancers are known as “artist researchers.” We integrate many fields and knowledge in each field by using digital environments.

## **6. Japanese Society for Dance Research and research grids in Japan**

While constructing an interdisciplinary network, I began to work as administrator for the Japanese Society for Dance Research, and at that time, Carl Wolz asked me to work for the WDA Asia Pacific Research Documentation Network as administrator. I applied my experience of constructing interdisciplinary network when I designed the website for the Japanese Society for Dance Research. Then, it was not so difficult to design the website.

(Japanese Society for Dance Research (JSDR) : <http://www.danceresearch.ac/>).

The difficult point in constructing networks comes at the beginning. It takes time to learn the life style and communication style of a networked-community. But now, this network works very well. It was successful in producing the image archive “The second Japan-Korea International Dance Research Symposium” in JSDR’s website.

Last year, the concept, Research Grid was proposed by Miki Wakamatsu. By this proposal, Japanese Dance World started to construct Research Grids in Japan. There are 3 research grids in Japan: Tokyo Area, Kansai Area by Ritsumeikan University and Tohoku area by Warabi-za. Ritsumeikan University has the best motion capture system in Japan. Warabi-za is known as their traditional folk dance. They are one of the few companies which have motion capture system in Japan. I am working as the leader of Tokyo Area. (Association for Dance Performance Telematics Tokyo Section:

<http://web.sfc.keio.ac.jp/~yukihiko/adaptjp.html> )

These days, the concept. Grid Computing is getting popular. There are 4 kinds of Grids. Computational Grid , Data Grid , Business Grid and Web service. Of these concepts, Data Grid will be an important keyword. By integrating digital contents on the Internet, we will search for the resources like meta-databases in the near future. Web service is part of Grid computing. But Grid computing is not Web Services. For grid computing, we have to find our common research mission. SETI@HOME is wide-known project which is based on grid computing. They have a common research mission to find SETI by using computational grid. It will be important for us to construct an original mission among us. In addition, this process will take the form of industries-universities cooperation.

As other networks, Japan Contemporary Dance Network is very common in the Japanese Dance World. In Japan, about 2001, networking is popular. JCDN is the first producers' network. Mainly they produce dance performance to stage Butoh, and Japanese

contemporary dance. As researcher and dancers' network, Dance forum was established last year. They are also just beginning. On the other hand, Contemporary Dance Association of Japan has their own network. Mainly, their stage is for modern dance. Traditionally, they have their own network and research division. If these networks are separated and do not collaborate together, networks come to nothing. So I feel that each network should collaborate together.

In recent years, even dance researchers have been changing their research methods. Researchers from humanities and social sciences, used to take form of project base. They collaborate together in same project and create contents. Researchers from information science work in a network-based research style, and this style has been united for these years. By their activity, a new research style will be created. Now, one researcher can have at least one archive. Then, researchers should work in parallel fields. For example, dance researcher in Cultural Studies, should understand the field of Documentation and Information Technologies.

For activity on digital networks, "network governance" is the first key concept. They mainly take ideas from network industries. Open Source is one of famous way to produce products. There is a good example. Japanese robots are popular in western countries. OpenPINO (<http://www.openpino.org/>) is the project which adapted this idea to developing humanoid. PINO's flanked robot, POSY danced with a Japanese top ballet dancer. Further more, voluntary action will be next key to develop projects. As moderator, I receive many petitions. Some of them are cases in Dance World. These petitions call for voluntary action.

We should find the best idea for everyone as voluntary action. If we make a more powerful research grid, this will be an important concept for researchers and artists.

The second keyword is “studies on common basis”. Artists and researchers should change their understandings of network, archives, and databases. They are not only technological subjects. They are a common basis of our activity. In such environment, artists and researchers can develop studies on a common basis. On one hand, artists should have their own study. On the other hand, they should work with these studies on a ‘common’ basis.

The third keyword is “coordination”. With the support of digital technologies, we need to coordinate ideas and people each other in different fields. Dance Research is a number of interdisciplinary fields. They are interconnected each other like Hypertext. We should coordinate ideas and people in the same grids and networks.

## **7. Conclusion**

In the 90’s there were a number of classic works in the field of dance and technologies. The few outcomes, as examples, were the works by Scott Fisher and William Forsythe. But we need to produce more outcomes and keep constructing networks. In short, as I changed the Japanese dance world by working three years as a volunteer, we were able to establish an interdisciplinary collaborative research network by seeking out transcultural and transnational solutions in ideas and methods. Every environment in each country is different from each other. Such work must expand and grow.

In conclusion, these three concepts are important to create research grids in Dance World. By the support of middle-ware for grid computing, it will be developed. In this field, the process is not idealistic. We need to construct networks and grids from our experience. If we propose the projects across nations, networks and grids will be a powerful basis. If we exchange ideas and information on this new field, it will develop the dance world.

## References

WOLZ,C. 1995, 'Dance at the Hong Kong Academy for Performing Arts, and Some Thoughts on International Networking', in Solomon R. & Solomon J.,(eds) *"East Meets West in Dance Voices in the Cross-Cultural Dialogue"* , Harwood academic publishers GmbH. p.99-117.)

"Cyber Atlas Internet How many online"

[http://www.nua.ie/surveys/how\\_many\\_online/index.html](http://www.nua.ie/surveys/how_many_online/index.html)

Dance Mailing List Japan: <http://web.sfc.keio.ac.jp/~yukihiko/danceml.html>

Japanese Society for Dance Research: <http://www.danceresearch.ac/>

Project Xanadu: <http://www.xanadu.net/>

Association for Dance Performance Telematics Tokyo Section:

<http://web.sfc.keio.ac.jp/~yukihiko/adaptjp.html>

Yasuda, Yuki. 2001 *JISSEN Network Bunseki (Practical Social Network Analysis)*. Tokyo: Shinyo-sha.

OpenPINO <http://www.openpino.org/>