

HIGH BAND-WIDTH NETWORKS

ARTISTIC CULTURAL AND EDUCATIONAL

USES AND INNOVATIONS

MEETING AT SOUILLAC: EVOLUTIONS

The confrontation of the technical state of the art and the committal to developing the network by the different countries represented at Souillac III brought to light a variety of developmental strategies adapted to equally various contexts, including forceful ideas, that could be universally applicable. The richness and quality shown demonstrated how fundamentally important the artist's involvement is in the exploration and future development of interactive high bandwidth networks. This in turn served to underline the important work of research and syntheses carried out in Souillac over the past few years.

NETWORKS & ART: DEFINITIONS & CONCEPTS

Basically, it became clear during the week's session that all agree that in defining network art one inevitably comes to define the network itself as an art form. In other words, according to the group at Souillac, the network becomes interesting in an artistic sense when the artist not only masters network skills but also the concept of interactivity. The network itself was not perceived as a tool such as an electrical network only conducting energy. It was deemed necessary to understand that there isn't on one side artistic content and on the other a technical network, but rather a dynamic relationship between content and container, resulting not in the creation of fixed objects but rather of moving, personal and collective, spaces. The incompatibility between an artist's ego - I exhibit (myself) - and a network mentality - with no center - is quite obvious: art is not a question of content only. From this emerges the network approach which adheres to a back-and-forth methodology, between artistic desire and technological limitations, well before one or the other totally materializes.

CONTENTS & CONDITIONS FOR NETWORK ACCESS

With few exceptions, most notably in North America and in particular Canada, high band-width networks are not yet available to artists. One or more factors, often linked, are the cause: a technology insufficiently developed within the country - as in Spain - or excessive connection rates - as in the Netherlands - or political decisions which do not go far enough to satisfy the needs of the scientific research and educational communities, as in Great Britain. Faced with today's limited access, artists and their research structures, production houses or educational institutions, have adopted attitudes that promote activities using other's success as a reference point on the local, state, and international level. Hence the interest in the Souillac meetings.

The spectrum of activities ranges from 'in the field pragmatism' providing demonstrated-value productions using current technology - the choice taken by the MIDE in Spain - to a high level political approach - as developed in France and finally the anticipatory example - as in the case of the V2 laboratory in the Netherlands - contributing to constructive and political strategies with national and European programs even though high band-width access is yet not available. Artists and cultural mediators are systematically required, time and again during their activities, to educate the political and industrial decision-makers. It is necessary to have them understand the cultural and innovative import of the artist's presence throughout network development. Also to remind them that artistic innovation is not focused on reproducing or adapting the existing forms to high band-width networking but in creating new content and forms of expression. It is important to recognize the specificity of these networks not only for those current existent analogies inherent in their all encompassing nature but also their unlimited possibilities.

THE LOGICAL DEVELOPMENT OF NETWORKS:

CONTRADICTIONS AND ALARM

The necessity to inform and convince users upstream is much more crucial today than that which network operators with their technical limitations are able to offer. An offer which is incompatible to artistic aims- whether via cable TV, telephone lines equipped with ADSL, radio or satellite connections- because rates remain typically asymmetrical. They greatly favor data retrieval to sending. Technical limitations are often compounded by regulatory restrictions on the quantity of data a user can send to avoid network saturation on networks with low capacities. Capacities that reflect insufficient budgets and consequently favor diffusion over the symmetry artists require to have an interactive creative forum.

The Souillac attendees referred to the diffusion logic as the 'broadcast logic' inferring that television's operating system functioned as the archetypical model. The user of a disymmetrical network is offered a choice of contents with an interactivity approximating improved zapping. The question here is not that content interactivity favoring inventive expression and artistic creation would go beyond the consumer logic denounced by the Souillac working group.

Some advocated putting a stop to the development of this 'broadcast logic' but their position was judged lacking a rationale and in addition didn't correspond to the diversity required for network operations and utilization.

However, the recent takeover of the american giant TIME WARNER (films, TV programs and content) by the other american Goliath AOL(access provider to the Web) demonstrated the power of the TV model and thus the 'broadcast logic' adhered to buy the latter. Here the danger of any other form of logic disappearing from the network is quite clear and underlines the motivating factor behind it: short term monetary gain. The consequences would be to marginalize artistic activities on the Net in much the same way as what happened to television. The Souillac meeting called for vigilance and sustained pressure on the decision-makers of the network operators with an end to preserving and developing a primary platform of exchanges between users: equal potentials for transmission whether upstream or downstream with regards to rates.

MUTATIONS WHICH QUESTION ART

However, artistic and cultural activities on Internet cannot deny the very nature of the Web, its non-point to non-point character(at its conception the Web was neither telephone nor video-conference). Today's reality will see more and more users with the arrival of wide band-width connections and private virtual networks guaranteeing fixed and even higher capacities for transmission. Regardless of these developments the Web must conserve its non-local nature. This idea is especially fertile from an artistic point of view and could catalyze a popularization of today's tools, TV included, well beyond traditional uses because network logic will be seen as the reference model. The group assembled at Souillac emphasized this while admitting to its contradictions with the broadcast logic and the inherent need for its expansion not as a simple evolution of current technology but a true mutation. The Studio d'Art Contemporain Fresnoy was mentioned as an example of this contradictory phenomenon.

This emphasizes a reality widely encountered by the artistic community at large: the absence on the Web of a concrete approach and culture; a fortiori, the need to speculate. In fact, one of the questions raised at Souillac remain unanswered: What is, where is, and to what point do we find THE PLACE of experimentation on the Web? Is the aim to go to the end of the activity or project? Does the natural orientation of the Web lead to or encourage artistic infringement? Is it possible to use the Web artistically and, a fortiori, have appropriation and infringement of art without the current popularization of Internet? If not, does the Web operate as a bestower of technical and social privileges? So many questions left unanswered due to the lack of objectivity and research on these subjects.

EXAMPLES OF STRATEGIES AND PROPOSED ACTIVITIES

Yet steps are being taken to work on developing this transitory context. The V2 lab in Holland and the Canadian SAT lab have demonstrated a well-founded strategy of shared network projects, mixing policy and how-to activities, though the latter was limited to specific skills and competencies. This type of parallel program was highly esteemed and recommended by the group at Souillac.

Wide band-width access is more often reserved for educational networks that are separate from self-managed artistic centers or private structures. Benefiting from state or international support these academic networks act as launching pads for new research and technological innovation with extremely cost effective results. Artistic organizations who are able to connect to these networks- in spite of their small size- benefit from reduced rates thanks to a cost-sharing structure. Those who lack access to this resource have two other possibilities: create partnerships in research programs or contract with public or educational organizations- as with the V2 lab- or be recognized as an indispensable element to the network- as with the exemplary strategy of SAT in Canada.

SAT was the first from the Souillac group to successfully implement a strategy whereby it and its research was recognized by the official Canadian body of educational networks, the CANARIE, and obtained the exclusive status of research organizations: "Center for Connections and Transfer". In return it must supply artistic content and receptacles(e.g. finished objects and procedures) and ideas for the exploitation of wide bandwidth networks. These projects of cultural information and technological communication have only recently been initiated but already SAT finds itself managing an art-industry linking department, an international connections office while operating an artistic Web address. It's not difficult under these conditions to become an artist's support center or producer. SAT also plays a channeling role vis

a vis self-managed canadian art centers organizing collaborative meetings with CANARIE. In addition it is developing support partners within the university. Applying this strategy further SAT has a project to incorporate actors from industry within its structure by offering an SAT residency to be paid for by private research funds. This is a particularly innovative initiative and reverses the classic art-industry relationship normally found within the research community. Industry will benefit from a long term point of view and their engineers given a chance to examine network perspectives and directions.

Based entirely on relevant operations for the private sector the V2 lab, like its counterparts, will not have dutch wide band-width access before at least a year and a half. Private centers have grouped into the Virtual Platform in an attempt to eliminate inter-competition and solidify shared platforms. The V2 lab itself has a two-pronged strategy. On the one hand, it delivers artists' and IT developers' skills and competencies to the core of European research programs concerned with wide band-width exploitation. This is done on local or national levels without taxing its own resources(creation of contents, scripts, and software programs). This positioning is very astute in providing increased financial backing for their expertise on the ever-expanding Web. On the other hand, the V2 positions itself as an artistic actor in development by implementing in partnership with the 2KM(Germany), Ars Electronic(Austria), and C3(Hungary) a mutual workshop based on available network technologies producing exhibitions and other events. In spite of the technical limitations and procedures precluding authentic means of artistic interaction they are able to find an in play forum for potential development. For example, the V2 lab is developing the means to manage audio-visual data and hence a network(multicast) not reserved to supervisors and other administrators but the end user him/herself: thus a regulatory tool becomes an interactive one.

Openly opportunistic, this strategy is seen as especially coherent since it emphasizes the two basic tenets of program language: to understand and to do. This approach was debated at Souillac in elaborating on the relationships between artists and engineers and the parallels found in programming. This resulted in the group advising artists and their organisms to connect and affiliate with educational and production organizations of technology. Recognizing of course that artists aim in exploiting technological tools and their development was to access to a platform for experimentation and not vice versa. Nevertheless, the Souillac group agreed that any measure of success on any level remained a measure of the people involved.

Where-ever artists are found- in their own centers or as the MIDE laboratory in Spain which is financed by a university needing network development, profitability, and technical business-oriented correspondents- the voluntary strategy of ito do will have to establish an economic framework that ultimately will result in an artistic projects economy. The Theatre Multimedia of Bonn also faced this problem for other reasons. The local technical and industrial laboratories in the network sector showed indifference or disinterest in artistic experimentation, preferring to focus on a ifinished product strategy. Their offers or proposed partnerships were deemed inappropriate by the artistic community which led the Theatre Multi-media, thanks to tis public-financing, to rent out its services and structures. All the same, in a liberal economy a general unification of artists and their associates to mobilize for wide band-width access would be very difficult to carry out.

Another example of a remarkable initiative is found in France where artistic organisms ordinarily don't have access to the educational networks, RENATER, due to a policy oversight in the Ministries concerned. Follow the initiative of Don Foresta and Georges-Albert Kisfaludi, the national Ministry of Culture and the National Administration of RENATER were mobilized, a national agreement reached which was in turned transmitted to the local level with the creation

of voluntary strategies to develop wide bandwidth networks municipally and regionally. This resource should be available to French artistic organisms no later than 2002.

Faced with these differing situations, from one country to another, the working group at Souillac put forth a proposal to establish a strategic policy on the European level to gain recognition of the importance of art experimentation during wide band-width development and operation. While at the same time promoting local initiatives, activities, experiments, research and productions simultaneously. According to some, a major argument for a European perspective is based on an intercultural strategy, founded on wide band-width network cultural exchanges between the North and South. Other strategies envision an even larger scope of activities with the idea of collect-ware (collaborative work on the Web sharing the same space), Web games, educational and artistic events on-line. All this entails a huge demand for content of course. Yet today there are many artists and processes already invested in these without waiting for possible access to wide band-width networks. And this is only the embryonic stage of the entire process.

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September 2000

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