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Asuar Digital Analog Computer

COMDASUAR

In his book “La música electroacústica en Chile, 50 años” (The Electroacoustic Music in Chile – 50 years) Federico Schumacher dedicates one chapter to introduce, describe and analyze the Asuar Digital Analog Computer: COMDASUAR, a personal computer dedicated exclusively to musical purposes built from scratch by José Vicente Asuar in 1978 in Santiago de Chile. At the end of that chapter the author writes the following about the composer and engineer: “Hopefully these lines that we have written about everything done by him during more than thirty years of work in our electroacoustic music landscape, will pay a fair and perhaps forgotten tribute, to the person who has done more than anyone for electroacoustic music in Chile”.

José Vicente Asuar (1933) is a pioneer in his field; he was the first composer to build a studio for electronic music and sound processing in Chile in 1957. The construction of that laboratory gave him the opportunity to write his dissertation in order to get accreditation as Civil Engineer, and was also the origin of his activity as electroacoustic composer. His text “En el umbral de una nueva era para la música” (In the Threshold of a New Era for Music, 1959) is a foundational theoretical text considering the possible impact of new technologies in musical production. His composition “Variaciones Espectrales” (Spectral Variations, 1958) is considered by many as the first piece of electronic music played/performed in public in Chile, and probably the same is true for the whole of Latin America. Later on in his life, he won some prestigious composition prizes like the one in Bourges in 1975 for his work “Guararia Reparo” and the Dartmouth Arts Council Prize for his composition “Divertimento”. All along his career he was in contact with several important composers however Meyer-Eppler in Germany seems to be particularly important as well as Juan Amenábar in Chile.

His experience creating studios in Chile, Venezuela and Germany gave him mastery in the knowledge of sound studios and music labs. At the time he faced difficulties of starting the process of making a personal computer



Fig. 1: José Vicente Asuar composing with COMDASUAR, Santiago de Chile 1978.
Photo: Picture from the LP "Así habló el Computador" by José Vicente Asuar.

in a country in South America where no industry was ready to receive his technical research the critiques about his computer based compositions were in general quite positive. COMDASUAR was made with the idea of creating a tool to explore different possibilities of computer music, on the one hand there is a system to generate sound that was a mixture between a digital and analog process and on the other hand there is a system to create algorithmic musical pieces, called "heuristic software" in the words of Asuar himself.

There are many things that make his work unique, amongst other things there is the equilibrium between his role as technician, as composer and as writer; in every step of his career there are texts, albums and technical achievements that show the coherence and consistence of his production. By the time José Vicente Asuar built COMDASUAR he already had composed music using computers, for instance he worked at the beginning of the seventies with the PDP 8 computer.

COMDASUAR stands for "Computador Analógico Digital Asuar" that translates "Asuar Digital Analog Computer". This machine was conceived and assembled entirely by José Vicente Asuar, the CPU was an Intel 8080 processor, the sound was produced using 2 timers, each one with 3 voices, therefore COMDASUAR was polyphonic (6 voices). COMDASUAR's software was completely programmed in machine language; some of the software that Asuar coded and called "heuristic software" can be considered today as algorithmic composition software. Asuar produced one educative and artistic album using COMDASUAR, that album is entitled "Así habló el computador"

(Thus Spoke the Computer) he published a comprehensive report in 1980 about COMDASUAR in the journal “Revista Musical Chilena”.

Conclusion

Often when we hear the expression computer music we think in composers that have used the computer – with different needs, approaches, methodologies and/or techniques – to process sound, to do compositions, to prepare the scores etc. However the group of those composers who also were able to build – totally or in part – their own computer machines to produce their work is very small, the fact that José Vicente Asuar made the “Computador Analógico Digital Asuar” COMDASUAR in 1978 in Chile and used it to create different kind of compositions constitutes a unique artistic and technical process in Latin America.

I also want to point out three unique characteristics about COMDASUAR: its experimental character, the fact that COMDASUAR can be seen as a compendium of creative and inexpensive technical solutions, and the fact that the need to build such a machine is exactly in between technical and artistic domains.

Acknowledgments

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References

- Burbano, Andrés. Nieto, Ignacio. Interview with José Vicente Asuar. Santiago de Chile, February 2008.
- Dal Farra, Ricardo. Some Comments about Electroacoustic Music and Life in Latin America. Leonardo Music Journal. Cambridge. MIT Press.
- Schumacher, Federico. La música electroacústica en Chile, 50 años. <http://www.electroacusticaenchile.cl/>

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Absolutum Obsoletum

If It Works It's Out of Date

In 1970 at the beginning of Chilean socialist pacific revolution in the Allende's government, Fernando Flores, an engineer in charge of CORFO, the office which was in charge to manage the nationalized companies, knew the work of the cybernetician Stafford Beer on Management Cybernetics, and invite him to apply his VIABLE SYSTEM MODEL.

Beer accepted the invitation and the project started with the configuration of a transdisciplinary team and a branch of several Chilean and foreign institutions, like INTEC (Institute of Technology), ECOM (Computer Company of Chile), together with important theorists, scientists and designers such as Raul Espejo, Gui Bonsiepe, Humberto Maturana, Francisco Varela, among others. They developed the interface, software, technical implementation and the training of the people who will compile and transmit the data, a group compound by engineers and common workers.

This was a conceptual and technological revolutionary project that was applying a data transferring system based on the human nervous system and autopoiesis, in a country where for the management of its own data, used to send the information to BBAA in Argentina by plane, to get the information 2 months later. They were developing a system to have the data for correct decision making in one day. Very ahead of its time.

Cybersyn mainly consists of an interface of hardware and software built in Chile and England. It creates a network of telex machines connected to a computer that ran the Cyberstride Software, with the mission to connect the state administration with the newly nationalized companies like CODELCO, Chile's biggest cooper company. But the main characteristic of this project was to give TO THE PEOPLE THE TOOLS OF SCIENCE, participating in the decision making through the Cyberfolk project.

They were almost on the same level of the most advanced researches on real time networks in the world, and if the coup had not occurred, maybe

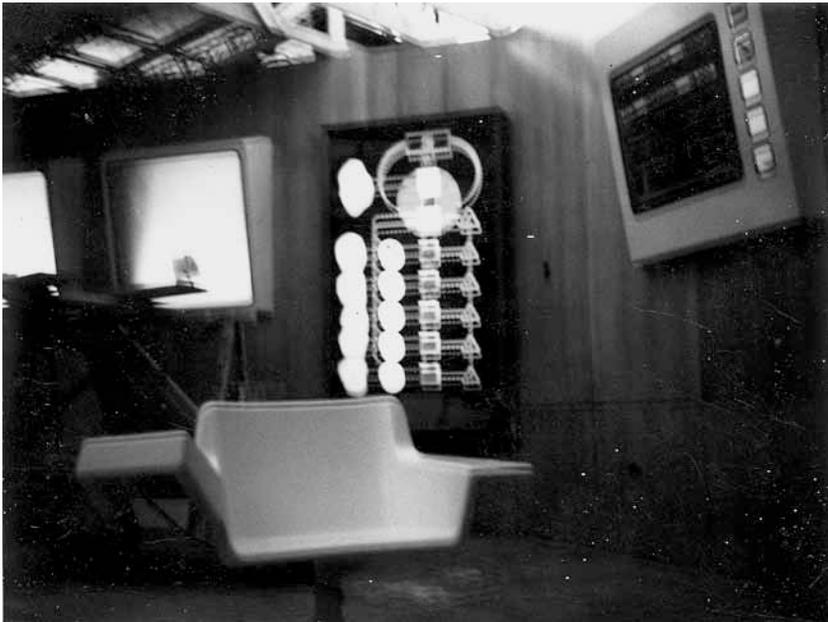


Fig. 1: Operation room on construction, 1972.
Stafford Beer collection, Liverpool John Mores University

this project could have been a great contribution for what we know today as creative commons, open knowledge, glocal, prosumers, social networks, immersive interactive spaces, decentralized economy and open democracy.

On the opening of the Cybersyn operation room, Salvador Allende and Stafford Beer prepared a speech which concluded with the next lines:

What you are about to hear today is revolutionary, not only because this is the first time that this is applied in the world, it is revolutionary because we are making a deliberate effort to give the people the power that science gives to us, enabling them to use it freely [1].

The operation room was supposed to move to the La Moneda Government Palace on September 1973, but this never happened, and the speech was never delivered. Describing this period, David Whittaker, a personal friend of Stafford Beer wrote [2]:

These were times of great uncertainty in Chile, as attempts to destabilise the government were rife. In Stafford's account of his final meeting with President Allende, on July 26th, he has this to say: "He asked me whether I had anything to ask him. I said yes; in view of the confusion being generated around the project, would he tell me quite directly the extent to which he expected worker control of the social economy. He replied: 'El máximo'. This had chimed perfectly with their first meeting, at La Moneda, two years

earlier. On that occasion the President wanted reassurance that the project was decentralising, worker-participative and anti-bureaucratic. Stafford Beer was immensely impressed with his grasp of the model of the Viable System set out in *Brain of the Firm*, confirmed by his intelligent and probing questions. The model was being sketched out on a large sheet of paper on the table, and as Stafford worked his way up through Systems One, Two, Three and Four – he came to draw the final box number Five and label it ‘The President’, but he was pre-empted by the President himself who threw himself back in his chair saying: ‘At last, el pueblo.’

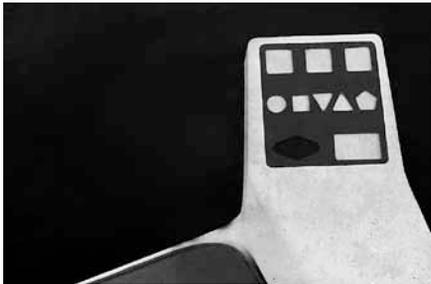


Fig. 2: Chair control panel detail, 1972. Stafford Beer collection, Liverpool John Mores University



Fig. 3: Multinode Metagame, ZKM 2008. Ossa & Rivera collection

This was the aim of the interactive installation *Multinode Metagame*, to bring the chance to the people to know this “archeology of Latin American media”, using variables proposed on the original project, but with modern technology. All these variables were created with the purpose of creating an atmosphere of immersion which would enable visitors to interact with the installation in an absolute unique and never to be repeated way. The different elements of the installation are laid out in such a way that they allow for what could best be defined as a kind of non-linear narration or edition, where information or knowledge can be modified by the visitors. This is why we could describe this installation as a non linear interactive documentary film, that is a kind of “aleph” that connects historical events and the new expansion possibilities of concepts and aesthetics proposed the Cybersyn project.

References

- [1] Stafford Beer quote
- [2] Opening speech of the operation room, by Salvador Allende and Stafford Beer 3: Catalogue of the installation *Multinode Metagame* www.multinode-metagame.cl

Maleficio

Rituals of the Illnated

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Where is that missile supposed to be landing?

Being teased to deal in words with the notion of “Lo-Tech” and, to come close to the subject matter while engaging and defining such an overly oxygenated notion could be or mean within the kingdom of tropical maladies one should at the very least try first to map the place where targeted group strives to exist.

It would be relevant to address in parallel the very notion of *tecne*, (from ancient greek *Τέχνη* meaning craftsmanship, craft, or art) which is always the very essence of thought. A track that is way too foreign as the language I’m using here, while the main is to lineate a place where the idea of “low-tech” can be presented and studied in the context of a Colombian editorial project. One can easily guess that all imported (from Europe or the US) models fail miserably when trying to enact valuable practices or discourse on local South American communities. In the case of Colombia, a place that remains in the midst of sustained intellectual addiction to the “first” world, whatever comes from the outside is considered by default as better. All induced information flows get mixed up with a lack of identity, a leftover complex gift of the colonialist endeavors to erase all roots and history. Today we leave on such backlashes that is sadly driven and maintained by “Us” the locals. Colombians live currently an international seizure. Ostracized from a world that is a forbidden place, while at the same time they get bombarded without mercy, via mass mediated images, news-lines, lifestyles, and what not.

Only about 14 countries on the planet allow Colombians to freely enter their territory. Most of these neighboring countries.

Instead of looking out to what the “Other” is producing under the low-tech slogan, we should subvert the approach and put our attention to reconsider why and how are those (“made in Colombia”) minisubmarines being built?[1]

It’s not just a “criminal” act as the media will put it. Fearlessly, we should think about how their navigational and communications systems can be

improved, following drone designs to avoid putting the life of the desperate in risk. Or, a less life threatening task, how can we build simple helical antennas and beam signals onto geostationary satellites to create networks for people living in the most remote locations (this has been done and proved to work and in a cheap and easy way so would remove telecommunications companies and data transmission ISP's). Activity from Brazilian pirates is mostly on 255.550 MHz but one can also hear them on 266.66 – 262.2 AOR fltscom 8. Some Russian pirates are discovering this UHF realm and make test calls on 257,000 and 257,900 MHz via a IOR (Indian Ocean Region) satellite.

It will be then the so called "Other" and not "Us" who would follow this free will examples of insurrection. We are all here receiving a call on civil disobedience. [Fig. 1]

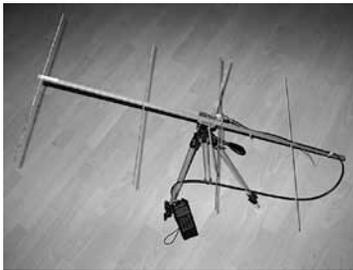


Fig. 1: A 4 elements yagi antenna for 260mhz UHF Military band



Fig. 2: Cocaine balls via X-rays – 10 to 15 condom made balls each containing 10gram of cocaine

From homegrown Coca-Cola recipes, USD, Euros or Australian (known to be one of the most secure systems) currency falsification, Black Cocaine, drug cartel messaging pigeons, radio techniques from 50 year old guerrilleros, GPS guided european border crossing (nothing to do with Heath Buntings project). This is only a short list of practices that some will classify as illegal, all bond by the kinship of the praxis tracing communities that are not the often quoted examples by Negri, Hardt, Klein, Moore, etc. to define their notion of multitude. There will be no more knowlledge than this on the practices of the everyday life taking place in most of the places of the developed world.

People pushed by the need to survive acquire and develop a way of living fearless of death, such techniques could be mistakenly labelled as "low-tech", but I claim them far from such a classification cause they actually enact a will to power, a particular philosophy of living. [Fig. 2]

Many Southern people stand with such an attitude, pushed and driven by the basic needs to survive and operate. They conform communities, systems which perform as "life technologies" (like individually we do our breathing, walking or shitting), invisible technologies that we could also define as "high tech" appropriation. A 'dispositif' that has managed to force a detour on established social economical structures (from the upraise of the indigenous communities movements in South America to the Pirate Party in Swe-

den). If one can't acknowledge this, then there will be no point introducing overhyped notions of "low tech", it will be all reduced to designers marketing strategies for selling online and offline little gadgets on the hype of the "Green", "environmentally aware" or the "radical artist" posing as conscious actor. It makes me see the MAKE magazine as today's version of what the Radio Shack catalog was for the American household but expanded to the global scale market.

References

- * [Roxy Music]: <http://www.youtube.com/watch?v=S4J6Uyv0JDY&feature=related>
- [1] [mini submarines]: http://en.wikipedia.org/wiki/Narco_submarine
- [2] [are being built]: http://www.nytimes.com/2009/04/26/magazine/26drugs-t.html?_r=2&pagewanted=all
- [3] [other stories on mini-submarines]: <http://scrying.org/doku.php?id=pm:alejoduque>

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From Free Software to Criticism on the Authorship Notion in Artistic Practices in Argentina

What responses are evoked by the free software model when it enters the scene of contemporary art in Argentina and some other countries of Latin America? The model of production, circulation and “participative” reception promoted and put into practice by the free software movement, has evoked manifold responses among artists – with potential and actual consequences – since they are both creators of “programs” and users of digital tools. These responses take place in a wide socio-cultural context including artistic practices within the art institution, but also those happening in the sphere of daily communication and global exchanges in which local actors take part, thus generating multiple echoes and feedback between the interacting fields.

Some shared key questions revolve around the artistic status of the digital tools and their resulting productions, or the nature of the creative process when digital technologies are involved – considering they were originally intended to serve other purposes; the knowledge and control of the new materials and procedures that artists need in order to use them; the potential of the new media for innovation and departure from tradition, and so on.

For artists, such questions are not new, from the invention of photography in 1839 onward, but they were given diverse and vague answers within the art institution during the 20th century, in contrast to the intense experimentation carried out by the artists in that field. All this has been taking place within countries which are not originators, but only recipients of technologies and, in a sense, also of artistic “trends.”

Free software and art: local connections

Apparently, there are two main ways through which digital artists directly connect themselves with free software: on the one hand, by considering free software as a new set of tools for experimentation, with a great potential for artistic use regarding to some capability for creating new and original functions. A new material to be mastered, a container which is no longer opaque, but open and transparent for those who have the required knowledge and skills for “subverting the interior of the black box”.

The open source code of free software used in art, is a strategy that enhances the display of what the artist now conceives as the work of art itself: the code. In many of these cases, more than an option and explicit stance, the use of free software is merely instrumental.

A particular variation of this group is one that “opens the code” of productions done with privative software of common access in Latin America.

Another way of connection, different and later in time, is embodied in those artists who envision the social takeover of information technologies, especially the Internet, as utopian promises of new ways of social organization and power distribution, also known as “first epoch” of artistic practices on the net. The second epoch would be represented by artists having access or migrating to the use of environments web 2.0.

In this case, the approach to free software is politically propelled, as a way of radicalization of ideas and actions which approximate these artistic practices to the deployment of the critical potential of the technical form itself. Thus artists problematize the celebratory acceptance of art-technology convergence from within the art institution, looking for new ways of overcoming the communication gap between artists and public perceived in contemporary artistic practices, or pointing out the colonization of people’s subjectivity by the market prevailing on the scene of the web 2.0.

Proto-copyleft culture and performative effects

Free software as a way of making culture points out a model practised with overwhelming frequency by contemporary artists. This model includes practices such as quotation, appropriation, remix, post-production, etc., as contemporary artistic strategies present in works of art.

In many cases, this ways of production are not explicit, or not executed as a “program” that can be extended to all persons, all media. Even more, usually these creative strategies are proposed as valid only inside the art institution, and for roles assigned within it, without projecting their transforming potential outside, and regarded as publicly acceptable “exceptions”, only as far as they remain politically deactivated. This fact comes into contradiction with a rarified context in which almost every cultural production can be get as an unauthorized copy.

In this sense, maybe the most powerful discussion around this topic is generated by the practice and discourse of the so-called “copyleft attitude” that we can find among contemporary artists. Its main effect is a performative one: an exercise in self-consciousness about one’s own ways of mak-

ing, distributing and winning over others for participating in the dynamics of culture, recognized as a “round trip” with different degrees of implication, interest, competencies, wishes among the actors involved.

From a background we have called “proto-copyleft,” to the concrete interactions of the free software community with artists, this analysis intends to point out some interpretative keys regarding the particular way of being which, in the Argentinian and Latin American context of artistic practices, we can link with the model created and spread by free software and culture.

References

- Bourriaud, Nicolás (2004) *Post producción*. Buenos Aires,
- A. Hidalgo. Brea, José Luis (2002) *La era postmedia*. PDF edition: http://www.sindominio.net/afe/dos_mediacivismo/LaEraPostmedia.pdf
- Flusser, Vilém. (1975) *Hacia una filosofía de la fotografía*. México,
- Trillas. Machado, Arlindo (2000) *El paisaje mediático*. Buenos Aires, Editorial del Rojas UBA.
- Smiers, Joost y Marieke van Schijndel (2008) *Imagine...* No copyright. España, Gedisa.

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Technology in Brazil**

This paper surveys both pioneer accomplishments and contemporary works by Brazilian women media artists since the early 1960s. Their works range from electro-acoustic music to neon light, holography, cinema, experimental film, video, photography, kinetic and multimedia performances and installations, virtual worlds, and Web-based cultural activism. Beginning with a discussion of the controversial issue of gender in Brazil, the essay weaves



Fig. 1: Jocy de Oliveira in 1964 performing *Winter Music* by John Cage on a showboat on the Mississippi river. Photo: James Rackwitz, courtesy of the artist.



Fig. 2: Anna Bella Geiger 1974 video *Passagens [Passages]* is a twelve-minute series of stairways in loop that the artist ascends indefinitely. Photo: courtesy of the artist.

social, aesthetic, and epistemological concerns. As a general rule, these artists did not explore women's issues as a project nor were they interested in feminist questions per se. Nevertheless, women artists contributed to the advancement of media arts with both personal and critical perspectives. This overview, despite the inclusion of a large number of artists (more than forty), is by no means a complete survey, but rather an early assessment, which will hopefully instigate new research.

The paper is divided into eight parts, which are organized chronologically and as much as possible according to media. The introduction gives an overview of feminism in twentieth-century Brazilian art. Part one examines three pioneers from the 1960s: Jocy de Oliveira [Fig. 1], Sulamita Mairenes, and Tereza Simões. They are early visionaries still waiting to receive further critical evaluation and historical recognition. Part two focuses on Cinema and the role of women directors throughout the twentieth century. This section is based on an earlier assessment from 1982, followed by a consideration of the increasing number of women directors since then. Part three analyses the area known as "Almost Cinema"—the moving image in the visual arts, in which women were always prominent. It includes among other pioneers from the early 1970s, Lygia Pape, Anna Bella Geiger [Fig. 2], Iole de Freitas, Letícia Parente and Regina Silveira. Part four examines the work of Sandra Kogut focusing on her award winning 1991 video "Parabolic People" [Fig. 3]. Part five probes Rosângela Rennó's "Universal Archives" along with issues of appropriation, memory and history in photographic installations. Part



Fig. 3: Sandra Kogut 1991 video *Parabolic People* is a forty-minute collage of footage taken in the streets of Dakar, Moscow, New York, Tokyo, Paris, and Rio de Janeiro. Photo: courtesy of the artist.

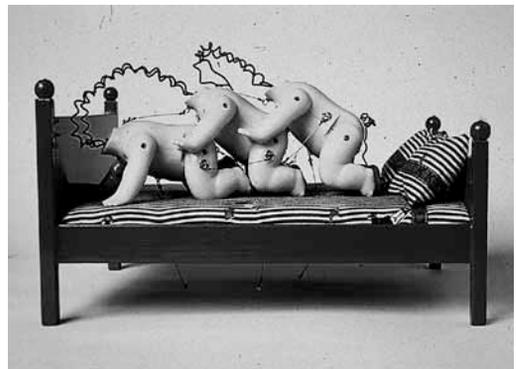


Fig. 4: Marcia X 1995 installation *Os Kaminhas Sutrinas* [meaning in Portuguese “the little Kama Sutrás”] includes twenty-eight doll beds (each 17 x 30 x 22 cm) and as many as sixty battery-operated crawling baby dolls connected by wiring and coupled according to positions of the *Kama Sutra*. Photo: Vicente de Mello, courtesy of the artist.

six focuses on the sexually charged low-tech-high-impact gadgets of the performance/installation artist Marcia X whose career ended prematurely [Fig. 4]. Part seven concentrates upon the multimedia performances and installations of Artemis Moroni, Simone Michelin, Bia Medeiros and Diana Domingues. Part eight looks at computer generated worlds and the use of the Internet as site and medium. It includes the works of Tania Fraga, Rejane Spitz, Suzete Venturelli, Giselle Beiguelman, and Patricia Canetti.

References

- Canongia, Ligia (1981) *Quase-Cinema*. Rio de Janeiro: Funarte.
- Hollanda, Heloisa B., ed., 1989, *Quase Catálogo 1: Realizadoras de Cinema no Brasil (1930-1988)*. Rio de Janeiro: UFRJ and MIS.
- Hollanda, Heloisa B., ed., 1991, *Quase Catálogo 2: Artistas Plásticas no Rio de Janeiro 1975-1985*. Rio de Janeiro: FUNARTE.
- Machado, Arlindo (1996) “Video Art: The Brazilian Adventure,” *Leonardo*, Vol. 29, no. 3, 225-231.
- Munerato, E. and Oliveira, M. (1982) *As Musas da Matiné*. Rio de Janeiro: Rioarte.