[manchinery]

Luis Soldevilla | thesis | project report

Luis Soldevilla
Ma(n)chinery : multi-channel video installation
Thesis / Graduation project report

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Ma(n)chinery

Abstract

The *Ma[n]chinery* installation places the viewer in front of four projections , a big composition that renders people, machines, gears and devices as different pieces working together for a bigger system or organism. The visual objective is to create a choreograhy of interconneted elements that render the pace of society (urban life) as a production line. A visual orchestration of diverse elements or situations cross-linked by dynamics of motion and relationships of cause and effect.

The projections become a panoramic window into the insides of this machinery. The large format (ideal projection canvas of 8 meters long by 1,12 meters high), plus the fact that the spectator is smaller than the projection, reinforces the idea that the social machinery is much bigger than the individual. The intention is to invite the viewer to reflect on its role and relevance as part of this machinery.

The narrative, which presented through the edit, is activated by the constant tension between "the machine" which aims to keep producing and accelerating, and the attempts of "the people" to control it. The struggle of these two forces is represented through the alterations in the production chain; interruptions, acceleration, changes of direction.

The piece is composed of two parts: The first is more related to the fordist in-line production henry forera, in which the link between elements (screens) is more mechanical; the second part is more related to the era of information technologies, in which the action / reaction is more digitally triggered. These two parts also talk about how people interact with machines (acoordingly to each era respectively), and how this relationship generated differents methods of control and production.

The artistic goal is to visualize these topics through the intricate beauty of an assembly line, a visual orchestration of machines, people and motion. As for the research, the objective is to set a theoretical background that works as the foundation for use of visual metaphors. The thesis besides this, will also be a detailed documentation of the whole the process.

Thesis structure

This thesis besides the theoretical research constitutes a detailed project report. Thus, it has been structured in different segments in which the content, the artistic praxis and personal interests can be easily verged, identified and related between them.

An annex with the *Indoor/Outdoor* installation (presented at the EYE Film museum) has been also included for two reasons : the first, is that the completion of this project was one of the main goals for this master programme and it has been successfully accomplished; the second is that this project have been developed within the last academic year and with the collaboration of other students.

Due that the *Manchinery* project has been relatively clear since the beginning of the second academic year, some segments in this thesis are the deepening and prolongation of the project proposal. Nevertheless, since the date of delivery of this document to the final assembly of the piece, some changes may occur.

In the following lines you will find a brief summary of each segment:

- **Aims and objectives** : the visual aims, the artistic goals and the research purpose.

- **Rationale** : Why do I consider relevant to do this project (from the sociological and artistic point of view)

- **Project Outline** : a brief description of the project in audio and video.

- **Approach** : what is my approach towards this project and the theme of society and machines. The distinction between the mechanical era and the current time of the technologies of information. An explanation how these distinct eras will be depicted visually and manifested narratively.

- Narrative structure: This part is directly related to the approach segment, and explains the story telling of the piece. It also mentions my communicational goals and intention behind this narrative. This may be complemented later with another document after the final assembly of the piece (although I have a narrative structure in mind it is still being polished and is open to changes in the editing and postproduction)

- **Method / Realization** : an explanation how I am doing this project. What tools (mediums) I am using and why I am using them. A short report of the shooting and the criteria behind the scouting.

- **Motivation** : a personal explanation of what drives me to do this piece.

- **Relation to previous work** : How this piece represents a continuation and evolution of my work, personal style and subject matters.

- **Expected Outcome** : what will be the audiovisual result, how this installation will look.

- **Research / Framing the work** : the questions I am inquiring myself about these topics (society and machines); and what is the theory that give foundation to this project (lectures, essays and quotations).

- **Research / Field of practice** : to what discipline this project belongs. Installation pieces and artist working in the same field. Inspirations and references.

- **Conclusions** : the personal conclusions of the project (and the experience) form the academic and artistic point of view. This part may be also completed with the final staging of the piece.

- **Descriptions for press releases, festivals and calls** : different versions of the description of this piece for different purposes.

- **Bibliography**.

Aims and Objectives

I have divided the objectives in three realms in order to make them more specific and interconnected: What do I want to achieve visually with piece, what is the artistic goal and what is the purpose for this thesis.

The visual objective is to create a visual orchestration that depicts society as a machine. A flow of people, gears, machines and interfaces cross-linked by mechanical principles. Dynamics of motion, different parts working together for bigger organism. The artistic goal is to create a different filmic experience that invites the viewer to reflect on its role and relevance as part of the social machinery. A narrative that makes sense in the space and allows the viewer to dive into the content, an immersive experience that empowers the spectator and gives him something in return. As for the thesis, the objective is to set a theoretic background that works as foundation for the visual metaphors to use. Articulate the content.

Rationale

In this time of over stimulus and a path full's of distractions, I consider relevant to evoke questions that ponder on our role in society. Most people feels that is nothing or very little what they can do individually to achieve a meaningful change on society. The intention of the piece is simple: don't forget that we are an important part of this machine. Then if people are just more aware, the "limited" field of action earns a different meaning.

Furthermore, collective actions (reinforced by information technology) are acquiring a new sense. Massive manifestations around the world, the "indignant" and"occupy" movements, the domino effect of the spring Arabic revolution are clear examples of how technology, communication and individuals "connected" can make a stronger impact. In this context in which "connections and links" make a difference, the idea to depict society as interconnected parts (functioning as a machinery) seems appropriate. In times like this, in which the perception is in constant change, I consider that we the artist have the responsibility of creating new ways of communicating and spread our message.

Project Outline

The Manchinery video installation places the viewer in front of four consecutive projections that conforms a canvas of approximately 8 meters long by 1,22 meters high. This big composition renders a system of elements that interact on mechanical principles and relationships of cause and effect. Gears, situations, actions and elements that trigger each other resembling a production line. A Choreography of interconnected elements working together as different pieces but for a superior self-organism.

The images used in the installation depict mechanism within society functioning, but more than depicting the social machinery, these images are visual allegories of society as a machine. The visual concept of the installation is to render a system of elements that interact on mechanical principles. A composition of motion and rhythm, a choreography of cause and effect, transformation and change.

Referential image : 4 screens composition

The 4 horizontal and consecutive screens create a wide panoramic scenery, giving the video a sculptural dimension that contributes to create an immersive effect within the piece. The panoramic widescreen format lends itself to represent visually the idea of a production line or a machinery . The use of many screens allows depicting different situations and ideas, and

linked them as gears inside a machine. The multi-channel sound strengthens the immersive feeling and helps to create a more dynamic motion within the space.

The audio mix is of great relevance; the 4 screens can easily make the spectator to lose the the track of production line. The sound will determine the point (or screen) of interest. The audio mix will be the "visual" guide of the installation. The influences of sound on the perception of movement and speed acquire a major relevance in the piece. The concept of *audio-vision* developed by Michel Chion, which highlights "the forging of an immediate and necessary relationship between something one sees and something one hears"[1], will be very present; giving the final audio mix a heavy expressive weigh.

This combination of a long format and multi channel sound makes the video to loses its bi-dimensional character, it allows to use the space as a expressive resource, expanding the image beyond the filmic frame. The fact that the projection has a large format and that is bigger than the viewer, reinforces the idea that the social machinery is much bigger than the individual, and that the person is immersed in these processes.

Approach


For matters of content (as visual material as well), there are two different approaches towards machines: One older and more mechanical, in which cogs, gears and pistons were visible and their functioning was more exposed as evident. And a more recent one in which the functioning and components are hidden inside a "black box". These two approaches are directly related to the narrative structure of the video that consist of 2 parts respectively.

-    First Part : This first part is more related to the industrial revolution, to a time in which machines and their strength became the wheels of industry. A machine related to steel, to a line of production and manufacturing, to physical manoeuvring. In this part, the rhythm and the visual bonds between screens are given by mechanical principles. This part at the same time is good way to introduce to the audience how the installations "works" visually and as a machine itself.

Still machinery .- original footage

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1   Michel Chion. Audio-vision (1990). Chion in this book explores and explains how sound and image are unified in an audiovisual product and how the perception of one influences and transforms the perception of the other.
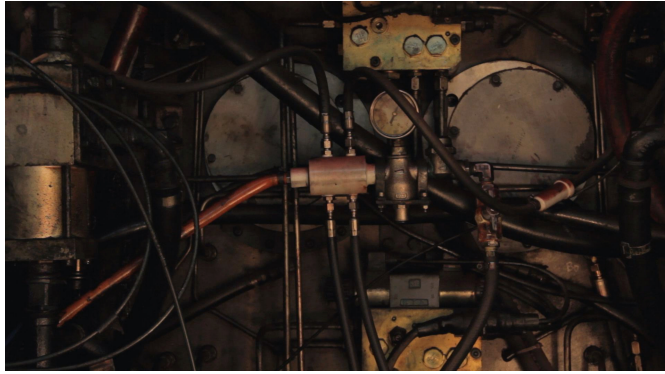
Still machinery - original footage

- Second part : This part is related to the era of the "information technology", to processors, computers and codes. Machines in which the "operation" is less visible and everything is independent and interconnected at the same time. Processes in which we basically see the inputs and outputs, but the transformation in between gets lost in a special dimension. In this part, the bonds between screens are triggered perhaps more digitally than mechanically.


Still machinery - original footage

Still machinery - original footage

These two approaches towards the machines (the mechanical device vs the black box) are each related to a different era, to a different way of economy, and especially into a mode of imaging. But that this project more than talking how people work with machines before and now, or the imaginarium of the world in each era and or what medium was used to documented it. This project is about creating a machine according my thoughts, and to construct a set of windows to see that machine working.

Although the idea of a *Goldberg machine* (a machine which purpose is to do a simple task trough very complicated mechanism) could be related, the difference relays in that the purpose of my machine is not to perform a task, its purpose is to render the pace of urban life as a series of interconnected elements. The notion of interconnected elements immediately relates to a machinery (a series of machines working together) and the pace of urban life is related at the same time to a city symphony film.
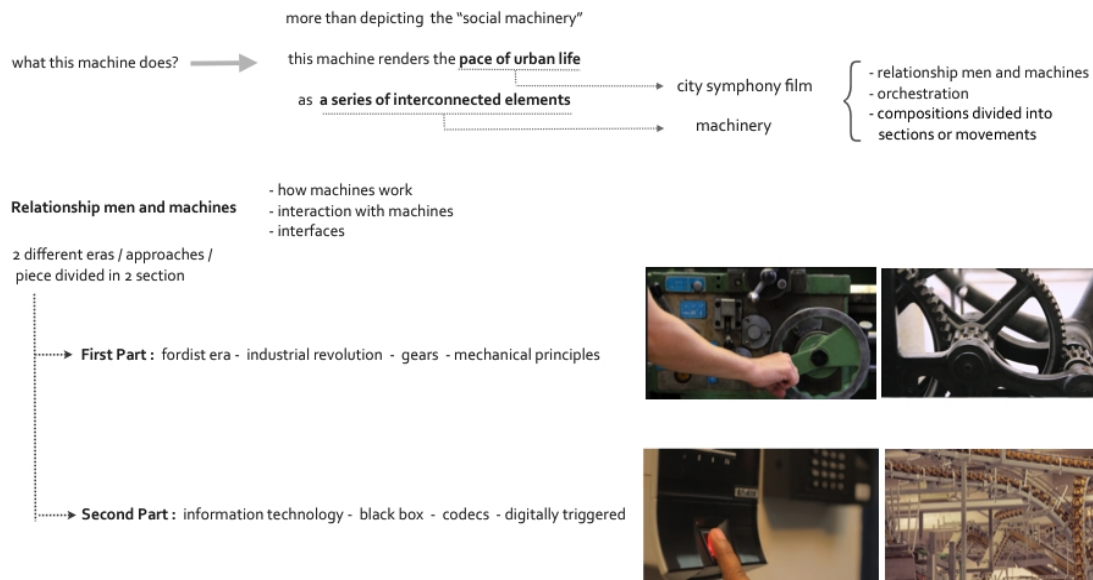
Narrative structure

Following the idea of a city symphony film, this piece is divided into sections or movements that vary in pace and intensity. Usually a symphony have four movements, the first is usually fast while the second is slow. The third movement is dance-like and the fourth comes to a lively conclusion. This piece has only two movements and, as mentioned before, this division in the structure of the piece is directly related to the different eras in the relationship of men and machinery (developed previously in the approach segment of this document).

In a city symphony film normally the narrative is just given by the regular pass of time. At the beginning the city (and its inhabitants) wake up, they go to their respective labour places, and the whole social machinery starts, it has a pause simulating the launch brake, then restarts and at the end of the working day ,then the energy of the city moves to leisure and other activities. Sometimes the narrative just follows a musical progression which is accompanied with a visual theme or situation. In this project, there is not a progression of time (start to end of day) but a progression that is related to the development of technologies, the way they work and how we interact with them. The two movements have a very similar inner progression, but what changes are the situations and mechanics showed in them. In the city symphonies there is just a staged flow of all the motion generated within a city. In this piece, more than the motion, energy and situations generated in any urban context, the idea is to have two forces

confronting each other (protagonist and antagonist as classic archetypes). On one side we have "the machine" which purpose is to keep growing and producing, consuming resources in a indiscriminately way in order to keep its exponential appetite. And on the other side "the people" who aims to stop or control the machine. The people is represented visually basic through hands, and the machine through mechanism, pieces, technology and devices. The figure of the hand (specially the raised fist) since many decades ago have been a symbol for fight, resistance, strength, solidarity, union, working class and control. Of course in this piece we are not going to see any raised fist, but "the hands" significance come through the fact that is basically through our hands that we "control" and interact with machines. Although many parts of out body are involved in any process, the hands are the ones that trigger any command or action. The phrase "it is all in our hands" could be appropriate in this case. Besides a hand "without a face" it is just a representation of an interest, an extension of a desire, a thought made action. "The people" it is just represented through hands or as a moving mass, there is no "individualism" or recognisable characters.

Thus, the tension in the narrative is given by the conflict of these two forces, the machine that aims to grown in size, production and speed; and the the attempts of the hands (people) to sabotage it or control it. This struggle is represented through the alterations in the production chain; interruptions, accelerations, changes of direction, and variations of movements. Images of interfaces and indicators (tachometers for example) acquire a symbolic weigh in this conflict. The diagram above, helped me to develop the "storytelling" , manage the footage, and somehow control the general rhythm of the piece. I just could fill in which direction the production line is going and how the people´s actions in the narrative unchain a different rhythm in the whole composition.

Narrative	Idea	Images	Sound	Rythm Composition			
First part / begining From black							

It is also relevant to mention that the two movements in the narrative structure (the first related to the in-line production industrial era, and the second related to processors and codes) also talk about the way we we interact with machines (accordingly to each era respectively), and how this relationship generated different methods of power, control and production.

> *Types of machines are easily matched with each type of society--not that machines are determining, but because they express those social forms capable of generating them and using them. The old societies of sovereignty made use of simple machines, levers, pulleys, clocks; but the recent disciplinary societies equipped themselves with machines involving energy, with the passive danger of entropy and the active danger*

of sabotage; the societies of control operate with machines of a third type, computers, whose passive danger is jamming and whose active one is piracy or the introduction of viruses. This technological evolution must be, even more profoundly, a mutation of capitalism, an already well-known or familiar mutation that can be summed up as follows: nineteenth-century capitalism is a capitalism of concentration, for production and for property. It therefore erects a factory as a space of enclosure, the capitalist being the owner of the means of production but also, progressively, the owner of other spaces conceived through analogy (the worker's familial house, the school). As for markets, they are conquered sometimes by specialization, sometimes by colonization, sometimes by lowering the costs of production. But in the present situation, capitalism is no longer involved in production, which it often relegates to the Third World, even for the complex forms of textiles, metallurgy, or oil production. It's a capitalism of higher-order production. It no-longer buys raw materials and no longer sells the finished products: it buys the finished products or assembles parts. What it wants to sell is services but what it wants to buy is stocks. This is no longer a capitalism for production but for the product, which is to say, for being sold or marketed
- Gilles Deleuze - Postscript on the societies of control (1992)

Methods / Realization

One of the first decision that determined what methods and mediums to use for this installation was related to what connotation I want to give to the projected image. Is the video going to be a screen? Or is it going to be a window? My vision is to create a machinery conformed by people, interfaces, devices and other machines, so the video instead of showing this machinery, the projections will works as windows to see the internal functioning of this machinery, a window into the insides of the machinery I am creating. The image below is quite a good example of this approach of the projection as a window.
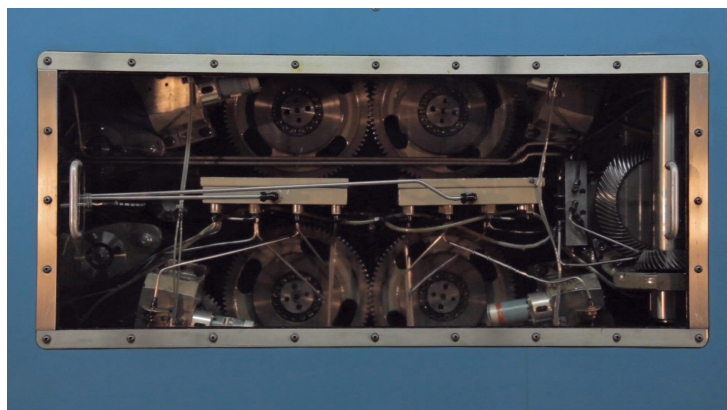
Still machinery - original footage

So to assemble my own machine - or rather to build these windows - I used tools as video cameras, DSLRs and post-production. In spite I am using digital medium to talk about mechanism (in the very old fashion of term) it is worth to mention that is the connection between the windows the one that works on mechanical principles. And this "connection" is completely done in the spectator mind; it is the viewer´s brain who makes this connection, the digital mediums just gives the clues, and the brain completes the image. The visual score is to

create these four windows that let us see the highlights of the production line, four big windows into the veins of this bigger system, the connection between them are thought to be displayed digitally and read as mechanical.

If my goal is to create a machinery conformed by people, interfaces, devices and machines; the raw materials I need are quite clear; but as any recipe, the success of the dish depends on the quality of the ingredients. I had quite clear that if want an impressive composition, the elements that conform it (footage) have to impressive as well. The more visually impact and the more meaningful that my images are, the more meaningful and stronger their combination will be. So I had to look for locations in which the machinery found there is not seen in any regular situation, the devices to shot had to be as far as possible as any machine that we see in our daily life (or at least shot in a completely different way). But besides being visually stunning they had to have certain meaningful connection with the topics I am dealing with. So for matters of scouting, permissions, and easiness in production I decided to shot in Lima than the Netherlands cause there I knew exactly where to go, what doors to knock, rentals, and the more important, a producer who could be interested in the project. So after some pre-production work, scouting and coordinations I decided to shot in five locations:

- **Torrico** : two blocks in the oldest part of Lima full of printing shops that still work in a very crafted way. Some of the machines I found there where more than 60 years old and still working, very good place for mechanic and hydraulic machines.

- **Reniec** : National registry of identification and civic state. This is the governmental institution in charge of all the red tapes about identification. They emit the Peruvian ID cards and also realized fingerprints scanning. The printing of the IDs and the scanning of the fingertips are directly related to the actual methods of management, control and digitalization of personal information (this subject will be more develop in the research segment). The permission for this locations was the harder to get and the material obtained was the less interesting (but useful anyway).

- **El Comercio**: the biggest press group in Peru. They own their own printing company and there they print four different newspapers at night and different magazines during the day. A non-stop machinery literally. They had high-tech offset printing machines, as a collection of old printing devices. By far the best footage was obtain there. The place was so big and had so many machines that the shooting in this location have to be divided in two days.
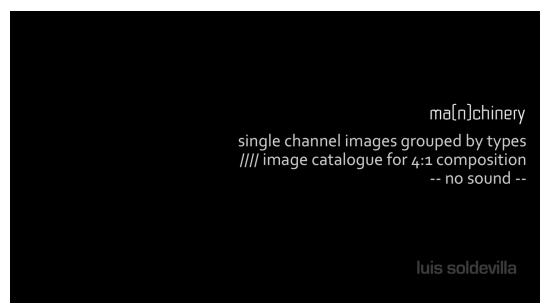
- **Metropolitano Central station** : The Central station of the new bus system in Lima, this place has a constant flow of people, people is constantly checking in and out with their cards and this is directly related to codecs, permissions and access.

- **Metropolitano El Naranjal station**: This is station is the last (or first) stop in the north side of Lima. This area holds a big percentage of the city´s population. At the very morning big lines of people are formed to enter the buses. The architectonical and lighting conditions of this station are quiet particular and were very interesting to capture.
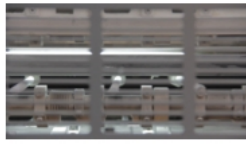
Due to budget limitations the shooting crew have to be quite reduced. We were: me doing the camera and directing, the sound technician who also helped as a camera assistant, the producer / location manager who also work as a general assistant, and a driver. In the locations were a dolly was needed we counted with an extra driver (and car) and a grip guy. Below you will find some pictures (making of) of the shooting in different days and locations.
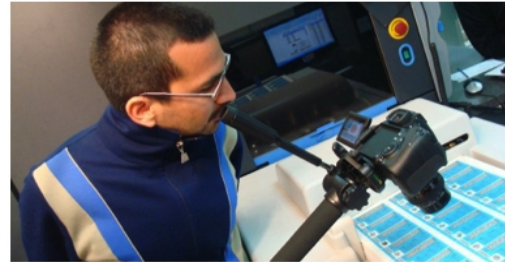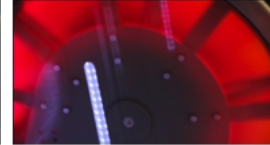
Bearing in mind the "projection as a window" approach I had to apply a similar visual style for all the shots. So in this way, they have something in common and could be easily combined.

I decided to place the camera very frontal to the object (as seen directly trough a window or vitrine) and basically work with close shots. To achieve this I worked with two different cameras, a DSLR Canon 60D for macro shots and a Sony HVR-Z1 for shots with internal movements or dolly cams (the rolling shutter of the DSLR is a big con for any camera movement). Then, after 5 days of shooting (not continuous) I had a lot of material, so the next step was start depurating the footage and start organizing it in some way. I have to say that this stage was the longest and more tedious one, first I have to transcode all the footage, make sequences with the best shots per location, and then group in categories by kind of machines, interfaces, textures, the motion they generated, if they belong to the first or second part, and many other subcategories. To have all the footage clean and organize (bearing in mind that I also had some footage that I shot in the Netherlands) was an epic work, but it was the only way to have all the pieces of the puzzle "on the table". This metaphor of puzzle was really useful during the whole process, because I start to collect the pieces (footage) without knowing what image the pieces will form at the end. So that helped me focused in having the best pieces as possible, and the nicer the pieces, the more impressive their combination will be. So after working a while with the pieces I was able to have an image catalogue, sequences divided by types from which I could start composing my four screens. Some examples of this visual catalogue can be seen on this link https://vimeo.com/42053518

ma[n]chinery
single channel images grouped by types
//// image catalogue for 4:1 composition
-- no sound --

luis soldevilla

Locomotive   Gears

Old interfaces   New interfaces

Moneraty interfaces   People / production line

Bio - mechanical   Access / flow

While editing and starting to work in the four screen composition, I realized that a potential problem could be that a multi-channel projection in which each screen shows a different image demands a lot of material. The fact of working on a large multi-projection piece brings a technical challenge in all senses. It is worth to mention that this document have been written before the final editing of the piece, some changes may occur during the progress.

Motivation

I've always been attracted to machines and understanding how they work. As a small kid I disarmed my toys to play with their parts and then re-built them. I even found most interesting what was inside than the toy itself. This mechanical curiosity, my observer personality and my affinity for social issues, made me always be aware of the social machinery and the omnipresence of the system. I developed a tendency to identify protocols and mechanisms of power that helped me to see what was behind certain situations. Machines fascinate me, in matter of industrial design their beauty is undeniable. It is also interesting to realize the design of the interface between the mechanical and electronic components of a machine and its users. It is interesting to see how interfaces connote the way we interact wuth machines and how we exert certain power and control on machines (or the other way around) The design of a machine is quite particular because functionality and safety are more relevant than the appearance of the product. There is certain beauty in a machine working, its orderly desirability is almost magical, its repetitive and mechanical movements have a special hypnotic grace. I feel driven by the challenge of making a visible manifestation of this much greater system. Creatively it will be very fun to mix and play with machines, motion, actions and ideas. Artistically I feel attracted by the ideas of composition, collage and juxtaposition.

This multichannel installation gives me the opportunity to construct my own visual puzzle not only of visual elements but also of ideas and messages. Artistically I enjoy very much working with projections, somehow this project is more cinematographic are makes me feel closer to my academic background. This project is basically a work of shooting and editing, two of the things I enjoy the most.

Relationship with previous work

This project represents the solidification of my my artistic praxis in the format of video installations, and a significant keystone in the development of my personal visual style and language. If seen together with my previous projects, this piece contributes to a personal signature and makes the sociological interest a recurrent theme . This piece follow the same line in matters of form as some previous project. The use of projections, and the creation of an immersive sensation in the space, have become a constant in my palette of expressive resources.

BASEL video installation 2006
Video installation

PAISAL video installation 2007
Multichannel video projection (3:1)

INDOOR / OUTDOOR interactive installation 2010 - 2012
Interactive video installation.

In matters of content, this installation represents the third and final piece of the machinery series. The ida of this series is to depict how machines keep the flow of vital energy within the city. How by means of machines, engines and devices all the necessary elements that keep

society running can reach all its parts and organs. This series render cities as a superior organism, as a symbiotic relationship of men and machines. In the piece Machinery video No1 (http://vimeo.com/23863746) the idea was to create an abstract piece made from machines that "transport" people (trains, buses, and elevators), the goal was to make an abstract movie from mechanism that help the habitant to move faster. In this video I wanted to explore the motion generated by the machines that "carry away" the citizens, so by adding and external motion (camera movements) to the inner motion of the device, the idea of displacement have an extras meaning, generating vertigo and the idea of no direction. The piece Machinery video No 2 (http://vimeo.com/25758974), worked as test and exploration for this graduation project, it purpose was to explore the "cause and effect" relationship and to visualize different scenes as interconnected elements. In an older video piece, Day No8 (http://vimeo.com/8848019) I have also played with the idea of people in line as products conducted through a transportation belt.

DAY No 8 - video 2010
Single channel video
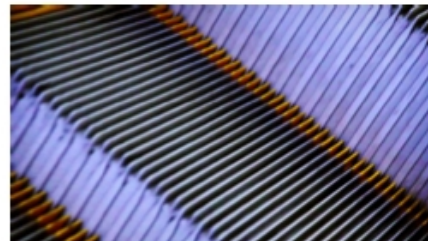
Machinery - video 01. 2011
Single channel video / installation

Machinery - video 02. 2011
Multichannel installation (2:1)

In my work I am interested in researching the landscape as a social portrait of our surroundings. In this sense, to create a work of larger scale and to play with a very long panoramic screen (with which I have not worked before) lends itself for continuing this social landscape idea, and of course gives me a more creative and expressive canvas. It will allow me to use the scale relationship between screen and spectator in flavour of the content, and not merely as a spectacularization of the image. This idea of a panoramic landscape was also explored in the Paisal video installation (http://vimeo.com/18921588) for this piece also a multi-channel projection and multi-channel sound (3:1) was used.

Expected Outcome

The equipment to be employed for the montage of this piece will be:
- 4 video projectors
- 1 video synchronizer (or media player)
- 4 speakers
- 1 audio Dolby mixer

Below you will find a graphic showing the proportions of the projection in relationship to the spectator. A video registry with some excerpts of the piece will be needed for documentation and promotion.

HD (1280 x 4) x 720 pix = Composition of 5120 pixels by 720 pixels
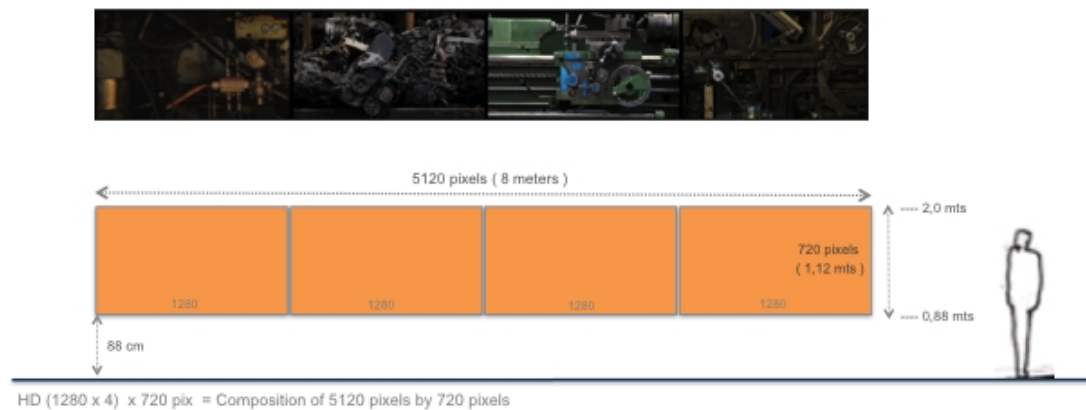
Research – Framing the work

If all machines have as a result one product. What does the social machinery produces? If there is a raw material, into what it transforms? what is the outcome? Who operates the machine? ? Who pushes the button ? What is the source of energy of this machinery? What keeps the machine going? In what direction is it going? Do we have an influence as individuals over this machine? Do we have an important role? Can we escape from it?. These question were the starting point for the research,   and although I have came with some conclusions at this point, my intention since the   beginning was that the spectator inquire himself the same questions and not necessarily that he (or she) could "interpret" my answers . My intention is that the spectator - after seeing the piece - inquire himself the same questions, and maybe then, find his own answers.

Of course all these questions sound interesting - as mentioned before they were just a starting point - but then I realized there is a previous and more relevant question... is there really a social machinery?

There is a widely held belief in the existence of an over-all super organic social system or organization which operates through large-scale social forces that govern our whole social life. This belief in a social mechanism not only is held by the general public and by those who speak and write on public affairs but is also accepted by various groups of social scientist who are studying social life.

No one has ever been able to point out or identify any kind of structure or organization that corresponds to this belief; indeed, the conception of a social system or organization carries with it the un-spoken but well-accepted implication that it exists somewhere (...) and operates like gravitation. Moreover, no one has ever been able to measure or otherwise detect the operation of these assumed social forces which are always inferred form a variety of statistical data.
- Lawrence K. Frank – what is social order (1895)

The social machinery has long been conceived as an organization or mechanism which exist as part of the cosmos and operated through diverse forces (the metaphor that Lawrence Frank uses is quite interesting, gravity is just there, we don´t see it, but is there, it keep everything working as expected). Nowadays the forces that influence on the social order can be easy identified as economics, politics and culture. But so far, there is not a formula to preview a social reaction. Otherwise this equation would be used as the alchemist formula for many marketing departments. Hopefully social mechanism still somehow abstract and ethereal. Economic laws, institutional patterns and social data can predict certain conducts and behaviours, but at the end it is just like predicting the weather. It will very pretentious from me to say that this piece tries to depict this equation, my goal is just to render these forces working together. What I try to explore visually is how to link them, how to create a bond, make a meaningful chain reaction of ideas that work since and for their connection. This is what Deleuze called the communication *of events " Between events, there seem to be formed extrinsic relations of silent compatibility or incompatibility, of conjunction or disjunction. What makes an event compatible or incompatible with another? We can not appeal to causality, since it is a question of a relation of effects among themselves". [2]*

How much influence do we extend over these forces? Of how much influence the social machinery have upon us? It is interesting to see how the research over these forces in relationship to the individual has been directed by " *the hope of revealing and all-powerful, controlling system or mechanism that governs and directs all social life - a search directed also by the belief that helpless man could hope for security and peace only by learning to conform to this all-powerful system and its forces and powers*[3]" . This defeatist attitude in which man see himself as at the mercy of something larger and powerful than himself to whom or to which he must passively submit ,may come from the reminisce of the idea of deity, sovereign or an authoritarian symbol. But the idea of a social machinery as we know today is relatively new and it is directly related to the development of tools and technologies. I am sure in feudal times there was not an idea of social machinery, of course there was a conscious of social structure, but its functioning was maybe conceptualized different . With the proliferation of machines, transport,industry and cities; people started to see society as interconnected elements; as bigger system driven by these superior forces for which understanding, new disciplines need to emerge. It is not coincidence that in the take-off of the industrialization the term "sociology" was coined for the first time by August Comte in 1830. It was an era of social and ideological upheaval. Industrialization brought radical changes to people´s lives, scientific

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2   Gilles Deleuze. The Logic of Sense (1969)
3   Lawrence K. Frank. What is social order? (1944)

discoveries about the structure of matter and technological innovations influenced man´s perception of nature and environment; psychoanalysis seemed to reveal the secrets of the human soul, the conflictual bond men-machine start to emerged.

But this relationship did not start with the right foot; " *Every new machine and better machine seems to throw many men out of work, and they see no end to it (…) so they hate machines and sometimes smash them, and always oppose new ones"* [4] Now, from our perspective we see that era as a peak of progress, railroads, steamboats and other machines that made life easier and more comfortable. But people by that time saw almost a threat to their jobs and way of living. Starr Hoyt in his review *"Men and Machinery"* (1898) picked up the two sides of the scale : *Mr. D.A. Wells says "it dulls by its monotony the brains of the employee to such extent that the power to think and to reason is lost" Mr. Hobson again asserts that since the "law of machinery is a law of statical order, and the law of life is dynamic, requiring order as the condition of progress; since variety is of the essence of life and machinery is the enemy of variety", machinery is the enemy of life".* Hoyt justifies these comments by putting them in the context of an changing economic model, and as any transition, its is a process[5] and not an easy one. It is important to bear in mind that the industrialization not only change the way the manufacturing was made, it not only change the production; but it also change the demand making products cheaper, accessible and desirable. The variables that rule economy completely change, the demand curve took a completely new shape, and being economy on of the big forces that shape society, this a a major change. A change that brought some new concepts in society that were never know before. Terms like mass production and pop market started to appear by that time, and they are not just terms, they are phenomenons that completely re-shape society. Hoyt had a more positive approach towards machinery, but his vision was not focus on the effect of the machine in labour hand, he was thinking more in what is the end of machine, and what is the purpose of work *" The machine´s perfection is man´s release from toil. (…) Work is not man´s chief end; rather is enjoyment of life his end, and life is more than work. The vast variety of the modern world has been brought out by machineries, which have released man´s hand and mind. Finding, therefore, as we dim in machinery the greatest motor of progress and the deliverer of mankind from grinding toil (…) .One risks nothing in saying that our own times are time of the machinery beyond everything else, and that our people are as much ahead of all former times in activity of mind and quickness of interest in life"[6]*

To recapitulate, It is not the purpose of this project to follow the evolution of the relationship man-machine, but is relevant to point how the productivity growth and the advances in technology shape the way we the way we conceived the world, how society worked, and the methods of control and power that result from this relation. So what kind of images will be used to talk about these topics? Although this have being explained in the approach segment of this paper, it is worth to give the research foundation that pushed me to choose those locations and the kind of machines I could find in them. Many of the machines seen in the piece are printing devices,they may be showed in an abstract and perhaps unrecognisable way, furthermore I choose these machines because its repetitive mechanical motion, and because printing is directly related to language and mediatic power.

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4 Starr Hoyt Nichols. Men and Machinery (1898)

5 The assembly line concept was independently redeveloped throughout history and not "invented" at one time by one person. Its exponentially larger development at the end of the 19th century and beginning of the 20th occurred among various people over decades, as other aspects of technology allowed.

6 Starr Hoyt Nichols. Men and Machinery (1898)

> *"Language is not made to be believed but to be obeyed, and to compel obedience newspapers, news, proceed by redundancy, in that they tell us what we 'must' think, retain, expect, etc. language is neither informational nor communicational. It is not the communication of information but something quite different: the transmission of order-words, either from one statement to another or within each statement, insofar as each statement accomplishes an act and the act is accomplished in the statement"*
> - Gilles Deleuze. Thousand Plateus: Capitalism and Schizophrenia (1988)

Other kind of images captured for this project are directly related to our digital identities, with how the embedded information in our cards or chips translate to who we are, where we can go, what can do, and what we are not allowed to do. Images of check (in or out) points, ATMs, monetary interfaces, computers and fingerprints scanning machines become metaphors of freedom and control at the same time. Our numeric identities leave a digital trace of our activities, taste, expenses, etc. which become value information for the market and some institutions. Our data and these digital traces are who we are, its value comes from the fact that companies need to know their customers. It is not crazy to say that Information is the currency of today's world, and those who control information are the most powerful people. This information that is "floating" in the cloud could be a bit abstract, but just take a look in all the cards and chips we carry in our wallets to see how our daily life is translated in data and codes.

> *"In the societies of control, however, the key is no longer a signature or a number, but a figure: the figure is a password, while disciplinary societies are regulated by watchwords (both from the point of view integration as from that of resistance). The numerical language of control is made of numbers, which make access to information, or rejection. We are no longer mass-pair to the individual. Individuals have become "dividuals," and masses, samples, data, markets or banks"*
> - Gilles Deleuze. Societies of control (1990)

We are not far to be in the city that Deleuze and Guattari imagined, a city in which everyone owns an electronic card to open barriers for leaving or entering a place. However, that card can be rejected on a particular time or space; "*it doesn't depend on the barrier but on the computer that is making sure everyone is in a permissible place, and effecting a universal modulation.*" [7] . Cities are not controlled by authorities, cities are self-regulated not "by confining people but through continuous control and instant communication." [8]. Information is precisely the system of control.

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7 Deleuze and Guattari. Thousand Plateus: Capitalism and schizophrenia (1988)
8 Ibid

Prevously *"Anti-Oedipus, capitalismus and schizophrenia" (1984)* Deleuze and Guattari used the term *"Social Machine"*, but this term is not refer to a social machinery and the identification or functioning of its parts, it is related to the entertainment industry and marketing. This term is used to see people as a machine of desire, a machine for consumption (marketeers would be very happy if they can transform us into robots which objective is to buy or consume). The use the term social machine as the coupling of two other machines: the machine of desire (man) and the machine of production (nature or society), being the first the product of the latter. They describe 3 different kinds of social machine (their distinction is not relevant for the purpose of this paper) but what is interesting is that they show how we turned into an organism of society, a component of a huge complex social machinery, which works more through virtual and real entities than a technological way.

Something I find quite interesting in the same lecture – and directly related to this project- is the definition of social machine through the concept of connectivity . Deleuze and Guattari understand social machine as the relationship of two inter-dependant machines: one that produces flow, and the other who interrupts it (This idea is easily identified in the piece Machinery video No2 http://vimeo.com/25758974).

> *"Everywhere it is machines-real ones, not figurative ones: machines driving other machines, machines being driven by other machines, with all the necessary coupling and conditions. An organ – machine – is plugged into an energy-source-machine: the one produces a flow that the other interrupts. The breast is a machine that produces milk, and the mouth a machine coupled to it.*
> - Deleuze and Guattari. Anti-Oedipus: Capitalism and Schizophrenia (1984)

This idea of social machine and connectivity not only gives foundation to the images but furthermore it is the key element for the multichannel composition. This connection makes the composition work as a whole, and also it is through the connection that the relationship of its contents create a new meaning. The composition and the editing allows a single screen to be connected to the whole and to determine the whole itself.

Research – Field of practice

In terms of form this project is closely related to what is know as expanded cinema , a movement in the 70s which explore the spatial aspect of the moving image, and the sculptural and architectonic qualities of film. In its origins expanded cinema dig also into the performative part of creating images, some of the key artist of that era are Guy Sherwin, Lis Rhodes, Nicky Hamlyn and Steve Farrer. Actually the latter developed installation directly related to machines, being the more relevant "*The Machine*" (1978-88) and "*the cinema of machines*" (1996). In *the machine "image stability and morphology are an effect of the speed of film movement through the camera-projector relative to the latter´s speed of rotation. The degree of anamorphism in the resulting image, both at the production and projection stages, since the same machine serves as both camera and projector"* [9].

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9   Nicky Hamlyn. Mutable screens. Part of expanded cinema book.

Although this wave of cinema could be seen as old and less original nowadays, this movement set the foundations for many other artist to come.Some relevant contemporary artists who work with space and multi-channel projections are: Doug Aitken, Isaac Julien, Pawel Wojtasik, Eiija-Liisa Ahtila and Ergin Cavusoglu (among many others). I mentioned them not only because the way they used video, but also because how they develop a narrative through the space. Their work also is a good reference of how to exhibiting the piece.

Reference relation spectator with the screen
Isaac Julien - *The True North*
3-channel projection

AES + F . Russian collective
The feast of trimalchio-2009
panoramic digital video

Reference of flat panoramic projection
Alan Michelson

Reference of flat panoramic projection
Catherine Sullivan
Triangle of Need

Going back in time, a first reference in the approach of movie making would be the late 20s avant garde. Especially movies like *Walter Ruttman´s Berlin Symphony* of a great city and *Vertov´s Man With a Movie Camera.* Both movies share a non-narrative documentary signature and are made with shots and scenes connected on relationships of image and motion, aiming to depict the life and energy generated within the city. Besides their experimental touch, in terms of content these movies also shared a similar approach with this project. In both movies we can easily perceive a symbiotic relation between man and machine, and how the directors acclaims the human relevance for the functioning of the machines. I tend to think that this is related to the close declination of the industrial revolution which brought many question in the relation man / machine, as some political and social consequences. Through the use of close-ups of machinery and their juxtaposition with scenes of daily life an idea of an assemblage is given, the interaction of men and machinery conform an excellent first attempt to depict the city (a representation of society) as a mechanical flow.
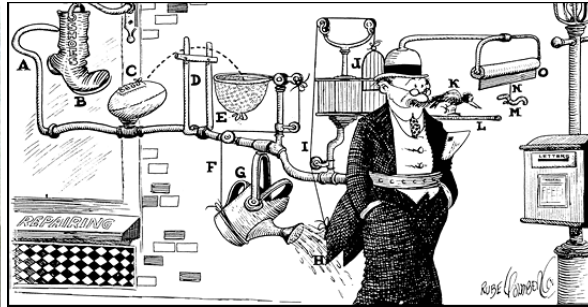

Still – Man With a Movie Camera
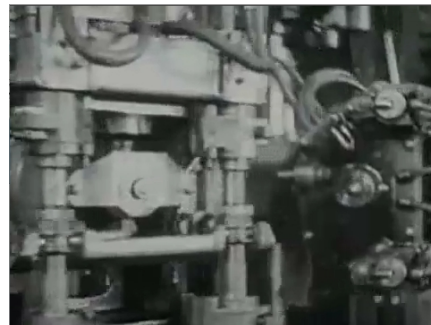
Still – Berlin City Symphony

A more related piece in terms of a moving object that excites the next is the piece "Der Lauf Der Dinge" (the way things go) by the swiss duo artists Peter Fishchli and David Weis, a film that documents a long causal chain reaction assembled of everyday objects, resembling a Rube Goldberg Machine (This last term comes from Goldberg´s series of cartoons in which a character made complex machines to perform simple tasks). Although this piece is more related to the relation cause- effect, it feels like a holistic machine (something also I am looking for). the idea that I rescue from Goldberg´s machine is the connection of elements that have different purposes in real life. This idea has also been adapted in the pieces of the swiss duo. They adapt objects and situations from everyday life and place them into an artistic context, They incorporates materials such as tires, ladders, and gasoline. Elements which have already alone a strong semantic load. In "Der Lauf der dinge" fire and pyrotechnics are used as chemical triggers, and things turn on and off consecutively. The idea of things that "triggered" others, was an idea that embrace the project from the beginning, together with the notion of chain reaction, the idea in my piece is to put together different elements that do not share the same purpose in daily life, but together they could be part of a process, of a mechanism

Still from "Der Lauf der dinge"   Rube Goldberg´s illustration

Machine as "muses" or as icons of society have being used in art since they appeared in our daily life. One of the first artist to make this stamen clear was Marcel Duchamp who was using useless machines and machine images to question the importance of the artist, and to challenge goal-oriented thinking. *" Through his use of machines in the production of art, and his portrayal of machines within his works, Marcel Duchamp sought a perfect objectivity and an escape from judgment, aesthetics, and emotion. Machines, in their pure indifference, appealed to Duchamp as manifestations of pure objectivity"*[10]

Looking for some other artist that work with machines in an more sculptural way, is was inevitable to pass by the work of Jean Tingueley, whose kinetic art machines "satirized the mindless overproduction of material goods in advanced industrial society"[11]. Another more recent artist that reflects about this industrialized processes in society is Mika Rottenberg. In her pieces she makes a sort of weird factories in which surreal characters are featured as bearers of production. in pieces like Squeeze (2010) *"creates mini-factories, farms, and tableaux, which produce products variously made by tremendously fat, tall, muscled, long-haired or long-fingernailed women. Women, who in their own lives commodify their eccentricities, are, in Rottenberg's films, featured as bearers of production".*[12]

10 Alan Foljambe. Marcel Duchamp and the machine. Suite 101 – Modern art history emag
11. Tingueley – Museum. Text about the artist.
12 Judith Hudson – article about Mika Rottenberg at Bomb Magazine. Isue 113 (2010)

What I found interesting is that Rottemberg does an sub-textual speech about labour exploitation and the relationship, effort, cost and products. *" If you simplify it, people use their vitality in order to make products; therefore every product contains part of the lives of the various that were involved in making it. I like the idea of measuring the value of something not by its "use value" but by the processes that were invested in its making – the amount of ¨life¨ that was put into it"*[13].

Another relevant artist who is interested in factories, machines, and the distribution of labour hand is the photographer Edward Burtynsky. His pieces more than a landscape are a social portray of what and how is the World nowadays. An interesting film-maker worth to mention is Harun Farocki, his films show how things, events and even training courses are made or organized, but more than a "how things are done" documentary, his films focuses in the production modes, and how this processes create spaces, social relations and structures. In a similar way Aleksander Komarov in his piece "estate" connects the production of asbestos, the stock market and art collectors as pieces for the production of value, desire and state; highlighting how these realms are related to the distribution of power and labour.

Conclusions

It is important to bear in mind that this document have been delivered in one month in advance to the final completion of the piece. The parts that still to be done are the editing and the post-production, and it is just in these stages of the process that all the ideas and pre-conceptions   take shape. This paper more that throwing an hypothesis and setting the academic foundation for its validation, aimed to be a report on how the project was constructed.

The framing of the work aimed to the epistemology of machines, to understand and interpret the relation between men and machines through time. In this sense, the research gave a better direction to the visual metaphors to use and how the piece is structured narratively. The first questions about what is the outcome of the social machinery, and if we have an influence or important role in the social process, were displaced by the understanding and deepening of the inter-dependant connection of elements, which somehow have become the core of this project.

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13 Mika Rottenberg "dough cheese squeeze" - text accompanied by the artist.

Description for press releases / festivals / calls

For purposes of touring the work, diffusion, press releases, or invitations; it is always useful to have different versions of the description of the project. Festivals and calls always demand different tones and amount of words, that is why I have decided to add the descriptions of the projects in the following durations : 339 words (abstract of the project at the beginning of this paper) , 71 words, 45 words and 19 words respectively.

71 words
503 characters
In the installation *Ma(n)chinery*, Luis Soldevilla presents a visual orchestration of machines, people, gears, interfaces and devices, working together for a superior organism. A multi-channel choreography of diverse elements and situations cross-linked by the dynamics of motion, transformation, change and the relationships of cause and effect. A panoramic window into the insides of this machinery, thay give us an up-to-date *City Symphony* film rendered through the intricate beauty of an assembly line.

45 words
317 characters
The installation *ma(n)chinery* is a visual orchestration of machines, people, interfaces, devices and gears, cross-linked by dynamics of motion and relationships of cause and effect. A multi-channel choreography that renders an assembly line in which men and machines cohabit in constant tension with each other.

19 words
140 characters
The multi-channel installation *ma(n)chinery* is a visual orchestration of machines, people, devices and gears rendered as an assembly line.

Technical description
 Multi-channel video projection (4:1) Multi-channel audio. Digital video. Digital projections. Variable dimensions

Bibliography

- Gilles Deleuze. The Logic of Sense. Columbia University Press (1969).

- Gilles Deleuze and Felix Guattari. Anti-Oedipus: Capitalism and Schizophrenia. The Athlone Press (1984).

- Gilles Deleuze. Thousand Plateus: Capitalism and Schizophrenia. The Athlone Press (1988).

- Gilles Deleuze. Societies of control. Columbia University Press (1990).

- Gilles Deleuze. Postscript on the societies of control. Columbia University Press (1992).

- Claire Colebrook. Deleuze : a guide for the perplexed (2006).

- Araujo, Yara Rondon Guasque. Immersion as "Social Machine"- analysing the coupling Human-Machine in the industry of entertainment. International Society for Presence Research (2003).

- Jia-Lu Cheng. On Control Societies: A Deleuzian Postscript. Goldsmiths College (2008)

- Expanded Cinema : Art, Performance, Film. A.L. Rees, Duncan White, Steven Ball and David Curtis. Tate Publishing (2011).

- Art of projection. Christopher Eamon & Stan Douglas. Hatje Cantz (2009)

- The Social Machinery and the Social Spirit. Helen Wodehouse. The Royal Institute of Philosophy (1930).

- Men and Machinery . Starr Hoyt Nichols. The North American Review, Vol. 166, No. 498 (1898).

- What Is Social Order?. Lawrence K. Frank. American Journal of Sociology, Vol. 49, No. 5 (Mar., 1944).

- Productivity Growth and Machinery. J. Bradford De Long. The Journal of Economic History, Vol. 52, No. 2 (Jun., 1992).

- The Influence of Machinery Upon Employment. John A. Hobson. Political Science Quarterly, Vol. 8, No. 1 (1893).

- Michelle Chion. Audio-vision: Sound on screeen Columbia University Press (1990).