Software-based Art from Delivery to Display:

Case Studies from the Tate Collection

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The Case Studies

The Case Studies are:

Rafael Lozano-Hemmer

Subtitled Public, 2005 /displayed at Tate Liverpool in 2008/2009

José Carlos Martinat:

Ambiente de Stereo Realidad 3- Brutalismo, 2007 / currently on display at Tate Modern

SIGNIFICANCE

„‘Significance’ refers to the values and meanings that items and collections have for people and communities”

”Significance 2.0” Collections Council of Australia, 2009

‘A statement of significance should be a reasoned, clear summary of the values, meaning and importance of an object or collection’

Australian Heritage Collection Council, 2001

RISK

Risk in the cultural context is described as the “Possibility of loss of value” or “Expected loss of value” Waller, 2003; Brokerhof, 2006

RISK

For most conservation objects loss of value will happen through one of the following factors:

Physical Forces
Fire
Water
Criminals
Pests
Contaminants
Light and UV radiation
Incorrect Temperature
Incorrect relative humidity
Custodial neglect (Waller, 1994)

RISK

For most conservation objects loss of value will happen through one of the following factors:

- Physical Forces (wear and tear)
- Fire
- Water
- Criminals
- Pests
- Contaminants
- Light and UV radiation
- Incorrect Temperature
- Incorrect relative humidity
- Custodial neglect (Waller, 1994)

RISK

For software-based artworks risks are similar to those we encounter in time-based media but the vulnerability of the artworks is increased because:

- Systems are bespoke
- Systems are easily changed
- The technical environment is rapidly changing

MAGNIFYING FACTORS

Magnifying Factors influence the consequences of a risk. These include anything that can be described as a lack of something, lack of technical possibility, lack of information on emergency procedures, lack of trained staff.

RECOVERY and VALUE

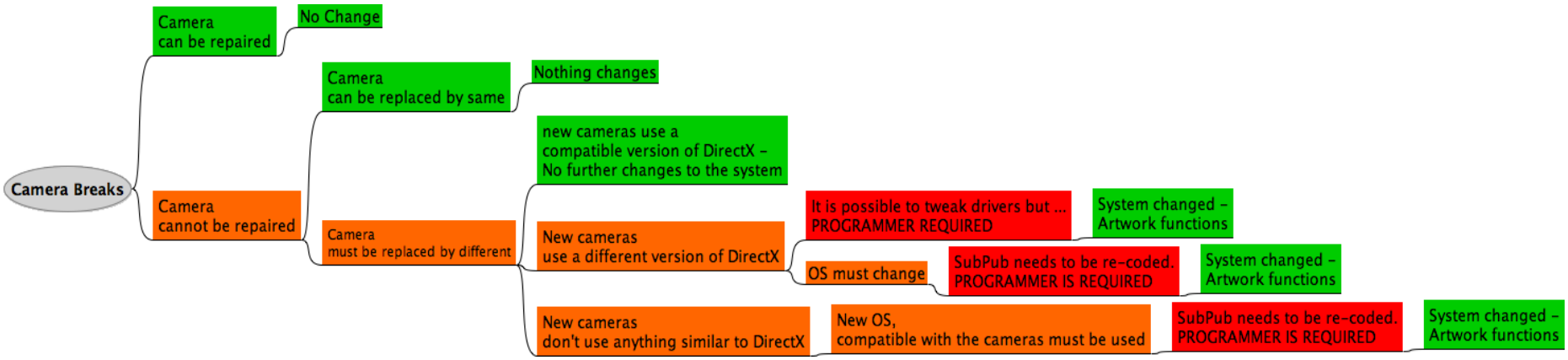
For traditional fine art objects any damage equates to loss of value, which is minimised by skilled restoration. Recovery of value is rarely complete.

For time-based media recovery depends on the value attributed to the element. Most elements are replaceable and therefore recovery can be complete.

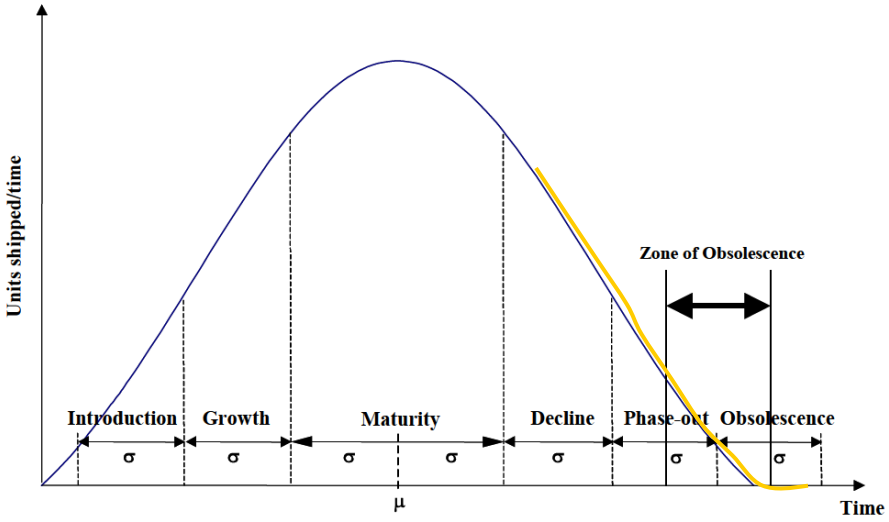
If an element is unique (highly valued) then recovery is similar to that of traditional fine art objects.

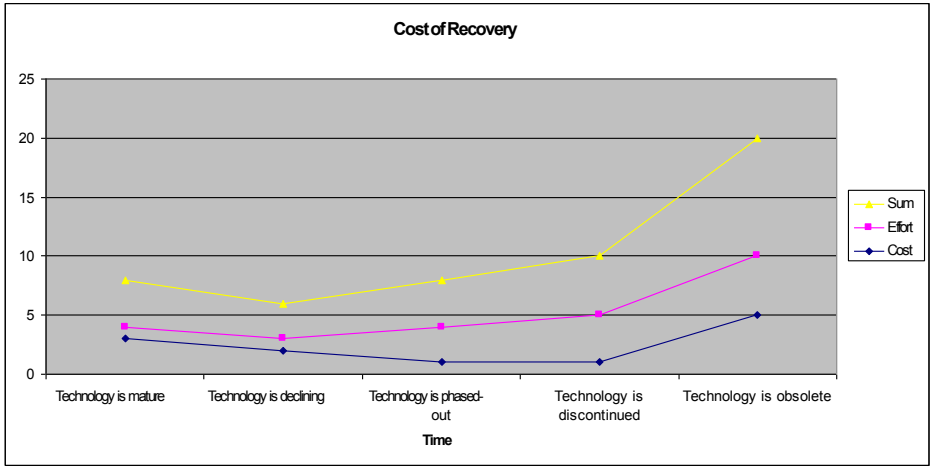
RECOVERABILITY

- Is the element replaceable?
- Can you find or produce an appropriate replacement?
- Can you afford to acquire or produce an appropriate replacement?



OBSOLESCENCE AND COST OF RECOVERY





The ARTWORK - Description

Ambiente de Stereo Realidad 3 - Brutalismo, 2007

Artist - José Carlos Martinat
Programmer - Arturo Diaz

The ARTWORK -Statement of Significance

Artistic/Historic Significance:

His work usually has a political background and the transmission of information is an important aspect.
Brutalismo has a political background, referring to the peruvian dictature of Alberto Fujimori, but at the same time it also refers to Galeria Leme (who comissioned the work) and is brutalist architecture. Transmitting information about this is the essence of “Brutalismo”

Technical Significance

•The artist refers that in discussion with the programmer they had agreed that the software is relevant, and that using a simpler system developed today would be a loss to the artwork.
•The printers have aesthetical significance and must be kept as long as possible. Replacement options were discussed with the artist.
•The untidy look of the sculpture, with cabling and hardware visible is part of the artistic intent.

RISKS - at Acquisition

Main risks are:

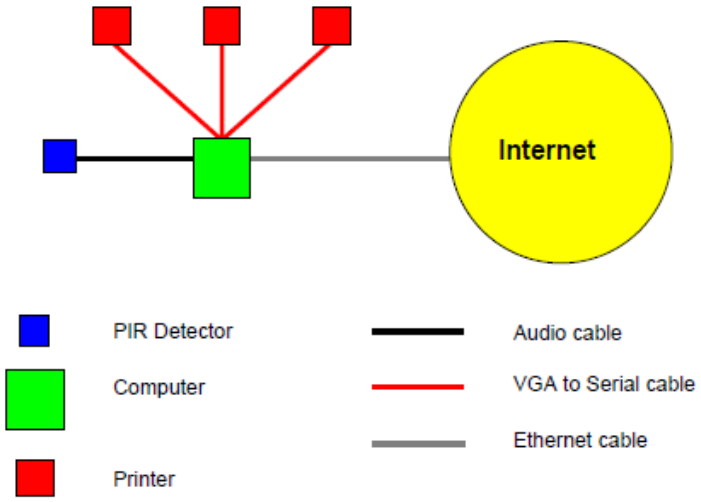
Not having a fully functioning artwork
Not having access to the system

Magnifying Factors:

•Lack of information about the work of art.

•Not obtaining all the elements required for preservation

RISKS – at Installation



Schematic representation of the hardware set up

Main risks are:

- Physical damage from handling
- Problems setting up the internet connection
- Problems with cabling
- Malfunction of the equipment
- Power supply issues
- Wrong installation due to lack of information
- Uncontrolled change to the system

RISKS - during Display

Main risks

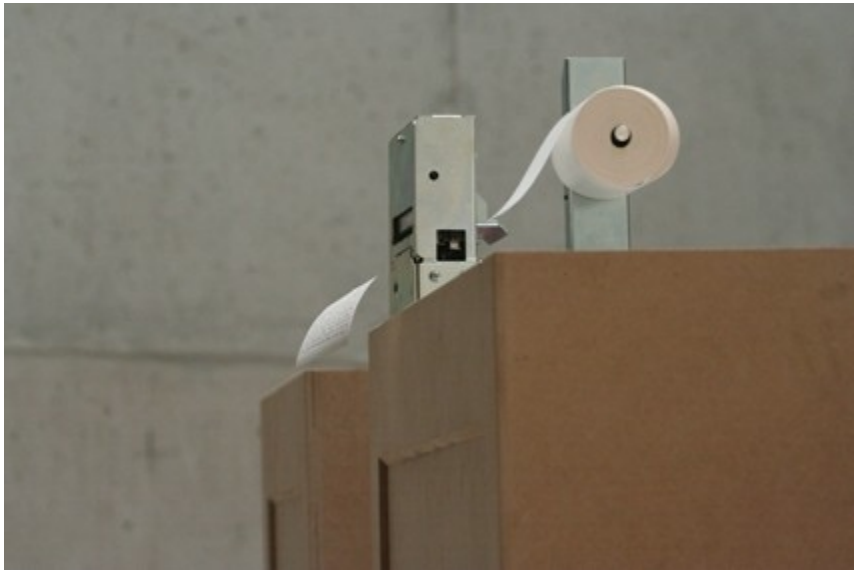
For Hardware:

•At Tate computer and printers will be working 70 hours a week.
•The computer should be placed on the floor, next to the sculpture.
•Paper slips should be left to pile on the floor.

For Software:

•Google search results vary with the location of IP addresses. Results in Europe are different from those obtained in South America. Results for searches in English are also different to searches in Spanish.
•Public may push the software to its limits, causing it to freeze.

RISKS - Long Term



Main risks are:

•The Internet and Google are the main variables and the museum does not have control over them.
•Change to the Google API will affect the function of the brutalismo software, unless something is made to prevent this.
•Replacing the Printers will become increasingly difficult.
•Information dissociation
•Inherent decay of hardware

Magnifying Factor:

•Obsolescence and its effect in recoverability

RISKS - Recovery

Ubuntu 7.04 Desktop

Main risks are:

- Artist assigned value to the code
- Printers have aesthetical value – replacing them for different means a loss of value
- Change introduced at recovery may result in loss if not tightly managed

CONCLUSIONS

- Issues with obsolescent equipment or software must take priority.
- When one of the elements breaks, or stops working, the main problems will arise in the interfaces between that element and the others, both at hardware and software level.
- For every artwork there will be a tipping point, a moment when an inevitable change in the technology will cause the need to change the whole system. These can be failures of the hardware, but can also be external factors, like changes to the internet.

IN PRACTICE

At Acquisition:

- Back-up immediately. Back-up not only the application but also the whole system.
- Get software versions, source code and the programming tools necessary to read project files. Assess obsolescence of the elements
- Gather both operation and service manuals and specifications for the hardware.
- Test the system, without the artist or his technicians, as soon as possible.
- Identify what can or cannot be changed, and if changeable within which parameters.

During the life of the work:

- Prevent uncontrolled changes to the original system

WHERE TO GO FROM HERE

- Continue to implement the preservation strategies identified for the case studies
- Develop procedures for the acquisition of software-based artworks
- Identify tools useful for preservation
- Test recovery strategies and confirm results over time

Thank you