

CINE-GT 1805 Handling Complex Media  
Mid-term assignment - Progress report  
Spring 2021

Aparna Subramanian  
Klavier Wang  
Robert Hoffman

## ***Flow* (2012) - Three channel video installation by Robert Hoffman Preservation and re-creation plan**

### **Introduction**

*Flow* (2012) is a three-channel video installation created by New York-based video artist Robert Hoffman for a public group exhibition called "A City Asleep and Dreaming." The exhibition took place in Rochester, NY in 2012.

In this project, the group is going to propose a preservation plan to preserve the essential elements and behavior of the artwork. In the case of *Flow*, the essential elements for preservation consist of the camera-original footage, the Adobe Premiere project, the previous exhibition copies of the videos and photo documentation of the artwork installation from its previous exhibition.

Because the hardware devices which used to display and install the video channels were missing, further discussion with the artist is still needed in this regard. What needs further discussion and research is how to preserve the behavior of the artwork since the installation is highly spatial dependent.

Based on this, the group is also proposing a plan to re-create the artwork in a designated space in New York city. Because this artwork is spatial-dependent - the video channels could be displayed with different technical specifications according to the spatial setting, with a (hypothetical) designated exhibition space in mind, it is better for us to understand how to preserve and reveal the behavior of the artwork. The re-creation of the artwork will not only rebuild the three-channel video installation, but also incorporate interactive elements so that the artwork will have an organic relationship with the new exhibition space.

### **About *Flow* (2012) - Exhibition history, artwork description and user experience**

*Flow* (2012) was part of the exhibition "A City Asleep and Dreaming - One Night + 18 Artists = City Space Transformed." The exhibition was a series of site-specific public media art installations created and organized by artists Jason Bernagozzi and Evelyne Leblanc-Roberge over several weekends in the fall of 2012. Using media and print strategies, the aim of the

exhibition was to provoke a public dialogue about the transitioning identity of the city - Rochester, NY and a re-imagining of what a public space is and what it could be. The last exhibition took place at the former First National Bank Rochester, located at 35 State Street, on December 7<sup>th</sup> 2012. Including Leblanc-Roberge and Bernagozzi, eighteen artists created works based on their interpretation of a specific space within the building (more information about the exhibition could be found here:

<https://www.evelynelr.space/the-city-is-asleep-and-dreaming/2020/3/5/as9g4p5zfczy7f7eavgv48xv5ni4b>).

Robert Hoffman, then a graduate student at The College at Brockport, SUNY, was one among the eighteen artists who transformed the legacy space of the former First National Bank Rochester. He brought to the space his video installation artwork *Flow* (2012).

*Flow* (2012) consists of three videos which were played through three color monitors separately. Two videos, "water coming from faucet" and "water running through" were displayed on 19-inch LCD monitors at a resolution of 720x480 stretched to a 16:9 aspect ratio. One video, the "water draining" was displayed on a 5-inch color CRT monitor at 4:3 aspect ratio with resolution at 720X480.

Video content for the monitors was edited and exported from Adobe Premiere Pro as MPEG-2 video and .WAV audio files encoded for DVD presentation. Adobe Encore was used to create the final preset looping DVDs. In the exhibition, the videos were played by DVD players, which were connected to the monitors via RCA outlets (one component, two composites).

The three monitors were mounted onto the false drop ceiling with the artist's DIY brackets.

In the exhibition, this video installation was individually placed in a room of approximately 160 square feet. Part of the ceiling height is 6 feet and another part is 8 feet high. On the walls of the room, hints of water damage could be seen. The room was dimmed during the exhibition period.

Once visitors stepped into the room, they would immediately notice the three channel video installation mounted on the ceiling. The in-loop moving images and the sound of water flowing would draw visitors to look up to the videos. Visitors may also notice the water damage traces on the walls as they continued looking around this "gallery" space.

No interactive element was included in the installation back in 2012.

More information about the artwork could be found here:

<https://roberthoffman.com/artwork/3475563-Flow-A-City-Asleep-and-Dream.html>

## **Artist Intent**

*Water is a fundamental element which not only sustains life but transforms the environment, such as a river eroding the land. Flow, aims to challenge the viewers visual perception and to consider how creations such as buildings are not immune from this of perpetual force of nature.*

--- Rob Hoffman

In 2012, the exhibition organizers Jason Bernagozzi and Evelyne Leblanc-Roberge invited a group of young artists to the vacant former First National Bank Rochester. Each artist was invited to pick a space in the old bank building which spoke to them in some sort of way or they could envision something. Rob Hoffman then walked to one room which looked like it had been a supply closet. Because there was a bathroom attached to it, signs of water damage from water dripping down the wall were easily spotted. This was when the "water" theme came into Hoffman's mind. Then the thought of water dripping brought in the idea of "water flowing". But Hoffman did not stop here.

Water is usually drained down and running down due to gravity. But sometimes the direction of water flow does change. For example, in a bathtub, water could run horizontally. Hoffman then decided to "play around" with the orientation of water flow, hoping to surprise visitors with some sort of "illusion". He installed the monitors at the ceiling, drawing visitors to look up instead of look down for the moving images of water flow. In the videos, water was drained up, and no water was falling down. Hoffman liked to convey the idea of "how that kind of defying gravity went against what was happening with the water running down the wall."

Hoffman then captured raw footage of running water in his own apartment, with a Nikon D800 digital camera. Elements such as water running down from the faucet and water being drained into the sewage were captured from different angles. Eventually, three camera-original digital video files were chosen for creating derivatives for the exhibition. They represent "water coming from the faucet", "water running through" and "water draining" respectively.

Speaking of the behavior of the artwork, Hoffman emphasized that visitors were drawn by the sound of the running water in the exhibition venue, and they looked up the ceiling and viewed the videos. "Looking up" is a key element here because this is how the artist plays around with the water flow orientation. Originally, the three video channels were displayed in different aspect ratios. But according to the artist, these display specifications, such as the aspect ratio, resolution and the choice of display monitor are flexible and adjustable, depending on the exhibition venue. The artist hopes the visitors could have a clear view of the videos and could hear the sound of the running water clearly. Therefore, if the artwork is to be installed in a huge space, the technical specifications are to be adjusted to fulfill this purpose.

## **Preservation Plan**

The above-mentioned three camera-original digital video files are the most essential elements to be preserved. These are the most original moving image sources of the artwork. It is based on these original footage that further editing of the videos were made and exhibition copies were created.

The raw footage video files were then edited in Adobe Premiere for creating exhibition files. The artist keeps the Adobe Premiere project, so that information about how the original footage (image and sound) were edited and exported could be traced. Therefore, the Adobe Premiere project needs to be preserved as well.

The third set of elements should be preserved is the 2012 exhibition copies of the three channel videos. Even though the display monitors originally used in the 2012 exhibition were missing, with these exhibition copies, preservationists could obtain a more clear sense of how the artwork was actualized back in 2012 and how the artwork could be re-installed in the future.

The artist also keeps a set of photos which document how the artwork was installed, how the DIY brackets were made and mounted, and how the artwork was displayed on-site back in the 2012 exhibition. These documentation materials are important elements for preservation as well because they to the best degree visually record the making of the artwork and the behavior of the artwork in an actual exhibition venue.

Unfortunately, after the 2012 exhibition, the hardware devices used for installing this three channel video artwork got stolen. This accident makes preserving the above mentioned elements more important and urgent.

Below is MediaInfo extracted metadata of the three raw footage video files.

***DSC3371 "water coming from the faucet"***

Format: MPEG-4

Format profile: QuickTime

Codec ID: qt 2007.09 (qt /niko)

File size: 1.27 GiB

Duration: 8 min 19 s

Overall bit rate: 21.9 Mb/s

Encoded date: UTC 2012-12-06 17:42:25

Tagged date: UTC 2012-12-06 17:42:25

NCDT: NCTG

Video

ID: 1

Format: AVC

Format/Info: Advanced Video Codec

Format profile: High@L4

Format settings: CABAC / 2 Ref Frames

Format settings, CABAC: Yes  
Format settings, Reference frames: 2 frames  
Format settings, GOP: M=3, N=15  
Codec ID: avc1  
Codec ID/Info: Advanced Video Coding  
Duration: 8 min 19 s  
Bit rate: 20.3 Mb/s  
Width: 1920 pixels  
Height: 1080 pixels  
Display aspect ratio: 16:9  
Frame rate mode: Constant  
Frame rate: 29.970 (30000/1001) FPS  
Color space: YUV  
Chroma subsampling: 4:2:0  
Bit depth: 8 bits  
Scan type: Progressive  
Bits/(Pixel\*Frame): 0.327  
Stream size: 1.18 GiB (93%)  
Language: English  
Encoded date: UTC 2012-12-06 17:42:25  
Tagged date: UTC 2012-12-06 17:42:25  
Color range: Full  
Color primaries : BT.709  
transfer\_characteristics\_Original: BT.470 System M  
Matrix coefficients: BT.601  
Codec configuration box: avcC

#### Audio

ID: 2  
Format: PCM  
Format settings: Little / Signed  
Codec ID: sowt  
Duration: 8 min 19 s  
Bit rate mode: Constant  
Bit rate: 1 536 kb/s  
Channel(s): 2 channels  
Channel layout: L R  
Sampling rate: 48.0 kHz  
Bit depth: 16 bits  
Stream size: 91.5 MiB (7%)  
Language: English  
Encoded date: UTC 2012-12-06 17:42:25  
Tagged date: UTC 2012-12-06 17:42:25

**DSC3367 "water running through"**

Format: MPEG-4  
Format profile: QuickTime  
Codec ID: qt 2007.09 (qt /niko)  
File size: 943 MiB  
Duration: 5 min 54 s  
Overall bit rate: 22.3 Mb/s  
Encoded date: UTC 2012-12-06 15:46:34  
Tagged date: UTC 2012-12-06 15:46:34  
NCDT: NCTG

Video

ID: 1  
Format: AVC  
Format/Info: Advanced Video Codec  
Format profile: High@L4  
Format settings: CABAC / 2 Ref Frames  
Format settings, CABAC: Yes  
Format settings, Reference frames: 2 frames  
Format settings, GOP: M=3, N=15  
Codec ID: avc1  
Codec ID/Info: Advanced Video Coding  
Duration: 5 min 54 s  
Bit rate: 20.8 Mb/s  
Width: 1920 pixels  
Height: 1080 pixels  
Display aspect ratio: 16:9  
Frame rate mode: Constant  
Frame rate: 29.970 (30000/1001) FPS  
Color space: YUV  
Chroma subsampling: 4:2:0  
Bit depth: 8 bits  
Scan type: Progressive  
Bits/(Pixel\*Frame): 0.334  
Stream size: 878 MiB (93%)  
Language: English  
Encoded date: UTC 2012-12-06 15:46:34  
Tagged date: UTC 2012-12-06 15:46:34  
Color range: Full  
Color primaries : BT.709  
transfer\_characteristics\_Original: BT.470 System M  
Matrix coefficients: BT.601  
Codec configuration box: avcC

Audio

ID: 2  
Format: PCM  
Format settings: Little / Signed  
Codec ID: sowt  
Duration: 5 min 54 s  
Bit rate mode: Constant  
Bit rate: 1 536 kb/s  
Channel(s): 2 channels  
Channel layout: L R  
Sampling rate: 48.0 kHz  
Bit depth: 16 bits  
Stream size: 64.9 MiB (7%)  
Language: English  
Encoded date: UTC 2012-12-06 15:46:34  
Tagged date: UTC 2012-12-06 15:46:34

***DSC3319 "water draining"***

Format: MPEG-4  
Format profile: QuickTime  
Codec ID: qt 2007.09 (qt /niko)  
File size: 770 MiB  
Duration: 4 min 58 s  
Overall bit rate: 21.7 Mb/s  
Encoded date: UTC 2012-12-03 20:48:26  
Tagged date: UTC 2012-12-03 20:48:26  
NCDT: NCTG

Video

ID: 1  
Format: AVC  
Format/Info: Advanced Video Codec  
Format profile: High@L4  
Format settings: CABAC / 2 Ref Frames  
Format settings, CABAC: Yes  
Format settings, Reference frames: 2 frames  
Format settings, GOP: M=3, N=15  
Codec ID: avc1  
Codec ID/Info: Advanced Video Coding  
Duration: 4 min 58 s  
Bit rate: 20.1 Mb/s  
Width: 1920 pixels

Height: 1080 pixels  
Display aspect ratio: 16:9  
Frame rate mode: Constant  
Frame rate: 29.970 (30000/1001) FPS  
Color space: YUV  
Chroma subsampling: 4:2:0  
Bit depth: 8 bits  
Scan type: Progressive  
Bits/(Pixel\*Frame): 0.324  
Stream size: 715 MiB (93%)  
Language: English  
Encoded date: UTC 2012-12-03 20:48:26  
Tagged date: UTC 2012-12-03 20:48:26  
Color range: Full  
Color primaries : BT.709  
transfer\_characteristics\_Original: BT.470 System M  
Matrix coefficients: BT.601  
Codec configuration box: avcC

#### Audio

ID: 2  
Format: PCM  
Format settings: Little / Signed  
Codec ID: sowt  
Duration: 4 min 58 s  
Bit rate mode: Constant  
Bit rate: 1 536 kb/s  
Channel(s): 2 channels  
Channel layout: L R  
Sampling rate: 48.0 kHz  
Bit depth: 16 bits  
Stream size: 54.6 MiB (7%)  
Language: English  
Encoded date: UTC 2012-12-03 20:48:26  
Tagged date: UTC 2012-12-03 20:48:26

In addition to preserving the above mentioned artwork elements, further puzzles remain to be answered and a further artist interview shall be conducted. For example, it is still pending that, if a gallery/museum is going to acquire this artwork, what exact elements the artist will provide and what elements the gallery/museum should prepare for this artwork? Does the artist still have the original wiring diagram of the artwork? As the artwork is very spatial-dependent, does it mean that the gallery/museum needs to consult with the artist every time when this artwork is going to be exhibited? Does the artist provide sufficient documentation for the gallery/museum for future exhibition? To what extent will the artist be satisfied with the gallery/museum make



their own decision on how to display the artwork? Could the videos displayed in any aspect ratio and resolution? About the digital camera original raw footage, does the artist still keep the original video file folders which usually directly come from a digital camera memory card? Does the artist keep any metadata file of the raw footage video files?

### **Plan to Re-create *Flow***

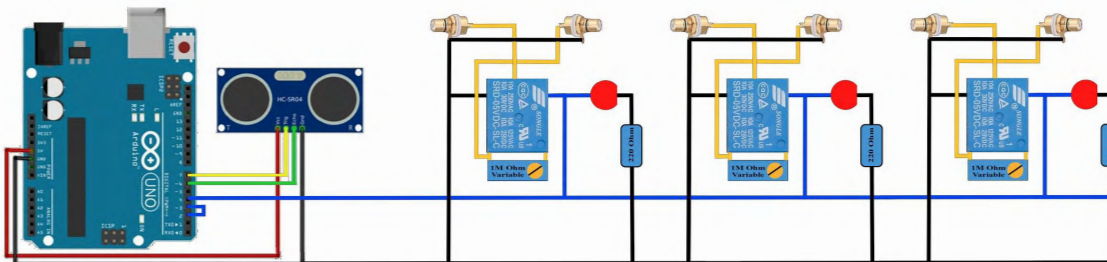
We propose to (hypothetically) re-create the three channel video installation at the Gulf and Western Galley, 1st Floor, 721 Broadway, New York, NY. This is the building managed by Tisch School of the Arts, New York University.

As this gallery is adjacent to a bathroom, it is surmised that by having this water-theme video installation displayed, an inviting and interesting user experience (and artistic expression) would be stimulated as the moving images and sounds of water flowing will company the way people entering the hallway to the restroom.

To accommodate the installation location, not a gallery space, an interactive element will be added to the artwork - proximity sensor on a microcontroller Arduino. With the videos looping on the monitors, when people approach the entrance threshold, the volume of the sound will be elevated to full exhibition level. After a prescribed duration the volume will be reduced to approximately half the exhibition volume.

A tentative wiring diagram of the Arduino is as below.

#### **Volume Control Relay Ver. 1.0 Robert Hoffman**



Three HD monitors will be mounted onto the ceiling of the gallery for displaying the videos. Power and other cabling will be hidden using cable covers.

### **Tentative Equipment/Supplies List & Budget for Recreating *Flow***

<b>Equipment/ Supplies</b>	<b>Price/ unit</b>	<b>Unit</b>	<b>Total</b>	<b>Purchase Link</b>
Monitor	\$159	3	\$477	<a href="https://www.bhphotovideo.com/c/product/1466228-REG/pyle_home_ptvled23_23_6_class_full_hd.html">https://www.bhphotovideo.com/c/product/1466228-REG/pyle_home_ptvled23_23_6_class_full_hd.html</a>
Media players component	\$43.50	3	\$130.5	<a href="https://www.newegg.com/p/2B5-005C-00007?Description=media%20player&amp;cm_re=media_player_-2B5-005C-00007--Product#">https://www.newegg.com/p/2B5-005C-00007?Description=media%20player&amp;cm_re=media_player_-2B5-005C-00007--Product#</a>
Adapter Cable	\$15.99	3	\$47.97	<a href="https://www.newegg.com/p/0ZK-08UH-0UWX6?Description=component%20adapter&amp;cm_re=component_adapter--9SIAMYSE4V9463--Product">https://www.newegg.com/p/0ZK-08UH-0UWX6?Description=component%20adapter&amp;cm_re=component_adapter--9SIAMYSE4V9463--Product</a>
Component Cable	\$6.49	3	\$20.00	<a href="https://www.amazon.com/Cmple-3-RCA-Component-Video-Cable/dp/B003ZFNZOU/ref=sr_1_6?crd=1BCG9GIDCCMYZ&amp;dchild=1&amp;keywords=3ft+component+cable&amp;qid=1616318405&amp;srefix=3ft+com%2Caps%2C234&amp;sr=8-6">https://www.amazon.com/Cmple-3-RCA-Component-Video-Cable/dp/B003ZFNZOU/ref=sr_1_6?crd=1BCG9GIDCCMYZ&amp;dchild=1&amp;keywords=3ft+component+cable&amp;qid=1616318405&amp;srefix=3ft+com%2Caps%2C234&amp;sr=8-6</a>
Mounting Bracket	\$83.40	3	\$250.20	<a href="https://www.bhphotovideo.com/c/product/937040-REG/peerless_industries_prgs_unv_w_prgs_series_prgs_unv_s_projector.html">https://www.bhphotovideo.com/c/product/937040-REG/peerless_industries_prgs_unv_w_prgs_series_prgs_unv_s_projector.html</a>
RCA Audio	\$5.00	6	\$30.00	<a href="https://www.amazon.com/C2G-40463-Value-Stereo-Meters/dp/B0019MEG4E/ref=sr_1_8?crd=1164MK3LEOI8G&amp;dchild=1&amp;keywords=3ft+audio+cable&amp;qid=1616319666&amp;srefix=3ft+a%2Caps%2C168&amp;sr=8-8">https://www.amazon.com/C2G-40463-Value-Stereo-Meters/dp/B0019MEG4E/ref=sr_1_8?crd=1164MK3LEOI8G&amp;dchild=1&amp;keywords=3ft+audio+cable&amp;qid=1616319666&amp;srefix=3ft+a%2Caps%2C168&amp;sr=8-8</a>
			\$955.67	