BlinkenLights Basel

Cultural-Historic Basis Thesis
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1. Introduction

In the pitch-dark, people generally see shining stars in the sky, windows, and illuminated streetlamps. At a certain point, there is a building with flickering lights. The lights of the windows are switching on and off, like a pixel animation. Suddenly, the game pong is recognizable and being played on a building.
In September 2001, the building “Haus des Lehrers” in Berlin was one of the biggest interactive computer-displays and was on display for 166 days. This project was one part of the installation series named “BlinkenLights.” It was recognised by the group CCC, short for “Chaos Computer Club.” They used 144 windows for the installation. Floodlights, a strong lamp made for stages, were used to light the windows, and simulate the pixels, every lamp was connected to the control centre, which had varied animations.
The CCC group invited the public to submit their self-made animations for this installation, rather than creating it themselves. While the animations are being played so is a game of pong. Thanks to the interactive element, the public felt uplifted by directly affecting what was happening on the big screen. This element garnered great attention and led people from all around the world to witness potentially their animations and play pong. It is a very impressive installation because of the huge size and organization of this project.[1]

F1: Pong on “Haus des Lehrers”,

2. Questions

For this paper, I want to explore if it would be possible to realize this kind of installation in the city of Basel. Where would this kind of interactive installation be possible, which buildings would be suitable? The text not only covers the organizational aspects, but also explores the possible impact it would have on the local community.

3. Chaos Computer Club and BlinkenLights

3.1. CCC

The CCC are one of the biggest groups of hackers, who work in smaller circles of around thirty groups, meaning the group is decentralized. The group mostly participated in projects for freedom of information, on which they target other organizations by hacking into their systems. One famous example is the hack of the “Hamburger Sparkasse” in 1984 during which they pillaged around 134’694.70 German Mark. The CCC were playing around the system and found a lot of security flaws. At the end, they published their hacking to the public.[2]

1 (Pritlove 2012b)
2 (Chaos Computer Club n. d.); (Erdogan 2014); (Fulterer 2021)
F1 (Würtembergischer Kunstverein Stuttgart 2001)

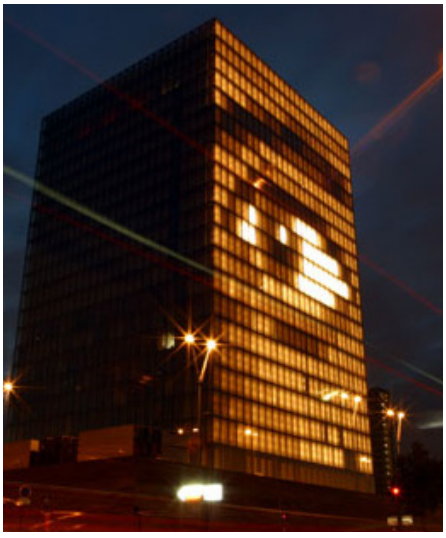
3.2 BlinkenLights

However, they also worked on creative projects such as, the installation series BlinkenLights. Their first project was on the building named “Haus des Lehrers,” taking place in Berlin 2001. The group organized this installation, due to their honour of celebrating their 20th anniversary of the CCC founding. To achieve the interactive part, they made the game pong playable on the phone and the building was used as the display.
The architecture of the building is rather simple, considering it is a block building. It was a good choice as the first project of the series, considering it would been more difficult with a complex structure. To illustrate the translucence of the light, the windows were painted white. That way, the light spread across the windows each. However, it would have been better to use plastic sheets for the translucence by reason of cleaning everything up after the end. The windows of the building have a clear grid and the grid lines horizontally are thicker than the vertical ones. The lines were thin enough to display it in a recognizable way. If it were to be thicker, then it would been difficult recognize the installation, except if the audience would be further away to see the whole. The pixel rate was 8 x 18 resulting to 144 windows illuminated. Thanks to the number of the pixel rate, it was enough to illustrate remarkably simple figures, shapes, and typography. For example, the combination of shapes and typography were used for love letters, which was a popular category of the sent animations. It was a good choice to make the installation temporary. Thanks to the limited time, people were more inclined to see the installation.[3]

F2: “Haus des Lehrers”,

F3: Heart on “Haus des Lehrers”,

Released in October 2002, the second installation “Arcade” of the series, could be called an improvement of the first project, because it could display eight different grayscales and the public had the opportunity to send programmed games for the installation.
They arranged in the fifth building of “bibliothèque national de France” in Paris. Instead of painting the windows white, plastic sheets were utilized for the translucence and to keep it uniform. They used twenty floors and each floor had twenty-six windows, resulting to 520 windows being illuminated. The grid of the windows also had the same size, and all grid lines had the same thickness. Thanks to the lines thickness, the pictures of the installation were more unified, because each pixel felt more to beside to each other. By cause of to the grey scaling, many animations had the possibility to make it more realistic. The reason of the realism is, that different grayscales of lights could be used for shading and highlighting a picture. For example, a lot of the presented animations showed realistic eyes, dancing people and portraits. To make those complicated visuals possible, they made a software of importing videos into a BlinkenLights project.[4]



F4: eye on the 5th building of
“bibliothèque national de France”,

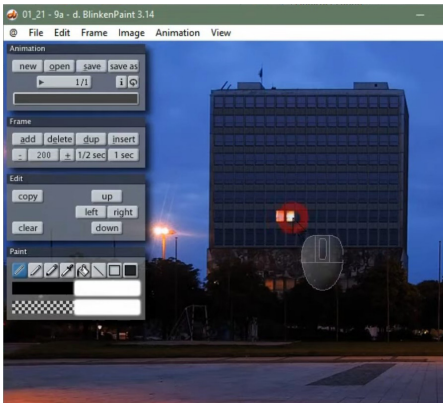
3 (BlinkenLights 2008c); (BlinkenLights 2008d); (Pritlove 2012b)
4 (BlinkenLights 2008a); (Pritlove 2012a)
F2 (Ajepbah 2015)
F3 (Günter 2001)
F4 (Harald & Erhald Fotografie 2007)

The third of the BlinkenLights series named “Stereoscope” was opened in the city hall of Toronto, Canada. The building itself has a unique shape, considering the structure is rounded and the windows are inside of the round shape. The windows have a clear grid and all of them have the same size, except from the middle floor and the top floor. This time 960 windows were used for this installation, the highest pixel rate of this series. Not only had the club a bigger display to work with, but also, they invited everyone, especially designers, in which they made a more professional software for them to send their animations. Thanks to the shape of the building, the installation had a three-dimensional appearance than the other installations, then the animation was played on a rounded display instead of a flat one. With that shape of the building meant, that a hypothetical installation does not have to be in a traditional block building. The illumination of the windows was grouped into four sets. The windows of the middle and the top floor were not used. The sets were either used all for one animation or some sets played different animations and games.[5]


F5: city hall Toronto in “Stereoscope”

3.3 BlinkenPaint

For the animation, the CCC released a software named BlinkenPaint on the BlinkenLights website. The software has an older interface with a grey colour scheme, and it has many buttons for controlling the animation, but instead of having an empty canvas, it has the building on which itself to animate. There is a simple timeline to use and to make graphics by clicking each of the windows. The software uses BML for exporting animations, but also making animations. BML is a programming language, short for “BlinkenLights Markup Language,” which has similarity to the web programming language HTML or “HyperText Markup Language.”[6]



F6: BlinkenPaint

4. BlinkenLights: Novartis Campus

But what if a project from BlinkenLights was on a building from Basel?

The building “Forum 3 Novartis Campus” is a part of the architecture series named “Novartis Campus”, that the pharma firm Novartis owns. It is 22 meters high, 83.50 meters long and 22.50 meters wide. There are five floors and one basement. It two window layers: The lower layer is a normal window, but the windows above have a selection of different glasses with different hues, strengths, and sizes.[7]

The first thing to notice is that there are less floors to work with, considering that the building has five floors. It would be difficult to achieve an illustrative animation with it. Also, which of the layer should be illuminated? If floodlights would be behind the inner window layer, it would look too simple for the complex layer.


F7: Forum 3 on the side

5 (BlinkenLights 2008e); (Pritlove 2012c)
6 (BlinkenLights 2008b); (Fischer n. d. a); (Fischer n. d. b); (Steffens 2018)
7 (Diener 2005, p. 93)
F5 (veggiefrog 2008)
F6 (Waringo 2021)
F7 (Diener & Diener Architekten n. d.)

However, if every glass of the upper layer was illuminated, it would be too complicated to animate with it. The most suitable would be to use under layer because people wouldn't be discouraged to make animations.
The height of the building made it difficult to play and design games onto the actual side. Even a simple game, like pong, would be tough to play. For this building specifically, it needs an intuitive game which is understandable to play with. There is a possibility to play snake on the building, because snake does not really need many pixels than pong. It would be interesting to use all sides for the installation. It would incline people to move around the building to see the animation and game itself. The audience would interact with each other as part of the game.
For the interactivity with the building itself, since we all use smartphones, people would have difficulties playing the games. The reason is, that most smartphones barely have any buttons outside of the screen and people would have a hard time to connect with the big screen. For example, many video game consoles have a controller with physical buttons and all users look mostly a separate screen, not the controller.
Nevertheless, the building would be great for abstract animations. There is a certain limit, and limits can give more creativity in animations than complete freedom. People would be fascinated with the abstract approach of the installation. And the colours of the upper window layer would give a strong impression to the audience.


F8: Forum 3 on front

5. Conclusion

In summary, the best buildings to use are with a clear grid and with same window size. The thinner the grid lines are, the more united would be the images of the installation. The exact place for the installation depends on the exterior architecture and space. If it is a block building, more clear pictures would be possible to work with. It is possible to work with one side with a building, but it can be more than one. The more windows it has, the more illustrative are the animations. But it does not have to be a building with a lot of windows, if it has a creative approach. People would be impressed and uplifted with interacting a building. Not only that, but the audience would interact with each other to play games on the building.
In my opinion, it would be great to see this kind of installation in Basel, because the city has a lot of diverse building, for example the Novartis Campus. I wish that there would be more of the BlinkenLights installations from the CCC or someone else because these kind installations make it more democratized.

F8 (Licht Kunst Licht AG n. d.)

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