Development of Artistic Concepts for VJing

Marcus Malmström
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Examiner: Peter Jenke
Supervisor: Torsten Jonsson
Development of Artistic Concepts for VJing
by
Marcus Malmström

Faculty of Engineering and Sustainable Development
University of Gävle
S-801 76 Gävle, Sweden

Email: malmstrom.marcus@gmail.com

Abstract
The aim of this research is describe the development of artistic concepts for visual artists and to evaluate aspects which augments the art experience for audiences. Competition and increased attention for the art form demands greater art to be produced, studying psychological aspects increases the probability of the art being perceived in line with the visions of artists. This research project uses a review of literature for its theoretical research, which is then used to underline decisions within practical experiments in order to give examples of the development of concepts. Findings include a description of the artistic process as well as aspects to augment experiences for audiences. The main conclusion from this work is the importance of combing innovative expressions with theoretical knowledge, in order to create spectacular art which audiences perceives in line with the vision of the artist.

Key words: VJ, VJing, Artistic Concept, Digital Production, Concept Development, Computer Graphics
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1 Introduction

Art has for a long time been a great part of our society. In its nature, art strive towards being a reflection of the surrounding world. New forms of expressing such impressions evolve constantly as artists get influences from each other and current events. Sound and visual art are two heavy cornerstones of the art pyramid, both of which have got grand arenas for exhibiting. Combining these two art forms generates a separate form of art were impressions from two senses create a united experience.

The term VJ (Video Jockey) is generally used as a label for artists within the media of live mixing of video clips to music and sound. The VJ diverges from the traditional video artist in two ways; a VJ performs live and works with music as component [1], [2].

1.1 Background

VJs and other visual artists today are reaping the benefits from the explosion like emerge of digital video capturing possibilities over the last couple of decades. Using smaller budgets, a wider spectrum of expressions can be reached, not least in combination with computer graphics. As the art form can be created and expressed to a smaller cost, it expands and gains exposure. Attention leads to economic advantages which in turn enables more time and effort to be put into the art, resulting in greater experiences. Today, VJs are a familiar sight at most clubs and many concerts. Techniques for DJs and producers to control visual elements whilst also performing music has led to multimedia artists merging the line between the DJ and the VJ.

Although the technological advancements supplant each other at an increasing pace, the art and the visual expression is what remains as the centre point for VJs.

1.2 Research Focus

To describe the development of visual artistic concepts to accompany sound and aspects which improve impressions when perceiving the art.

Visual artists at musical events often find their work overshadowed. More often than not, the music is what attracts the crowd. Visual Artists know that they are often being seen as a complementary service to the musical artists [3], something which may reflect on the actual art being performed and produced. By being to dependant and held back by their musical likes, the visual art expression will stagnate. As a VJ, you are attracted to the art form by your interest and fascination for both music and visual art. The knowledge and artistic feeling for the combined art form is often greater with the VJ than it is with musicians. It is therefore crucial that the Visual Artist get the creative and artistic freedom needed to create their art [4].

As the attention for the art form increases, the same applies to the artists themselves. Requirements imposed from the surrounding world to the artists grow greater, as does the freedom which artists may work under. The need for spectacular and original work is growing stronger and artists have to be unique to remain at the scene. There is today not a great amount of resources available that covers both the importance of creative aesthetic visions and aspects of visual and audial perception directed towards VJs.

This research will be an exploration and development of artistic concepts from the perspective of a VJ. It will also explore how artists may develop their concepts in order for the experience of the audience being in line with their visions. What is the experienced effect from contrasts in images versus sound? How does artists motivate their aesthetic choices? The reason to experiment and reflect around such questions is
to gain a deeper understanding for the perception of the art form. Clarifying this enables a greater control for artists to influence the way the art is perceived. Working from that basis, artistic decisions will be taken based on a greater consideration to what they will express and what emotions that disengages with the contemplators. This may lead to greater correlation between the visions of the artist and the experience of the audience, resulting in an augmented experience and greater satisfaction of the perceived art.

To straighten these issues and theories two different methods will be used, one of theoretical nature and the other with a more practical direction. A search and evaluation of current literature and studies will be carried out and summarized in a Literature Review. This will establish vital background information and clear out possible difficulties before the second part will take place, the practical work. This is where the acquired knowledge will be implemented as an ingredient in the process towards creating artistic concepts. From this, valuable knowledge will be gained which will be discussed contra the theoretical findings. Before actually carrying out the technical work of creating the final output, inspiration will be gathered and mood boards created in order to separate and reflect upon different stylistic approaches. This reflection will be based upon the findings of the literature studies.

A case could be made that visual art in the context of being exhibited in combination to music is a very diverse subject and largely depends on musical direction and the scene for exhibition. It can also be stated that art in general is something which should come from the heart rather than being based on research. However, although taste and preferences are personal, within various genres certain aesthetic expressions appeal in different ways to the audience. This points to a need for further research in order to straighten how artistic decisions may be taken and on what grounds. Exploring this enables a clearer view to be expressed on the artistic process from draft to final output. Possibilities for artists to influence their audience grow greater and directions where spectators may be led becomes clearer and wider. Visual performances can give the music and the live multimedia experience as a whole another dimension by telling stories and accompanying the music.

1.3 Overall Research Aim and Individual Research Objectives

*Increase the insight of how artistic concepts for live visual exhibitions are produced and how artists’ knowledge of the correlation between sound and visual perception may augment the art experience*

The ultimate aim of this research is to pinpoint theoretical and practical issues in the development of visual concepts that are to be shown together with live music. The research aims towards describing vital aspects to take into consideration when developing concepts. To succeed with this task, there are a couple of ground stones that need to be laid out. Understanding the history of the art form is vital, knowing what has made live visual art to what it is today will help in unming the future for artists and what forms of expressions may be considered as pioneering in the near future.

In order to fulfil the research aim stated these research objectives have been set up:

1. Describe the history of video art in combination with sound
2. Study the influence on the art experience by visual components and their relation to sound
3. Develop artistic concepts based on briefs and findings from the literature review
4. Digitally produce video material to be screened with sound
Objective 4 will take place building upon the preceding objectives. Three projects, were the sought after expressions and moods are different, will be carried out. This in order to apply these findings in a broader perspective and show possible differences within the process of developing different concepts.

1.4 Outline Structure

**Chapter 1: Introduction**
This chapter describes background information for the art form, such as the term VJ and the premises in which they work. The research focus and ultimate aim is defined and objectives for the completion of the research are stated. The motivation for the research is specified and each section of the report is outlined.

**Chapter 2: Theoretical Background**
Provides fundamental theories for the rest of the research by describing the history of the art form, mentioning various popular techniques and setups for exhibition of the art. Discusses perception of various stimuli and the way these correlate and describes how a process of creating artistic concepts may be carried out.

**Chapter 3: Research Methods**
Within this chapter, the research strategy is described (a study of literature and practical implementation), valuable sources are named and the practical implementations and tests are described more in depth. Briefs for the three practical projects are stated as well as the purpose for these to be executed. Aspects that limit the research project are discussed along with possible problems that may occur during the process.

**Chapter 4: Result**
This chapter declares the process of creating each artistic concept from the brief to completion. Practical outcomes and motivations behind artistic decisions taken will be presented here while the theoretical gridlines can be read under chapter 3.

**Chapter 5: Discussion**
Contains discussion about the method and result of the research. The importance of having psychological aspects in mind during the artistic process and the future of the art form will be discussed. From this discussion, recommendations for future research will be made as well as hands-on advice for artists. A reflection over the research procedure and its structure and limitations is included and by stating the value of the conclusion made, guides for further development of the research will be described.

**Chapter 6: Conclusion**
This chapter presents the outcomes from each research objective; the history of the art form; audio-visual perception & correlation; development of concepts and practical implementation. Findings from each objective are summarised and conclusions from these presented.

2 Theoretical Background

The visual artist within the media of live mixing of video clips is also called a VJ. The VJ diverges from the traditional video artist in two ways; a VJ performs live and works with music as an aspect [1], [2]. Taking the rhythm and feel from the music as a starting point; the artist uses images, composition, colour and contrast to enhance the overall experience from the music. Adding video to music, it resembles very much the art of music videos where stories and moods from the music are being presented through visual perception. Actually, the term VJ first rose to fame as the title of MTVs music video presenters [2]. However, the take on the actual visual elements separates itself from how it is approached within music videos. At live events, there is rarely time immediately for deeper reflections over the information perceived. Although this
is possible with music videos, especially today when these are available at the viewers’ own command over the Internet. Live visuals require a more instant effect as the art flushes over the viewer rather than being accessible on command [4].

This chapter contains findings that will be of great importance for the forthcoming research. Practical implementations of these findings are presented within chapter 4, “Result”.

2.1 The History of the Art Form

Synesthetic art forms using vision and sound have been experimented with for several hundreds of years. The umbrella term “Colour Organ” is used when referring to early mechanisms designed to display coloured light to music. Bainbridge Bishop created a colour organ which could project coloured lights synchronized to music [5], for which he got a patent in 1877 [6]. However Gregorio Comanini described how Arcimboldo invented what he called “colour-music” as early as 1590 [7]. Pianist and inventor Mary Hallock-Greeneewalt appeared with a light organ which trigged and adjusted lights as sliders were moved, pedals pushed down and switches flicked in 1919 [8]. Hallock-Greeneewalt’s organ was the first device which allowed manual triggering of visual elements in synchronization to music.

Until visual elements at concerts became more common during the 1970s, they had become a quite regular sight at bigger clubs and events across the world. The usage of video experienced a break-through as the techniques for recording and screening became more available. As the art of music videos grew a great part of the industry, with the effect that clubs and bands started showing them as a complement to the music, as did the forum in which artists could create and present their work. Further technological advancements made it possible, and eventually often required, that artists brought computers and video mixers to help them perform their art.

Video material, just like art in general, became easier to attain thanks to the Internet. Artists began to sample works of others and also screen parts of actual movies and other copyrighted material. This went on for a couple of years but as the copyright laws became strict, artists started avoiding such materials to a greater extent [9]. This was a natural step not only due to the law changes. Most active VJs were (and are) artistic in mind and wanted to set their mark more clearly, producing their own material was the obvious development. Today, this is the general approach and has led to increasing appearances and exhibitions from VJs in art galleries across the world [2], [9].

The increasing recognition as individual artists benefits the artistic environment. This means getting more freedom and influence in collaborations as well as a greater chance of external funding. Such aspects allow more time and devotion and thus further improving the art [3], [4]. It is vital for artists to get the time and funds to explore themselves as artists and consequently progress.

The creative freedom that VJs have sought after renders out in development for the whole artistic community. Parallels can be drawn to composers such as Scriabin (1872-1915) and Rimsky-Korsakov (1844-1908) who let their music be accompanied with projected visuals. They wanted to develop their art and made it happen, which possibly never would have happened if they were answering to someone who did not share their visions. Filmmakers around the same time, Post World War One, started projecting films onto objects. Rather than the regular white rectangle, they used physical shapes and humans [9]. Such artists were true pioneers and their thoughts lives on today as projection mapping is on the rise. Many VJs project their work onto cubes and object in order to create new and revolutionizing experiences, using the very same concept artists experimented with nearly a hundred years ago [9], [10]. Such techniques are still quite complex and time consuming, which also helps making them feel exclusive and through that modern. As they become more accessible new techniques will develop and be in the front line. Artists often strive towards being
spectacular and remarkable in their expressions, there is therefore a natural act to quest for new ways to express the art. Development of digital technologies enables new techniques and resources for the art, which in turn leads to the evolution of the art form [11].

2.2 Technology and techniques

There are a few different approaches to the actual VJing; utilizing a media bank with prepared video loops, the live generation of visual elements from input sources or a hybrid of both techniques [12]. A common workflow is to mix available sources and processing these live using computers and/or controllers. It is up to the artist to choose which method that is more appealing, as is of course the material that is displayed as the actual art. Just like the DJ chooses the music which is played, the VJ controls the visual material. The job of the VJ is judging what is good, what the appropriate processing steps are to amend the original source and what components enhance the experience. The same applies for DJs [9]; the only disparity between the two is that they work within different mediums.

2.2.1 A General VJ Setup

Many VJs today practice a hardware-software combination for their performance setups. By using digital software as media banks and to generate effects, costs are cut and any available resources can be used for enhancing the screening techniques and thereby the experience for the audience. Hardware may be used for a more hands on control over the practical mixing and the triggering of effects and visual elements. The output from the visual artist is then connected to a source of screening, such as projectors or large screens [12], [13]. It is perfectly possible to screen the art using only a computer and a projector, making it possible for low budget performers to be as active as high budget artists.

2.3 Perception

Targeting research objective 2: “Study the influence on the art experience by visual components and their relation to sound” and the aim to explore how the art may be produced in order to be experienced in line with the artists’ visions, a literature study on perception was made. This was carried out in order to gain knowledge to take into consideration when developing artistic concepts as a part of research objective 3.

A key aspect to what the mind takes in from its senses to the emotional experience is association [14]. When experiences from sense organs repeatedly happen in correlation to each other, they will ultimately trigger one another since this is what the mind expects based on previous experiences. As one of the human sensory stimuli perceives a sensation, the mind instantly tries to put it in a context in which it is familiar. Our perception of events and impressions is not constant. As we experience new things and think in new terms, eventually our minds automatically provide us with new associations and process the thoughts [15].

To gain a deeper understanding of the way the stimuli correlates, valuable aspects may be learned from studying them independently.

2.3.1 Audial

The human ear generally perceives sounds within the frequencies of 20 Hz and 20 kHz (20 000 Hz) [16].

Musicians may use multi-channel pan effects (alternating speakers from side to side) within songs to create the experience of space and dynamism. Synchronizing such effects with visual events may help in order to tell stories and putting the art into context. As objects approach from the left side of the screen, having their
accompanied sound pan from the left side of the speaker set is logic since this is what the audience would expect to happen in real life.

2.3.2 Visual

As mentioned previously, experiences are what cause our minds to draw instant conclusions and associating. This applies to visual perception as well. The brain interprets the information perceived by our eyes and then reacts in the way it is anticipated to do in similar situations. At times, this can be a cause of confusion as the mind misinterprets the information from senses. The reaction does not match up with the reality; an example of this is optical illusions [14]. Studying such phenomena reveals both the simplicity and greatness of the human mind, giving hints how the mind may be deceived and fooled by simple tricks.

Techniques such as Virtual Reality and Stereoscopic 3D rely on deceiving the mind, using physical aids such as glasses. Creating enhanced sensations by feeding the mind with visual information which it interprets as real. Within the VJ-scene, techniques such as projection mapping are used to augment the illusion of depth from a flat projected image. This is accomplished by mapping three-dimensional points to a non-flat projection target and the impression of depth is experienced as real.

2.3.3 Attention

A vital part of trying to control the audience’s experience is to direct the attention to elements and events that are important. To achieve this, the following valuable aspects should be considered by any artist.

Contrast, Size, Intensity (Both within motion and colour), Emotional Imagery, Size and Sudden Events [17].

The attention works in two ways; utilizing these aspects audio-wise, the effect applies to visual perception as well. It is therefore not necessary that the two are related in order to both transmit the feature that one possess. Increased attention from a sudden change in intensity in the music may be used to stress vital points in the visual storytelling, as it leads to more attention being given to the visual impression. In the same way, if the sound and/or imagery are monotone, it will lead to both stimuli paying less attention to what they are being fed [17], [18].

One of the most complex and versatile of the mentioned aspects is colour. Factors that contribute to the perception of the composition colour-wise are the surrounding environment (contrast), brightness (hue), size relations to other colours in the composition and previous use in the composition [19], [20]. Memory proves a big part of how humans perceive colour, prior experiences have a large effect on the mood related to colours. Although individuals have different backgrounds and cultural preferences general factors such as the ease in which certain hues are perceived, are universal. Green and yellow hues attract the human eye before such as violet and red. Consequently blue and orange lands somewhere in between [19].

Motion is an effective way to gain attention to visual elements. By moving objects, the eyes and attention of the audience are drawn to those objects. A sudden change in motion is an effective way to gain attention to elements within compositions. When expected, the attraction of attention is not as strong [21].

Contrast may occur within all of the above-mentioned aspects. Theories about the impacts of contrast can be applied over a broad spread of contributing factors and generally they all have the same impact over the experience. Strong contrasts draw attention as they attract the eyes. Subtle contrasts contribute with the opposite experience and gain attention when time is being given for reflection over the composition [18].
2.4 The Production Process

There is no determined or general process to follow in order to create visual elements for musical artists. It depends on the situation, width and budget of the project. Still a common workflow can be as following:

When receiving the project brief, the visual artist(s) should start off with gathering as much information as possible about the artist, the music and its message. Analysing is a vital first step in order to make sure that the following work is relevant. When such information has been gathered and the artist(s) feel comfortable to accept the offer a dialogue about the brief and the visions of the artists take place, this is where the major outlines of the project is drawn. Often storyboards, mood boards and sketches are presented to ease the visualisation process and to avoid misconceptions. At this point the budgets has been presented and is the practical guideline to the advancement and complexity of the project. Pieces that are more spectacular and ground breaking obviously costs more in research and man hours and may sometime have to be overlooked to fit in the budget and timeframe [22].

When the customer has accepted concepts and storyboards, the actual production of material is the next step. Thorough planning of every single stage and work task must be carried out in order to make sure that time frames and budgets are held. Once the project is up and working, reviews of completed parts are carried out and draft are sent to customers. Tough mental aspects such as knowing when to fine-tune small elements to increase the quality of the work and when to stop has to be considered. Once the work has been sent in to the customers and demanded corrections been finalized, the material is ready to be screened at concerts, events and exhibitions [22].

3 Method

After essential background information had been acquired, the first aesthetical visions were summarized and visual directions drawn in the form of mood boards. This was an explorative part of the research where personal artistic style was allowed creative freedom whilst keeping knowledge and results from Objective 1 and 2 in mind. Sketches and mood boards were completed as an elaborative part of Objective 3. Conclusions drawn from Objective 1 and 2 were reviewed on the material produced. Minor changes that were considered necessary in order to communicate the moods and messages stated within the briefs were carried out. The plot outlines as well as mood board and sketches were used as foundation when developing storyboards which in turn acts as a guide to the dramaturgy of each project. When these had been completed the research reached Objective 4, where the outcome from Objective 3 was the foundation and guidelines which further research built upon.

Creation of the digital material took place using a variety of computer software. A time consuming but fairly straightforward part as the Research Objectives 1, 2 and 3 rendered in detailed plans, which only had to be finalized. Using the artistic and aesthetical directions documented in mood boards and storyboards, the material was produced. This part of the research was a technical execution of documented artistic visions.

In order to apply the theories and findings from the literature review in several different situations three different project briefs was created. By exploring the development of projects that aspires for different reactions for audiences, similarities and differences in aesthetic decisions may be described. The briefs were turned into video material following a digital creation process. The created film clips are short examples what longer projects may look like.
3.1.1 Briefs

Project 1. A reality based project with a supernatural twist. A visual piece that tells a story in order to enhance the feeling from the music. Mystical, anxious and atmospheric.

Project 2. Different shapes and colourful patterns. A rapid chain of events with a dynamic feel. Pacey, powerful and energetic.

Project 3. A logo oriented composition that fills the task of being a visual presentation for a club. Attention bringing with flickering colours and abstract patterns. Representative, lively and rough.

4 Result

Artistic decisions are based on the findings that are summarized in the Theoretical Background section of this Research Report. The results will be presented for each project separately and a walk through from brief to final outcome will be carried out. The storyboards created for the projects are limited to the time of the produced example films. As these examples are within the time frames of 5 to 10 seconds, only a few frames are needed to describe the events and movements of the camera.

From the research objectives, the result presents practical outcomes from Objective 3 & 4. The work created within the frames of those objectives build upon Objective 1 & 2, as presented within chapter 2 Theoretical Background.

4.1 Project 1

The brief of project 1 reads as follows:

A reality set project with a supernatural twist. A visual piece that tells a story in order to enhance the feeling from the music. Mystical, anxious and atmospheric.

4.1.1 Research

The research began building from the brief. The mystical and atmospheric guidelines were considered and combined with the given directive on being reality-based. Visions of forests and mist drew themselves within the mind of the researcher. The perception of mystery is largely based on something unknown within familiar frames. It is the way of the human mind to tell us that something is or even only might be wrong or diverging for the way it normally is. The visions of the forest and mist were therefore considered to be a sensible interpretation of the stated brief. Especially as it is important that audiences quickly takes in the visual information and understands its meaning. A familiar design within the sought after mood (in this case a forest combined with mist) helps with this, and associations are likely to be drawn quickly.

4.1.2 Mood board

Design work then took place as the mood and story were to be constructed and put to paper in the form of a mood board. A number of images had been saved and reviewed in order to make a first visualization of the mood of the piece. To create a more compact and thorough expression these images were narrowed down.
Addressing the mystical and atmospheric wishes from the brief the images within figure 1 were collected. However, they were rejected as they were deemed not to enhance these impressions and the overall quality of the concept. Image 1 (In figure 1) was first chosen in order to represent a chaotic look for the entire composition. It seemed appropriate as it would eliminate detail and increase the feeling of something unknown and mysterious. This was ultimately rejected on the grounds of being too diffuse and would cause confusion rather than enhancing the desired impression. Image 2 represents objects of light floating in the air, adding an abnormal effect to a familiar environment (the forest). Such objects would contribute to a mysterious and anxious composition but were deemed redundant in combination with the floating text. Involving both in the composition would draw too much attention from the environment, representing science fiction rather than reality. Basically the same applies for Image number 3. Originally considered to be implemented as an odd feature, having unnatural light emitting from objects, it was decided not to be used on the basis that it would be too much. As stated in the research section 4.1.1, the experiencing of mystery rises when something unknown occurs within our familiar frames. Having a composition that predominantly consists of unknown features, it will not come across as familiar and therefore not very mystical. Viewers would be curious rather than anxious. As for Image 4 within figure 1, it is not too different from images capturing the light of the final composition. It was decided not to be used based on its distinct light sources. Softer sources of light were preferred as it does not appear to be produced by humans in the same way that smaller light sources does. A natural sky gives a greater impression of mystery than light produced by humans does.

The images that fulfilled the visions and stated mood for the project were used to compile the mood board for Project 1 (Figure 2).
The mood board consists of all elements that the final outcome was planned to involve. A river was going to be implemented into the picture to increase the sense of familiarity; the shapes of the trees were to be a combination between narrow, tall ones and more gnarled. The lighting of the sky and the density of the mist were also outlined.

Addressing the concern of the mood being mystique and supernatural, implementations of incandescent objects were considered. After studying images of incandescence, much greater effect was experienced when the fluorescence was emitted from text rather than objects and shapes. Text is also a valuable tool for visual artists as it allows an easy accessible channel for expressions to be perceived. To further enhance the perception of mystery within the composition, it was decided that a perspective distortion would be applied to the text. By distorting the text, the eye would perceive the shapes as familiar but detect that something was wrong and unfamiliar with them. This is combination with the forest and mist would create the impression of mystery and anxiety as stated in the brief.

4.1.3 Storyboard

After outlining the mood and setting for the project, the storyline and events were to be composed and described in a storyboard. As the forest and text itself are passive objects, a decision was taken that the camera would be moving to provide the actual motion to the shot. The described mood does not approve sudden or rapid movements, as it would distract the viewer from the actual events. In story driven pieces, it is wise to facilitate the composition to be viewed and the actions to lead into each other. Rapid changes in the composition confuse viewers and force them to revise the impressions of what he/she is watching. As this would diverge from the brief, a calm camera movement was to be used. The original thought was that the camera would move over in axis only, causing a linear chain of events (Figure 3).
However, upon review this was considered too calm of a motion. It would not be appealing for the viewers, as the camera motion itself does not introduce the text distortion in an interesting way.

To get an overview of this, a top view of the scene and the camera movement drawn up (Figure 4.)

As shown in figure 4, the original outline for the camera movement (Image 1), only has the text as the centre of composition for the latter part. Omitting focus to be drawn to it at an early stage, the viewer will not have enough time to reflect over the distortion and what it eventually will form. By rotating the camera using the text as pivot point, it will stay within focus for a longer amount of time. Furthermore, a rotating movement will increase the sensation of distortion and dynamic resulting in a more interesting experience for viewers. This movement were then framed in a new storyboard, which became the guideline for the project (Figure 5).
The text presented as the diverging factor in the mood board is used once again to enhance the awareness of mystery. By letting the distorted letters merge into their expected shape as the camera moves and finally unite into a word provides a prominent aspect to the composition.

### 4.1.4 Production

After the planning stages, the practical work was carried out within the Autodesk Maya software. Geometry were created in the form of polygon meshes, and water was created using a Ocean Shader. The scene was set-up to resemble the storyboard. A large quantity of trees was put in to make the forest denser, resulting in a more eerie impression. The letter distortions were augmented even further, breaking up the letters in their counters and moving the parts apart in z-space. All the geometry were textured using textures created in Adobe Photoshop. After setting this up while testing some lightning, fog was added by using fluids. The hardest part of the final production as render times increases drastically when working with fluids for the creation of the fog. As quite a lot of fog had to be used to reach the aspired look as described in the mood board, it was a time consuming process to achieve the visions. Adobe After Effects was used for post-production, primarily consisting of colour correction.
4.2 Project 2

For project number 2, the following brief were given:

- Different shapes and colourful patterns. A rapid chain of events with a dynamic feel.
- Pacey, powerful and energetic.

4.2.1 Research

Thoughts were immediately drawn to incandescence just as in project 1. Rather than using the fluorescence as something vague and scary, it represented speed and agility. The colour request from the brief would contribute to this perception, to increase it even further symmetry were considered. Symmetry provides a quick reference for the eye which in turn improves the perception of speed. Building on the same theory, a grid was to be included in the composition, giving the eye an easy accessible reference. A grid is also important in order to give the mind some sort of frame for its impressions. Even though the shapes are abstract they appeal more natural to the mind when connected to a grid and through this appearing to be physical object in the sense that they obey under gravity.

Producing the project in 2d-space was the initial idea, involving moving patterns and a still camera. These plans were declined on the basis that a 3d world would enable a more dynamic feeling, resulting in a greater sensation. Putting flat 2d-objects in 3d space were also considered in order to fake 3d, but were refused by the fact that it would not take any extra effort to carry out the work in actual 3d. If this had been the case, this idea would have been preferred as the time schedule was tight.

The 3d would help creating a feeling of the objects being a part of an actual world with endless possibilities rather than being limited to the edges of the screen. Giving the impression of objects existing in a 3d-space makes it easier for the audience to relate to their impressions, thus improving the experience.
4.2.2 Mood board

A colourful composition with a lot of motion gains attention easily. Using a black background, the full focus of the viewer is turned towards the action rather than considering the context and setting. Viewers may concentrate on the actions rather than reflecting over a hidden purpose. Using bright colours on black also increases the contrast which in turn augments the movement and events even further, creating a more powerful experience. Using a black background for live screenings is also a grip to make the projections seem too be a part of the room, as the environment at concerts are usually dark. The outer edges of the projected film become invisible and the full attention from the audience is directed towards the visual art.

Reference images were gathered to reflect bright colour on a black surface as well as glowing shapes of different kinds. Images within figure 7 were rejected as they in different ways did not match the brief and the research for the project. Images 1 & 2 were too soft in their expressions. Spheres and diffuse colours would not represent the energetic and powerful expression that was aspired. Pyramids and triangles were chosen to be the main shapes due to their diversity and possibility to create interesting patterns when combined with each other. The patterns represented in figure 5, images 3-5, were chosen not to be implemented in the mood board for future development as they would be hard to emulate whilst keeping a flowing chain of events. If objects are to transform into patterns, these patterns naturally have to be able to be recreated using the available shapes.

Figure 07. Rejected images and visions for Project 2.
Tackling the task of the visual pieces being perceived as rapid and dynamic, the colour scheme was decided and outlined as a hue-spectrum where the colours of the objects would change gradually. Such colour combinations prevent even the slightest of motion to be experienced as static. It also helps the shapes to gain attention as they appear on the screen. Any new objects added will gain the attention of the eye.

4.2.3 Storyboard

Upon the completion on the concept for the project the events were drawn and described in a storyboard (Figure 09).
The first few frames created for the storyboard have a distinctly brighter tone than what is described in the Mood board section 4.2.1. This is to make the perspective differences visible only; the background colour in the final composition will be black for the entire clip. The first frame of the storyboard shows rows of triangles growing exponentially, before reaching the ground plane. Once on the ground plane, more rows keeps growing towards the camera.

Originally, there were plans that the rows would be in a V-shape and have spaces between each other in symmetric positions. In these spaces, coloured rectangles would grow towards the camera, just as the ones that grow horizontally. An example of these plans is showed within Figure 10.

Figure 09. Final Storyboard for Project 2.
These plans were rejected as they were considered to involve too many objects and colours. As the art would have to be processed in a small amount of time, overview is essential. Too many impressions prevent a clear focus and causes confusion. As seen in Image 2 (Figure 10), the V-Shape would cause an irregular pattern as the camera rises above the objects. This was rejected as it would only raise questions and refers to a change in the continuation of the composition, as the last section of this scene is a transition to black this is not the case. It was therefore decided that the rows would be straight in order to form a uniformed pattern towards the middle of the scene.

The glowing triangles combined with the slight change in hue for every row represent the music growing and building up. At this point, boxes with contrasting colour start growing on the ground plane across the screen as the camera continues backwards. The rows of triangles stay within the frame which enables a visual support for the changes in music. As the new elements in the composition are moving the attention will be focused on this, creating staging, which means the eyes are drawn towards the important actions. When they become static, new elements appear and gain attention. Utilizing this technique of all objects following the scheme of appearing-moving-stopping, the mind expects this from the film and can concentrate more on the composition rather than trying to figure out what the next event will be. It also enables greater focus from the brain to be spent on the feelings created by the colours and motion rather than a pure abstract chain of events.

Addressing the briefs and its demand that the composition were to be perceived as powerful, the animations were set out to be distinct. By animating objects with distinct movements and not much overlapping action, they will be perceived as heavy.

From frame 3 & 4 (figure 9) the elements changes into flat patterns as the camera turns and faces straight towards the ground plane. Doing this by evolving from the previous composition creates a consistent plot and the impression of entirety. At the same time the camera rotates, this is due to the wish to keep the composition dynamic and interesting even though no new elements are added. New blocks appear to be growing attached to the camera before they turn and make the image black. This provides a clean slate for new events as well as a dynamic transition to a black frame.

4.2.4 Production

The theoretical plans were completed and produced within Autodesk Maya for the 3d. Basic polygon shapes were used to build the scene, following the description summarised in the storyboard. A cylinder was used as a mask to make objects appear to be growing from the grid.
The objects were then textured in a variety of incandescent colours with strong hue values. The 3d-animations of the camera were tweaked and tweened from the frames described in the storyboard, having to be reviewed in order to fulfil the stated guidelines of a distinct animation. Proving to be a quite difficult task in order to achieve the objective, as the animations were either too soft or clumsy. Following a few tries and test renders to get an overview over the flow of the events, the aspired flow was achieved. Adobe After Effects was then used for post-production, consisting mainly of colour correction and compositing of render layers.

**COLOURS**

*FINAL RESULT PROJECT 02*

![Screenshot of final result for Project 2.](image)

**4.3 Project 3**

The given brief for project number 3:

A logo oriented composition that fills the task of being a visual presentation for a club. Attention bringing with flickering colours and abstract patterns. Representative, lively and rough.

**4.3.1 Research**

The logo is the important part and what the entire composition should circle around. It is vital that the logo and its message are easily read. In order for the composition to give the expression of being purely abstract it is important that there are no rhythm or regularity in terms of colours and structure. With this in consideration a decision was taken that the footage used were to be physical in nature and through that possess a natural irregularity. In order for the audience not to lose focus of the film due to it being too repetitive, sections of images were to be implemented as a contrast to the abstract footage. By flashing these images quick, contrast will be created to both the colour and motion of the abstract parts. Through this contrast in colour, composition and events, attention will be drawn towards the screen. The composition will be perceived as more alive and not as statically abstract.

The plot of the film were not to be dramaturgic, this is due to the fact that it is supposed to be a presentation of the logo rather than a story. If the film were to have a plot, the audience would have to pay attention to the piece at all times in order to follow and perceive the message. Without a storyline, the film may be viewed at the own command of the members of the audience which sometimes may even increase the actual viewing time as the image processing is not as demanding for the brain.
4.3.2 Mood board

Using a bank of Film Clutters as inspiration, suitable clutters were chosen and frames of these extracted to visualize the vision of the final composition. However, some footage was rejected on the grounds that it did not fulfil the mood described within the brief. Images 1 & 2 within figure 12 were considered to bright and full of hue and contrast. Combined with the flickering nature of the other resources they would simply create too much motion and change in contrast. This would result in a composition that would be tiresome to view for longer periods of time. Also, as the motion was vertical it would have been perceived as objects falling or rain, opposing to the abstract part of the brief. Images 3 & 4 were refused on opposite grounds, being deemed as too dull and desaturated. Furthermore they are very complex in their textures, combining this with flicker and motion, the overall experience would have been tiresome and confusing. Such emotions would defeat the purpose as the idea of a logo driven composition is to be clear and pleasant in order to convey its message.

SO FRESH

REJECTED VISIONS PROJECT 03

Figure 12. Rejected images and visions for Project 3.

As for the clips that were considered suitable for the project, these were gathered in a mood board. Abstract stills from clips and the logo had been determined as the main part of the final product and consequently had the equal part within the mood board. Using several layers merged into one using blend modes rendered out in aspired looks. These were noted in order to recreate the looks within the film production. As the research and underlining theories were quite comprehensive and clear, the actual concept was not to hard do develop.
4.3.3 Storyboard

The logo is the main part of the composition, and the most important aspect of the storyboard was to determine its use. In order for the logo to be easy perceive but yet be of significant interest to not look away from immediately, a static logo was determined to be ineffective. By animating it in different ways, the attention will be drawn to it and through this the logo would make a greater impression with the audience. Something that is vital, as any band/club/label would want their logo and profile to be well known and as associated with the concept as possible. Using several different animations as well as allowing time for the logo to be displayed in its original static form, both attraction of interest and readability is taken into concern.

The flickering colours and patterns in combination with the animation of the logotype provides support for the composition to remain interesting even though it lacks a dramaturgic plot.
4.3.4 Production

Film Clutters from Artbeats were used and combined to create patterns and colours. A vectorized logo was externally delivered and the material were put together and produced within Adobe After Effects using blend modes. Logo animations were done using After Effects as well.
5 Discussion

Beginning the research, the aim was to highlight theoretical and practical approaches and issues in the development of artistic concepts for VJing. These findings would result in a clearer view on how artists may work in order for audiences to experience their visions of the art. The method used to fulfil this consisted of two major parts, a theoretical study of literature whose findings were used in a practical sense when developing concepts based on given briefs. The theoretical results includes the history of the art form, techniques and setups for VJs as well as background theories over how elements and aspects within compositions may be experienced and a description over the production process when applying these findings to a given brief. The practical work explored the development of concepts from three different stated briefs and took the theoretical findings into consideration in order to enhance the final result.

5.1 Method & Findings

Comparing results from the Theoretical Background section and the Practical Implementations of these theories shows that it is clear that there is a component of compromise which is not evident within the theoretical review alone. Theories are not applicable in every single case, they are more descriptions for general senses. Different moods and projects demand special aspects to be taken into consideration, such as colour schemes, which prevents some methods to be used in order to achieve the aspired effect. The importance of compromising is also evident in the sense that artists cannot merely lean on theoretical grounds when creating their concepts, as it will result in static and uninspired art. Likewise, to rely solely on arbitrary aesthetic preferences without taking aspects of perception into consideration is not recommended, as the audience might not perceive the art in the line of the artists.

Results from the study of literature showed the ease of which the mind may be mislead into experiencing emotions, in the same way the mind experiences optical illusions when trying to interpret the information it perceives based on previous situations. This is valuable knowledge for any artist to understand. Using the same basic idea to trick the mind of the viewer into experience something, moods may be planted in order to increase the chances of the audience experiencing the art in the way the artist intend them to. It is a matter of playing into the hands of the audience, giving them what the artist expects them to need in order to get into a certain state of mind.
Caution must be taken though as the audience need to experience something new or unexpected in order to feel that the art is interesting and worth paying attention to.

The theoretical findings describes several factors that contributes to the overall experience. However, these factors are only defined briefly and thus do not give a clear overview over how they correlate and what the overall effect is when they are combined. The choices of literature were taken based on factors such as reputation, applicability and accessibility. Other sources may contain different information but the literature chosen were deemed to be most suitable for this particular research.

Studying the history was valuable in the sense that it allows inspiration and knowledge not to be lost in technological advancements. There is always something to learn and advantages to apply in the current work. Equally, being up to date increases the understanding for developments and attention may be drawn when experimenting with new procedures.

The three projects were carried out in order to line out possible differences between vital aspects depending on briefs. Rather than speculating in this matter, practical experiments uncover real problems that are likely to occur for artists. When given a brief, artists are provided with both directions and limitations for the project. The brief may state that the expression should be happy and uplifting, while also mentioning a toned down colour scheme. In such cases, artists are obviously limited from using methods such as strong colours, mentioned within the Theoretical Background section, to enhance a positive experience and expression. However, as long as the brief allows psychological knowledge to be used in order to enhance vital emotions, it is a very useful and valuable thing to incorporate. Likewise project 3 showed that for commercial VJing, e.g. concepts for organizations or clubs, you have to take into consideration the visual profile for the customer. This can restrict the artistic margins significantly, demanding more creativity and innovativeness from the artist.

These three projects were chosen since they would test previous findings in a wide range in order to point to several different aspects. Making the results valuable to apply in the variety of different briefs artists may receive. Upon reflection, an external customer would have been preferred, as it would have showed aspects within the client-artist relationship and communication that is a great part of any production. Using external customer(s) would also have led to a more randomized set of briefs which would have been an realistic challenge to put the theoretical findings into context. Practical results from this research are based on the development of briefs created by the researcher. They may thus be biased in the sense that they were created upon the researchers valuation of being most suitable to apply the theoretical findings. However the aim was to apply the findings on to a wide spectrum of expressions, which the stated briefs represents.

The research shows on the complexity of understanding how audiences will perceive the art as well as the importance to produce the art with the audience in mind. The conclusion points towards the essence of being an innovative artist and using knowledge and anticipations for how the audience will perceive the art as an extra ingredient. However, conclusions from the theoretical research over how actual elements and aspects are experienced cannot be drawn due to the lack of depth in the theoretical studies.

5.2 Future Work

The findings from this research spans from both the theoretical research and practical development of concepts. The literature review covers important parts in visual compositions and their importance for how the final result is experienced. However, the depth of this study is limited, and a more thorough study of a few factors would have resulted in a sharper review over their impact to the art experience. Likewise the practical results could have been tested on an audience in order to reveal
what impact they had for the experience and mood of the combination of visual art and music. This would have enabled a view upon the actual importance of having the experience of compositions in mind when developing, rather than just exploring it from the view of the artist.

5.3 Limitations and potential problems

This is a research over the development process of artistic concepts which takes aspects to enhance live experiences into concern. Several steps within this research have their limitations. Aesthetic choices are taken personally with the findings from the literature review in mind. Due to this combination between subjective preferences (within the aesthetics) and objective knowledge (gathered in the literature review) a general result will not be able to be presented. However, the presentation over the artistic process describes the way the researcher proceeds in the development of expressions. This write-up may be used as inspiration for similar procedures. The objective of the research project is not to create a step-by-step guide for artists; it is to describe how a practical process may be carried out and what aspects artist may take into consideration to improve the final result and the way an audience experience this. The conclusions drawn from the practical implementations are taken from the point of view of the researcher and the projects that are carried out within this research. Other conclusions may be drawn depending on the background of other researchers and the briefs and projects the findings are applied on.

The practical implementations will consist of several minor examples of different expressions and the processes in developing these. Creating concepts that span over a longer period of time would enable the impact of creating intrigue and dramaturgy. This will due to time constrains not be done, as it would eliminate the possibilities of using the theoretical findings in a wider range. However, to complete a study that applies to several areas and directions for artists, multiple examples has been produced. This enables differences and similarities between visual directions and transmitted moods to be shown and defined.

Results and conclusions presented within this report are based on the briefs created for these experiments only. Consequently, the motivations behind aesthetic decisions are based on these cases only and may be different for other projects.

6 Conclusion

Beginning this research, the aim was to study the process of developing artistic concepts and possible factors which increases the probability of the art being perceived in line with the vision of the artists. Doing this would lead to a fundamental source of information for visual artists in order to give greater control over how their art would be perceived by audiences. To complete this, the following research objectives were stated:

1. Describe the history of video art in combination with sound
2. Study the influence on the art experience by visual components and their relation to sound
3. Develop artistic concepts based on briefs and findings from the literature review
4. Digitally produce video material to be screened with sound

In the process of developing artistic concepts for live exhibitions planning is vital. Outlining moods and expressions that the art are going to have provides a solid ground to review each step of the process against. This in turn increases the probability of the art being perceived by the audience in the aspired way. During the development of these guidelines, vital information to have in mind is that knowledge of visual
perception may influence impressions and emotions of spectators. Being aware of this, in combination with having clear and stated visions of the aspired mood enhances the likeliness of the art communicating exactly what the artist had in mind.

Not to forget however is the importance of being unique and groundbreaking in a world of art where competition is tough. Only extraordinary artist gets the chance to work on their art on a full time basis, which is the ultimate objective of many artists. Depending solely on theoretical ground when developing aesthetic concepts will not result in interesting and creative work. Consequently, the theoretical knowledge is mostly useful for creative and unique artists as it is best used to enhance the moods and expressions of art work that are perceived as spectacular and groundbreaking.
References


### Appendix 1: Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td><strong>Augmented Reality</strong></td>
<td>Perceived reality augmented by computer-generated elements, viewed through devices such as head-mounted displays and virtual rental displays.</td>
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<tr>
<td><strong>Blend Modes</strong></td>
<td>Different choices of how digital image layers are blended together when overlapping.</td>
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<tr>
<td><strong>Projection mapping</strong></td>
<td>Projection of three-dimensional points on a two-dimensional target plane.</td>
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<tr>
<td><strong>Staging animation</strong></td>
<td>One of the 12 basic principles of animation, staging is the term of directing the attention of the viewers to important parts of compositions.</td>
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<tr>
<td><strong>Tweening</strong></td>
<td>Generation of intermediate animation between two given key frames.</td>
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<tr>
<td><strong>VJ</strong></td>
<td>Short for Visual Jockey, responsible for visual elements at concerts, exhibitions and events.</td>
</tr>
<tr>
<td><strong>VJing</strong></td>
<td>The VJ’s act of performance.</td>
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