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Variations

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VARIATIONS

ANIMATION THESIS PRODUCTION FOR
MASTER OF FINE ARTS DEGREE

BY

MICHAEL GOCHOCO

2008

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VARIATIONS

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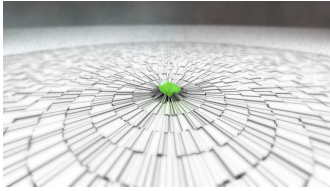
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I. Abstract



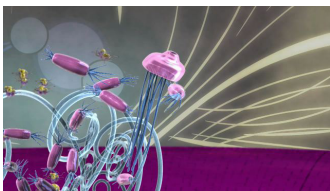
Variations was developed using experimentation and discovery.

Variations is a film that was developed in the context of experimentation and discovery. It can be described in many ways to be a film that was born out of process. In the same way that many artists may refer to a piece of art as process, the aesthetic development of *Variations* was linked to the methods in which the work was created and was progressively revealed.

II. What is the Concept?

Variations was originally realized as a non-figurative, non-narrative experimental animation inspired by the three main seasons of Fall, Winter and Spring. To further clarify, this animation was not meant to be a strict interpretation of the seasons, but rather aesthetically developed from the themes that are implied by them. Themes such as decay and revitalization were investigated and used as points of inspiration to develop an original work.

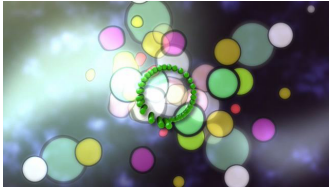
III. How did the film change over time?



New techniques in 3D animation were realized.

Since the film was created using the experimental process, meaning experimentation and discovery were used to create the film, design and storyboard were not as important as the discovery of new techniques and methods in order to produce the film. New techniques in Maya had to be discovered and realized. In this way, the aesthetics, the design and the color development became more important than sticking to the confines of a script or timeline.

The original musical score was composed specifically for the film. First drafts of this score were composed prior to production of the visual elements of the film. However, the music was continuously edited and re-composed during and after production



An ethereal experience for the viewer suspends all expectations.

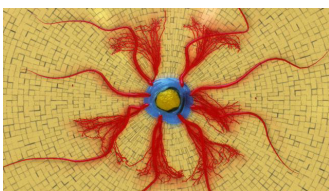
until the final music version was completed. This development of musical and visual aspect simultaneously allowed the film to become a woven integration of equal parts sound and imagery.

IV. What is the main aim of *Variations*?

The main intent of *Variations* is to allow the viewer to achieve an aesthetic understanding of the concept through abstraction and to journey into a complex and tightly integrated world of vibrant moving imagery and sound. *Variations* is a visual music work that attempts to transcend viewer expectations for narrative by presenting a complete auditory and visual experience. The strength of the visual music experience requires that the viewer release any arbitrary prerequisites and expectations of what a film should be. The music and imagery become the main mechanisms by which to experience the work.

V. What kind of techniques were used to achieve this aim?

Maya and After Effects were the main tools used to create the visual elements of this film. Apple Garageband was the primary tool for creating the original musical score.



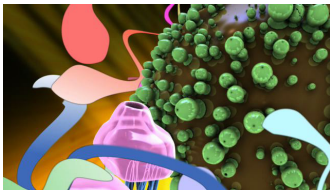
The main challenge was to create an imaginary and abstract world.

Many new techniques of animation were needed to complete this film. Experimentation and discovery were used to arrive at these new techniques. This included methods in programming and processes in Maya and After Effects. Various traditional methods were innovated upon. This included the creation of a new 3D animation rigging method for a multi-tentacled, metamorphic ethereal organism. Most of the 3D work was rendered in multiple passes and combined in After Effects. The number of active After Effects layers easily reached into the hundreds, stretching the limits of what After Effects was capable of. Various simplifications and alternate methods were explored in order to speed up the process. Some methods were found to

be more useful and others were discarded. These techniques could easily be transferred for use in the production of many different genres of animation.

The musical score was composed using Apple Garageband. The music was developed in conjunction with the film. Three different scores were developed. One was chosen to become the soundtrack for the film. This soundtrack was developed further during production of the visual elements of the film. The musical and visual elements influence and inspire each other. In this way, the film developed as a dialogue between the sonic and the optical elements of the work.

VI. What challenges were necessary to overcome?



Two dimensional and 3D animation techniques were combined to create a unique visual style.

As mentioned before, it was necessary to create an ethereal experience for the viewer in order to suspend any expectations. The main challenge was to create an imaginary and abstract world for the viewer. One in which the viewer is believably transported. All the techniques and processes used to create the film were developed with this declaration in mind.

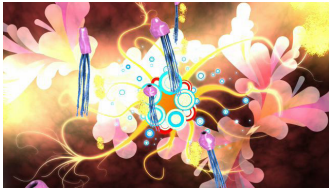
One of the other challenges I encountered was determining the camera animation and color combinations in order to create a unique visual experience. Research, perseverance and maintaining an open mind were important and necessary. It meant that I had to be inventive and original. I was able to find many creative solutions to keep the visual world of *Variations* interesting and expressive and keep the work strong.

VII. What was audience reaction to *Variations*?

The audience reaction to the film, on the whole, was very positive. It had been important to distinguish this visual music work from the traditional narrative film and I believe this was

achieved. The composition, design and music of Variations were cohesive and exciting and the work gave viewers the opportunity to transcend their own expectations of what a film should be and enter the artist's imagination.

VIII. How has the film enriched my vision for future work?



The number of active After Effects layers easily reached into the hundreds.

A long term project such as a thesis can take on various forms. Just completing the film can be a daunting task as it is usually completed not in a vacuum but as an active, ongoing and dynamic process.

As I move forward along a career path that will take me further into visual music and animation, I will not only bring the technical and creative knowledge that I have gained from this process, but I will also take with me the experience of knowing that hard work and perseverance are necessary requisites to achieve a successful visual music piece. I have also learned that experimentation is the predecessor of innovation.

Various things in life may alter your path and may distract you from completing an art work. It is easy to become ambivalent about one's choices and the aim of the work. It becomes even more important to try to keep the vision actively alive and fresh as much as possible. Technical problems and many of life's little frustrations that may or may not include the film itself all form the gestalt of the work and leave some kind of mark on the finished product.

Ultimately, I have learned that the experimental process can be affected by so many of variables, and in the end, one can make all the same decisions and still discover so many different variations.

APPENDIX A

PROPOSAL

VARIATION

DIRECTOR	MICHAEL GOCHOCO
ADVISOR	STEPHANIE MAXWELL
START DATE	MAY 2007
END DATE	FEBRUARY 2008
RUNNING TIME	7 MINUTES
GENRE	EXPERIMENTAL ANIMATION

CONCEPT

Variation will be realized as a 3-movement non-figurative, non-narrative animation. Each movement will be a play on developing visual and sonic ideas introduced progressively throughout the work. Variation is inspired by the seasons of Fall, Winter and Spring. Each season is alluded to by way of dancing abstract forms expressing ideas of decay (Fall) and revitalization (Spring) that bracket the period of suspension (Winter). There will be no literal elements in this work. Rather, the rhythms and patterns in the music, the composition of the 3-dimensional shapes, and the overall color space will be coalesced to create an original visual experiment. Imagery will be tightly choreographed with an electronic musical composition.

TECHNIQUES

Variation will be created in Maya using modeling, rendering, and shading techniques and processed in After Effects. The music will be composed using Garageband. Each movement will last approximately 2 minutes.

DESCRIPTION

Movement 1

A black spherical object in a white infinite space duplicates itself. These duplicates move apart. The spherical objects then transform into numerous triangular planes. The two groups of planes rotate in space. The two groups of planes dance in space intermittently intersecting and blending their colors. Eventually the moving planes cease their dance. They resume their groupings and then gradually disperse into space.

Movement 2

White rectangular solids slowly rise out of a white infinite but porous ground plane and float upwards. These rectangular solids lift off the ground plane and continue to float upwards. The bottoms of the solids begin to break apart and disintegrate, fall downwards and are absorbed into the pores of the ground plane. This process continues until all the solids have disappeared.

Movement 3

The triangular planes from the first movement will reappear in a white space and order themselves in an infinite grid-like arrangement in the white space. Bright multicolored semitransparent 3-dimensional amorphous forms emerge from the infinite grid and rapidly dominate the space. Brilliant luminous clusters of colorful energies are emitted by these forms and replicate numerous times to create an overall patterning in the distribution and movement within the space.

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BUDGET

PREPRODUCTION/PRODUCTION

MUSIC AND SOUND PRODUCTION	IN-KIND
3D PRODUCTION SOFTWARE MAYA, AFTER EFFECTS, PHOTOSHOP	IN-KIND
MUSIC PRODUCTION SOFTWARE GARAGEBAND	IN-KIND
COMPUTER EQUIPMENT	IN-KIND
COMPUTER LABORATORY	IN-KIND

POSTPRODUCTION

EDITING SOFTWARE FINAL CUT PRO	0.00
SOUND PROCESSING SOFTWARE SOUNDTRACK PRO	0.00
PRODUCTION & DISTRIBUTION MEDIA DVDs, CDs	200.00
DISTRIBUTION FESTIVAL FEES	400.00
PROJECT WEBSITE MAINTENANCE	100.00
TOTAL	700.00

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TIMELINE

2007 MAY	MUSIC COMPOSITION, LOOSE STORYBOARDS
JUNE	MUSIC COMPOSITION, MODELING, EXPERIMENTATION PROCESS DEVELOPMENT
JULY	CONTINUED MUSIC COMPOSITION, MODELING, EXPERIMENTATION AND PROCESS DEVELOPMENT
AUGUST	EXPERIMENTATION AND PROCESS DEVELOPMENT
SEPTEMBER	MODELING
OCTOBER	MODELING AND ANIMATION CAMERA ANIMATION
NOVEMBER	ANIMATION, CAMERA ANIMATION TEXTURING AND LIGHTING
2008 DECEMBER	ANIMATION, TEXTURING AND LIGHTING RENDERING PROCESSES
JANUARY	TEXTURING, LIGHTING, RENDERING, MUSIC AND SOUND PROCESSING PRELIMINARY COMPOSITING
FEBRUARY	RENDERING, COMPOSITING, EDITING, SOUND EFFECTS TITLES, CREDITS, DEPARTMENT SCREENING

APPENDIX B

SAMPLE VISUAL REFERENCE GUIDES

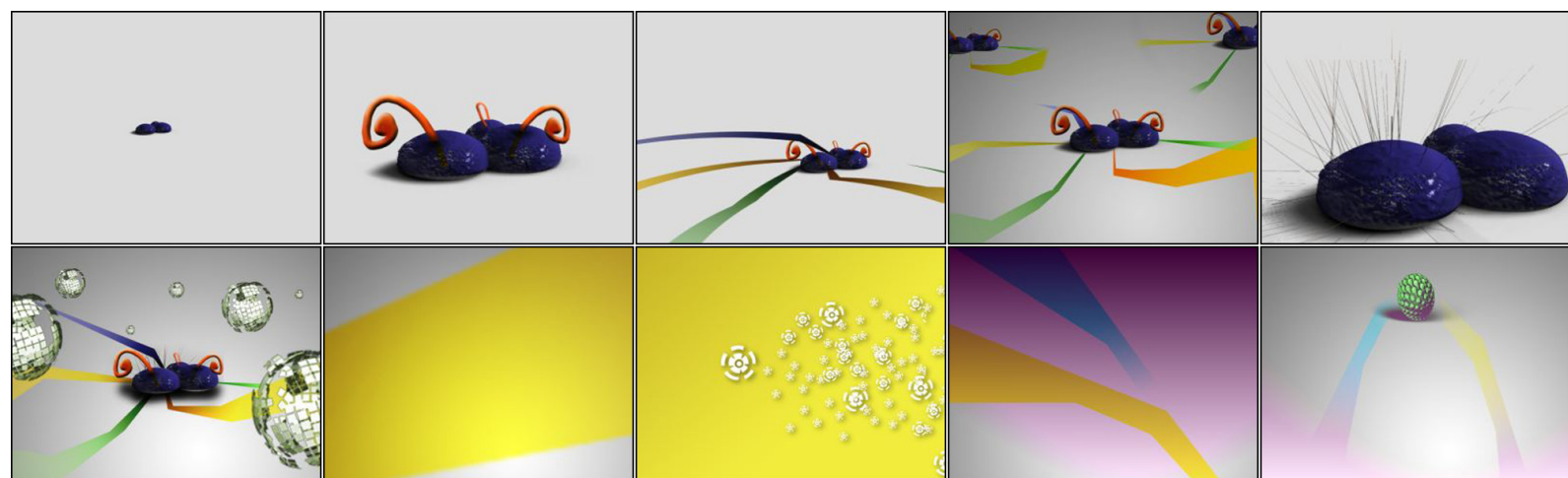


Figure 1. Original Storyboard Variations

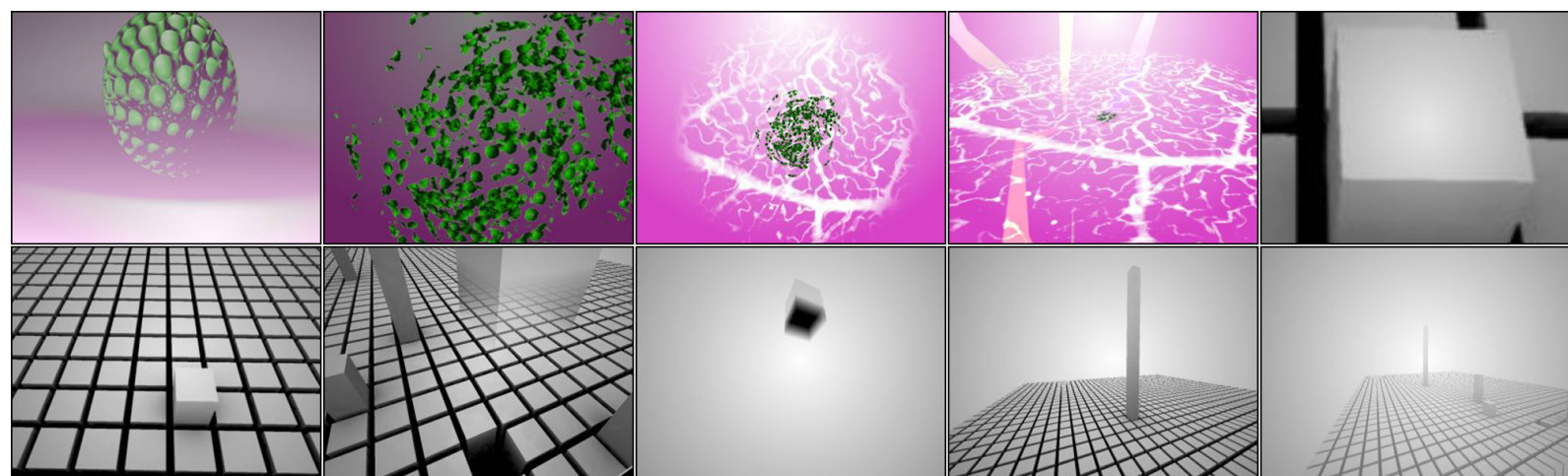


Figure 2. Original Storyboard Variations

APPENDIX C

PRODUCTION STILLS

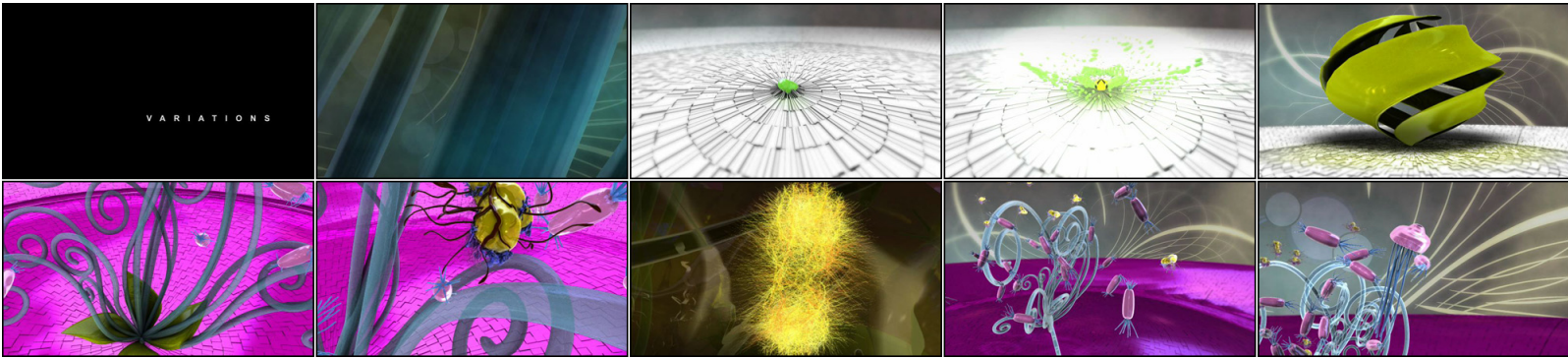


Figure 1a. Production Stills from *Variations* 2008
These are stills from the first minute and a half of the film.

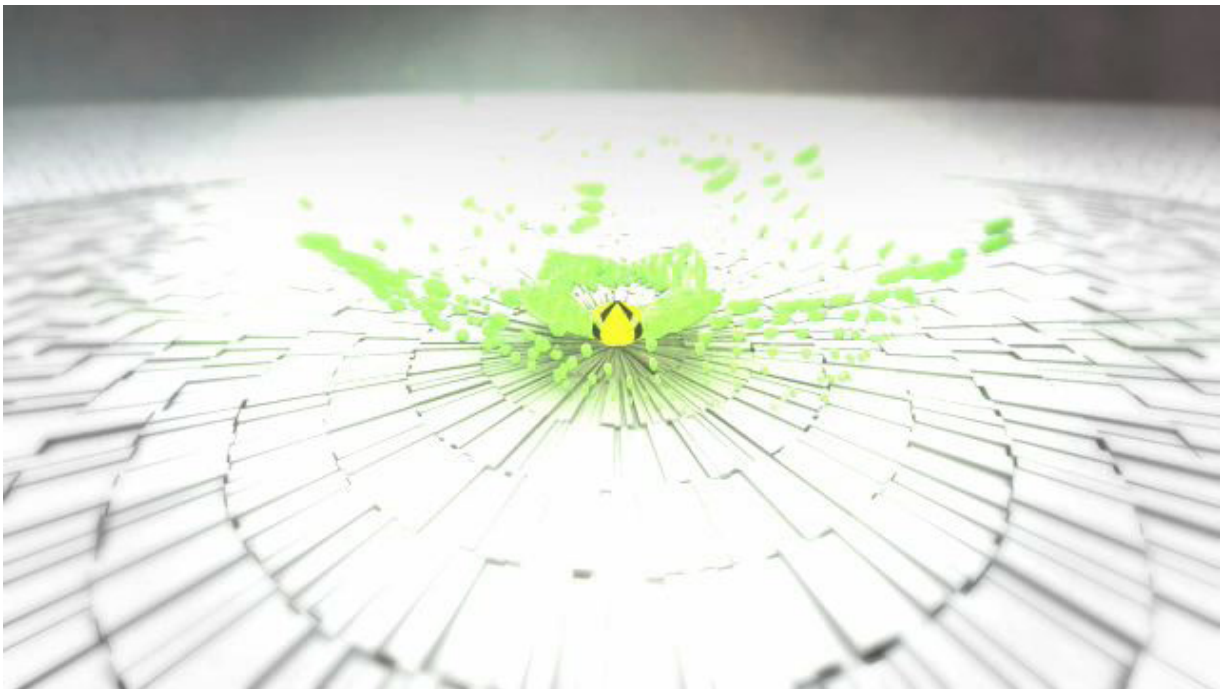


Figure 1b. Particles and particle expressions were used
to create some of the animation for the film.

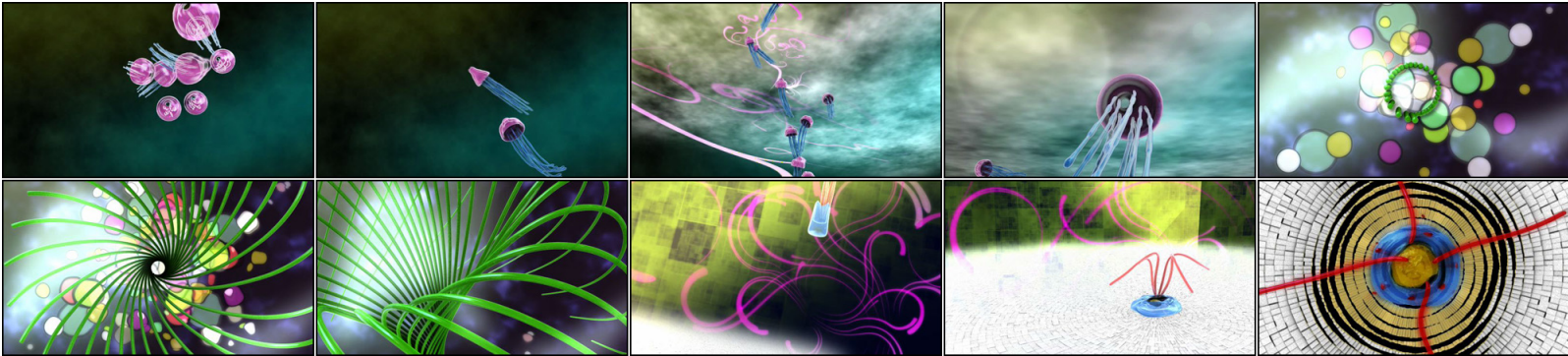


Figure 2a. Production Stills from *Variations* 2008
 These stills are comprised of 1 minute of the middle of the film.

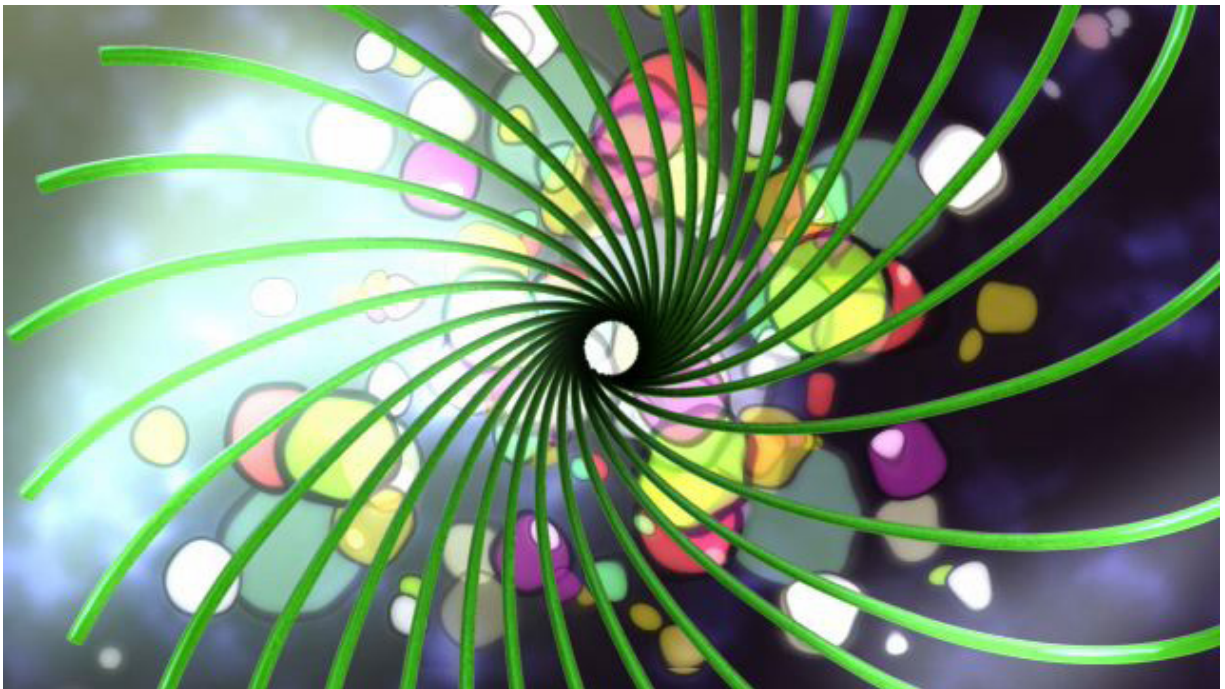


Figure 2b. New techniques in creating and
 animating 3D geometry were discovered.

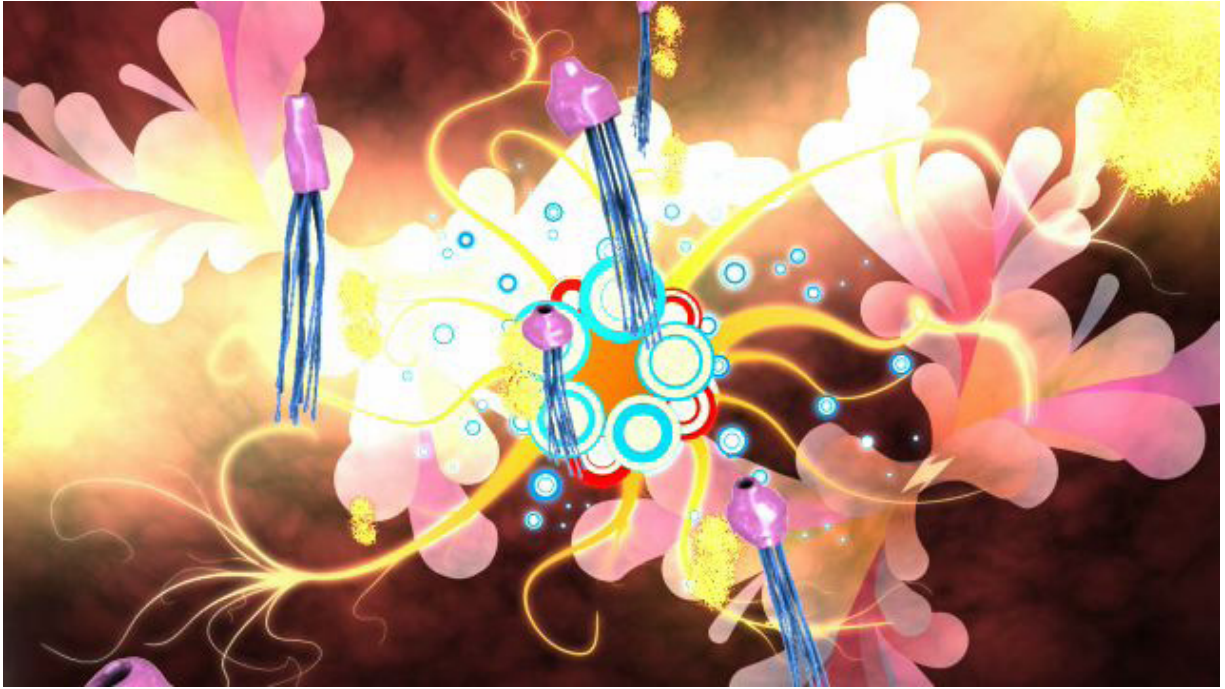


Figure 3a. Multiple layers of 2D and 3D images were composited to form a seamlessly integrated visual experience.

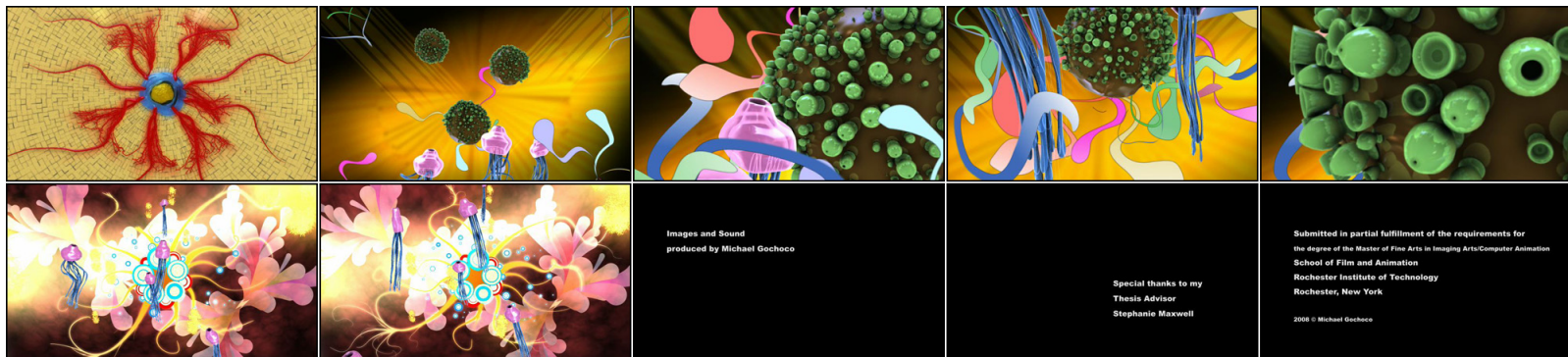


Figure 3b. Production Stills from *Variations* 2008
These are stills from the last minute of the film.

APPENDIX D

REFERENCES

REFERENCES

165 Star Oasis. Dir. Scott Draves. Music by Alex Theory. 2005

Viewed 2007 at the Visual Music Marathon.

<<http://draves.org/blog/archives/000275.html>>.

200 Nanowebbers. Dir. Ruth Jarman and Joe Gerhardt . Music by Double Adaptor.

Semiconductor, 2005

Viewed 2007 at the Visual Music Marathon.

<<http://www.semiconductorfilms.com/root/nanowebbers/nanowebbers.htm>>.

Attractive Prices. Dir. Chris Dooley. National Television. British Airways, 2007

< <http://www.natl.tv>>.

Evolved. Creative Director Seton Kim. REZN8. Microsoft, 2007

< <http://www.rezn8.com/press/msdx10.html>>.

_grau. Dir. Robert Seidel. Music by Heiko Tippelt and Philipp Hirsch. 2004

Viewed 2007 at the Visual Music Marathon.

<<http://www.2minds.de/grau.9.0.html>>.