Abstract: From a painter’s perspective, 3D stereo animation provides a fresh method of intensifying and isolating a pictorial space while conveying an illusion of a “real” notion of space and time. The resulting animated painting appears to share its physical space with the viewer. This paper describes the making of “Elysian Fields,” a 3D animated experimental short film that commemorates WWII. It aesthetically and philosophically examines the effect of the representational and abstract qualities of animation and their ability to convey a narrative. This paper will reflect on an art form that has resulted from cross-media exchanges between new media painting and stereoscopic 3D animation. The film’s extremely naturalistic figurative animation visually occupies a contradictory space in relation to the narratives told through surreal and abstract painting. Earlier abstract films by the author influenced the creation of the surreal war film and played a significant role in the structure of the narrative. Furthermore, Elysian Fields was adapted and calibrated for display on various 3D display systems, from large-scale immersive cinematic spaces to an immersive 320° theatre at the Nanyang Technological University, Singapore, Ars Electronica’s Deep Space and gallery space installation. Winner of a number of accolades, including multiple “Best Animated 3D Short Film” awards, the film competed with another 56 films for the 86th Academy Awards Qualifying Screening Entry. (http://www.elysianfieldsfilm.com/)

Keywords: Experimental animation, painting, visual arts, new media art practice, 3D stereo

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1. Introduction

A. The Undiscovered Country: Mediated Painting

In his book, Working Space ‘86, Frank Stella stated that painting was in “crisis” and standing in an “awkward position” in relation to its own past. He questioned the reinvention of painting and stated that there was an immediate requirement for painting to create a new form of pictoriality for itself – one that is “as potent as the pictoriality that was developed during the Italian Renaissance.” Thus, the challenge for painting does not concern perspective (linear or atmospheric) or flatness. Rather, it appears to be related to the intention – the acceptance of a given configuration and attitude toward covering a set 2D surface that has allegedly limited painting as an art form, and that has actually restricted it from creating a surface that is capable of making figuration appear real and free [1].

In all of the essays in his book Painting as Model ’93, and in "Painting: The Task of Mourning" in particular, Yve-Alain Bois limits his consideration of paintings’ “highest moments” to discussing a handful of artistic “geniuses,” such as Malevich, Duchamp, Rodchenko, Mondrian, and Pollock. These avant-garde painters rendered future painting unnecessary. Bois predicted the end of painting as a medium and speculated that it was traveling in a doomed direction towards death and negation. He contended that one cannot paint in the era of computer games, mass media, and simulacra [2], [3].

The regularly proclaimed death of painting as a medium only seems to redirect attention to life after death. As Hamlet proclaimed in Shakespeare’s Prince of Denmark:

“...the dread of something after death. The undiscovered country, from whose bourn
No traveler returns, puzzles the will...”[4]

Shakespeare’s metaphor suggests an empty canvas and an uncharted territory into which the painter has to venture. Concurrently, it also evokes a sense of privilege and an “eternal” adventure for the artist [5].

Today, through “cross-medium exchange” involving the inclusion of new media technology, the new media artist is seriously challenging premises long associated with painting practices. Painting methods are investigated and tested for new properties that are fueled by other media, categories, and practices, such as animation, 3D stereoscopy, film, and music. New media enables artists to borrow from other disciplines that may be at times contradictory, but in their alchemic mix with painting, are complementary and fuel each other. The resulting art
forms span various media and replace the still canvas with an architecture composed of mapped projections, digital full-dome interactive cinemas, and 3D stereo projections. This is testimony to the crucial role that “network-thinking” plays in new image-making possibilities [6]. (Fig. 1.)

With the aid of digital techniques, these works have allowed the image to be recorded, reworked, and remediated. However, the digitalization process does not equate to a “dematerialization” of the art form [7]. Viewers often become fully absorbed into the environment. With the arrival of screen space, one is not only capable of transferring oneself into the works, but more importantly, able to permeate beyond the boundaries created by the surface of the painting into a “liquid perception” [8],[9].

In fine arts, human perception plays a central role in establishing a channel between the artist and the audience. It focuses primarily on the communication of emotions, feelings, and ideas. This intellectual experience forms a formal and spatial analysis that complements the optical phenomena perceived by the eye, allowing the immersive experience to be rendered as a comprehensible whole [12].

In painting, some of the monocula depth cues, such as light and shade, relative size, interposition, textural gradient, aerial perspective, motion parallax, and linear perspective, have been vastly exploited and exaggerated to compensate for the absence of binocular depth cues (binocular disparity and convergence) [13].

In today’s hybrid mixed-media art works, depth remains a considerably powerful tool in regard to perception. To create “a painting which shall not be distinguished in the mind from the object itself,” is becoming easier with improvements in 3D stereo, where forms can be created that exist synthetically in a binocular-space-field that is itself consonant with reality [7]. Therefore, mobilizing 3D stereo would build upon this new form of pictoriality, thereby creating an art form that is just as potent as the pictoriality that was developed in the Renaissance Arts.

B. 3D Stereoscopic Pictorial Space

“How do I paint a painting that does not begin and end at an edge but rather starts to take in and become involved with the space of the environment around it? [10]”

The discovery of stereoscopy, coupled with the psycho-optical consequences of the human binocular view of reality, encouraged a new and long-lasting enthusiasm in the field of arts. In his commonly quoted manifesto, Roger Ferragallo wrote,

“Painting is reborn. Enter the new awareness of stereo space and a new aesthetics. The century’s long conquest of plastic forms within a monoscopic pictorial space may be at the end. A new powerful illusion of the three-dimensional space is possible. It asks nothing more than the trance-like stare of the middle eye to waken Cyclops from his 35,000-year sleep. The primeval giant’s reward is the sudden revelation and witness to the dematerialization of the picture surface into an aesthetics of pure space where visible forms materialize and release themselves into forms that are suspended, floating, hovering, poised, driving backward and forward, near enough to touch and yet far away enough to provide an escape into the void. So now enters a new aesthetic empathy, subjective intensity and an unparalleled space for generation and communication [11].” (Fig. 2.)

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C. Unframed

“From today the painting is dead”, 1839 [14]

Upon understanding the nature of the photographic process, the academic painter Delaroche announced that there was a crisis in painting [5]. Indeed, photography’s
representational and pictorial capacity threatened the existence of paintings as the most fundamental form of image portrayal. Traditional properties of images, such as color, composition, and reception of light, along with the surface, support, frame, and relationship with the wall are radically transformed by the introduction of photography. These elements are no longer the materials and tools used to create the illusion of a receding space within a bounded frame. Instead, by assembling a set of uniquely blended images, they create new pictorial spaces that are capable of dissolving limitations once caused by perspective perimeters and traditional surface planes.

Unframed paintings often transcend boundaries and cross into an alternative space, which affords a responsive experience that is no longer separated from the beholder (Fig. 3.). Stereo contributes to this new depth through a method that is both dynamic and emotional. Unlike the static quality imposed by Renaissance paintings, with a requirement for precision and the rigidity of the flat canvas surface, the new pictorial space is an experience that creates a virtual feeling to be actualized by the viewer [15].

![Fig. 3. Simple painterly composition laws are coupled with 3D stereo animation to depict cloud formation from single raindrop. Le Phénomène Atmosphérique, Ars Electronica Deep Space 2011](image)

In the film *Le Phénomène Atmosphérique* (Stereoscopic 3D animation, duration 9 min, 2011), the non-representational aspect of weather phenomena was explored analogously through an animated painting (Fig. 3.). The project focused on the simulation of “life” in a fluid form that constantly forms and dissolves, assimilating the idea of water as a source of life along with the boundless energy states often experienced in one’s lifetime. This project was also influenced by the dynamic “drip paintings” of abstract expressionist painters, emphasizing the closely intertwined relationship between “art” and “life.” Rather than using a classical representation of objective reality to create an illusion of movement, 3D stereoscopic animation affords space for the creation of a new pictorial space and the potential pictoriality that emanates from it. As such, the resulting experimental animated films are art forms that are simultaneously connected to and distanced from the classical definition of animated film (Fig. 4) [16].

Following this trend and trajectory of animate painting creation has resulted in the inevitable questioning of the animation process itself. The representational illusions of animation and the typically linear story narratives are now being critically analyzed. Thus, the foothold that traditional animation styles once possessed is brought into question when painting as a medium charts a new course that is “turning away from the world as seen to the world as understood” and affords experiences that favor the “profound realism” of the mind against the “superficial realism” of the eye [6].

![Fig. 4. Deep Space Ars Electronica 2011](image)

2. Painting Process: Re-animated

*Le Phénomène Atmosphérique* was motivated by the desire to create abstract animation that is directed towards the involvement of the artist’s introspection and emotional perceptions. It focused on the artistic and mediated process of image making as an engaging procedure that enables multiple layers of mediation through animation and stereo digital tools. The film questioned story development through the mere process of creation, ultimately bringing to mind the question: Can the process take care of the story?

The process of creating illuminated light patterns encouraged the exploration of caustics and fluid particles as a means of expressing various weather formations (Fig. 5.). The concept of the creative process addressing and “taking care” of unpredictable outcomes, which would otherwise be challenging or even uncomfortable for an artist, became the film’s main direction [7].

*Le Phénomène Atmosphérique*, (Weather) was an attempt to continue the exploration of how one could experience depth, space, and color, and the Light and Space Movement associated with figures such as artists Robert Irwin and James Turrell and their works in Southern California during the 1960s and 70s. Irwin in particular was attempting to create a painting that would simply “dissolve” into its environment. While artists used light to enhance the presence of the painted image, Irwin was concerned with light itself as an integral part of the painterly aesthetic. One of the methods employed as a means of overcoming the challenge of creating an animated film inspired by these highly-established artists,
icons, and ideas, was the incorporation of careful choreographing in order to create a series of deliberate incidents using light, caustic effects, and fluid generating particles. Determining the creative process and analyzing the qualities of paintings that were pictorially interesting became key points of consideration. Therefore, works of this form were deemed challenging to fabricate. (Fig. 3. and 4.)

3. War Poems: Elysian Fields

A. Painting War

Franz Mark, a friend of Kandinsky’s at the climax of First World War, wrote that painting should not depict things that already exist. Painting is a “vehicle,” a medium and interface with another world and a new form of interaction of the works we usually perceive unconsciously [15]:

“At any rate the war is not turning me into realist — on the contrary: I feel so strongly the meaning which hovers behind the battles, behind every bullet, so that realism, the materialism disappears completely. Battles, wounds, motions, all appear so mystical, unreal, as though they meant something quite different from what their names say — yet everything is still coded in a terrifying muteness — or my ears are deafened by the noise, so that I cannot yet distinguish the true language of things. It is unbelievable that there were times in which one represented the war by painting campfire, burning villages, speeding horsemen, etc. This thought seems almost funny to me, even when I think of Delacroix who is still the most skillful. Uccello is better, Egyptian friezes are better — but we still have to do it quite differently, quite differently! [17]”

Using WWII as its theme, Elysian Fields (stereoscopic 3D animation, duration 11 min, 2013) was an attempt to “return” to the creation of representative images. This is achieved by retaining the painterly processes from earlier abstract films as tools, not only to create visuals, but also to tell the story. While there are distinct differences between the author’s early works, they possess similar conceptual and aesthetic strategies. Most importantly, the author continues to creatively use stereo, digital techniques, and VFX to explore the potential of inserting the qualities of abstract fine-art paintings into animation (Fig 6. and 7.). In addition, there is a critical engagement with creating a non-linear animated narrative by choreographing a series of free-flowing images that mimic the instinctive movements found in the creation of abstract painterly strokes (Fig. 6. and 7.).

B. Realms of Elysium

The term ‘Elysium’ in Greek mythology refers to “Islands of the Blessed,” a paradise for the souls of heroes resting in peace on the edge of the Earth by the streams of Oceanus [19].

If you find yourself alone, riding in the green fields with the sun on your face, do not be troubled. For you are in Elysium, and you’re already dead! [...] Brothers, what we do in life echoes in eternity [20].
The film Elysian Fields alludes to the paradoxical nature of war. Wallace Stevens, an American modernist poet, once wrote, “Everything is as unreal as real can be,” suggesting the notion that the “reality” and the “world” we see are the result of our imaginations [21]. Wars are real; but so are the regular dire consequences of the madness, greed, and fear. War contradicts logic, for there is no right or wrong. In the chaos of war, there are no winners because everyone is in conflict, hurt, and suffering. War inspired the dejected existential statement summarized by Charles Simic (Serbian-American poet, b.1938), “We are here today, gone tomorrow.” As such, ontological questions are brought to mind, such as: What makes us go on? Or, most importantly, what makes people remain passionately engaged in finding meaning in life? What is the material that our consciousness, imagination, and memories consist of? [22]

Therefore, Elysian Fields is an imaginary projection of war that provides a platform for the consideration of and meditation on these questions through the phenomenological experiences afforded by the technologies of stereoscopic 3D animation.

C. Here and There

For the film’s first screening, the author, Conradi, gave the following insights about the motivations behind the making of Elysian Fields:

“As a child, I grew up hearing my father recounting stories of the war. Whenever our family experienced tough times, my father would remind us that our situation was not as bad as those he had experienced in the war – which were of course much harder. The idea of making a war film came to me with my father’s passing. Initially titled ‘War,’ the working title for the film was changed to ‘Paradise’ and later to ‘Elysian Fields.’ The film reflected my personal attempts to keep the memory of my family’s history alive. My father, Egon Conradi (1925-2011), was a WWII veteran. In his journal, he wrote of his father, my grandfather, Leopold Conradi (1897-1961): ‘...my father was dragged out from his agronomy school desk in 1915 into the former Austro-Hungarian military machine. He was wounded on the Russian front in Galicia (one of the many battlefields of the monarchy) and afterwards transferred to the Soča (Isonzo) front in the Alps region on the western border of Austro-Hungarian Empire. There he survived the famous Battle of Doberdò, one of the bloodiest battles of World War I, fought in August 1916 between the Italians on one side, and the Austro-Hungarian Army, composed mostly of Hungarian and Slovenian regiments, on the other. Immediately after the declaration of the Kingdom of Serbs, Croats, and Slovenes in 1918, my father volunteered and reported as a non-commissioned officer in the Yugoslavian army, which sought to displace the northern border of Yugoslavia beyond today’s city of Celovec. General Rudolf Maister was his commander. The outcome of the fighting is well known. Why do I write about it? I think the battle for the northern border was a stamp of his political affiliation.

Until his death, when he was 64 years old - a result of the so-called Nazi vivo-experiments at Dachau - he was a great Yugoslav patriot…”

I wanted to animate a painting that would, at first glance, have a seemingly representational clarity; but upon closer inspection, possess a very surreal environment that would stand between magic and reality. The production of the film started in August of 2011 [23].”

D. Inspiration and Themes

[Heaven and Earth]

The film’s surreal structure appropriated concepts and imagery from Western alchemical tradition. This includes the transmutational image of the “Emerald Tablet,” and the concept of the alchemical Above and the Below – the invisible spiritual order of “What is the above is from the below and the below is from the above” (Fig. 10.) The subject of the verse is the “child of the moon” (gold in embryo), who is carried in the womb of the wind up to the heavens and down again to the Earth. The Emerald Table was interpreted by Arabs as a description of the distillation process, during which volatile spirits were separated from their dregs by heat [24]. The sharp line between the two realms indicated the presence of two very different and distinct transcendental realms [25].
Fig. 10. Tabula Smaragdina The Above and the Below

This alchemical depiction divided the film’s story and afforded a visual treatment that assimilates the sharp contrast of day and night. This theme created the environments in which the air battle chase scene was set. The flack lines suggest the re-weaving and union of life’s opposites. Relentlessly pursuing each other, the fighter planes plunge from night to day, connecting the floating shores and suspended seascape horizons of the Above and the Below.

Sergei Bondarchuk’s epic film adaptation of Leo Tolstoy’s novel “War and Peace” was also an influence on Elysian Fields, particularly in relation to the way in which it engages with themes of war, heaven and earth, spirituality, magic, and religion. The emotions of the characters in the film are always connected to larger forces and themes at play within the story and yet, they are never resolved [26], [27]. The epic battle scenes and aerial shots accompanied by alchemical iconographies of the circle and metaphysical highlight Tolstoy’s concept of the cyclical nature of human events (Fig. 11 and 12.). Tolstoy’s “swarm of life” philosophy and the Eye of God point of view formed the basis for the film’s spectacular war scenes [28]. These fragments serve as points of discussion and were referenced in Elysian Fields’ visual development (Fig. 13 and 15.).

Fig. 11. Aerial Shot of the battle, still from War and Peace

Fig. 12. Bondarchuk’s “War and Peace”

Fig. 13. Still from Elysian Fields
Alchemical iconography of circle

Fig. 14. Still from Bondarchuk’s War and Peace

Fig. 15. Still from Elysian Fields

[Angel]

New German Cinema’s “Wings of Desire” by Wim Wender consists of a narrative structure that is closer to poetry and music than linear storytelling. This was a source of inspiration for the film’s main character, particularly the “divine angels: the human angels,” along with its structural representations (Fig. 16 and 17.) [29].
4. Mise-en-Scène

The Elysian Fields film was also edited for various immersive visualization platforms, where printing technology and 3D stereo animated projection added new levels of intricacy to art viewing and space experiences.

A. The Institute for Media Innovation Immersive Room

5. Conclusion

3D experimental art films present an invaluable platform allowing painters and digital artists to incorporate the use of 3D stereo. Rather than reducing itself to a narrow definition of the medium, painting has re-emerged as expansive. This includes existing animation technologies and techniques, which allow room for development and growth within the field. The films presented in this paper encompass not only 3D as a method of storytelling, as it is often used by the mainstream
Hollywood industry, but also serve as an open discussion on the methods through which technology is used as an artistic means of exploring ideas. More importantly, this paper hopes to impress upon readers the potential of 3D experimental art films as vehicles for conveying notions of pictorial space and time, and how those, in turn, relate to formal concerns and art practices in general.

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I. C. Chavez: War Poems: A Transgression of Objective and Linear Imagery towards the Avant-garde in Animation


Biography

Ina Conradi Chavez is an award-winning digital new media artist living and working in Singapore. Referring to animated films as “unframed paintings,” her works innovatively combine digital animation and stereo to suit diverse media spaces. Ina holds a MFA from UCLA, is a Japan Foundation Fellow, and a member of the Union of Slovene Fine Arts Associations. She has exhibited and screened her works internationally, including at: Ars Electronica Festival; Beyond Festival ZKM Karlsruhe, Germany; New Media Festival LA; 67th Edinburgh International Film Festival, Brooklyn Film Festival; Anima Mundi Festival Brazil; Arizona International Film Festival; Dimension 3 Festival, Paris; ISEA; and Siggraph Asia.

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