

Story-building techniques for animation using the power of symbolism and semiotics to increase narrative depth and meaning

Gray Hodgkinson
Massey University
Wellington, New Zealand
g.f.hodgkinson@massey.ac.nz

Abstract

While symbolism in cinema is intensively studied and theorised, techniques on how to employ symbolism in an animated narrative are less assessable. Teaching of animation in the western style tends to focus on expressive movement and acting. While this leads to emotive characters which can elicit empathy from an audience, the intellect is frequently less stimulated. By increasing the use of symbolism, this paper proposes that the audience is able to interact intelligently with the movie, receive the coded messages, and experience the emotions of discovery. This paper demonstrates one approach to employing successful symbolism in a short animated movie.

Specifically, this paper discusses the essential role of symbols and semiotics in animated movie making, and how these tools can help build a narrative that has depth, meaning and reward for the audience. Secondly, this paper will take the reader through a narrative development example for an animated short movie, using symbols and semiotics as its main building blocks – informing story arcs, character design, performance and world building. This movie focuses on the real-world issue of emigration, using symbols and codes to create a language unique to the animation and a bridge to the audience.

Why symbols and semiotics?

While a full discussion of semiotics in cinema is beyond the scope of this paper, a very brief outline of the fundamentals will provide a useful introduction.

Semiotics is the study of “signs” and the implied meanings of these signs. A “sign” can include words, images, objects and sounds. The sign itself is referred to as the signifier, or denotation, and the meaning of that sign is referred to as the signified, or connotation. Founded by the linguist Ferdinand de Saussure (1857–1913) semiotics is the “science which studies the role of signs as part of social life” (Saussure 1983).

In 1964, Roland Barthes expanded semiotics to include all media; “semiology aims to take in any system of signs, whatever their substance and limits; images, gestures, musical sounds, objects, and the complex associations of all of these, which form the content of ritual, convention or public entertainment: these constitute, if not *languages*, at least systems of signification” (Barthes 1976).

Some signs are universal within any one culture, and across different cultures. In his book *Mythologies*, (1957) Barthes discusses codes and conventions by which certain meanings are universally accepted for all of society. He calls this a “mythology” that makes certain meanings natural or common-sense to most citizens. These myths are supported by codes; practices, languages and conventions which are natural and embedded.

Figure 1: Barthes’ example.

In this often cited example of a magazine cover, Barthes describes two orders of meaning:



1. The literal signifier: a young dark skinned boy in a French uniform saluting, eyes uplifted, most likely fixed on the French national flag.

2. The signified, or connotation of the sign: “that France is a great empire, that all her sons, without any colour discrimination, faithfully serve under her flag,” (Mythologies, p116).

The success of a mythology then, relies on the shared ideology between cultures – a human expression of happiness or grief is the same for all cultures. However, problems can occur when language crosses cultures or contexts: A red rose can be a symbol of love, but it can also be a symbol of social democracy. If the symbol does not cross cultural boundaries, meanings will be lost.

For example, as Japanese anime becomes more prominent with western audiences, a new semiotic language is required to follow the new symbolism. The list is long, but one example is the role of the umbrella in Miyazaki’s movie *My Neighbour Totoro*. In Japanese culture, the umbrella is a symbol of affection, caring, or love. In *Totoro*, the young Satsuki gives her umbrella to the forest spirit Totoro, to shelter him from the rain, demonstrating care and thoughtfulness. A second situation is where Kanta, the interested boy neighbour, gives his umbrella to Satsuki during a downpour, but then runs away nervously in the pouring rain. In this way, he demonstrates his honour and signals his romantic interest in Satsuki. In western cinema, by comparison, umbrellas are generally used to dance, or fly, or simply to shelter from the rain, or sometimes to symbolise a character’s repressed mood.

Other symbols from Japanese anime can be greater in their scale and come closer to Barthes’ description of cross-cultural myth. A common theme in anime is that of the apocalypse. A western viewer could see this cataclysmic imagery as a memory of the nuclear holocaust of WWII. However, as Susan Napier points out, equally apocalyptic to the Japanese are the alienating aspects of an increasingly urbanised society, generational and gender tensions, and a decade of economic problems that began with the collapse of the stock market in 1989 (Napier 2005 p29). Similarly, the recurring themes of apocalyptic monsters in movies such as *Nausica* and *Princess Mononoke* represent concerns of conservation and the threat of technology and progress to nature.

Audience reaction

While there is extensive literature on the subject of semiotics in film, there is much less clarity on the associated mechanics of appreciation. Why would an audience appreciate the use of symbols at all? As Wollen discusses, there is "an equally strong prejudice against symbols"... "To show weeping, one must weep". (Wollen p147)

So why do viewers respond favourably to the use of symbols? One answer to this comes from neuropsychological research and the area of affective design. Affective design is a term developed out of studies in human computer interface (HCI). Central to this notion is that humans have an uncontrolled emotional reaction to any interaction with a system. Once recognised, a system's design can be improved to invoke a more positive affective response. A positive affective response has many benefits, one being that the user is more likely to solve problems or control a system if they are in a positive frame of mind.

Ashby et al (1999) describe how this improved problem solving effect is linked to the effects of the neurotransmitter chemical dopamine in the anterior cingulate part of the brain. The anterior cingulate provides a mediation type of communication between the prefrontal cortex and the limbic, connecting, if you like, cognition with emotion. In this way, Dopamine "mediates the cognitive effects of pleasant feelings that may be denoted by self reports of pleasure, happiness, or satisfaction" (Ashby et al, 1999). Simply put, if a problem is solved, the person feels good.

Ashby et al also observe how dopamine is also released when the subject receives an unanticipated reward, a "surprise". Holleram and Shultz (1998) demonstrated how dopamine levels vary according to the prediction of the reward. If the reward is exactly as predicted, the levels do not change. If the reward is more than anticipated, the dopamine levels increase. Conversely, if the reward is less than anticipated, the levels decrease. In this way, dopamine is a mechanism to facilitate reward-based learning. It is the body's way of recording the best outcome, and setting up a memory, or somatic marker (Damasio 1994) – "This was good, let's do it again". As summarised by Marr, (2002) it is the new knowledge, or surprise reward that produces the most dopamine, reinforcing the learning, and producing the greatest pleasure. (Hodgkinson 2007).

If we relate this to symbolism in movies, this implies that the unexpected symbolism would produce the greatest reward for the viewer. This makes good common sense when you consider the joy of learning, discovery and comprehension – the "Ah HA!" moment. This does not mean that actors need to produce items like magicians pulling rabbits out of hats but it does suggest that subtle, solvable symbols will stimulate an audience.

A further advantage of requiring the viewer to thoughtfully interact with a movie's symbols is that the viewer's *ownership* of the concepts will increase. Once moved beyond being a mere spectator, the viewer is more likely to reflect on the connotations, meanings and implications. Because the viewer is required to resolve the symbol, the solution is now part of the viewer's creative process. Apart from receiving the emotional-chemical boost outlined above, there is a greater likelihood of the message staying with the viewer once the movie has finished.

Design of symbols and semiotics for the animated short movie Repatriation

In the animated short movie Repatriation, a conscious effort is made to use imaginative symbolism to give the viewer the

reward of discovery. Many concepts and objects key to the movie have been replaced with alternative symbols. Once the notion that everything can symbolise something was adopted, the design became very natural and almost instinctive – this is certainly an approach that any animator could adopt, and offers a valuable design tool and learning approach for students of animation.

The overall themes of the movie are colonisation, emigration, compassion and the desire for a home. A key reference in this work is the Tampa boat incident. In August 2001 the Norwegian container ship MV Tampa picked up 438 Afghan refugees on the high seas near Australia. The Australian government refused entry to Australia, provoking a humanitarian issue, a political controversy and a diplomatic dispute with Norway. The asylum seekers were taken to the nearby island Nauru to be processed. It took a further seven years for all of the refugees to be finally settled.

I found several aspects of this story conceptually powerful:

- The refugees were a very long way from their home country, in a foreign sea, which must seem as alien to them as the desert is to Pacific island nations.
- The refugee's boat was fragile and puny when compared to the massive hulk of the Tampa, and while the Tampa was rescuing the refugees, there was real risk of inadvertently smashing the refugee's wooden boat against the towering steel sides.
- Australia has only been colonised for little over 150 years, but new, uninvited "colonists" are not welcome.
- There was such a dramatic display of contrast between the wealth and power of the Tampa and modern civilisation with the desperation and poverty of the refugees.

These key themes were pivotal in designing the narrative of the movie. Applying the principles of symbolism, I sought a balance between literalness and subtlety: If I were too literal, the inferences would be obvious, and I would lose the benefits of the coded message. If I were too obscure or culturally specific, the messages would fail outright or be limited to a specific audience. My characters needed to be archetypes, embodying known universal concepts and behaviours. For example, the female character "The Countess" (figure 2) represents the modern imperialist government. Her moods and expressions of approval and disapproval are synonymous with governments and political pressures that play in situations such as these. Her personification also implies that governments are not only systems and bureaucracies, but also are comprised of real people, forced to deal with situations that affect other real people.



Figure 2: The Countess

Other symbols employed are as follows:

The environment would be the desert, a symbol of the ocean, only this time an ocean of sand – a place where one cannot stop, where there is no food, and has nowhere to rest.

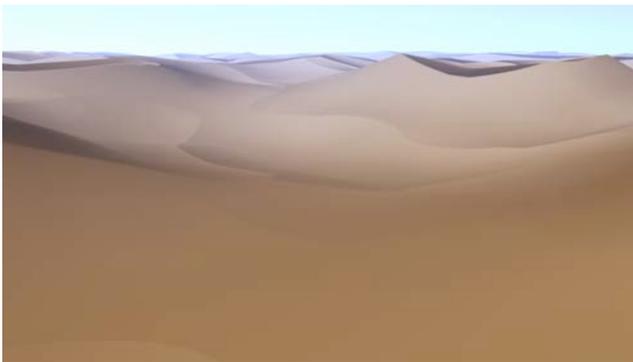


Figure 3: The Desert

The ship would be excessively tall, as was the Tampa. It would be inaccessible save for one small door at ground level. This references the small flimsy ladder that the refugees needed to climb to get to safety. The ship would also have characteristics suggestive of an old world sailing ship, to imply that this ship is also a ship of colonisation, though one that is enforced by wealth and technology.

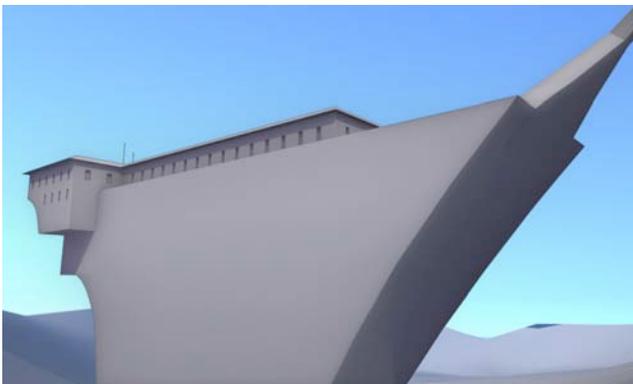


Figure 4: The Ship

The refugee would be a girl of middle Asian appearance, slightly exotic to the western audience. She is awaiting her opportunity to leave her deserted village. There is no water remaining, no one else living there, no reason to stay. She is ready to travel, dressed in her ceremonial clothes, and has a wheeled suitcase ready packed.



Figure 5: The Girl

This mix of traditional dress with a modern suitcase is a visual clue to the irony of modern-day travel. International airports are full of people with mixed cultures, religions, wealth and technology. It is the act of travelling, and some of the accessories required such as wheeled suitcases, that link travellers together. And as happens in this movie, when one is in a hurry, the suitcase falls and tumbles in the most awkward way, destroying the water bottle carefully inserted in the side pocket. The suitcase, therefore, expresses the concept that we are all travellers, experiencing the same problems, only separated by our cultural situations and backgrounds.



Figure 6: The Girl running

The male lead character is "The Count". He is busy operating his ship, looking for a place to berth, under the supervision of The Countess. This references the role of the captain of the Tampa, who was under a range of pressures from the two governments and the rules of the high seas. The Count comes across the girl, who desperately wants to come aboard. Under pressure from his government, the Countess, he makes ready to leave.



Figure 7: The Count

Upon the girl falling to the ground, he shows compassion and turns the ship around to pick up the girl. To the disapproval of The Countess, the girl comes aboard, and is taken to the final destination.



Figure 8: Entry to the ship

The final scene will need to resolve more issues. Most importantly, the girl will need to demonstrate initial happiness at finding a home, but then a change to uncertainty, at the unfamiliarity of her future. This references the temporary home the refugees were given at Naru. The prison-like conditions keep families apart, led to hunger strikes, though eventually all refugees were processed and homed.

Summary

The use of symbolism in film making, and animated film making in particular, is not necessarily new. Interviews with film makers will often reveal the hidden messages placed in a movie, available for the audience to discover and enjoy. What this paper sets out to do, is to demonstrate how the process of using symbols can inform the central story of an animated movie. In doing so, the principles central to the author can be conveyed, while at the same time placing the story in a whole new visual realm, mixing fantasy with fact. At this time of writing Repatriation is not complete, although early audience tests reveal that the objectives of giving the viewers "something to think about" are successful.

References

- ASHBY, F. G., ISEN, A. M., & TURKEN, A. U. (1999). A neuropsychological theory of positive affect and its influence on cognition. *Psychological Review*, 106, 529-550.
- Aumont, J. et al. (1992) *Aesthetics of film* (translated and revised by Richard Neupert), Texas Press, Austin
- BARTHES, ROLAND ([1957] 1987): *Mythologies*. New York: Hill & Wang
- BARTHES, ROLAND ([1964] 1967). *Elements of Semiology* (trans. Annette Lavers & Colin Smith). London: Jonathan Cape
- CHANDLER, D. (2007) *Semiotics: The Basics*. Routledge. New York.
- DAMASIO, A. (1994) *Descartes Error: Emotion, Reason, and the Human Brain*. Avon: New York
- HODGKINSON, G. (2007) *Visually Representative Web History Browser*. Masters thesis: Massey University, Wellington
- HOLLERAM, J. SHULTZ, W. (1998). Dopamine neurons report an error in the temporal prediction of reward during learning. *Nature American Inc.* [<http://neurosci.nature.com>]
- MARR, A. (2002) *Hijacking the Brain Circuits With a Nickel Slot Machine*. [Retrieved 18 March 2004 from http://www.senrs.com/hijacking_the_brain_circuits_with_a_nickel_slot_machine.htm]
- NAPIER, SUSAN J. (2001). *Anime from Akira to Howl's Moving Castle: Experiencing Japanese Animation*. Palgrave Macmillan.
- SAUSSURE, FERDINAND DE ([1916] 1974): *Course in General Linguistics* (trans. Wade Baskin). London: Fontana/Collins
- WOLLEN, P. (1970) *Signs and meaning in the cinema*, Bloomington, London, Indiana University Press

Author Biography

Gray Hodgkinson has been the Computer Animation Programme Leader for the past 11 years at the Institute of Communication Design at Massey University, Wellington, New Zealand. Gray has been developing animation education for 15 years, and has been instrumental in creating links between tertiary institutes and industry internationally and in New Zealand.

Gray has given presentations on animation pedagogy at SIGGRAPH Asia 2009, FMX Stuttgart 2009 (invited), Ed-Media Vienna 2005 and 2008, SIGGRAPH Taipei 2006 (keynote), and the Art Animation Symposium, Tainan 2005 (invited). In the past two years he has concentrated on creating his animated film Repatriation, due for release in 2012.

This paper will be of interest to anyone designing narrative for animation, and in particular to educators and students of computer animation.