SLAVE TO THE RHYTHM:

Animation At The Service Of The Popular Music Industry

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CERTIFICATE

I certify that this thesis has not already been submitted for any degree and is not being submitted as part of candidature for any other degree.

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ABSTRACT

The use of animation has been associated with some very successful music videos. Prior to its use by the popular music industry animation had been used in combination with music since the days of the 'follow-the-bouncing-ball' cartoons produced by the Fleischer Studio in the mid 1920's. The Disney Studio devoted an entire series of cartoons to the visualisation of music called the *Silly Symphonies* which culminated in the feature length animated film *Fantasia*. In so doing Disney and his animators set the technical standards by which subsequent work in the field has been measured. They also established the aesthetic base. This was challenged by the Fleischer Studio in the 1930's and also often parodied by the Warner Bros. Studio.

Half a century later the popular music industry turned to animation, amongst other film and video forms, in the production of the first wave of music video. The global cable television station MTV consolidated the connection between pop music and animation with the production and screening of a series of animated logos for its corporate identity.

Between the activity in the 1920's and the advent of music television there have been various attempts by other studios and by individuals to visualise music. In most of these instances images have been created in response to the music. The soundtrack has preceded the visuals. This is contrary to normal practice in film and television production where the music is not composed until after completion of the editing. But here the music was privileged and the animation was, so to speak, slave to the rhythm, as this thesis will show. Not only did the music take precedence over the visuals in production but the identifiable image of the pop stars involved in the videos took precedence over any animated effects. This suited the needs of the popular music industry which saw the videos as a marketing tool for the promotion of musical product. Once again the Disney aesthetic was challenged and reworked.

Establishing the emergence of a new aesthetic of animation set to music is the basis of this research. It will be seen that music and animation have certain commonalities. Accordingly, the method of structural analysis employed in this thesis is similar to both a musical score and an animation bar sheet and is employed to uncover the multi-layered nature of music videos. After a brief introduction to this new aesthetic I will review current theory on animation and music video. There follows a short history of American animation set to music with some references to European experimentation. The research model is designed and then applied to three music videos. The analysis of these videos shows the nature of the new animation aesthetic and how in music video the animation is indeed a slave to the rhythm

INTRODUCTION

In recent years the fields of animation and music video have experienced a slow but steady growth in critical attention.Whilst far from reaching saturation point there has been a stream of journal articles and books on both of these subjects. Helping to foster this flow has been the formation of an academic society in each domain. The Society for Animation Studies, an international society based in Los Angeles, was formed by a group of largely American academics in 1987. The International Association for the Study of Popular Music is older and, as its name implies, has a broader charter than merely the study of music video. These two bodies organise conferences at which papers are presented. Occasionally the conference proceedings are published. What is rare in this volume of activity is work on the combination of these two fields of study within an intertextual approach. This dissertation sets out to address this joint interest of animation and music video, albeit in a modest way, whilst offering a contribution to the growing body of criticism in each respective field.

Figure 1. Animated logo for MTV.

From 1986 the global cable channel MTV(Music Television), which first came on air in August, 1981, in the U.S.A. and later in other countries, made extensive use of short promotional spots, varying in length from 10 to 30 seconds, most of which were animated. The animations were completed in a variety of styles but all had in common an ending which featured the MTV corporate logo, which was also animated (Figure 1). This activity, in itself, generated much interest in the creative possibilities of animation communication and conveyed the association of pop music with animation to a new audience. Apart from this activity the use of animation in music video has not been widespread. It has nevertheless made its mark. Animation has been employed to successful effect in the launching of new pop music artists, in the consolidation of the careers of established artists, and in the re-establishment of waning or interrupted careers.

This study investigates the links between animation and music video in general and three animated music videos in particular. One goal of the dissertation is to provide a method of analysis of animated music videos and to apply that model to the three videos in question, each of which employs a different animated technique. Whilst music video is clearly an international activity with up to 70 countries actively producing the form it should be noted that this study deals with Anglo-American examples of the form, which include Australian examples. Accordingly, conclusions drawn are only relative to examples of music video form within this area. [1] Likewise, my historical outline of animation set to music is largely an American history although it does include references to European experimentation, the work of New Zealander Len Lye, the Scottish animator Norman McLaren and the case of the English production *Yellow Submarine*. This historical outline is in no way intended to present an international overview of developments.

The visualisation of music by means of animation was popularised by the first Mickey Mouse sound cartoon in 1928, one year after the release of the first successful sound film, *The Jazz Singer* (1927). Prior to this the Fleischer Studio had produced simplified animations of music with its series of *Song Car-Tunes*. These cartoons featured the words to popular songs over which a moving bouncing ball danced in time to the music. As the series developed there were additions to the moving ball. The words occasionally metamorphosed into literal images. These Fleischer cartoons were originally silent but sound was provided live by the cinema's pianist or organist plus the community singing of the audience. Nevertheless the fact that the animation was related to music forced the animators to develop an acute sense of timing, a sense of rhythm so to speak. The Disney Studio elaborated and developed the idea and techniques of animating music from its initial effort with *Steamboat Willie* (1928) through the *Silly Symphony* series, beginning with *The Skeleton Dance* (1929) and climaxing in the feature length animated musical film *Fantasia* (1940).

Initiated and developed as an alternative type of cartoon to the studio's character based cartoons featuring Mickey Mouse and Donald Duck, the *Silly Symphonies* were invariably constructed around a musical score. The studio usually selected classical music to this end but, in a parallel series at a rival studio, the Fleischer Studio followed up its production of *Song Car-Tunes* and another series called *Screen Songs* with jazz music based cartoons. In an interesting development, popular jazz performers such as Cab Calloway and Louis Armstrong provided not only the music but also the basis for the animated movement in these cartoons. Meanwhile, following the commercial and aesthetic success of the *Silly Symphonies*, other animation studios developed their own versions. MGM had its *Happy Harmonies*, whilst at Warner Bros, there were the *Merrie Melodies* and the *Looney Tunes*. The independent Walter Lantz produced his series of *Swing*

Symphonies and *Musical Miniatures*. Warner Bros. in particular had strong cross-media interests and the animators there were often compelled to include extracts from some of the studio publishing arm's popular song repertoire in their cartoons to help promote sales of the sheet music. These and other American cartoon studios, led by Disney, developed and established an aesthetic for the animation of music, throughout the hey days of cartoon production in the 1930's and 1940's.

In Europe, a group of experimental animators created graphic visualisations of music in the early 1920's. Mirroring developments in the visual arts these animators embraced abstraction and music as a basis for their work. Whilst Pablo Picasso and Georges Braque painted guitars and violins and other musical motifs this group of experimental animators, including Walter Ruttmann, Viking Eggeling, Hans Richter and Oskar Fischinger suggested in the titles which they gave to their films the dominance of music in their work: *Opus I* (1921), *Diagonal Symphony* (1921-24), *Fugue* (1920), *Rhythm 21* (1921) and *Composition In Blue* (1934). The bulk of these experiments were carried out prior to the availability of sound-on-film technology but Fischinger continued working in this area into the 1930's and 1940's, actively designing animations to predetermined musical tracks. He was eventually invited by Walt Disney to design the abstract animation sequence of *Fantasia* (1940). This enabled the European abstract style of animation to feed into the Disney model, thus enriching the aesthetic. The Hollywood musical genre occasionally employed animated effects, mostly as novelty, as in the opening puppet animation sequence of *Ziegfeld Follies* (1941). Fifty years later, in music video production, many of the ideas and techniques developed for staging the musical sequences of these Hollywood musicals would resurface.

From the inception of rock and roll, the rock music was featured on the soundtracks of several successful dramatic films such as *The Blackboard Jungle* (1955), *Jailhouse Rock* (1957), *The Girl Can't Help It* (1956), *Beach Party* (1963), *A Hard Day's Night* (1964), *Help* (1965), *The Graduate* (1967), *Easy Rider* (1971), and *Zabriskie Point* (1970), but *Yellow Submarine* (1968) was the first to strongly feature the animation of popular music. The pop music of The Beatles formed the basis for *Yellow Submarine* as well as for the animated television series, *The Beatles*. In addition to the dialogue and the storyline the film contains ten complete songs by The Beatles which have been visualised into elaborate sequences most of which have been executed in the drawn cartoon style animation technique, by a large team of animators. Despite their stylised 'Pop art' form The Beatles are recognisable and appear as characters, with their voices provided by actors. They are the members of Sergeant Pepper's Lonely Hearts Club Band in a story about their journey to and rescue of the residents of a mythical place called Pepperland. In a short section of live-action footage at the end of the film the real Beatles appear.

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Although there is a sense of narrative the film is essentially structured like a musical, or a collection of musical numbers which have been edited together. It succeeded in making a very strong visual statement about Pop art and its marriage to music. This would later form the departure point for animated experiments in music video.

Two other animators who visualised music, working as a team, were the Italian designer and animator Giulio Gianini and Emanuele Luzzati. They have made a series of animated films which were carefully synchronised to music. They chose classical music both for the soundtrack and for the titles of their films, including Rossini's *The Thieving Magpie* (1964), Puccini's *Turandot* (1974) and Mozart's *The Magic Flute* (1977). They choreographed animated movement in precise coordination with the rhythm of the music. Another Italian animator who has set animation to music is Bruno Bozzetto. He produced a parody of *Fantasia* (1940) called *Allegro Non Troppo* (1976). Scottish born but Canadian based animator Norman McLaren made several animated films based on music including folk tunes, boogie-woogie piano pieces, swing jazz and classical music. In addition, he contributed to the theorising of animation. Initially inspirational to McLaren was the work of New Zealand animator Len Lye who animated to music in a most creative and experimental manner.

In the early 1980's the emergent form of music video made use of popular music for animation. Initially, BOHEMIAN RHAPSODY, [2] a video for the band Queen, alerted the popular music industry to the power of music video as a selling tool. The song had already peaked in the charts and was declining in popularity when the video was first broadcast on British television. Instead of continuing to slide down the charts the song climbed to the No. 1 position, surpassing its previous highest position. BOHEMIAN RHAPSODY contained no animation but it did utilise visual effects generated by the emerging video technology, the special effects generator. Although not employed on a widespread basis in other music video productions, the use of animation techniques and special effects steadily grew and a new style of animation was developed for the popular music industry. In the process the established Disney aesthetic for animated music was rewritten. This thesis documents key developments in the history of animated music along chronological lines and posits a theory as to why animation in music video is fundamentally different to that commonly found in the cartoon form, in particular in its preference for more realistic techniques such as rotoscoping and pixillation over the traditional drawn cartoon style.

A short American history of key developments in the setting of animation to music prior to its use in the field of music video production will also be outlined. Animation history has an emphasis on technique with many of the developments centred on technological

development and the strategies made possible by new technology. Music video too has been eager to embrace new technical innovations as they have become available. One of the videos analysed in this study, MONEY FOR NOTHING, was amongst the first music videos to employ the design capabilities of the then new digital image processing machine called the Quantel Paint Box. This machine enabled graphic designers and animators to work directly on video imagery with a view to altering it. More recently artists such as Prince, Peter Gabriel, David Bowie and The Residents have released material on CD-ROM, the new non-linear interactive computer based format which enables viewers to become more active and selective in their consumption of the material.

This study begins with a review of writings on the subject, examines the fundamental terminology used in animation and its genealogy, including the work of Small and Levinson, and provides a description of the more common theoretical concepts employed when discussing animation and music video. The anthropologist Edward B. Tylor's theory of animism will be applied to the study not only of animation, for which it has special relevance, but also to music. In 1987, British animator and industry spokesman John Halas lamented the lack of critical writing on animation.[3] This situation has changed over the past few years with the appearance of the work of an increasing number of animation scholars. From this group the work of animation theorists Joe Adamson, Donald Crafton, Alan Cholodenko, Norman B. Klein, William Moritz and others will be examined, as well as relevant writings on animation from those in related fields such as art theorist Erwin Panofsky, film theorist and film maker Sergei M. Eisenstein, and sound-on-film expert Philip Brophy. Another theorist who has analysed sound on film in Hollywood musicals is Alan Williams. The implications of his work on music video will be examined. From the field of music video and popular music studies the work of prominent theorists E. Ann Kaplan, Andrew Goodwin, Michael Shore, John Fiske and Simon Frith will be considered. Alone in this group is Lauren Rabinovitz who has written specifically on animated music videos, albeit in a postmodern context. In this intertextual project the writings of semiotician Roland Barthes, the poets Ovid and Robert Graves, and the postmodern theorist Frederic Jameson also have relevance.

It will be shown that despite basic differences, music and animation have much in common. Both, for example, are dynamic in that they occur over the passage of time. Secondly, they are commonly segmented into phrases and sequences and this segmentation makes use of 'the score' approach, employed in the analysis of the videos, highly appropriate. Music is normally written in a format known as the score, which is a method of representing the individual parts played by the various instruments throughout a piece of music. The parts are laid out in a series of parallel lines so that one can see a cross-section of all of the individual instruments involved at a particular point in the music,

simultaneously. The plan used in this thesis is to apply a similar approach to the image track of an animated music video so that all of the elements which make up the image at any particular point in the video can be noted and analysed from the point of view of the relationship of one to the other. What will be examined is the structure of the scores, of both the image track and the sound track, the relationship between the components of each level and the inter-relationship between the components of the two levels, and their relationship to a number of other issues that are not normally formalised, such as symbolism, visual art influences and self-reflexivity.

The structural analysis model based on 'the score' approach is then proposed and assembled. It is also compared with another proposed method of analysis for music video analysis designed by Alf Björnberg. The layered analysis approaches used by Erwin Panofsky in art and by Boris Uspensky in literature will also be referred to. The model is then applied to the three music videos under examination with the intention of establishing a methodology which can be used to analyse other animated music videos and determine the level of richness of their content. Finally, conclusions are drawn about the aesthetic which has been developed for animated music videos, and about the analytic model. Suggestions for further related research are also made.

In animation and in music video production the soundtrack is usually finalised before work begins on the images. This is counter to normal film and television production in which the reverse procedure applies. A composer of music for a feature film, for example, must wait until the film has been edited before commencing work. Until the edit, the timing of sequences requiring music are not known. The composer then studies the completed visuals for the film before creating the music. In this way the images dictate the soundtrack. In music video production, however, the film makers are handed the completed music track and asked to visualise it, thus forcing images to play a subservient role to music. Furthermore, it will be implied that the choice of the word 'rhythm' in the title of this thesis stands not just for the music but for the music industry as well, with the implication for the animators of music videos that they are working in a design relationship with the artists and their record companies. The aim of the latter is the advertising of the artist's product and the selling of C.D.s, concert tickets, videos and related merchandise. That is why, it will be argued, the aesthetics of musical animation have been reworked and why, in music video, animation is a slave to the rhythm and at the service of the popular music industry.

CHAPTER 1. CURRENT THEORY IN ANIMATION AND MUSIC VIDEO

Animism

There was a hill, and on the hill a wide
Level of open ground, all green with grass.
The place lacked any shade. But when the bard,
The heaven-born bard, sat there and touched his strings,
Shade came in plenty. Every tree was there... [1]

In this extract from the myth of *Orpheus and Eurydice* Ovid describes Orpheus' ability to charm nature with his music. Distant trees, on hearing the music, uprooted themselves and moved toward the source of the sound, thus providing shade where previously there had been none. Ovid's poem reflects the philosophy of animism, a term which essentially refers to the theory of the universal animation of nature, defined by anthropologist Sir Edward Burnett Tylor in his research of 1871. Animism is the atribution of life to inanimate objects and natural phenomena and the acceptance that inanimate objects have a living soul. Tylor describes animism as:

...the belief in the animation of all nature, rising at its highest pitch to personification...a belief in personal souls animating what we call inanimate bodies, a theory of transmigration of souls as well in life as after death, a sense of crowds of spiritual beings, sometimes flitting through the air, but sometimes also inhabiting trees and rocks and waterfalls, and lending their personality to such material objects... [2]

It is a theory which endows the phenomena of nature with personal life. Tylor claimed that in full-blown animism nothing is really inanimate; everything is alive with spirit. He described the phenomena of a ghost soul, able to enter into, possess, and act in animals, plants, and objects (e.g. weapons, clothing, food). The notion of being 'beside oneself' suggests this idea of one's soul departing from one's body. Tylor felt that religion had its origin in early man's superstitious atribution of a soul to every sort of living being and physical object around him. Animism is the view that everything in the Universe, including even plants and inanimate objects, has some kind of psychological being more or less similar to that of humans and animals. 'The transmigration of souls' is another aspect of animism but in this case the souls are capable of being reborn, not only in other humans but also in animals, plants and objects. They can also travel in the opposite direction from animals to humans in which case the human assumes the characteristics of that animal e.g. a person becomes cunning like a fox. This is echoed in metempsychosis, where the person takes on the physical appearance of the animal.

Stressing the primitive, and consequently superstitious, nature of the cultures he studied, Tylor found many examples of the practice of animistic belief: the Algonquin Indians believed that a body in a trance indicated that the soul had gone and had to return to the body in order to re-animate it; the Sioux Indians buried face paints with the body so that the deceased would look decent in the spirit world; and in Fijian burial rites the deceased's club was buried along with the body so that the soul of the deceased could protect itself in the spirit world (Tylor, 1871 and 1958, 66-67). The dead person was equipped with cooking utensils so that the soul had something with which to eat and the deceased's vessels were broken as they believed that those objects, too, had spirits which could only be released by 'killing' the object itself. In this case the breaking of the vessel allowed the now 'dead' object to release its spirit which could then be reunited with the spirit of the deceased person. An unbroken cup was of no use to the deceased, for example, but the spirit of a broken cup could be used for drinking by the spirit of its dead owner. Likewise, all of the spirits of the deceased's possessions could accompany the deceased into the spirit world.

In these and other primitive societies, based on a philosophy of nature, animism played a major part in mythology. It played the part which poetry and metaphor play in myth today. The sun, the moon, the stars, the trees and the plants became animate, sometimes to the extent of becoming personified as human or animal creatures with specific roles to play. In the primitive culture of the Kukis, the relatives of a man, who had died as a result of falling out of a tree, would chop down that tree and reduce it to chips. In classical culture at the Athenian court, an inanimate object such as a stone which had killed a man without human intervention was tried and, if found guilty, was cast beyond the border. Under old English law the wheel of a cart which had run over a man and killed him had to be forfeited and sold and the money raised distributed to the poor. In the shamanistic practice of the North American Indians the Power animal is the name given to the guardian or totem of a particular individual for whom it becomes a protector, a guardian angel of the animal world, the power referring to the power of nature. Lévi-Strauss has described the animistic belief and practice of the medicine man of eastern Canada who places a small offering at the site of each plant he picks for his medicines in order to placate the plant's soul, for, without the help of the soul of the plant, the mere body of the plant is ineffective and unable to render the cure. Robert Graves found that the Pythagorean mystics refused to eat beans because of their belief that to eat beans was to eat one's parents' heads:

The Platonists excused their exemption from beans on the rationalistic ground that they caused flatulence; but this came to much the same thing. Life was breath and to break wind after eating beans was a proof that one had eaten a living soul- in Greek and Latin the same words, anima and pneuma, stand equally for gust of wind, breath and soul or spirit. [3]

Here we find the animistic belief at work. The beans were not only beans but also housed the spirits of the dead. The beans could then be thought of as being animate. Proof of this came with the flatulence which resulted from eating the beans. The beans contained living souls, and life contains breath, so to eat beans was to eat life.

There is an echo of animism in civilised societies when children at play talk to their toys, dolls and stuffed animals and when adults strike or swear at an item of furniture they have tripped over or bumped into and have been injured by. Similarly, the act of kicking the tyre of a car which has broken down and consequently caused frustration to its driver is an indication of an unconscious belief in animism. In each of these cases the inanimate objects are treated as if they were alive or possessed some inner soul or spirit which could be communicated with.

Frederick W. Schodt has studied animistic practices in modern Japan which he labels 'robotto okoku', the robot kingdom. The practice of animistic belief has survived in both the Buddhist and Shinto religions of that nation. It is particularly strong in Shinto, which is Japan's indigenous religion. Shintoists worship trees, rocks, mountains and streams for their 'kami', which is the spirit they believe resides within them. Just as the samurai were convinced that their swords possessed a spirit, today's craftsmen regard their tools of trade similarly. Each New Year rice cakes are offered by tradesmen to their tools in gratitude for their service the preceding year. The tools are also washed and purified in a further animistic act of personifying them (Schodt, 1988, 199). Workers at Nissan's Zama plant have also participated in this personifying or anthropomorphic aspect of animism by naming robots at the plant after popular singers, actors or cartoon characters (Schodt, 1988, 197). Tylor identified this anthropomorphic attribute of animism, which will be dealt with in the next section of this chapter, and developed it further into areas of totemism, stone worship and idolatry.

Film director and film theorist Sergei M. Eisenstein described animism as the belief that all objects possess a natural life or vital force or that they are endowed with an indwelling spirit, usually used to designate the most primitive and superstitious forms of religion. He saw in animation the perpetuation of the spirit of animism both as a belief and as a practice:

The very idea...of the animated cartoon is like a direct embodiment of the method of animism. Whether a momentary supplying of an inanimate object with life and a soul, which we also preserve when we bump into a chair and curse it as though it were a living being, or whether a long-term supplying with life, with which primitive man endows inanimate nature. [4]

Eisenstein, in pointing toward animation as a suitable site for the practice of animism, enriched the thinking of animation which had previously been spoken of only in terms of a new technique of film making and a novel form of cinematic movement provided by moving drawings. This master of film theory took animism out of its anthropological domain and applied it to the study of animation, insisting that the very technique of animation was a direct embodiment of animism. To take a still drawing, the inanimate object, and to make it appear to move, that is become animate, was for Eisenstein, evidence of the application of animism. A lifeless drawing is brought to life. Additionally, the object which the drawing represents, whether an object, animal or plant, is also brought to life (Leyda, 1988, 43). In Disney's cartoons Eisenstein saw the survival of animism and totemism in art. He felt that to audiences watching the animal cartoons, there was the possibility of experiencing the feeling which comes from contact with nature, something which was fairly alien to their urban lives. He described Disney as being 'beyond good and evil', like nature itself, and in his humanised animal characters saw an appropriate art for the age of American mechanisation and its attendant lack of humaneness. Viewing Disney as the supreme American artist he praised his cartoons for their sense of liberation:

The epos of Disney is 'Paradise Regained'. Precisely Paradise. Unreachable on Earth. Created only by a drawing... Disney (and it's not accidental that his films are drawn) is a complete return to a world of complete freedom (not accidentally fictitious), freed from the necessity of another primal extinction. [5]

Today Disney is not thought about in such glowing terms. Although his studio's animation work is still regarded as the pinnacle of achievement in the field in terms of technical excellence, increasingly scholars are revealing that this came at a price. With the exception of a few senior animators known as the 'nine old men' whom Disney singled out for special treatment (an elitist strategy which caused divisions amongst the staff) the Disney animators were generally poorly paid in comparison with their colleagues at rival studios despite being forced to work extremely long hours and having to attend art classes during week nights. They were not given screen credits for their work until they organised themselves into a union, went out on strike and demanded them. Disney was anti-unionist and sacked many of the staff who had produced such exacting work for him, although he was forced to improve working conditions for those that remained loyal to him, including the allocation of screen credits to his animators. Nevertheless, it should be noted that Eisenstein held Disney and his work in high regard.

Eisenstein was obviously excited by the possibilities which animation offered to film makers. In his own dramatic film *The Battleship Potemkin* (1925), there is a short montage sequence in which he employs an animation like technique to produce an animistic

effect. There are three successive shots, each less than one second in length, of three statues of lions, each in a different pose. Through manipulation of framing and angle, and the effect of montage (the cumulative effect produced from a sequence of images), the statue appears to come to life. A reclining lion seems to sit up and take notice of what is happening around it. The inanimate becomes animate. The lifeless statue appears to possess life. Although the individual shots are unlike animation in that they last for more than a few frames, they are very like the result which animation produces.

In the light of Eisenstein's theoretical contributions, animism can be seen as an essential element to the theorising of animation. It may also be applied to the theorising of music. The actual musical instruments themselves, constructed as they are from wood, cat gut, horse hair, ivory, skin, metal and plastics, all dead materials, represent a parallel to animism. When drums are struck, a guitar string is plucked or a violin string bowed musical sounds are produced. The playing of these instruments, the inanimate objects that they are, makes music. It brings them to life, or 'animates' them. Like the graphic drawing which Eisenstein describes as coming to life in a manifestation of animism, the instrument also comes to life. The French painter Georges Braque refers to this when commenting on musical instruments, objects which frequently appear in his paintings:
Their modelling and volume belonged to the world of still life as I understood it. I was moving towards tactile space- or "manual" space, as I prefer to call it- and a musical instrument as an object had the peculiarity that one could animate it by touching it. That is why I was so strongly attracted by musical instruments. [6]

Furthermore, the instruments are endowed with the spirit of the performer who plays them. Different performers playing the same melody on the same instrument are capable of producing different sounding music. This relates back to the 'transmigration of souls' aspect of animistic belief. The musician is capable of imbuing the instrument with his or her own 'spirit', a personal expression of musical style developed from a mixture of the feelings and skill of the individual performer. Although the production of cover versions is not as widespread in recorded popular music as it is in classical music, where it is considered normal practice, it offers an interesting opportunity for comparison of individual styles of musical performance.

Anthropomorphism
Long legs,
Crooked thighs
Little head,
And no eyes. [7]

This is an example of anthropomorphism from a South Sea Islander rhyme which describes a pair of cooking tongs. Anthropomorphism is a common feature of animation. In his research into primitive culture Tylor developed a sub-category of animism called anthropomorphism (also referred to sometimes as personification) which is the atribution of human qualities to inhuman objects or animals. *Anthropo* is the literal Greek meaning for 'he who has the face of man', combining the form of the Greek *anthropos,* man, anthropology, the science of man, the Greek *anthropomorphitai,* a sect ascribing human form to God, and the Greek *anthropophagoi,* man-eaters. *Morpho* means form, shape, and "anthropomorphous" means having the form of a man, of a human form, compounded of "man" and "form, shape". In architecture, for example, this can take the form of the combination of windows and doors in buildings designed so as to be read as faces or parts of the human body. In animation, the Disney musical cartoons feature animal characters which stand upright on their hind legs, speak, and wear clothes, and generally behave more like humans than animals. Inanimate objects, as well as coming to life, often have human features, as do landscapes. Prior to this use in animated cartoons, animal symbols had been used throughout art and religious history. The Babylonians had animal gods such as the Ram, the Bull and the Crab. The Egyptians had gods with animal heads on human bodies such as Hathor, the cow headed goddess, Amon, the ram headed god, and Thoth, the ibis headed god. Similarly, the Hindu god of good fortune, Ganesha, had an elephant head on a human body. In Greek mythology there is a lot of animal symbolism e.g. Zeus, the father of the gods, could transform himself into an eagle, a bull or a swan in order to attract a woman he desired. In Christianity, Christ has been symbolised as a fish, a serpent, and as the 'Lamb' of God. To the Algonquin Indians of the 17th Century the sun and the moon were brother and sister, and to the Egyptians Osiris and Isis were sun and moon, brother and sister and husband and wife (Tylor, 1871 and 1974, 26). The Australian Aboriginals say the stars are men dancing a corroboree and that a rainbow is a snake. Whereas to us this personification in myth has more of a metaphorical and poetic meaning, in primitive cultures metaphor was replaced by animism and anthropomorphism. The stars really were dancing men who had climbed a very tall tree which had been cut down, leaving them stranded in the sky.

There is an Australian Aboriginal myth which demonstrates the use of animism and anthropomorphism in mythology. It tells the story of how the rocky outcrop at Katoomba came to be called the Three Sisters. The story involves a medicine man who lives on top of the mountain at Katoomba with his three daughters. He is in possession of a magic bone which has the power to transform him into a lyrebird. Each day he has to journey down into the valley below to find food. In order to get to the valley he has to pass a cave in which a monster is sleeping and whom he tries not to disturb. When he reaches the bottom of the valley he cries out "cooee" to his daughters at the top and they call "cooee"

back to him. This ensures that he knows that they know that he has safely reached the bottom. One day after returning their "cooee" call the three daughters, whilst playing a game called mountain devils, accidentally roll one of these small rocks over the edge of the cliff. It's noisy journey down the mountain awakens the monster who angrily searches for whoever has disturbed its sleep. When the monster roars it creates an earthquake which leaves the three daughters stranded on a rocky ledge out over the valley. The father hurries back up to the top and uses the magic bone to turn his three daughters into stone to protect them from the monster. He also turns himself into a lyre bird to flee the monster but in his flight he drops his magic bone and so is forced to remain a lyrebird. His three daughters remain three stone shapes, the Three Sisters of Katoomba, as they are referred to today. The myth ends with the image of the roughly human shape of the three figures which form the rocky outcrop known as the Three Sisters and the animistic notion that these three stony shapes contain the spirit of the three souls trapped within. In addition, the story contains examples of another fundamental feature of animation, metamorphosis, the transformation of an object from one form to another. Metamorphism is expressed here with the change of the father into the lyrebird and his daughters into stone.

A further aspect of anthropomorphism is the mixing of the objective and the subjective. This was acknowledged by Claude Lévi-Strauss when he commented on the compatibility of knowledge and sentiment evident in the behaviour of a zoologist who named a dolphin he was studying both *tursiops truncatus* and Flippy (Lévi-Strauss, 1966, 38). In the natural history television series *The Trials Of Life,* a scientist refers to a particular killer whale he has been studying in the wild as Bernard, and a female zoologist refers to an elephant cow as Tulip and wonders which mate from the herd Tulip will select. It is not uncommon to hear of examples of people giving human names to their pets, their cars, and even their houses. In meteorology, too, the weather is personified by the atribution of human names to cyclones and hurricanes.

There is a further connection with nature in the early musical cartoons through the use of animal characters and animal symbolism, with the animal characters representing humans. This is extended with the common use of the fable form of storytelling, often used in animation, in which animal characters, representing humans, play out some moral tale for the edification of the humans. In primitive societies, a man disguised as an animal becomes, in rituals, that animal. In the palaeolithic period there was a form of hunting magic in which images of the targeted game were painted on the wall of a cave and stabbed with spears with the intention that in the real hunt life would imitate art and the game, like the image, would be killed. In Jungian therapy the self is often symbolised as an animal, the animal representing ones instinct, and one's connection with

nature, and suppressed instincts in civilised man are evidence that the 'animal' is disconnected with nature.

Many of the early animated cartoons featured animal characters in anthropomorphic mode playing out a scenario based on a fable. The fable has been used throughout history and probably originated in primitive cultures whose members were in close contact with animals and from whose observations of animal behaviour similarities with human behaviour were deduced. In 18th Century England the fable was very important, first as a means of political satire and later as a method of teaching children socially acceptable behaviour. The fable is a form of story, not based on fact but a type of myth, or legend, or short moral tale, especially with animal characters that talk and act like people. La Fontaine translated fables from Aesop and Phaedrus into French and developed them into a legitimate literary and pedagogical form. Because of its use of humanised animal characters the fable had an indirect application to humans. Whereas some readers rejected this application on an anthropomorphic interpretation alone, finding the notion of talking animals behaving like humans quite ridiculous, others, permitted the inherent communication process to work on themselves. The novelty and entertainment value of these animal characters lowered their resistance to the teachings contained in the fable, teachings they may have rejected if humans had been assigned the principal roles. Often fables implied that humans acted less rationally than animals and had become disconnected with nature. This contrasted with the Cartesian view of animals as mindless machines.

Figure 2. Scene from the Walt Disney *Silly Symphony* , *Three Little Pigs*.

In addition to animals playing the principal characters in fables, fabulists also cast humans, gods and inanimate objects, and as a strategy to make the communication work, perhaps, these characters were designed to resemble humans closely, and so possessed the speaking and reasoning abilities of humans. To accept talking animals and objects

also required an act of imagination on the part of the reader and it was this creative participation which helped make the fable memorable and consequently retained in the reader's mind. The act of deciphering the fable, of finding the moral or the lesson, also required active participation by the reader of the text. In the Disney cartoon *Three Little Pigs* (1933), (Figure 2), 1930's audiences were not only captivated by the sight of singing and dancing humanised pigs, but, in responding to the song "Who's Afraid Of The Big Bad Wolf?", interpreted the lyrics as if they represented an invitation to fight and survive the prevailing economic crisis of that time.

Anthropomorphism has been widely used in the visual and graphic arts, as well as in literature, religion and mythology. The 12th Century Japanese Chojugiga or Animal Scrolls by Toba portray anthropomorphised animals which mock the human condition, as do three by Zoshi, the Hell Scrolls, the Disease Scrolls, and the Hungry Ghost Scrolls. The 19th Century French illustrator and caricaturist J.J.Grandville represented humans with animal heads or animals with human bodies for the purpose of satire, and the 16th Century Italian painter Giuseppe Arcimboldo formed human faces from animals, fish, plants, flowers, fruit and vegetables and in so doing, reaffirmed man's connection with nature, implying that man is organically linked to other living forms. Daumier, a peer of Grandvilles, often imposed vegetable shapes e.g., a pear, on peoples faces and bodies. Landscapes have been represented as human forms or faces by 16th Century painters and later by Salvador Dali. Other illustrators to use anthropomorphically designed characters include Griset, Landseer, Edward Lear, Beatrix Potter, May Gibbs, Norman Lindsay and Dorothy Wall. This work of storytellers La Fontaine in the 17th Century, Hans Christian Anderson in the 18th Century, Lewis Carroll in the 19th Century and Walt Disney in the 20th Century represent a continuity of theme which Eisenstein has described as representing a return to nature as a reaction to the oppositional ideas of Descartes, Voltaire and, Kant with their emphasis on the rational and the industrial.

Metamorphism
Over those arms spread grisly fur,
Her nails lengthened to claws, her hands curved down
To serve as feet, the lips that Jove so praised
Were hideous jaws, and, lest her prayers prevail,
Her power of speech was quenched; a fearful growl,
Angry and menacing, came from her throat.
She was a bear, but kept her woman's heart... [8]

This extract from Ovid's account of the myth of Callisto demonstrates two aspects of animation theory and technique, metamorphosism and anthropomorphism. Animation is

rife with the former which involves a constant state of transformation. Metamorphism is a technique fundamental to animation practice and to the thinking of animation. Animation theorist Norman Klein sees metamorphosis as an essential element of the medium:

I have to admit that I use metamorphosis as one way to determine whether the animator is using the medium more fully and more effectively. [9]

An important enabling factor in animation is plasticity of form. What Eisenstein describes as the "liberation of forms from the laws of logic" applies to the sheer motility of line found in animation, that shifting boundary capable of stretching and squashing, as animators label the technique, into any possible form, so that any object, any character, is not limited by its own form. Its design is pliable. In animation the pliable shapes are capable of assuming any form and usually do so as the process of metamorphosis is commonly used in animation. *Metamorphosis* is the Latin title of a work by Ovid dealing with changes of form. In animation an elephant can be made to stretch through the eye of a needle. Like Lewis Carroll's *Alice In Wonderland* the characters and objects of the animation realm can achieve the impossible. This is a reaction against the real world where everything is fixed, solid and stable, a flow into the dream world where things can float, wilt and wobble, breaking free of reality's restrictions. The practice of metamorphosis in animation allows the expression of this plasticity in animation as well as the practice of an animate design disintegrating or being destroyed then reassembling itself and reverting back to its original shape. The German graphic designer Wilhelm Busch (1832-1908) illustrated with lyrical, flowing lines like corkscrew effects, his characters Max Und Moritz. Ludwig Richter (1803-1884) created illustrated animal characters with an earthy rural humour and a refined naturalism. The work of both of these graphic artists influenced the Disney animators.

Figure 3. Use of metamorphosis in the Fleischer cartoon *Snow White.*

As the designs transform from one shape to another and back again, this metamorphosis was orchestrated by the music on the soundtrack of the early cartoons, and later by the music forming the basis of the soundtrack in music videos. In the case of Arcimboldo, who did not use music at all for his transformational paintings, the transformations were represented by the visuals alone. Giuseppe Arcimboldo, the Sixteenth Century Italian artist and designer, can be thought of in a sense as one of the first animators. His composite portraits, whilst undeniably still images, possess not only a sense of movement but also a sense of play, both of which are associated with the process of animation. Roland Barthes has described the threefold sense of movement inherent in his composite portraits:

Arcimboldo is animated by so great an energy of movement that, even when he affords several versions of the same head, he produces certain significant changes; from version to version, the head assumes different meanings.......Everything happens as if, each time, the head were oscillating between marvellous life and horrible death. These composite heads are heads which are decomposing. [10]

Firstly, there is a series of heads. Arcimboldo produced a series on the seasons and on the elements. As in animation, there is a movement from one image to the next in the sequence of images and each subsequent image is different from or has developed from the preceding image. A transformation or metamorphosis, very common in animation, has taken place. Secondly, there is movement in the philosophical sense of animation. A journey through time from death through life and back to death again. Animation involves the notion of the animate/inanimate duality, the states of life and death, so to speak, and the movement between them. In Spring the head is alive with fresh flowers. In Winter the head is dying because the vegetables are rotting. Barthes:

The swarm of living things (plants, animals, babies), arranged in a close-packed disorder (before joining the intelligibility of the final figure), evokes an entire larval life, the entanglement of vegetative beings, worms, fetuses, viscera which are at the limits of life, not yet born and yet already putrescible. [11]

Thirdly, Barthes refers to the mobile nature of the portraits, the fact that the viewer has to move to get the whole picture. Close up, all that can be discerned are the elements of the portrait: an arrangement of fruit or vegetables or cooking implements. It is not until the viewer moves away from the painting that the picture is transformed from the elements to the whole, from the fruit to the face. These magical transformations of everyday objects into human faces also suggest the mantle of the conjuror for Arcimboldo, a magician of metaphor, creating a sense of marvel and wonderment with his creations.

Inherent in Arcimboldo's portraits are the three aspects of animation covered so far, animism, anthropomorphism and metamorphism. The inanimate pieces of fruit and vegetable from his painting 'Der Herbst' of 1573 become through their animistic quality, a living anthropomorphised object, the portrait of a man, and whereas the produce is presented in full bloom, in its ripened state, there is a suggestion of the impermanence of that state. Through his method of presenting a series of composite portraits, and that series representing the march of time through the seasons of the year, the notion of the portrait eventually becoming composed of dried and rotten fruit, or having previously been composed of the Spring shoots of the not yet grown fruit, is put forward. This notion suggests metamorphism.

Animation

Having examined some of the basic attributes of animation, namely animism, anthropomorphism and metamorphism, it is now time to analyse the broader term of animation. Small and Levinson have noted that despite the growing number of books on animation there is little available on animation theory and that, within film theory, animation has either been ignored or deprecated. There are books on technique and books on history but little in the way of theory. Curiously they found that Eisenstein has neglected animation, when in fact he hasn't. [12] Small and Levinson perceive animations as "film (or video) constructs that depend rather upon an aesthetics of artifice," whereas the film theories of Kracauer and Bazin concern those constructed around "physical reality". [13] This offers some immediate relevancies to animated music videos because of the mix of imagery between representations of physical reality and representations of artifice by means of animated graphics. The most fundamental theoretical issue is the definition of animation. To Small and Levinson animation is defined in terms of single frame recording and linked to montage, the putting together of individual shots into filmic units, the editing of images in the camera, similar to animation's juxtaposition of single frames. Eisenstein's use of this technique in *The Battleship Potemkin* (1925) has already been discussed. The method of shooting animated film one frame at a time, or frame by frames as it is sometimes called, provides a technical definition but is problematic in that it could be said that all film is recorded frame by frame. In live action film, however, the single frames are recorded as part of continuous sequences made up of other single frames, although even in animation there are times when a series of continuous frames are filmed. These are called 'holds'. More interestingly, Small and Levinson also say that animation is reflexive:

By 'reflexivity' we mean the modernist aesthetic strategy that returns audience attention to the very construction of the art work itself (as opposed to its subject, theme, message, etc.) [14]

Ultimately they hope to see animation theory accepted into the main body of film theory and, by its inclusion, cause a rethinking of film theory (Small and Levinson, 1989, 73). This is exactly what is happening through the efforts of Alan Cholodenko and his colleagues. Cholodenko has started an argument for the re-examination of the relationship between animation and live-action film and this idea will be returned to after examining some fundamental definitions of animation.

Dictionary definitions of the word "animation" include the following: life, vivacity, the action of animating, the action of imparting life, vitality, or, (as the sign of life) motion, quickening, the state of being animate or alive, animateness, vitality, the representation of things as alive, and a photographic technique that gives the illusion of movement to what is actually inanimate and stationary. The term "animate" means to 'give life to, to breathe, to quicken' and is derived from the Latin word *animare* which also means 'to quicken'. The related word *anima*, Latin for 'soul' means 'air, breath, life, soul', 'breath of air, air, breath, soul, life'. Related words and derivations include *an*, Sanskrit for: 'to breathe, to live, to supply with life, to enliven', as in how the soul animates the body, an animated picture; *anemos*, Greek for: 'breath, wind'; and anima, Latin for: 'soul'. The Greek word for "alive", like the equivalent Latin word *animatus* and its English derivative "animate", is etymologically the same as "ensouled". So "animate" means endowed with life, or to give life to, to enliven, from Latin *animatus* past participle of *animare* , to fill with air or breathe, to animate. Most of these definitions reinforce the association of animism with animation. They also point to the notion of aliveness, as indicated by breath and by movement. To be animated then is to be in a lively state, which gives the appearance of or representation of life. There is also the specific definition which relates to film production and that is to give apparent motion on film to a series of drawings.

This duality, this contrast between the opposing states of being animated and being inanimate as a means of defining the one or the other is addressed by Roland Barthes in his appraisal of the Bunraku puppets of Japan. He describes the level of artistry of the puppeteer as achieving a fusion between the duality of being dead and being alive. He writes:
Concerned with a basic antinomy, that of animate/inanimate, Bunraku jeopardizes it, eliminates it without advantage for either of its terms. [15]

In endeavouring to illustrate this antinomy in animation and point to the differences between the state of being animate and its contrary, there is a moment when the inanimate object, whether drawing or puppet, becomes animate, or at least appears to do so by virtue of apparent motion and with the aid of the constant motion of the film projector or video player. At the same time it never really comes to life, except apparently, but

always remains one fragment of stillness in the magic of the animated process.

Definitions and assessments from practitioners and scholars include John Halas's notion that animation should start where reality ends and restrict itself to the realm of fantasy, reality being the domain of live-action film (Halas, 1987, 35). Halas has also noted that no other medium derives so clearly from the magic of legends and fairy tales, undoubtedly mindful of the fact that much Asian and European animation is constructed in storytelling form and based on the relevant folklore and mythologies of those cultures. Charles Solomon sees animation as imagery recorded by the frame-by-frame method, where the illusion of motion is created rather than recorded (Solomon, 1987, 10). The latter part of his definition has a similar idea to that put forward by the Scottish experimental animator Norman McLaren who describes the process as an art form consisting not of drawings-that-move, but rather movements-that-are-drawn (Solomon, 1987, 11). He makes further play on the space between frames, what animators call the inbetweens, as the art of manipulating the invisible interstices between frames. This space has attracted many post-structuralist and postmodernist critics keen to apply the writings of the French philosophers Gilles Deleuze and Jacques Derrida to animation. Acknowledging that Deleuze hardly addresses animation in his two books on cinema, *Cinema 1: The Movement-Image* and Cinema 2: *The Time-Image,* (in a total of 595 pages one paragraph is devoted to animation), Keith Clancy hones in on the inbetween process. In describing cinema as a system which reproduces movement by means of a series of snapshots and that any other system is foreign to cinema, Deleuze tries to include animation by describing what happens in the process:

...the drawing no longer constitutes a pose or a completed figure, but the description of a figure which is always in the process of being formed or dissolving through the movement of lines and points taken at any-instant-whatevers of their course. The cartoon film is related not to a Euclidean, but to a Cartesian geometry. It does not give us a figure described in a unique moment, but the continuity of the movement which describes the figure. [16]

Clancy sensibly rejects the Cartesian link, which seems to arise repeatedly in discussions about the definition of animation involving as it does the argument between the spiritual and the mechanical, but seems to support Deleuze's notion of continuous dissolve rather than a series of separate fixed images, an idea which is contrary to animation practice (Clancy, 1991, 256). Alan Cholodenko takes Derrida's notion of the 'borderline' and applies it to the notion of the 'frame' and 'framing' claiming that as an area of academic study, animation itself has been 'framed' by film. Both Clancy and Cholodenko are part of a new wave of animation theorists who have been developing the field of animation studies and who have been affectionately labelled animatophiles.

Animatophilia

Mark Langer's article in the special animation issue of *Film History* suggests the term 'animatophiles' (derived from the term cinephiles for afficionados of film) for a new group of scholars who possess a scholarly knowledge of animation studies. In his introduction to the volume Langer points to the increasing activity amongst animation scholars in re-examining animation over recent years. He indicates that animation had come into existence prior to the invention of film and the cinema and is based on a theory of motion. Consequently, as Will Straw points out in his review of *The Illusion Of Life: Essays On Animation,* some theorists are now arguing for the redesign of the Film Studies model, making film a subset of Animation Studies and not the other way round. This argument is advanced by Alan Cholodenko, editor of that book:

... a claim can be made that animation film not only preceded the advent of cinema but engendered it; that the development of all those nineteenth century technologies-optical toys, studies in persistence of vision, the projector, the celluloid strip etc.- but for photography was to result in their combination/ synthesising in the animatic apparatus of Emile Reynaud's Theatre Optique of 1892; that, inverting the conventional wisdom, cinema might then be thought of as animation's 'step-child'. [17]

Cholodenko defines the parameters of animation as lying between the approach of the animists and their spiritual belief in objects being endowed with life and the mechanists' emphasis on motion and its obedience to the laws of physics (Cholodenko, 1991, 16). What interests him most is the notion of what he calls an animatic apparatus, rather like the film projector which animates still frames into the simulation of motion. These single frames may be of live-action film or animated drawings. He refers to Erwin Panofsky's thoughts on animation:

The very virtue of the animated cartoon is to animate, that is to say endow lifeless things with life, or living things with a different kind of life. [18]

With this comment Panofsky, too, subscribes to the animistic notion of animation as well as the general idea of providing movement. The latter part of the quote suggests anthropomorphism in that already living things such as animals, may take on another life, such as a human life.

Joe Adamson is another animatophile having written books on individual animators Walter Lantz and Tex Avery. In his work on the latter figure he puts forward the premise, as espoused by Avery himself in his films, that in animation reality is irrelevant. A character in one of Avery's cartoons actually says in a Texan drawl:

In these here cartoon pictures, a fellow can do about anythaing. [19]
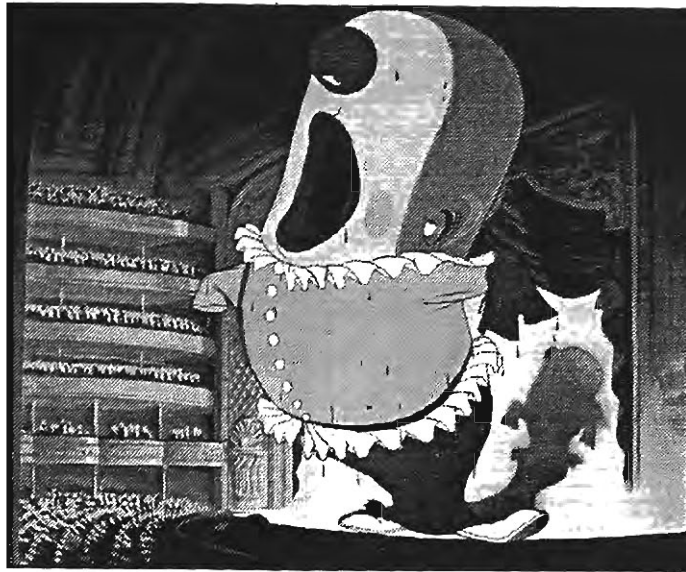
Figure 4. Anything is possible in animation: Walt Disney's *Willie The Whale Who Wanted to Sing At The Met.*

Avery agrees with Adamson in an interview about doing things that are impossible. Not being limited by the laws of gravity or logic Avery turned animation land into a personal Utopia in which reality was forgotten and fantasy was celebrated. This reinforces the notion of difference between live-action film, being more concerned with representations of reality, and animation, dealing more with representations of a fantasy (Figure 4).

Another animation expert who has contributed to the theorising of animation is Donald Crafton. He has researched and written two histories of animation: a general account of the thirty years of activity in the industry covering the period 1898-1928, and a specific account of one of the animators from that period, Emile Cohl. Crafton found that:

...the general development over the first thirty years of its history was toward the refinement of a relatively small number of codes having as their primary function the figuration of the animator. The enterprise of self-figuration was not constant, but drifted away from simple overt representations toward increasingly complex and symbolic manifestations. [20]

What he is referring to here is the business of the animator acting through his creation, the animated character. Whereas the early animators appeared in their work, rather like magicians doing tricks, there was a gradual trend towards animators removing themselves from the frame. For a long time audiences could still see the animator's hand interacting with the character but that too, was eventually withdrawn when animators 'became' their characters. Crafton also notes the proliferation of animal imagery in the early cartoons which he sees as another form of 'self-translation', not just for the animator, but also for the audience:

Almost all the animated films discussed begin by establishing an "alien universe" into

which the spectator may project himself. Although the creators of the first animated films were not surrealists or even cognisant of that movement, they inadvertently made films that demonstrated a disregard for everyday existence, normal logic, and causality, and a propensity for dreamlike action which Andre Breton and his followers admired...The increasing use of animals as vehicles of what the anthropologist called "self-translation" can also be understood better in terms of surrealist motives. For both the animal and the spectator, animals provided codified channels by which, through personal identification, the dream world on the screen could be entered. [21]

William Moritz has researched the work of experimental animator Oskar Fischinger and the general area of non-objective and non-linear animation. He laments the fact that most attention is lavished on animation which is constructed around representational work and which attempts to simulate live-action film, furthering the argument for animation to ignore the real (Moritz, 1988, 21). He enthuses over the possibilities which abstract animation allows but also acknowledges the difficulties inherent in the design and production of that genre:

Non-objective animation is without a doubt the purest and most difficult form of animation. Anyone can learn to "muybridge" the illusion of representational life, but inventing interesting forms, shapes and colors, creating new, imaginative and expressive motions- "the absolute creation: the true creation," as Fischinger termed it- requires the highest mental and spiritual faculties, as well as the most sensitive talents of hand. [22]

What Moritz is suggesting is almost an analogy to music, itself a generally abstract form. Fischinger, to whom he refers, made several animated films in an abstract style based on the visualisation of music (Figure 7). Another aspect of Moritz's idea is the possibility of improvisation by the animator, playing around with colours and shapes with the intention of discovering new designs and movements.

Norman Klein, who also subscribes to the animism theory in the way, in which the drawings of objects come to life, has analysed the relationship between animation and music (Klein, 1993, 260). Klein comments on the approach of the Fleischer studio to the animation of music:

Their animators tried to follow the patterns of jazz improvisation as cartoon, to use the gags the way a horn plays against the piano, or to insert metamorphoses just as the vocalist holds on to an unexpected note. [23]

An example of this approach can be seen in the Fleischer cartoon *Snow White* (1933) when the singing ghost, into whom Koko has been transformed, undergoes further metamorphosis. When he sings about money he is transformed into a gold coin, and when he

sings about alcohol the lyric, *Gimme another shot of that booze*, is accompanied by the animation of his head beinged turned into a bottle (Figure 3).

In terms of animating to music he also refers to Warner Bros'. cross media interests, mentioning their music publishing division, and its effect on the studio's cartoon unit. The animators were required to include two choruses of a Warner Bros. song in each cartoon (Klein, 1993, 101).

Philip Brophy supports the argument for dynamism rather than animism in his essay on the use of sound in animation. This interpretation favours the idea of animation as simple movement rather than the more poetic notion of the imbuing of inanimate objects with life, as the animists claim. This idea is represented by the term mechanism as opposed to animism. In his research into the Disney Studio's use of sound in its *Silly Symphony* cartoons and in the *The Sorcerer's Apprentice* segment of *Fantasia* (1940) he finds a sense of dynamic flow which is based on, amongst other things, the close marriage of image and sound into a fused state and the strongly synchronous and dependent relationship between the animation and the music, and the use of nature as a theme (Brophy, 1991, 81).

From Brophy's schema the synchronisation between image and music, their close relationship with each other and the idea of 'nature' as a theme warrant discussion. Firstly, there is the absolute synchronisation of sound and image forming a symbiotic relationship. The synchronisation of sound and image is a characteristic of both the early musical cartoons and contemporary music videos. The movements and visuals are in absolute synchronisation with the rhythm of the music forming a symbiotic relationship with it. Things jump and dance to the beat. Music possesses the same fluid ability to flow into various forms as animation and so aids this synchrony. Even if the music jerks and twitches in a frenetic beat the animated images can be made to jerk and twitch in synchronisation with it. The plasticity of animation and its potential to be designed frame by frame allows animators to match the equivalent fragments of music to the visuals with perfect timing and with a consequent powerful and expressive impact that non-synchronisation lacks. Brophy uses the word 'fusion' to express the resulting impact of the marriage of music with the animated image. Where contemporary animated music videos and the musical cartoons of the 1930's and 1940's differ is the formers disregard for but the latters frequent use of animal characters, animal symbolism, use of the fable form, and anthropomorphic characteristics. This is inferred by Brophy's general reference to 'nature as subject' of the animation.

A further connection between animation and music comes from the etymology of the French term for animation, *dessin anime*. This term has a particular emphasis on animated cartoons in order to distinguish from *bandes dessin* which refers to comic strips. The word *dessin* itself means 'drawing, sketch' and is distinguished from *dessein* which means 'design, plan, scheme' and interestingly enough was employed by Czech composer and music theorist A. Reicha (1770-1836) and others to denote the smallest unit of melodic construction.[24] This musical association is appropriate to discussions about designing symbiotic relationships between animation and music as, in order to forge this close relationship, the manipulation of the smallest units are necessary.

Music Video

The primary function of a pop video is to sell a song-it is an advertisement. But it is an advertisement that is generally entertaining, sometimes thoughtful, occasionally arty, often sexist, at times ridiculous and at other times glorious. It is also an advertisement that many people want to own, which means that record companies can now sell a song on two formats: audio and visual. Moves are afoot to combine both formats on one disc especially as most predictions for the future of pop video point to long-form video albums...So if the video's primary function is to sell the song it could now come with an equally important secondary function-to sell itself. [25] These notes from the Pop Video exhibition catalogue at the Museum of the Moving Image make a direct introduction to this next topic, and, for a time, a move away from animation.

Both Kaplan and Goodwin have determined categories for the classification of music videos. Goodwin's is simply chronological and is dated to coincide with the events of MTV's history. The first period dates from 1981-1982, the second from 1983-1985, and the third from 1986 on. Goodwin calls this first period the 'New Pop' and stresses the stylistic emphasis of its music which he says was well suited to visual promotion on television via music video (Goodwin, 1993, 132-133). Several British pop artists were able to effectively exploit this including Duran Duran, Culture Club, the Eurythmics, the Human League and the Thompson Twins. In this period and in these videos performance and narrative were ignored in preference to visual style and expression. The second period (1983-1985) marked a return to performance videos with a predominance of heavy metal music. These videos concentrated on showing bands performing their music whether on stage or in the studio. Goodwin notes a move from the 'artifice' of the 'New Pop' to the 'authenticity' of performance, even if some of the 'on the road' documentary style videos seemed rather contrived (Goodwin, 1993, 136). The third phase (post 1986) saw a widening of the types of music with the screening of rap music and black rock musicians and the retention of the dominance of heavy metal (Goodwin, 1993, 137).

Kaplan's system involves fitting the videos into one of five categories: classical (has a narrative, tends to follow the Hollywood film model, features the male as subject and the female as object of the male gaze), romantic (1960's soft rock music, nostalgic, melodious, involves a love relationship that has ended and which the singer wants restored), socially conscious (modernist, 1960's and 1970's 'oppositional' rock music, anti-establishment, contains a message and/or critique of society, puts emphasis on content), nihilistic (heavy metal music, aggressive, anarchic, violent in nature, usually features live performance and sudden, unmotivated pyrotechnics) and postmodern (ambiguous, uncommitted, two dimensional, contains much pastiche, leaves the viewer confused as to what it's all about) (Kaplan, 1987, 54-88).

Simon Frith suggests the categorisation which record companies use to classify videos (performance, narrative and conceptual) but favours a system based on the type of music involved. He uses categories such as country music videos or crossover black music videos (Frith, 1988b, 217). His system points to a dominance of music over video imagery and is by far the most flexible. However, in each case (Goodwin, Kaplan and Frith) it can be a frustrating exercise trying to fit a video into any one of their categories. Rarely is there a fit, let alone a neat one. Usually more than one category applies. There is obvious need for a more complex and more flexible system of categorisation or, alternatively, every video could be considered as an individual unit. Other stylistic matters to consider include the repetition of pleasurable images which may be employed as a hook to keep the viewers watching, and the making of references to feature films as a form of pastiche. Pastiche features frequently in music videos whether it is MATERIAL GIRL in which Madonna plays at being Marilyn Monroe in *Gentlemen Prefer Blondes* or U2 on a city building playing a rooftop concert like The Beatles did in *Let It Be*. As Frederic Jameson defines it, this is pastiche and not parody or satire:

Pastiche is, like parody, the imitation of a peculiar or unique style, the wearing of a stylistic mask, speech in a dead language: but it is a neutral practice of such mimicry, without parody's ulterior motive, without the satirical impulse, without laughter, without that still latent feeling that there exists something normal compared to which what is being imitated is rather comic. [26]

As in animation, postmodern theory has also been applied to Music Video. On this matter Simon Frith gets most annoyed at the great deal of attention which the postmodern scholars have given to studying the image track at the expense of the music. Equating music video aesthetics with advertising aesthetics he comments:

What makes pop videos postmodern is not their expanding signifiers but their equation of art and commerce. Their aesthetic effect can't be separated from their market effect.
[27]

This mix of artistic expression and commercial promotion makes music video an interesting medium. At the 1986 American Video Awards presentation ceremony Peter Gabriel used his winner's speech to make a plea for video to be treated as art and not promotion.

On technical matters Goodwin has mentioned how speed or slowness may be enhanced through rapid camera movement or through lack of it or by means of quick editing or dissolves, or how visual movement may be synchronised to the rhythms of the music:

...cuts tend to occur around the beat, with emphasis on the music illustrated by a cut on the beat when the rhythmic emphasis is syncopated-stressing an 'up' beat that is accented in the music. [28]

This is a seminal point in understanding the medium of music video. Invariably the editing rhythms are matched with the musical rhythms so that cuts occur simultaneously with selected beats in the music. Editors must have a sense of rhythm and the ability to coordinate visual imagery with musical phrasing just as directors of musicals need a sense of rhythm to choreograph movements of the camera. In the earliest days of production of Hollywood musicals when record-to-playback was discovered, directors found that they no longer needed to cover a musical number in one complete take like it would be presented on stage in a theatre. The coverage could be broken down into shorter segments which could later be edited seamlessly together. This was not possible when orchestras played live on the soundstage during the filming and recording of the number but the record-to-playback method of filming meant that a tape recording of the music replaced the live orchestra. Tape could be stopped, started and rewound as required. It also allowed the director to score the camera movements to match sequences in the music thus enabling the cinematographic elements to contribute to the timing of the film.

Performance has both a musical and a visual side to it in music video and usually involves a convention shunned by normal narrative film and video practice. It is a form of direct address, as Goodwin has noted:

...pop songs are often performed through a direct and/or first-person mode of address, thus breaking with the illusionism of the "fourth-wall" of naturalistic cinema and television. [29]

If, however, the video involves the performer in an acting part, then the fourth-wall illusionism comes into play and the actor never looks directly at the camera, as is the practice in direct address, for to do so causes a very different dynamic with the audience.

Beginning with J. G. Peatman's original classification of pop songs into just three categories ('happy in love,' 'frustrated in love,' and 'novelty song with sex interest,') Frith argues that although the subject of pop song lyrics has evolved since then the love song is still the dominant category, providing people with the romantic language with which to express their feelings. [30]

On the matter of dealing with a song's lyrics in a music video Goodwin has proposed three strategies: illustration, amplification and disjuncture (Goodwin, 1993, 86-90). Illustration is interpreted as an attempt to translate the lyrics into the storyline of the video. Amplification is the building on the level of illustration of the lyric with additional meaning not mentioned in the lyrics but consistent with them. Disjuncture occurs when the images in the video bear no relation to the lyrics of the music or even appear to contradict them.

Goodwin also mentions the use of what he calls 'visual hooks' as a potential component of a music video's structure (Goodwin, 1993, 90-94). There are three types. The most common type of hook is the close-up shot of the faces of the star performers. The second kind of hook involves use of the male gaze at objectified images of women as a strategy to gain attention and to encourage those male viewers to want to see the clip again. The third visual hook stems from the music and comprises the emotional impact of experiencing the marriage of image and music in exact or appropriate synchronisation.

Alan Williams has analysed the recording techniques used in popular music including the use made of recorded popular music in the Hollywood musical and its relationship to the image. Although that genre is different from music video in that the musical sequences form part of or interrupt a narrative, there are similarities in the musical's approach to visualising the music, in the performance and in the use of technology. Referring to the musical numbers in musical films he mentions that the images are subordinate to the music which determines the timing of their editing. He then goes on to describe the closeness and clarity of the music and how the first provides the second in that the nearer a microphone is placed to a sound source the clearer that sound will seem (Williams, in Altman, 1981, 150) This clarity, he continues, is dependent upon the removal of any sense of space in the music. The closeness both promotes clarity and defeats space. From this he concludes:

Thus, the very clarity and closeness of commercial music recording partially violates canons of 'realism' when juxtaposed with a supposedly believable visual image since, except in extreme close-up, the perceived distance of sound source would be much closer than that of the object within the image. [31]

In a musical production number then, the voice of the singer and the music may sound extremely close and very clear despite whole sequences of shots showing the singer and the musicians at varying and far greater distances from the viewer, yet the sound seems unrealistically clear. The result is static sound with dynamic image, the viewer close to the sound but at a distance from its image in spatial terms.

Lauren Rabinovitz has theorised animated music videos. She points to the graphic aspects of animation, underlining the basic difference between live-action film's recording representations of reality and animation's construction of its own reality:

Closer in semiotic properties to painting than cinema, animation is always a sign of a sign. Materially based in paintings, drawings, cut-outs, puppets, or clay sculptures, animation draws on the signifying properties of these forms as "images of images". As opposed to photography's attributes, the painting always signifies a constructed image rather than testifying to the actual existence of an object in nature. When the illusion of motion is extended here, the artificiality of the image is heightened because motion is not a natural property of constructed images...In this way, animation as a signifier becomes it's own signified... [32]

She sees similarities between the unattached nature of animation's signifiers and Frederic Jameson's postmodern theory of detached signifiers whose only resort is pastiche (Rabinovitz, 1989, 105). Furthermore, Rabinovitz points to the doubling effect on the semiotic system in these videos which feature a live-action performer surrounded by animated imagery. In this instance a separate semiotic system is at work for both the animation and the live-action components which make up the image (Rabinovitz, 1989, 109). The juxtaposition of the live-action images and the animated images within the same frame makes for interesting and unusual visuals. Stylistically, the combination of these two forms is not common but it has become the basis of the new animation aesthetics for animated music videos.

Rabinovitz summarised the first batch of animated music videos to be screened on MTV in the early to mid 1980's with reference to Peter Gabriel's SLEDGEHAMMER:

The "first wave" of animated videos, however, did establish a set of conventions for animation's role in the music video. Differences in animation styles notwithstanding, they all respected the record companies' dictum that the performer must be centrally shown performing the song. In fact, the performer's identity generally becomes a stabilising point in videos where constant transformation is normative. The performer's physical body, along with the objects and space, may be acted upon, changed and transformed so long as the performer's identity as such is frequently reinscribed... Things may happen around Gabriel and even to him so long as he- by the end of the verse- resumes his recog-

nisable identity and physical position as the performer. Whereas the animation or con-
stant transformation disrupts the cinematic referentiality, the convention of frequently
returning to a live-action performer inscribes within the image a cinematic signifier to
the singer's existence as a real rock star, and his identity flows relatively unperturbed
through the video's emphasis on constructed images...The body of the performer
inscribes the necessary connection between the pleasure of the images and the fulfilment
of desire in the rock star as a cultural commodity. [33]

The performers appear centre-stage with all the animated fantasy rushing around them, sometimes even involving them, yet the performers remain identifiable as their musical persona, the marketable commodity which they represent. And however much animated activity whirls about them the performers usually remain centre-stage and retain the identifiable representations of themselves. This placing of the star in the foreground means that the animated effects are displaced to the background offering the contrasting image of a live-action figure in an animated landscape. The effect of the animation is to destabilise the realism of the image (Rabinovitz, 1989, 104). Will Straw reinforces Rabinovitz's conclusions about the central role to be played by the performer:

Video stars must be present in the video narrative-they get to act out the fantasies-
but...they must also be seen as they really are, as musicians-the fantasy confirms their
reality. [34]

Rabinovitz does not go into the animation aspects of music video in much detail, restricting her research in typical postmodern mode to the goings on on the surface. However, her establishment of the basic aesthetic of animated music videos provides a good departure point for this thesis. Her conclusions can be tested and the aesthetic fleshed out in more detail. Particular attention will be given to the animation and to its relationship with the music. And it is worth pointing out at this stage the importance of music in the study. The aesthetic in question is derived from the political economy of the popular music industry. Its basic purpose is to sell product. To achieve this the product must be identifiable to the public. It must also be attractive. As Kaplan has pointed out:

There is a built-in contradiction, familiar from Hollywood, between the interests of the
artists and performers, and of those creating a profitable enterprise (Kaplan, 1987, 15).

This tension between commercial function and artistic intentions makes a most interesting impact on music videos!

CHAPTER 2. THE SILLY SYMPHONY: A SHORT HISTORY OF ANIMATION SET TO MUSIC

Smile, darn ya, smile
You'll find this whole world is a great world after all
Things are never black as they're appearing
Smile, darn ya, smile! [1]

In Robert Zemeckis's *Who Framed Roger Rabbit* (1988), after entering the tunnel from the live-action realistic setting of 1947 Los Angeles, Eddie Valiant drives toward Toontown, the name given to the place where cartoon characters reside. Toontown has its own set of special laws which are the laws of the animated screen space. This is an uncomfortable place for humans to enter as it does not follow the rules of reason or science. Whereas a cartoon character can comfortably enter the live-action space accompanied and protected by animation laws, a human character entering Toontown is totally subject to the rules of animated screen space. So it is with some trepidation that Eddie approaches the borderline which separates Toontown from Los Angeles. As he nears the end of the tunnel a red theatrical curtain, of the type which used to cover cinema screens, rises to reveal a patchwork quilt landscape with a bright yellow sky which is so bright that it causes Eddie to squint. After a distorted musical note the landscape literally bursts into song. The sun, with a human face, sings along with the trees which also have faces and arms. They are accompanied by singing mushrooms and flowers, several singing animals wearing clothes, and even a singing cow pat. One of the trees waves a baton and conducts this anthropomorphised orchestra in an utterly animistic musical performance. It is nature's chorus playing a silly, absurd symphony. The landscape is alive with singing and dancing creatures and plants: a little cherub, singing pigs and moles, a flying horse, a tree strumming a banjo, cute little female rabbits in dresses, three little pigs, a blue dragon and four dancing elves. The words to the happy song they sing are quoted above and underline the eternal sense of optimism witnessed visually in the scene. Eddie drives along this happy highway, greeted by humming birds, through the musical landscape to the city where all of the buildings have faces and the set of traffic lights conducts the traffic with its arms. Even the bullets which leap into his animated gun have faces, wear hats and speak about their relief at being removed from Eddie's bullet bag after a long period of cramped existence inside it. They are excited, too, about the business of being loaded into his gun and about the prospect of some real action.

Most of the characters and designs in this scene have been "quoted" from the Disney musical cartoons of the 1930's and early 1940's such as *Three Little Pigs* (1933) (Figure 2) *Tortoise And The Hare* (1935), *Flowers And Trees* (1932), *Fantasia* (1940) and *Song*

Of The South (1946). These cartoons form part of a series called the *Silly Symphonies* and represent some of the earliest experiments in animation set to music. Similar in effect to the films of the Hollywood musical genre of that same period, they suggest the notion of escape into another world, a happier, more optimistic world. This world represents a Utopian landscape where the inhabitants whilst not immune from pain, are immortal. It also implies relief from the difficulties of life in the 'Depression affected' reality of 1930's America. However, these Hollywood musicals and musical cartoons were popular with the cinema-going public not only because they represented a desirable form of escape into fantasy but also because of the novelty of their synchronised sound and image and more particularly, synchronised music and image. The cartoons produced by Walt Disney had the added novelty and appeal of colour which he introduced in 1932. The musical cartoons, like the Hollywood musicals, were experiments with the visualisation of music. They helped to establish the Disney aesthetic which runs through American animation history like a rich vein and has become a dominant influence in the design and production of animation.

This aesthetic is largely based around the technicalities of drawn cel animation, an essentially two dimensional, flat graphic process through which the Disney animators managed to convey a convincing suggestion of three dimensional depth. In this technique the outline of the animated drawings are traced or photocopied onto transparent plastic sheets called cels. These cels are then painted on the reverse side in opaque colours to 'solidify' the drawings. Finally the cels are laid over a painted background of paper or card with the result that the characters appear to be located in that setting which is revealed wherever it is not obscured by opaqued cels. The content of the cartoons invariably involved fable-like stories featuring anthropomorphised animal characters or inanimate objects such as toys, flowers or dinner plates which come to life. Implicit in the conceptualisation of the work was an acceptance of the animistic view as applied within the context of animated fantasy film production.

One strong stylistic aspect of this aesthetic is the notion of 'cuteness'. This has an emphasis on the characters' design as they are invariably drawn with enlarged eyes with long lashes. At times those eyes, which are supposedly the eyes of animals, carry the cosmetic traces of eye-shadow and mascara. The heads of the characters are commonly enlarged so that their scale forms one third of their body height. The cranium is usually enlarged so that it appears similar in proportion to that of a baby's. This use of scale in the design of the eyes and the head helps produce the 'cute' effect in the appearance of the character. Stephen Jay Gould, in his affectionate homage to Mickey Mouse, has used his scientific research skills to measure the proportions of the various designs of Mickey over the years and concluded that the mouse is growing younger and consequently cuter

due to the infant like proportions of his features which include an increased head size, larger cranial vault and bigger eyes. [2]

Other contributing elements to the aesthetic are the use of colour, especially bright colours, and the remarkably smooth movement of the animated characters. No shortcuts were taken in ensuring the highest quality of animated movement, including perfectly synchronised movement to the variable tempos contained in classical music. The *Silly Symphony* cartoons, which carried this aesthetic, were produced following Disney's first excursion into sound-on-film production in 1928.
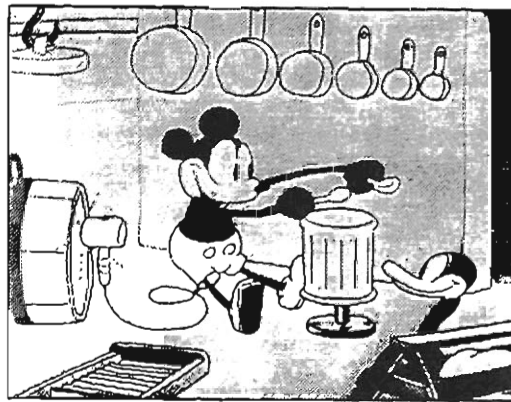
Figure 5. Mickey makes music in *Steamboat Willie*.

At his first attempt at producing animation set to music Walt Disney produced a hugely popular short sound cartoon called *Steamboat Willie* (1928)(Figure 5). This cartoon featured the first appearance of his newly created animated character, Mickey Mouse. It also reinforced the idea of the synchronisation of music and movement. This was still a novelty to the public at that time as the whole notion of seeing films with a soundtrack was a new phenomenon. Audiences were used to seeing films in cinemas accompanied by the music played live by the cinema's organist, or a band or small orchestra but this had a different effect to hearing the perfectly synchronised music and sound effects to characters' movements resulting from the sound-on-film technology. It had a sense of rhythm provided by the practice of synchronising the images to the rhythm of the music, a practice which would be widely adopted in music video production half a century later. In the cartoon Mickey plays a chorus of "Turkey In The Straw" and has his every other move timed to the beat of the music. Although novel it was not actually the first sound cartoon. That honour had been taken four years earlier by the Fleischer Studio Out Of The Inkwell Inc.'s *Song Car-Tune* series cartoon *Mother, Mother, Mother, Pin A Rose On Me* (1924), one of a series of 'follow-the-bouncing-ball' singalong cartoons. The majority of these singalong cartoons, however, were silent and the music was provided through the combination of the live playing of the cinema organist and the community singing of the audience. A few months previous to the release of *Steamboat Willie*, Paul

Terry of Terrytoons had also produced a sound cartoon called *Dinner Time* (1928), which had been released with an accompanying soundtrack of voices and orchestral music. Neither of these releases had the popular impact of *Steamboat Willie*, however, before continuing with Disney's activities, it is important to note the achievements of the Fleischer Studio in the animated visualisation of popular music.

The Jazz Cartoons

Produced by the Fleischer Studio, the Betty Boop cartoons showed the influence of big city living on human characters dealing with urban problems to a background of jazz music. This was in contrast to the prevailing Disney studio aesthetic which invariably dealt with animal characters playing out fables in nature settings scored by classical music. The Fleischers not only used the music of jazz artists such as Cab Calloway and Louis Armstrong but, in an attempt at authenticity, also traced the body language and dance steps which they made whilst performing their music. They achieved this by inventing new technology called the rotoscope and the rotograph which would be re-employed half a century later in the first wave of animated music videos. Their method of animating movement which is motivated by music was aimed at achieving authenticity of timing and movement to a particular piece of music.

Their intention with the technique was to achieve life-like animation with very credible motion without investing too much time and effort. There were no instructional books or classes on animation technique available at the time so most animators were self taught and had to think for themselves about solving particular problems. [3] So Max Fleischer invented the rotoscope, a method in which live-action film footage was traced by hand onto paper, frame by frame, in order to obtain convincing movement and avoid the necessity of having to accurately time action and break it down into units. The technique involves the making of a live-action film of the relevant moving subject. This film is then projected as a series of still frames, one at a time, onto a special screen which has a drawing pad attached to it. A line drawing is made of each projected image by tracing an outline, plus any other relevant details, onto the drawing pad, with the general intention of reducing each image to a simplified line drawing. Any desired colour effects are added before all of the traced drawings are rephotographed on the animation rostrum. The resulting drawings could then be exaggerated into cartoon style. The machine was patented under the name "Rotoscope" in 1917, with Max Fleischer credited as the inventor. For the filming process the drawings were pinned to a plank supported by two chairs. If one chair got bumped, however, the drawings moved out of registration so the plank was nailed to the chairs to prevent this.

The technique was first used on the Fleischer character Koko The Clown. Charles Solomon quotes a media reaction from the *New York Times*, of Feb.22,1920, praising its lifelike effects:

This little inkwell clown... His motions, for one thing, are smooth and graceful. He walks, dances and leaps as a human being... [4]

One problem which arose was the unrealistic effects sometimes produced as a result of the freezing of live-action footage. Dave Fleischer, director of animation at the Fleischer Studio explained:

We animate action the way we feel it's to be animated. But live action if it's traced takes peculiar forms that you could never imagine or create. That's why when you use the roto-scope, trace that down and make an animated character out of it, it will have a real, life-like walk. No one that I know could ever make it as real as that because some of the shapes (on a frame of live-action footage) don't even look like a figure...It's probably on account of the perspective, it's foreshortened or lengthened, and it looks partially like something else...if (the movement of the figure) is too fast it blurs, and you've got to guess your line when you trace it (Cabarga, 1988, pp. 21-22).

This is referred to by Paul Virilio as the distorting effect of the camera's instantaneous "image-freeze". He relates a conversation between the sculptors Auguste Rodin and Paul Gsell about the unnatural frozen looking effect of photographs which capture people in motion and the consequent need for artists to distort the image of that moment in time in order to render it convincing to the eye (Virilio, 1994, 2). This was discovered, too, by the Disney animators as a result of the studio practice of filming the actors voice recording sessions. The intention was to make rotoscoped copies of these performances so that the animators would have a guide to the body language of the character from the accompanying gestural performance of the actor. The practice started with *Snow White and the Seven Dwarfs* and in that film a rotoscoped character, Snow White, is juxtaposed with characters which are stylised, the dwarfs. Many animators felt uncomfortable about relying on the rotoscoping technique because of the resultant awkward, stilted motion and because of the limitations it imposed on the artist's expression. Disney animators Frank Thomas and Ollie Johnston explain:

No one knows for sure why a pencil tracing of a live action figure should look so stiff and unnatural on the screen...The camera certainly records what is there, but it records everything that is there, with an impartial lack of emphasis. On the other hand, an artist shows what he sees is there, especially that which might not be perceived by others. His drawings can be closer to the true realism of an object because he can be selective and personal in what he chooses to show. [5]

The *Song Cartunes* were the first series of animated musical films produced by the Fleischer Studio. They replaced the slide shows of song lyrics in which the audience sang the words they saw projected on the cinema screen to the accompaniment of the cinema's organist or orchestra. The images used in these slide shows were static shots of the lyrics plus illustrations of them. These singalongs were designed to sell sheet music. The *Song Cartunes* added movement and took the form of following the bouncing ball, with the audience singing the word as the ball landed on it and thus keeping in time with the rhythm of the music and with the organist who accompanied them. Problems arose with worn prints where a splice had been made to repair film damage resulting in a missing word or line. Both the organist and the audience had to cope with this. Although these films were initially animated, the Fleischers found they could produce them faster by shooting them in live action and having someone wave a white ball on a black stick, held by a black velvet gloved hand, over the lyrics which were being rotated on a drum. This all had to be coordinated in time with the music and meant careful rehearsals because any mistake in timing meant re-shooting from the start. This form of presentation also produced interaction between audience, organist and animation. *Mother, Mother, Mother Pin a Rose On Me* (1924) and *My Old Kentucky Home* (1926), both released with sound are examples from this series.

The *Screen Songs* series replaced the *Song Cartunes* with full animation of popular music such as *Oh, You Beautiful Doll* (1929), *I'm Forever Blowing Bubbles, In The Good Old Summer Time, Row Row Row* (1930), *I Wonder Who's Kissing Her Now,* and *Alexander's Rag Time Band* (1931), *When The Red Robin Comes Bob Bob Bobbin Along, Oh How I Hate To Get Up In The Morning* and *Shine On Harvest Moon* (1932). Several of these cartoons featured popular singers such as Rudy Vallee- *Kitty From Kansas City* (1931), Ethel Merman- *Let Me Call You Sweetheart* (1932), the Royal Samoans- *Aloha Oe* (1933), and the Mills Brothers- *Dinah* (1933). The bouncing ball was replaced in the chorus by animated effects such as in *In The Good Old Summer Time* when a dog character bounces from word to word, instead of the ball, grabs the first letter, I, from In and turns it into an umbrella when it starts to rain. The music was obtained through buying the rights to existing 78rpm records and using them as a basis for the cartoon imagery. The animators had to match the rhythm and mood of the music.

The *Talkartoons* series went into production whilst the *Screen Songs* series was still running, and included some of the first Betty Boop cartoons including *Minnie The Moocher* (1932), which featured the song "Minnie The Moocher" by Cab Calloway and His Orchestra. In this cartoon the Fleischers applied their rotoscope technique to the visualisation of jazz music by tracing the dance steps of Cab Calloway's performance. The car-

toon begins in live-action mode with footage of the featured musicians playing the song. The Fleischers visited the Cotton Club to watch Cab Calloway performing and to select musical numbers for the films. Later he admitted that his cartoon appearances increased his take at live venues. This gave clear indications of the promotional aspects of cartoons set to music. Several other jazz cartoons were made by the Fleischers with artists such as Louis Armstrong and Don Redman. The mouth movements of the back-up singers who answer in chorus to Calloway's lead vocals, have been rotoscoped and then car-toonised onto the singing cats and ghosts in the cave. This echoed a feature of the jazz dance bands in which the chorus was sung by the band members. Another feature was the scat singing, an element of vocal improvisation, although complete improvisation in jazz was to come later. The humour and liveliness of the band and singer were added to the cartoon ghouls. The movement could simply take the form of dancing which in itself is a visualisation of music. Norman Klein, commenting on the approach of the Fleischer Studio to the animation of music:

Their animators tried to follow the patterns of jazz improvisation as cartoon, to use the gags the way a horn plays against the piano, or to insert metamorphoses just as the vocalist holds on to an unexpected note." [6]

Snow White (1933), (Figure 3), another Betty Boop cartoon, is also based on a song by Cab Calloway and His Orchestra, called "St. James Infirmary Blues." The footsteps of the evil Queen are synchronised with the opening drum beats of the music and Koko moves like Cab Calloway before being transformed into a pair of dancing legs with a face. There is a background, like a circus backdrop, of themes of Death. The animation produces a definite feeling of phantasmagoria, similar to the *Night On Bare Mountain* sequence of *Fantasia* which was similarly based on the events of Walpurgis night, and in which the spirit world comes alive at night in an eerie procession of skeletons riding other skeletons, those of cows and horses. There is also an influence of voodoo culture suggested by the blues derived music.

In this series of Betty Boop cartoons the two techniques were put together, the anima-tion of music and the animation of movement motivated by music. The images are held together by music. In fact the music seems to animate everything, characters, fore-ground, objects and background. For the Fleischers this was big city jazz as opposed to Disney's classical music. The cartoons are set in the city rather than in the country like Disney's and show the influence of big city living and vaudeville. The references to get-ting drunk also refer to Prohibition. The cartoons seem more adult oriented than aimed at children. The cave is used as a visual metaphor for the nightclub, the place where Betty should not go. Betty, whilst retaining the innocence and voice of a child, has a very

noticeable sexuality, a baby's nose but a woman's breasts. With these cartoons the Fleischers challenged the developing Disney aesthetic for musical cartoons.

The Silly Symphonies

During the period of the 1920's the Disney studio experimented with the problems of producing animated cartoons. All of these were silent and so the emphasis was placed on the design of original characters and on storylines. The idea of designing animation to a pre-recorded soundtrack did not occur to Disney, or to many other film producers, until the popular success of the Warner Bros. feature length film *The Jazz Singer* (1927). The huge financial success which this film generated forced all other film producers to contemplate the question of abandoning silent film production and learning the new technology of sound-on-film. At the time Disney had just lost control of one of his character creations, Oswald the Rabbit, after a dispute with his distributor Charles Mintz and so needed commercial success to stay in business. Disney demonstrated, as he did throughout his career, a willingness to embrace new technology and so resolved to delay the release of a recently completed cartoon until it could be screened with an accompanying soundtrack. He set about the process of learning the sound-on-film technique and surrounding himself with a team of animators willing to master this process. One of the key players in subsequent developments was Wilfred Jackson.

Jackson joined the Walt Disney Studio in 1928 after graduating from the Otis Art Institute as an illustrator, but with the intention of becoming an animator. Apparently, he was so keen to make cartoons that he had offered to work at the studio for nothing. His initial duties at the studio included cel washing which involved cleaning the ink and paint from the animation cels for the cost cutting strategy of permitting them to be reused. This is a frightening thought today when one considers the high price paid for original animation art. In between the washing and in his free time he played a mouth organ and this brought him to the attention of Walt Disney. Disney, who prided himself on knowing a little about music, found out that Jackson knew a little about music, too. So he thought that between them, they might find a way of solving the sound and image synchronisation problem. Jackson brought a metronome into the studio, his mother being a piano teacher, and recalls the events which followed:

Now, I knew what a metronome was, so I brought one to work and showed it to Walt. I set the metronome at 60 and it ticked sixty times in a minute - one tick every 24 frames. I set it at 120 and got a tick every 12 frames. I could make it tick in any multiple of frames Walt wanted. Then I got out my harmonica and played "Turkey in the Straw" while the metronome ticked away and Walt could tell how fast the music was going. From this basis it became possible to time the action to the rhythm of the music. [7]

The mathematical relationship between a sequence of beats in a piece of music and the speed of film projection could be determined following this method. Film technology determined that there be 24 frames per second. If the music was timed in seconds the number of frames required to match the length of the music could be calculated. At this stage the metronome was being used as a tempo guide for the musicians as well as the animators as the soundtrack was being constructed for already completed visuals. Improvising music for an already completed film, whilst challenging, was less complicated than designing images for a set piece of music. In the former case, both the animators and the musicians could feel the sense of rhythm required for the images and music, respectively, by paying attention to the tempo set by the metronome. It was not very long before the animation was produced after the soundtrack had been completed, as is the case in music video production today.

Commenting on Jackson's simple yet considerable achievement in terms of its impact on production, two of Disney's 'nine old men', his masters of animation, had this to say: *The newly arrived Wilfred Jackson had the answer with his metronome. He reasoned that if the film ran at a constant speed of 24 frames a second, all one had to do was determine how much music went by in a second. Although his knowledge of musical structure was rudimentary, he did know bars and beats and staffs and signs, and since the tunes being used for these first films were rather rudimentary themselves it all worked out quite nicely. A new language had been discovered.* [8]

In solving this technical problem, Jackson also developed bar sheets, sometimes called dope sheets because they contained all the information about what was happening on the soundtrack and what had been planned for the matching visuals. It was similar to both a musical score and a film storyboard but without the level of detail found in either. Jackson designed the sheet with a small square representing each beat in the music. Tempo markings were also indicated (Figure 10) (Holliss and Sibley, 1988, 17). Not only did Jackson play a key part in solving the synchronisation problems for *Steamboat Willie,* he also contributed musically to the actual soundtrack of that film with his harmonica rendition of "Turkey In The Straw". Furthermore, he was instrumental in inventing and designing the 'bar sheet' or 'dope sheet' which has since been in common use in animation production to determine the synchronisation of music and image.

Another key player in the pioneering days of animating music was Carl Stalling. Stalling came from Kansas City, just as Disney himself had. The two had even been friends there. Stalling was a theatre organist, employed to supply live musical accompaniment to films in cinemas, and, as Disney became involved with sound film production, he decided to send for Stalling, offering him a job at his studio as musical director. Stalling accepted

the offer and came to Hollywood in 1928. He even managed to become involved in the final supervision of the *Steamboat Willie* soundtrack which featured the debut of Mickey Mouse. Following the success of *Steamboat Willie* and the popularity of its leading character it was decided that a series of Mickey Mouse sound cartoons would be produced, some of which would feature the character playing music or making musical sounds from everyday objects as he had done in that first cartoon. Some examples of this series include *The Karnival Kid*, directed by Walt Disney, *Mickey's Follies*, directed by Wilfred Jackson, and *The Jazz Fool*, directed by Walt Disney, all from 1929. As the animators became adept at synchronising the drawings to the soundtrack, changes took place in the studio. Christopher Finch found that:

The director always had a piano in his office so that, at story conferences, the composer could illustrate the melodic and rhythmic lines the animators would have to follow (for this reason the director's room became known as the music room, a designation it retained for many years). 9

The music used in these first Disney sound cartoons was drawn from the public domain in order to avoid the payment of royalties. This practice was in contrast to the policy used at the nearby Warner Bros. Studios where animation directors had to include extracts from current popular songs in order to promote the studio's cross-media interests. A tune from a Busby Berkeley musical, over which Warner Bros. held the music publishing rights, could reappear in a Warner Bros. cartoon. As Mel Blanc, the character voice actor employed by Warner Bros. studio recalled:

Stalling's music was predominantly his own original work, but he would often insert several bars from a popular tune to advance the plot. Because of his background as a onetime silent film accompanist, he had an uncanny recall of titles... A cat gone fishing in A Fractured Leghorn is backed by the soothing "By A Waterfall" from a 1933 Warner Bros. film starring Dick Powell and Ruby Keeler, Footlight Parade. The frequent inclusion of Warners' owned material was no coincidence, the company's logic being that movie-house audiences might then go out and buy its sheet music. 10

This quote refers to the period after Stalling had left the Disney studio and had gone to work for Warner Bros. Back at the Disney Studio in 1928, Stalling was keen to demonstrate his compositional capabilities and pushed the concept of a musical series in addition to the character series to Disney. In the character cartoons Disney wanted the flexibility of being able to manipulate time to fit the action, rather than having to time things to fit a sequence of music. The argument was finally resolved by Disney's decision that in the Mickey Mouse character cartoons the music had to fit the action, but he would produce another series in which the action would be designed and timed to the music (Finch, 1973, 76). This series was called the *Silly Symphonies*.

Herein lies a fundamental difference in approach to film making, whether animated or live-action, between making music fit the final edited images and making the images fit prerecorded music. It is the latter which is the practice in music video production, and in most animation production. A set piece of music is found, or composed and recorded, and then handed to the film makers or animators to use as the basis for the construction of the images, the length and tempo of the music remaining unchanged.

The first release in the *Silly Symphony* series was called *The Skeleton Dance* (1929). The most striking aspect of the concept, apart from the animation being synchronised with music, is the juxtaposition of cartoon characters with classical music. The serious overtones of classical music had never been subjected to this type of wacky and humourous association. In an interview Carl Stalling remembered:

After two or three of the Mickeys had been completed and were being run in theatres, Walt talked with me about getting started on the musical series that I had in mind. He thought I meant illustrated songs, but I didn't have that in mind at all. When I told him that I was thinking of inanimate figures such as skeletons, trees, flowers, etc, coming to life and dancing and doing other animated action, fitted to music more or less in a humourous and rhythmic mood, he became very much interested. [11]
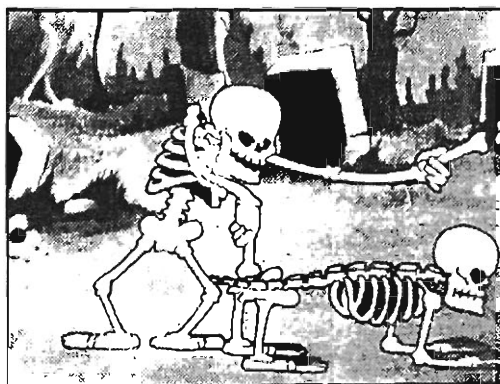
Figure 6. Animism in the Walt Disney *Silly Symphony, The Skeleton Dance.*

Disney instructed Stalling to compose music that resembled but which did not copy existing music which was protected by copyright, in order to avoid having to pay the requisite fee. For *The Skeleton Dance* Stalling composed music which sounded like and was mistaken for Saint-Saen's "Danse Macabre". Stalling's experience as a cinema organist had provided him with a knowledge of several hundred popular tunes and the ability to improvise. He also possessed the ability to work quickly, composing the scores for 15 Mickey Mouse and *Silly Symphony* cartoons for the Disney Studio before leaving in 1930 to join Warner Bros. where he composed the scores for another 600 cartoons. In addition to these skills he was adept at the business of bringing to musical life the still images of the story sketches and visual concepts provided by the Disney and Warner Bros. animators, for which pre-scoring was required. Disney and Stalling were so enthu-

siastic about the possibilities of combining music and animation that they decided to make a whole series of them. Beginning in 1929, a total of sixty nine were to be produced in the years to 1940 when they ceased production after the release of the first feature length *Silly Symphony, Fantasia.* It was due to the enormous financial losses incurred by *Fantasia* that Disney reluctantly made the decision to discontinue the series. Ironically, after subsequent re-releases, *Fantasia* is now considered to be one of the studio's most financially successful films.

Produced in response to the huge public interest in the novelty of animation set to music reinforced the year before by *Steamboat Willie*, *Skeleton Dance* is set in a graveyard at night. The cartoon consists of the choreographed antics of four skeletons who come back to life at midnight to play and dance before returning to their graves at dawn. It was based on Walpurgis night on which the spirits of the dead rise from the dead at midnight to partake in revelry till dawn when they return to their graves. The animation produces a definite feeling of phantasmagoria, which had been used in some of the early magic lantern shows in the 18th Century to instill more drama into the performance and to create spooky effects. Using a single lantern, the forerunner to today's slide projector, painted glass slides of skeletons were projected onto cloth screens. Both the lantern and the screen could be moved in an attempt to bring the still images to life and to create the illusion of movement thus heightening the impact of the show. An additional effect could be achieved by the dexterity of the graphic artist whose job it was to paint the images onto the glass despite having to work on an extremely small surface area. By omitting the circular or square shaped framed edges of the figures a more realistic impression could be achieved so that the projected image looked less like a framed picture and more like an image of what had been framed. The design of The *Skeleton Dance* was influenced by popular 19th Century Gothic art and by Grand Guignol melodrama. The French Romantic illustrator of the 'fantastic and the menacing' Gustave Dore (1832-1883), whose works included illustrations of Dante and the Bible, was another influence on the Disney animators.

In *The Skeleton Dance* the skeletons make music from their own bones by playing them in the manner of a xylophone causing a doubling of the animistic effect- the dead bones come to life and the silent bones produce the sound of music (Figure 6). Like a metaphor for cinema the lit shapes play out their routine in the shadows of the night. Philip Brophy has attributed the cause of the animistic force to the music in his description of what takes place in this animated cartoon sequence:
...the human skeleton (the matter that remains after death) is re-animated by rhythm, the 'rhythm of life' (remembering that the human body is basically a container for the rhythmic flow of fluids). [12]

Wilfred Jackson directed thirty two, or almost half of the total number of *Silly Symphonies* produced. His credits include *The Night On Bare Mountain* sequence from *Fantasia* (1940), *The Night Before Christmas* (1933), in which the toys around the tree come to life, *The China Shop* (1934), which features the animation of inanimate china, crockery and figurines, *Music Land* (1935), about a war between classical music represented by the Land of Symphony, and jazz, represented by the Isle of Jazz, and *Woodland Cafe* (1937), in which singing and dancing insects dressed in formal human evening wear make music from flowers.

The whole series of *Silly Symphony* cartoons is rife with the spirit of animism and anthropomorphism. In *Flowers And Trees* (1932), the first to be made in colour, nature comes to life when rival trees battle each other for a female tree's affections. Colour suited this fantasy genre and was not to appear in feature films till later in the decade in *The Wizard Of Oz* and *Gone With The Wind* (both 1939). In *Flowers And Trees* the trees talk and walk in an anthropomorphic style. In *Three Little Pigs* (1933), the pigs sing and dance, wear clothes and speak. *The Cookie Carnival* features talking, singing and dancing biscuits and cakes. Most of the first wave of these cartoons featured animal characters. This was followed by a move toward animating inanimate objects such as trees, plants and the landscape. All of this was based on the rhythm of nature and the change of seasons and featured themes like the 'birth' of plants and creatures with the coming of Spring, and their 'death' in Autumn. Disney had grown up on a farm in Kansas surrounded by animals. The series also represents one of the early attempts to visualise music. The Disney animators developed their techniques in preparation for their work on *Fantasia*. Disney held a high regard for music and was interested in exploring a new form of music which he called 'animated music'.

Although the music used in *Fantasia* was predominantly classical music, selections of pop(ular) music and jazz were employed in some of the *Silly Symphonies*. At first simple musical structures with regular tempos were employed such as the original song "Who's Afraid Of The Big Bad Wolf?" composed for *Three Little Pigs*. Gradually, as the staff gained experience, more complex tempos such as those commonly found in classical music were used. As the production approach consisted of drawing images to fit the music, as opposed to the method used in conventional film scoring, progress was initially slow and animation techniques were consolidated before the more ambitious project *Fantasia* could be contemplated.

The success of the *Silly Symphonies* also bred imitators. Warner Bros., pioneers of the sound film and producers of *The Jazz Singer*, the first commercially successful sound film and which also contained musical sequences, set up a cartoon unit in 1930 under the

control of Leon Schlesinger. Jerry Beck and Will Friedwald have described the studio's multifaceted plans with this venture:

When Warner Bros. released its first cartoon in 1930, the intention was to remain ahead of the competition in the field of "talkie" motion pictures, to provide their theatres with fast-moving musical novelties, to promote their Vitaphone Corporation, and to plug their popular music library. [13]

Their first cartoon was *Sinkin' In The Bathtub* (1930) and featured an original character, Bosko. This *Looney Tunes* series was successful so a second series called the *Merrie Melodies* was commissioned. The titles of these two series also reveals the Disney influence. His *Silly Symphonies* became at Warner Bros. either *Merrie Melodies* or *Looney Tunes,* and this influence didn't end there. Other animation studios copied the name, the style and the approach of the *Silly Symphonies* which were based mostly on expressing a theme or mood rather than telling a story. The *Happy Harmonies* appeared at MGM under the guidance of the aptly named team of Harman-Ising, *Song Car-Tunes* were already established at Fleischer Studios, and the Walter Lantz studio began a series called the *Swing Symphonies.* The Swing *Symphonies* were cartoons based on popular songs such as "The Boogie Woogie Bugle Boy Of Company B". Just as Cab Calloway and his orchestra found that after they had appeared in two Fleischer cartoons that there had been a significant increase in box office receipts for their live performances following the release of the cartoons, the success of the song "Who's Afraid Of The Big Bad Wolf?" from the Disney cartoon *Three Little Pigs* was significant in terms of the visual promotion of the music (Figure 2). Although this song had been especially composed for the cartoon it became popular with audiences in its own right, the sheet music becoming a best seller. These two examples of animated musical films promoting the sales of music anticipated the potential commercial impact of music video fifty years later.

At the Terry Toons animation studio a different approach was adopted- the composition of original music for each cartoon rather than using existing popular songs like their rivals did. This required a fundamental change in production approach, namely, the music had to be made to fit the images and not the other way round of drawing images to fit the musical rhythms. In this sense the images had dominance over the music whereas in the practice where the soundtrack is completed first, the music was privileged over the image. The problems of having to fit images to the set timing of the music and the lack of understanding about the rigidity of that timing and the fixed nature of a piece of music have been mentioned by Disney master animators Thomas and Johnston:

There were other times when the animator simply could not put over all the business demanded within the footage limitations imposed by the music, and then the musician would be asked to add just one more little beat to his music - just one? Astounded at this

lack of comprehension of the basic mathematical structure of music, the musician would insist on a full measure, or better yet, a phrase, but that only seemed to add more problems. The action could not be padded by that much. [14]

Prior to Jackson's invention of the bar sheet animators used exposure sheets which contained frame-by-frame details of backgrounds, cels and camera movements. These exposure sheets were quite briefl and only showed a few beats of music per page. Jackson's idea was to show the entire piece of music at a glance. This was facilitated by his invention of the 'bar sheet'. As the design of the bar sheet was further developed it showed all of the planned visual action alongside the relevant portions of music. Also included was the tempo of the music and this was broken down into beats with the number of frames per beat alongside. Separate indications were given for the verses and the chorus and any repetitions of music or chorus were marked. These were further segmented into individual words and sound effects showing the precise placement of their beginning and end so that all details could be translated into a time scale and interpreted in mathematical terms (Thomas and Johnston, 1981, 288). The beginning and end of an action could be carefully positioned to coincide with a specific beat of the music producing an effect which gave extra impact to that action and which produced a pleasing sense of rhythm. Everything that could be thought useful to appreciating the timing and the feel of the music was added to the sheets.

The effect of this on audiences was one of excitement. Leonard Maltin has enthused about the magical effect of seeing cartoon characters moving, talking, singing and playing musical instruments in synchronisation with the beat of the music (Maltin, 1987, 35). Maltin also cites other reactions: the critic Gilbert Seldes feeling enormous satisfaction of experiencing the effect, in these first animated cartoons, of the use of unreal sound to match the unreal action resulting in a unity of fantasy and not a disunity of fantasy and reality (Maltin, 1987, 35), and John Grierson writing of Disney's excellent use of the possibilities that film sound synchronisation offered by distorting his characters in counterpoint to the music (Maltin, 1987, 35). Wilfred Jackson commented on the potentiality of this unity between the animation and the music:

I do not believe there was much thought given to the music as one thing and the animation as another. I believe we conceived of them as elements which we were trying to fuse into a whole new thing that would be more than simply movement plus sound. [15]

The problems of synchronising the lip movements of the singing characters in cartoons could be overcome in the animation production process with much the same degree of control that a skilled puppeteer has over his puppet (Figure 12). More problematic is the often discovered contemporary pop singer's inability to mime in time to a vocal track.

This is especially difficult in the photographic realism type of animation production so favoured by contemporary musicians. In these pixillated live action productions the performer becomes a puppet in the hands of the animator.

At the same time as the image/sound synchronisation problems were being dealt with by the animation industry the burgeoning Hollywood musical genre was developing some of its own technical breakthroughs in solving production problems. Foremost amongst these was the technique of 'record-to-playback'. Recording music live in the studio whilst simultaneously shooting the visuals was fraught with technical problems. The camera had to be enclosed in a soundproof box otherwise the noise of its motor would be recorded on the soundtrack. Putting a box around the camera rendered it immobile. The breakthrough came with the idea of separating the soundtrack from the images, making a recording of the music and playing that back during the shooting of the scenes. Not only did this mean that the performers and crew could make as much noise as possible during filming but the camera could be freed from the confines of its fixed position in a sound proof box, mounted on a crane and moved around the sound stage, thus allowing a more filmic approach to be adopted by the director. This practice was also cheaper as the producer did not have to employ the musicians throughout the lengthy shooting process to play during each take. Instead, after making the recording, they could be discharged.

The actors were faced with a new challenge, having to mime to the lyrics in the music. It was this breakthrough that was to make the biggest technical impact on music video production. Rick Altman has noted this and other technological innovations in the Hollywood musical genre such as improvements in the quality of sound recording, the invention of the camera crane, several special effects techniques plus the process of combining animation with live-action sequences, as in *Anchors Aweigh* in which Gene Kelly dances with an animated mouse (Altman, 1981, 147). Most of these innovations have had an influence on music video production, including a segment not unlike the Gene Kelly one in which Paula Abdul dances with an animated cat in the music video OPPOSITES ATTRACT.

Animated Music In Live-Action Films

Although the stars of Hollywood musicals have mostly been human, in *Ziegfeld Follies* (1941) there is an extensive introductory sequence featuring animated puppets of popular music stars such as Will Rogers and Fanny Brice. Some cartoons even 'quoted' visuals from Hollywood musicals, as for example when hundreds of hens in a fowl yard undertake a Busby Berkeley type production number and satirise his choreographic excesses in the process. Berkeley was one musical director who made extensive use of

the technical innovations of the genre, having his camera mounted on a crane to swoop over carefully choreographed groups of dancers whom he had organised into kaleido-scopic patterns. The result of his efforts was the production of exciting visual effects. In *Hollywood Party* (1934), a live-action musical revue film, there is a short animated sequence in colour, like a *Silly Symphony* type of cartoon, called *The Hot Choc-Late Soldiers* which MGM had commissioned from the Disney Studio. This sequence influ-enced the production of a similarly themed *Silly Symphony* called *The Cookie Carnival*, in 1935 (Kaufman, 1993, 164).

Generally speaking these examples demonstrate Hollywood's attitude to animated musi-cal sequences. They were perceived as novelty introductions to or inclusions in live-action films or as special effects, separate from short cartoons which were an entity in their own right. The 1960's beach genre film musical *How To Stuff A Wild Bikini* (1965) had a claymation title sequence animated to surf music. Not only was the notion of an animated title sequence novel to rock audiences but so was the animation technique employed. Claymation is a three dimensional technique and was almost never used by Disney. In fact, Disney rarely used three dimensional animation but tried instead to obtain the illusion of 3D from special 2D technology such as his multi-plane camera equipment. It was produced by Art Clokey, later to become the designer of the popular children's television animated character, Gumby. Clokey laid the basis for the technique of animating clay which was later popularised by Will Vinton in his music video work with Michael Jackson and also by Aardman Animation's Wallace and Grommit films *The Wrong Trousers* and *Big Day Out.* In *Bikini,* to a soundtrack of surf music Clokey makes abstract shapes made from clay move and metamorphosise in strict synchronisa-tion with the rhythm of the music. There is a feeling of play and fun in the sequence. It also had the appeal of being a novelty. This technique is perfectly suited to this musical manipulation and synchronisation because of its inherent plasticity.

Another designer to work on title sequences for films was Saul Bass who specialised in this field for over twelve years, although not all of his work was animated. Commencing with *Carmen Jones* (1954), he designed very simplified yet highly stylised animated images and typography to a films' theme music. In the case of *Carmen Jones* he had been employed as a graphic designer to produce the poster for the film but ended up, in addition to this task, animating it in the title sequence and setting it to Bizet's music. Other notable examples of his animations to music are *The Man With The Golden Arm* (1955), *Anatomy Of A Murder* (1959) and *Psycho* (1960). A feature of his work was that apart from setting the mood and communicating the information about the film's cred-its, he attempted to make the title sequence work as a metaphor for the theme of the film. In *Anatomy Of A Murder,* for example, he manipulates graphic fragments of a corpse

around the screen like a jig-saw puzzle until all the pieces finally come together, thus suggesting the process invoved in the solving of a crime. And in *North By Northwest* he manipulates animated directional lines which echo the title of the film. But the amount of this animated activity as title sequences in live-action films and as special effects in musicals did not compare to the huge volume of the musical cartoons themselves.

The Aesthetics Of Disney Musical Animation

The musical cartoons of the 1930's and 40's have certain attributes in common. Firstly, the music is used as a basis for their design with more emphasis on mood and theme than on story or characters although these other elements are often present. Secondly, anthropomorphic treatment is given to the design, characters and landscape. The trees in *Flowers And Trees* have faces and human limbs which enable them to move around instead of being rooted to the spot. In *The China Shop,* all of the plates, jugs, clocks and vases have faces and make human actions, and the porcelain figurines come to life and walk. The fire in *The Moth And The Flame* has a face and *Willie The Whale Who Wanted To Sing At The Met* (Figure 4) has his dream come true and performs, standing upright on his tail, in full opera costume, on the stage in an opera, singing in the full operatic range. Thirdly, there is the use of animals and the fable form. Disney's *Silly Symphony* series may be considered as fables and Disney as a fabulist. In the silent era of animation production a series named *Aesop's Fables* had been made. It was based on the stories written by the 6th Century B.C. Greek slave, Aesop. *The Tortoise And The Hare* (1935) is based on a fable of Aesop as are *The Moth And The Flame* (1938), *The Spider And The Fly* (1931), *The Grasshopper and The Ants* (1934), *The Wise Little Hen* (1934), *The Flying Mouse* (1943), *Three Little Pigs* (1933) and *The Practical Pig* (1939). Fourthly, the practice of animating inanimate objects, both natural and synthetic, is commonly employed. Fifthly, there is the absolute synchronisation of sound and image. Finally, there is employment of the plasticity and elasticity of line sufficient to enable the designs to assume any possible form, to metamorphosise from one shape to another and to break free from any limitations of rigidity or fixed form.

The use of music in cartoons of the 1930's generally, whilst not unusual, was restricted to the quickly established use of music in the live action feature film, namely as one of many supporting elements, underlining the drama and assisting the narrative. What was unusual was the selection of music as a basis for the specifically music oriented cartoon, rather than the normal method of basing cartoons around a story or at least around a character. Character animation had become a trend throughout the 1920's with popular figures such as Koko The Clown and Felix The Cat, followed in the 1930's by Mickey Mouse and Betty Boop. The development of personality animation, wherein the character became so popular that it became a star, has both similarities and differences to the

stars of the Hollywood musicals of the 1930's and 1940's and to the pop stars of the music video genre half a century later.

Many an actor cast in a Hollywood musical could not sing or dance, and yet was expected to. Likewise, many of today's pop musicians having to appear in music videos can't act and yet are required to play a role. By contrast the animated character, whether human, animal or inanimate, in the context of animation where anything is possible, could be made to give a virtuoso performance, not only singing and dancing, but doing it most skillfully and with consummate ease. Musical cartoons had a novelty value, the novelty of seeing an animated character not only give a convincing musical performance but also having its every move scored by music. The infrequent use of animation in music video gives it a similar novelty value. Animation makes it possible for the images to flow in rhythm with the music, the one can be tied to the flow of the other, the synchrony measured to a fraction of a second by virtue of the frame breakdown charts. The dynamic visual impact of animation, especially when accompanied by music, had a strong appeal to audiences of both the 1930's and 1980's.

European Experimentation

In Germany there had been a series of experimental animations set to music made in the early 1920's. Leopold Survage produced a series of motion paintings titled *Coloured Rhythms* in 1914. Whilst not an animation this work influenced many of the subsequent abstract animators and their work. Survage was essentially a painter but through his fascination with the notion of moving images, and his frustration at not having the technology available with which to realise this idea, he began to theorise the concept of abstract animation. Influenced by the Modernist movement's Cubist paintings he designed his *Coloured Rhythms* series. He wrote:

I will animate my painting, I will give it movement, I will introduce rhythm into the concrete action of my abstract painting, born of my interior life; my instrument will be the cinematographic film, this true symbol of accumulated movement. It will execute the "scores" of my visions, corresponding to my state of mind in its successive phases. I am creating a new visual art in time, that of coloured rhythm and of rhythmic colour. [16]

Survage also argued that this new visual form of abstract animation had an analogy with music through it's shared interest in time. Unfortunately, Survage never realised his plans. Walter Ruttmann did. The first screening of an abstract animated film took place in 1921 when Ruttmann's *Opus I* was shown. The film was enthusiastically greeted by the critic Bernhard Diebold as 'a new art, the vision-music of film'. Ruttmann saw music in painterly terms as a visual movement of form. He continued his experiments with *Opus II, Opus III* and *Opus IV.* The next significant work of abstract animation was

made by Viking Eggeling. Called *Diagonal Symphony* it was produced over the years 1921-1924 and consisted of a dance between a pair of curved forms which grow and shrink in time with each other. A collaborator of Eggeling's, and a person who shared his interest in the analogy between abstract animation and music, was Hans Richter. Richter made three films *Rhythm 21, Rhythm 23* and *Rhythm 25* in the years 1921, 1923 and 1925 respectively. Together with Eggeling he tried to express in his work what he called 'the music of the orchestrated form'. The films contain moving rectangular shapes which constantly change in scale and in ratio of length to breadth. Despite the musical titles and associations all of these films were silent.
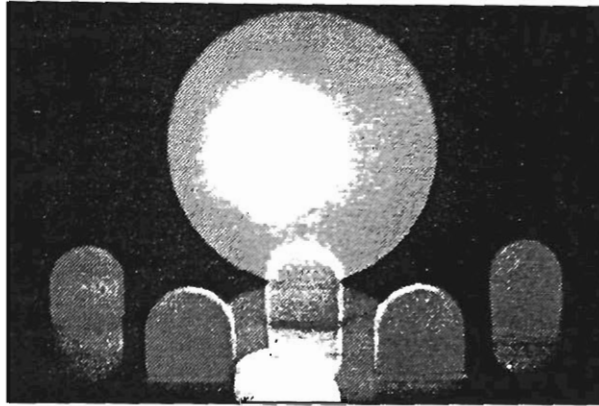
Figure 7. Animated image from Oskar Fischinger's *Composition In Blue*.

The first of this group to work from an actual soundtrack was Oskar Fischinger. Even his early silent films were synchronised to phonograph records at screenings. He worked from classical music and from jazz music. After having made animated cigarette commercials for the cinema, and an abstract animation set to music *Composition In Blue* (Figure 7) in 1934, Fischinger left Germany and worked at the Disney Studio in Hollywood where his reputation for the visual abstraction of music had preceded him. On *Fantasia* (1940) he designed and animated the abstract visualisation of Bach's "Toccata and Fugue", the sequence which opens the film. Although he did not stay long at the Disney Studio, preferring to work alone, his influence on the staff was felt long afterward.

Amongst his other animations based on music are *Study No. 5* (1929) and *Study No. 6* (1929-30), both of which are based on jazz, *Study No. 7* (1930-31) based on the second "Hungarian Rhapsody" by Brahms, *Study No. 8* (1931) based on Dukas' "The Sorcerer's Apprentice", and *Study No. 11* (1932) based on Mozart's "Divertissement". Fischinger had this to say about the experience of animating to music:
The flood of feeling created through music intensified the feeling and effectiveness of this graphic cinematic expression, and helped to make understandable the absolute film. Under the guidance of music, which was already highly developed there came the speedy

discovery of new laws- the application of acoustical laws to optical expression was possible. As in the dance, new motions and rhythms sprang out of the music and the rhythms became more and more important. [17]
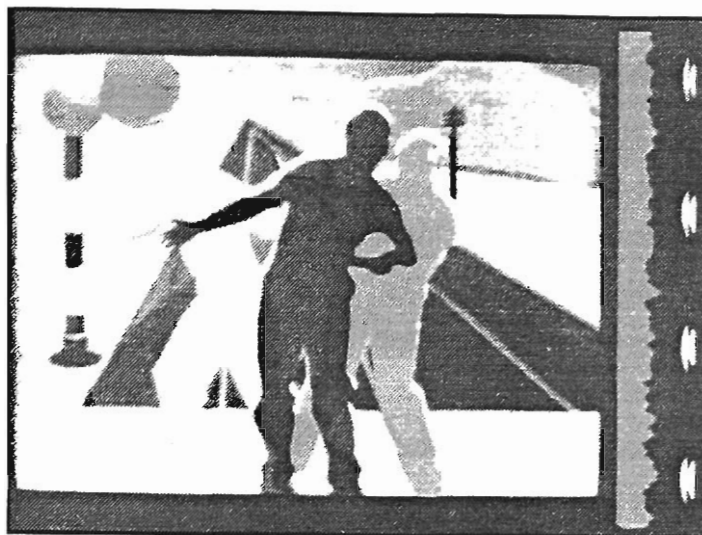
Figure 8. Animated image from Len Lye's *Rainbow Dance.*

Another pioneering animator to experiment with music and animation was the New Zealander, Len Lye. Despite his limited output, animation historian Giannalberto Bendazzi describes his work as being "among the best in animation history" (Bendazzi, 1994, 76). Originally an artist and kinetic sculptor Lye was fascinated by the possibilities which animation offered for the control of movement. After visiting Australia he travelled to London where he obtained employment with the G.P.O. Film Unit and made *Colour Box* (1935), a pioneering work of cameraless film making which contained hand drawn images painted directly onto film stock and set to music (Figure 8), *Rainbow Dance* the following year, and *Trade Tattoo* in 1937. These films feature garish coloured images which move and dance in perfect rhythm with their musical based soundtracks. Lye's work was initially inspirational to the Scottish born but Canadian based animator Norman McLaren.

McLaren quickly put his own stamp on the medium, developing a range of animated techniques including the cameraless film and pixillation. Heavily influenced by music as a creative force in his life and his work he made several animated films based on music. This included music from folk tunes, boogie-woogie piano pieces, swing jazz, ballet and classical music. *Hen Hop* of 1942 is an impressive example of how McLaren worked to music with the animated hen hopping and fragmenting in exact synchronisation with the fast tempoed music. In addition to his prolific output of films he actively contributed to the theorising of animation, providing one of the fundamental definitions of animation, that it is is the art of drawn movement (see Chapter 1).

Italy has produced some formidable talent in this area of animated music. Most famous is Bruno Bozzetto who made a parody of *Fantasia* called *Allegro Non Troppo* (1976). Whereas Disney attempted to make a serious 'art' statement with his film, Bozzetto aims for serious satire. Also using classical music he structures the film around efforts by a conductor to rehearse a symphony concert with an orchestra composed entirely of female musicians. Two other Italian animators, who generally work as a team, are the theatrical designer Emanuele Luzzati and the animator Giulio Gianini. They collaborated on the production of animations which are very carefully synchronised to music. Choosing classical music for both the soundtrack and the title of their films, such as Rossini's *The Thieving Magpie* (1964), Puccini's *Turandot* (1974) and Mozart's *The Magic Flute* (1977), their work is a combination of theatrical and graphic design. A special feature of their work is their choreographing of the animated movement to the rhythmical structure of the music. In *The Thieving Magpie,* for example, the bird's every move is determined by the timing and emphasis of the music.

Mention must also be made of the American brothers John and James Whitney, pioneers of computer animation. At first, they abandoned the idea of using music as the basis for their animation as they felt that audiences who knew that music may have already formed their own visual ideas about it and that these ideas might conflict with the Whitneys' creative interpretation of it. Instead they decided to generate their own music and developed the technology for that purpose. They expressed their strategy in the following terms: *Since both image and sound can be time scored to fractions of a single motion picture frame, there is opened a new field of audio-visual rhythmic possibilities. The quality of the sound evokes no strong image distraction such as was observed in other music. Consequently, the sound is easily integrated with the image.* [18]

Figure 9. The Beatles in *Yellow Submarine.*

Animated Pop Music

The pop music of The Beatles formed the basis for the concept of the 1969 film *Yellow Submarine* (Figure 9) as well as the content for many of its sequences. In addition to the dialogue and the storyline the film contains ten complete songs by The Beatles plus orchestrations of Beatles songs by George Martin. These songs have been visualised into elaborate set pieces, as has the entire film. Designed by Heinz Edelmann the film has a distinctly Pop Art and psychedelic look, fashionable at the time and also expressive of The Beatles' involvement with that form of music from their "Sergeant Pepper's Lonely Hearts Club Band" period. The animation predominantly involves the drawn cartoon style of animation technique, and there is some use of collage and rotoscoping as well. Despite their stylised cartoon form The Beatles are recognisable as graphic representations of their late 1960's personas and appear as characters involved in a story. Their voices are provided by actors.

The Beatles play themselves at first, then become members of Sergeant Pepper's Lonely Hearts Club Band. The narrative involves a journey to a mythical place called Pepperland which is under siege from the Blue Meanies. Pepperland is located 80,000 leagues beneath the sea which is why a submarine is involved. The purpose of the trip is to rescue the residents of Pepperland from their lifeless state. The Meanies are enemies of music and have frozen the people of Pepperland into an inanimate and colourless state with their anti-music missiles. In this state the inhabitants of Pepperland become frozen solid and then drained of their colour. This is a most effective graphic method of expressing the life force being drained from them. The only antidote for this condition is music and it is the music of The Beatles which is used as the liberating force. The Blue Meanies physically shrink at the mere sound of music, another graphic means of expression. Finally, the music of Sergeant Pepper's Lonely Hearts Club Band animates the people out of their state of inanimateness.

Although there is a sense of narrative, including some long narrative sequences without music, the film is essentially structured like a musical with a series of musical sequences connecting the stages of the band's journey. It also seems in hindsight like a collection of music videos edited together. In the film there are several musical sequences in which the lyrics are illustrated such as in the "When I'm 64" sequence where The Beatles grow old during the song. "It's All Too Much" not only illustrates the lyrics but has a strong sense of amplification of them. It is designed as a full psychedelic finale to the story in the film, a moment of elation at having saved Pepperland from the Blue Meanies. It begins with the fast vertical movement of the character Jeremy, the Nowhere Man, and the timing of this motion has been perfectly matched to the rising pitch and wavering scream of the opening notes from George Harrison's electric guitar. The animation is

carefully timed to the musical rhythm throughout. This close marriage of music and image is a feature of the film. Disjuncture of the lyrics is also employed. In the "Lucy In The Sky With Diamonds" number a rather earth bound, rotoscoped Lucy riding a horse suggests the circus more than the effects of the mind enhancing drug LSD. And at times, the sheer virtuosity and power of the animated Pop Art imagery seems to weigh heavily on the gentle parts of the music and suffocate the soundtrack somewhat.

In a small section of live-action footage at the end of the film the real Beatles appear and the final credit sequence features photographs of them. This sudden change of visual style from drawn, animated form to live-action and photographic representation seems rather awkward despite an attempt being made to incorporate little animated icons over the top of the live-action footage. Nevertheless it represents a move into a new direction for animated pop music which was to be developed into a full flowering of this approach in the first wave of animated music videos.

Later, The Beatles' music was used for the animated television series, *The Beatles,* first shown on network television and later on MTV. Like *Yellow Submarine,* this show featured The Beatles as animated characters with each episode loosely based around the theme of one of their songs. The featured track was usually sang near the end of the show. This series did not have the level of funding that the film had nor the presence of Edelmann on the design team and so the animation lacks the quality of that in the film and the design lacks the style. Whereas the film was distinctive in appearance the series lacks visual flair and looks like many other animated television series.

Conclusion
The animated visualisation of music has developed considerably since its primitive beginnings with the Fleischer Studio 'follow-the-bouncing-ball' films of 1924. As the form evolved animated imagery replaced the static lyrics on the screen and synchronised soundtracks replaced the live playing of the cinema organist. These developments required the invention of new technology and techniques of production and both the Fleischer and Disney Studios were actively engaged in the solution of these technical problems. In addition to their technical achievements both studios contributed to the establishment of a set of aesthetics for the animation of music.

Relying on fables for story material which were acted out by cutely designed, humanised animal characters in rural settings, the Disney Studio devoted much of its resources to the production of a series constructed around the visualisation of music. This series, the *Silly Symphonies,* influenced other Hollywood cartoon studios to follow similar directions. Whereas Disney demonstrated a preference for classical music, the Fleischers

experimented with jazz and blues music and the urban adventures of their human cartoon character, Betty Boop. All of the studios included references to animism, anthropomorphism and metamorphism in their cartoons, both as ideas and as techniques. Generally, animators had a playful time in their work, expressing the fantastic and the unreal possibilities which the animated film medium offered.

The dominant animation technique to emerge was two dimensional drawn animation, in the cartoon style, hand painted on cel and photographed, frame by frame, onto 35mm film. Challenging this approach, experimental animator Len Lye made animated films without a camera by painting directly onto found film footage. Other independent animators explored abstraction and the possibilities of 'animated music.'

Operatic music was eventually set to animation and so, too, was rock music. The efforts of the animators who made *Yellow Submarine* laid the groundwork for the animated visualisation of rock music in music video. The difference between *Yellow Submarine* and the musical cartoons of the Disney and Fleischer Studios was that the main characters in the former represent real musicians, The Beatles. The design of the Betty Boop character had been based on a singer called Helen Kane and aspects of her performance technique were included in the design but Kane's influences were integrated into the creation of a new character which was not meant to represent Kane at all. Similarly, the singing and dancing of Cab Calloway was cartoonised and incorporated into other characters. But in *Yellow Submarine* the characters look and sound like the real Beatles whom they are meant to represent. Despite their graphic stylisation their identity remains.

The first wave of animated music videos such as SLEDGEHAMMER, MONEY FOR NOTHING, TAKE ON ME, AND SHE WAS and LEAVE ME ALONE were less adventurous in this respect. The pop stars in them are represented in photographically realistic style. There is a general reluctance to be cartoonised like The Beatles in *Yellow Submarine* or abstracted like the images from the early European experimental animations. Nevertheless this new group of musical animations is indicative of some very creative work. Building on the foundations laid by *Yellow Submarine,* a new generation of animators had started to construct a new type of animated music, and with it, contributed to the the formation of a new set of aesthetics.

CHAPTER 3. A MODEL FOR THE STRUCTURAL ANALYSIS OF ANIMATED MUSIC VIDEOS

Music video has enough aspects to make it a rich medium for analysis. A form of mass media it nevertheless provides the opportunity for individual and idiosyncratic uses. A product of television, it often contains influences of the cinema. Linked to advertising practice it also allows an avenue for artistic expression. It combines two separate forms, music and video, into a marriage of audio-visual form and content. Animated music video, as a field of study, is a small but complex area which involves the simultaneous use of live-action and animated imagery. These two types of imagery are normally considered stylistically incompatible but have managed to find a niche in music video. In order to examine this use of the medium a layered method of structural analysis has been adopted.

Layered Structure

The layered structure approach to the analysis of a text was carried out in literature by Boris Uspensky. He demonstrated the multiple points of view which can exist throughout a narrative text. Each character in a story may have a point of view that the reader is presented with. This results in a fluctuation in viewpoint from one character to another throughout the story. This change may take effect several times between different characters during one page of the book. In addition, there is the reader's own point of view as he/she attempts to make sense of the story. This constant switching of various points of view, characters' and reader's, can flow back and forth throughout the text. Uspensky also describes the changes of place or location within a tale. This includes even such a simple move as that of a character from one room to another. [1]   Also in literature, Mikhail Mikhailovich Bakhtin has employed methods of layered structure, using temporal and spatial aspects for example, in his analysis of the novel. He has borrowed the analogy of 'orchestration' from musicology, treating the novel as a musical score:

...a single "horizontal" message (melody) can be harmonised vertically in a number of ways, and each of these scores with its fixed pitches can be further altered by giving the notes to different instruments. The possibilities of orchestration make any segment of text almost infinitely variable. [2]

The idea of a text consisting of several layers, and also of the division of the image into both literal and symbolic components, has been used in art by Erwin Panofsky who showed in detail how distinctions can be made between different levels of analysis in painting. The basic level of description of a work of art is what Panofsky calls pre-iconographical and he gives the example of a painting by the seventeenth century Venetian artist Francesco Maffei. The pre-iconographic description of this painting is the literal

description of the facts and expressions in the painting such as the shapes and colours. In this case these represent a young woman carrying a sword in one hand and a plate with the decapitated head of a man on it in the other. Panofsky calls the next level the iconographic analysis. This involves the ascription of identity to the dead man, who is, one supposes, John the Baptist, and the significance of the circumstances of his death, that he was beheaded at the request of the woman, supposedly Salome. This level requires an understanding of the subject, the circumstance and of the context and it is at this level that any obscure meanings may be clarified. Amazingly, Panofsky, armed with the required knowledge then proves the importance of this by proposing that the painting is not in fact of Salome and John the Baptist but rather of Judith and Holofernes. Cultural awareness is cited here as a relevant factor. Panofsky points out, for example, that to an ancient Greek the act of lifting one's hat would not be perceived as an act of politeness. The third level of analysis to which Panofsky refers is iconological analysis and this involves what he calls "synthetic intuition", intertextuality and the cross-referencing of symbols from different works of art within their social, political, historical, religious and artistic contexts. Panofsky is able to confirm his suggestion of Judith and Holofernes as the subjects of the painting at this level. [3] It is at this level, in the analysis of the animated music videos which follows, that references to the theory, history, aesthetics and practice of animation will be made.

Panofsky is cited by Peter Wollen in his proposal for a 'semiology for the cinema'. In his argument for the anchoring effect of words on the meaning of images Wollen quotes Panofsky's recollections of the use of titles in silent films to clarify the visual drama. With the introduction of sound film these titles disappeared and were replaced by dialogue or narration on the soundtrack. This has an implication for music video where the lyrics can act as a guide in the interpretation of the images. Wollen also points to the semiological work of Charles Sanders Pierce and his 'trichotomy of signs'. In this system there are three operational units, the icon, the index and the symbol. Pierce named the first of these, the icon, for its resemblance to the object which it represents. A rotoscoped drawing of a pop singer, for example, can be expected to be reasonably similar in appearance to the actual person. The second term, the index, contains a suggestion of probability, an indication that one can be fairly certain that a particular sign points to a particular outcome. There is a physical connection between the index and what it stands for like wind blowing on a weather vane, the latter being an index for the former. Pierce includes photographs in this category because of the direct physical connection which exists between the subject and the camera. This is also confusing because of the resemblance between the subject and the photograph. Might the photograph not rather be an icon? Wollen defends this potential confusion as a strength in Pierce's system:

Pierce's categories are the foundation for any advance in semiology. It is important to

note, however, that Pierce did not consider them mutually exclusive. On the contrary, all three aspects frequently-or, he sometimes suggests, invariably- overlap and are co-present. [4]

The third unit in Pierce's system is the symbol and this has neither resemblance nor physical connection to what it represents. Rather it possesses the 'arbitrariness' of Saussure's original 'sign' wherein the word guitar, which changes in any case from one language to another, bears no audio or visual connection to the object which it describes. Saussure intended his system for the field of linguistics, which he helped to establish with the development of his system. In the design field, typographers may shape the word so that it looks like a guitar but in normal written and verbal communication the word seems an arbitrary choice for its object.

Wollen favours the use of Pierce's system in comprehending the aesthetics of film, arguing that the merit of this system of signs is its lack of rigidity in the three units, this flexibility enabling interaction to take place between icon, index and sign (Wollen, 1972, 141). Ultimately, Wollen proposes a plurality of interpretation in which each viewer constructs his/her own meaning from the text rather than being recipients of a single, clear meaning. He praises the work of Jean-Luc Godard in this respect for its 'semiological mystification'. This is a result of Godard's directorial style which involves frequent interruption to the sequential flow of his films and his refusal to allow the audience to become passive. Instead it has to take an active role in constructing meaning from his work. A similar reaction is prompted by postmodern music videos which leave the viewer trying to make sense of the fragmentary flow of images with few clues as to overall meaning.

For the purposes of assisting in this attempt to comprehend animated music videos a technique of layered structural analysis has been developed and employed in this dissertation. For the sake of operational simplicity animated music videos have been divided into two layers, the soundtrack and the image. These two have been further separated into sub-layers. The soundtrack consists of the lyrics, the music and the vocal performance, whilst the image consists of both the literal and the symbolic image. These sub-layers have the potential for further subdivision. For example, in the area of vocal performance the acoustical space of the recording and the quality and dominance of the voice track may be examined. Then there is the matter of the relationship between layers. The acoustic space of the recording, for instance, may be at odds with the visual space employed in the video. It can be seen that to make an exhaustive analysis of the three animated music videos chosen for this study using this method of analysis from the different points of view is a complex process. To accomplish this task with a degree of

thoroughness, it is not enough simply to document each layer (music, lyrics, visual symbolism etc.) as a separate unit.

There is also the whole question of cross-linking or coordination of levels. The very nature of this intertextual exercise means that boundaries separating one category from another are easily crossed. A music video has the inherent capability of simultaneously displaying sound and image and this is not so easily achieved in written form on the page without resorting to some type of storyboard layout. Even then a written description of the music is not the same as hearing the music itself. Nevertheless this analysis will be carried out in as cohesive a manner as possible. To facilitate matters a simplified series of headings will be used. Under these headings the various subdivisions will be called upon where relevant or required. Whilst every heading listed in this model may be applicable to a particular animated music video not every topic listed under the headings will necessarily be relevant. However, the potential complexity of structure and of meaning will be apparent from the model in the way in which areas overlap and share the same space. In order to demonstrate the links between levels, and this complexity, the study will move freely from one heading to the next and back again rather than proceed exhaustively through each level, one at a time.

Stressing the need for flexibility, the aspects I will consider in carrying out this multiple series of analyses of the basic material are as follows: the soundtrack, which includes such aspects as music, speech, sound effects, lyrics, vocal performance, beat, rhythm, tempo, melody, harmony, timbre, arrangement, acoustic space, and repetition. To these must be added the analysis of the image, which includes design, animation, cinematography, special effects, editing, performance, acting, lip-synching, dance, choreography, visual space, treatment of music, and both the literal and symbolic meaning. Where possible, these separate layers will be dealt with one at a time in a fairly pragmatic fashion. The analysis will be concluded by sampling some of the devices which relate these different levels to each other, and by examining what intermeshing or crosstalk between the levels takes place, and whether, at times any one level influences one or more other level. In developing this model of analysis the need for flexibility in the use of the model is reiterated. Some of the layers run parallel to each other or there may be parallel analyses of the same material and the need to move back and forth from one heading to another.

Putting all of these headings into list form produces the following more easily referenced checklist:

ANIMATED MUSIC VIDEO (SOUNDTRACK AND IMAGE)

SOUNDTRACK

-Music

lyrics, and their vocal and physical performance

beat, rhythm and tempo

melody, harmony and chorus

instrumentation and musical arrangement

structure of song

-Other sounds and factors

speech, dialogue or narration

sound effects, other than musical

acoustic space

repetition

IMAGE

-Design

style of sets, costumes, props and make-up

titles and graphics

special mechanical and visual effects

lighting

visual space

-Animation

technique (rotoscoping, pixillation, claymation, drawn etc.)

animism, anthropomorphism, metamorphism and figuration

movement, fusion with soundtrack

-Performance

musical (movement, dancing, lip synching and body language)

acting (gesture, role playing and/ or use of direct address)

stardom and construction of celebrity

-Film and Video Technique

lighting, cinematography, visual effects and editing

-Visual Style

music video classification (Kaplan's romantic, socially conscious, nihilistic, classical and post-modern categories or Goodwin's MTV Phase 1, 2 and 3 model)

genre (narrative or documentary, performance or conceptual, promotional or pleasurable, fantasy or realism)

semiological aspects (literal or symbolic)

illustration, amplification or disjunction of lyrics

pastiche

repetition

Soundtrack

Starting with the soundtrack there are four other possible additional components to consider, apart from the music. These are other vocal sounds such as speech, dialogue or narration, sound effects other than musical sounds, quality of acoustical space, and use of repetition. Sounds not present on the musical recording may be added to the soundtrack of the video to make auditory sense of visuals and to increase dramatic effect e.g. the screams of the audience watching the horror film in which Michael Jackson metamorphosises from man to beast in THRILLER. In that same video there is dialogue between Michael Jackson and the young girl in the scene in the park in which he says "I'm not like other guys", prior to the commencement of the music. This speech was not present in the original recording but has been added to the soundtrack of the video. Throughout the music there is a narration in the form of a rap by actor, Vincent Price. The acoustical space suggests that unrealistic clarity and dominance have been given to the spoken and sung vocal tracks which register clearly whether in the noisy cinema or outside on the street. There is extended use of repetition in the music during the long sequence where the ghouls advance on the house for the final confrontation with the young girl. This enables the dramatic tension to build and the sustained choreography to be played out. And then there is the music itself.

Both Simon Frith and Andrew Goodwin have openly acknowledged the lack of attention given to music in the analysis of music videos. Referring to the 'deafening silence in the corridors of the academy' Goodwin has criticised the lack of referral to the music in music video (Goodwin, 1993, 2). Frith has gone so far as to claim that it is "the deaf who have so far dominated pop video theory".[5] It is usually bypassed in the rush to discuss the visuals. The model proposed in this thesis attempts to address this problem by using the soundtrack as the point of departure in discussing the videos and by dealing in detail with some aspects of the music. Following on from Wilfred Jackson's original design of the bar sheet, this model will take samples of music for analysis and, commencing with the lyrics, freely examine various aspects of both the image and the soundtrack.

Firstly, the lyrics are analysed, then, because they are sung rather than read, the vocal and gestural performance involved in delivering those lyrics are studied. This is immediately problematic in that the lyrics in the video are invariably being mimed rather than sung. The aspects of performance which can be analysed include the quality of the voice, the style of singing and whether the vocals have been foregrounded, backgrounded or blended into the audio mix. Already the image track becomes relevant because the use of accompanying facial expression or body gesture, for example, may affect one's interpretation of the sung lyrics, or the lyrics may be given literal description by being acted out in the imagery. Goodwin has suggested that the lyrics of a song may be used to cre-

ate either mood or metaphor in the music and then those words may be "illustrated in the video imagery." [6] An example of this occurs in SLEDGEHAMMER when the lyrics "You could have a steam train" are accompanied by an image of a toy steam train. There are an increasing number of videos in which the lyrics are literally presented on screen and so may be read as well as listened to. These take on the added function of typographic design and move the analysis of a video from the soundtrack to the imagery. Examples of these include Prince's SIGN O' THE TIMES and Talking Heads' NOTHING BUT FLOW-ERS.

Musical aspects such as the beat, which may be steady or variable, and the rhythm, which may be fast or slow, contribute to the overall tempo. The melody, whether tuneful or discordant, the harmony and the timbre, the tone and colour of the music, may all come together in a chorus. The musical arrangement may be heavy or light, and the song's structure may be simple or complex. It may consist of a few verses, followed by a chorus, an instrumental interlude, and then another verse or chorus. Repetition of verse or of riff may play an important part. The instrumentation may involve old or new instruments and technology or a mixture of both. The acoustic space, which is the suggestion of the physical space in which the music was recorded, may be authentic as in the case of a live concert recording, or contrived as is the practice in Hollywood musicals. A selection or all of these elements can be identified and described, one at a time, in relation to each other, and in relation to the overall music, difficult though these analyses may be. Retaining the flexibility required for intertextual analysis, freedom to move from the music to the image is recommended and demonstrates the links between the layers which make up the text. It also points to the inherent complexities of examining dynamic, audio visual material.

In agreement with Goodwin, McClary and Walser have acknowledged how little work has been undertaken on the theorising of the musical components of music video, and have perhaps suggested a possible reason for this (McClary and Walser, 1990; 57-58). They discovered the difficulties of intertextual analysis as they sought to establish the relationship of the music with the visuals:

...an aural signifier generates another signifier, which is visual, simultaneously with the mental production of the signified. What is problematic here, in the terms of semiotics/semiology, is the question of which signifier attaches to the signified- or whether indeed the sound-image fusion is sometimes so great that the two signifiers are actually one. [7]

At the start of Talking Heads' music video AND SHE WAS we hear David Byrne suddenly shout out the word, "Hey", followed by the introductory chords of the guitar and drums.

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It is both abrupt and urgent. This aural signifier is accompanied by a visual sequence, the other signifier, which shows a rather theatrical reveal (the scene is uncovered graphically producing an effect similar to the rising of a theatre curtain) of an animated hand holding a kitchen spatula, moving back and forward across a photograph of a woman's knees. This voyeuristic shot suggests the engagement of what Laura Mulvey calls the 'scopophilic male gaze' (Mulvey, 1975, 6-18). At the same time the viewer forms a mental image of what is being signified. The shout is undoubtedly an attention getting device, as is the bizarre image. For a male audience the bare knees of the woman serve the same function. There is also some suggestion of domesticity with the presence of the spatula, and of music in the way it is waved in time with the rhythm of the guitar and drums. The marriage of the sound and image in this sequence is so effective that they appear to go together quite naturally and so form the fused but solitary signifier that McLary and Walser suggest may be possible.

Alan Williams' work on the disparity between the acoustic space suggested in a video and the quality of the recorded sound is relevant to ONCE IN A LIFETIME. In this video Talking Heads' vocalist, David Byrne, is seen both in big close-up shots and then shrunken to appear more like the size of a pattern on wallpaper in the background. But in both shots the closeness and clarity of his voice are the same despite him being visually quite distant from the camera in the reduced scale shot. Similarly, there is another sequence of him in which he appears to be floating on his back and swimming in water This image has been shrunken and replicated into a pattern, but despite this distance and the strenuous activity his voice sounds the same as when he appears closer to the camera, relatively inactive and simply singing.

IMAGE (Design)

In terms of the analysis of the image track of animated music videos a good starting place is the design of the video. Some video producers did not originally employ designers, but this was generally attributed to the low budgets involved. Once videos such as DON'T COME AROUND HERE NO MORE by Tom Petty and the Heartbreakers and ONCE IN A LIFETIME by the Talking Heads were released the potential of the medium for designers was realised. These videos carry the unmistakable mark of the designer. The latter also includes a choreographer credit making a further connection between music videos and Hollywood musicals. Although there is a somewhat blurry line between walking and dancing as demonstrated by the non-dancing stars in that genre of films, invariably a choreographer was part of the production team. Which design style has been chosen and how that style has been manifested in the settings, props, costumes, make-up, lighting and visual effects, titles and graphics is the next issue. Also, how have design elements such as line, form, colour and texture been manipulated and to what effect?

Increasingly, as new computer technology became available, the use of digital design in music videos became a 'novel' feature. In Mick Jagger's HARD WOMAN the space used in the video, together with the settings, furniture, lighting and the female character have all been digitally designed. The effect of this is to leave Mick Jagger pursuing an animated woman through an animated environment. At times he carries a guitar and this is turned into a graphic symbol and increased in scale so that the neck of the instrument becomes a staircase for him to climb. A computer designed landscape is used by The Jacksons in their CAN YOU FEEL IT? This video has additional computer animated visual effects. A giant Michael Jackson lifts an imaginary animated rainbow over his head and his brothers sprinkle animated stardust on the multicultural crowd watching from below. The design of Sting's LOVE IS THE SEVENTH WAVE reflects the naive drawings and writing found in a primary school classroom. This is appropriate considering that in the video Sting is surrounded by young children in an art classroom. On the other hand, the more expansive space of the open road and the country landscape is the setting for Talking Heads' ROAD TO NOWHERE where the open space setting of the deserted country road effectively underlines the theme of the song. Again this choice of location and style of animation is appropriate to the subject matter of the song. So, too, is the more confined space employed to show objects animating out of control all around the singer, David Byrne, while he reassures us that everything's all right.

Make-up effects are used in this video to design and document the aging process of two other members of the band as they progress through courtship, marriage, parenthood and into middle-age. Costume design accurately recreates the look of late 1960's psychedelic fashion in Prince's RASPBERRY BERET. The soft coloured set design and pastel animated sequence in this video reinforce the style of the music and the period design. Another recreation of the 1960's is found in the costume, set and prop design, and in the animation of Tears For Fears' SEEDS OF LOVE. Mental As Anything's APOCALYPSO contains some mechanical effects in its animation. The band members are portrayed as puppets sitting around a table when a 'Santa Claus' puppet emerges from a case on top of the table. The puppet heads are manipulated throughout the scene. The lighting design with its dull and pessimistic colours reflects the grim setting of British Comprehensive schools in Pink Floyd's THE WALL. In contrast, the video for BE NEAR ME by ABC has been lit with very bright white light to underline the happy pop image of that band. The musicians perform in pixillated animated fashion around a white space with white studio floor and white cyclorama. The visual space or suggested setting of a video may echo a stage or club performance as in Dire Straits' MONEY FOR NOTHING, or a rehearsal hall or space (the empty studio or warehouse), or be more like a film location chosen as a specific setting to contribute to the overall design of the production as in CLOSE (TO THE EDIT) by Art Of Noise. In the latter case this may be appropriate if the treatment given

the video is of a particular genre or narrative style. For example, the choice of railway tracks in CLOSE (TO THE EDIT) suits the avant-garde nature of the video which takes on the appearance of an experimental short film.

IMAGE (Animation)

Turning to the animation, the question of which style and what technique has been used can be put. Is the animation drawn, painted, modelled, pixillated, rotoscoped, modelled from clay, of a special effects nature, or designed and produced on computer? What proportion of the video does it occupy, and does it exist simultaneously with live-action footage or are there discreet animated sequences? In HARLEM SHUFFLE by the Rolling Stones there are separate sequences of the band playing alone and then with some animated cat characters but it is edited in such a way as to suggest that both the musicians and the cartoon characters occupy the same space. Are there possible reasons to suggest why animation was chosen for the video and why a particular technique was used? Is there evidence of the implied acknowledgement and use of animism, anthropomorphism and metamorphism in the animation? In Devo's THAT'S GOOD the static colour bars which precede video signals, jump onto the screen one after the other in time to the beat of the music. This demonstrates the animistic act of normally inanimate objects or graphics coming to life. Mick Jagger dances with an animated female character in HARLEM SHUFFLE, whilst in the background a humanised male cat figure is on the prowl. Paula Abdul does a dance routine with an animated cat in OPPOSITES ATTRACT. The cat wears clothes and stands upright in anthropomorphic style. And both appear in the same frame at the same time, Abdul in live-action form and the cat in drawn animation form.

Another question which can be asked is whether or not the performer undergoes a process of transfiguration and is represented by another form? This is the case with Michael Jackson in SPEED DEMON in which he is transformed into a large rabbit. As well as denoting the process of metamorphism this transformation into animal form also denotes the transfiguration of Jackson into a character. This new character retains elements of his image but also allows a manifestation of other, wilder elements. In one sequence, for example, he, in animal form, is booked for speeding by a member of the Highway Patrol. Although Jackson, as Jackson, may not wish to condone speeding, as an animal character he can, perhaps, feel more comfortable with this behaviour and even get away with it. In WHO'S THAT GIRL? Madonna appears both as herself in live-action mode and also as an animated cartoon character which is essentially a stylised graphic version of her real image. In KISS THAT FROG Peter Gabriel's eyes have been electronically inserted into the face of the animated frog. Once the princess kisses the frog it metamorphoses into Peter Gabriel suggesting that he had been trapped in the frog's body. This frog, not Gabriel, makes lascivious advances to the innocent young woman in its

efforts to obtain the kiss required for the release of Gabriel from his amphibious state.

The strict synchronisation of sound and image into a symbiotic relationship is a feature of many music videos, not just animated ones. In both live-action and animation there exists the potential to control the timing down to units of single frames. With animation, however, there is the added control of being able to generate the image, rather than simply record an existing image. Whereas the latter may or may not provide a suitable visual moment for the music the equivalent animated moment may be designed from the outset in response to the music. In the case of editing prerecorded documentary behind-the-scenes footage of a band on tour to the music of a new single, for example, the editor must select suitable images to coordinate with the timing of the music. In animation production the designers can start with the music and conceive images which will match the music in perfect timing so that both move together. In WHAT YOU NEED by INXS, for example, considerable graphic manipulation of photographs and rotoscoped footage shot especially for the video have been forged into an effective fusion of music and image.

IMAGE (Performance)

In terms of performance there are factors other than the musical aspects, although it is difficult to separate some of these. With singing, for example, the vocalist may move or dance or make other physical gestures to accompany his/her vocal sounds. Dancing, in itself, is a form of visualising music, as is the rhythmic swaying of the body in time with the music that is not so much dancing as a form of movement. This dancing or movement may be motivated by the music and so a close connection can exist between the two. Laurie Anderson hardly moves at all in O SUPERMAN but makes extensive use of her hand gestures in this most minimalistically staged video. On the other hand, the animatronically controlled puppets in Herbie Hancock's ROCKIT are constantly jerking and twitching in time to the scratching technique of the music. The emphasis given to the puppets in this video, and the relegation of Hancock to brief sequences on a television set within the setting, was a strategy employed to get the clip shown on MTV at a time when that station had a policy of not screening black artists. The visual performance of the artist in a music video usually involves lip-synching or miming of the lyrics of the song. This can be facilitated by other factors such as camera coverage. In a distant or long-shot, or under dark lighting conditions, the accuracy of the lip-synching is not too critical but in a close-up shot any inadequacy in matching mouth movements to the music is most marked. Character animators are familiar with this problem as they are always having to draw or mould mouth shapes to fit the look and sound of the words being spoken or the lyrics being sung. In Jackie Wilson's REET PETITE the singer is represented through claymation by a clay figure whose mouth has been moulded and shaped, consonant by consonant in time with the music. Facial expression is another fac-

tor which comes under performance. For LAND OF CONFUSION by Genesis all of the political and celebrity figures are satirised by models of their heads, made from latex rubber by the puppeteers Spitting Image. Their faces have static expressions, with the exception of the band members and the animated caricatures of Ron and Nancy Reagan, whose are animated. Here, one facial expression is used for each character, like a mask or statue, to represents their whole repertoire of expressions.

Some videos have narratives or narrative sequences which feature musicians cast as characters. Here the artist has to act. Most, however, require the artist to engage the viewers in direct address. This involves the musician looking directly into the camera and produces the effect on the viewer of being personally looked at, played to or sung to. In MAGIC by Queen, the lead singer Freddie Mercury is dressed up as a character who is both a tramp and a musician and who has the ability to transform from one state to the other by means of the use of magical graphics. In DON'T DREAM IT'S OVER, on the other hand, the Crowded House lead singer Neil Finn doesn't assume the role of another character but remains himself. He also engages in direct address with the viewing audience, singing to them as he wanders through a house, which presumably represents a place where he lived in his past. As he wanders through the rooms objects from his past move or float across the screen. These have been animated and electronically inserted as another visual layer between him and the set. Whether as an actor playing a role or a singer aiming for the direct engagement of the viewer, all artists are involved in the construction of their celebrity status and the promotion of themselves as star performers. To this end, their visual performance is also affected by the make-up they are given and the clothes they wear. In BE NEAR ME, the members of ABC have been studiously dressed in the latest fashion, carefully made-up and coiffured and flatteringly lit. The result is both an artistically rendered piece of pixillated animation and a marketing exercise. On the other hand, the artist may adopt a more naturalistic approach and stand in the spotlight, without make-up, as both Billy Bragg and Elvis Costello have done.

IMAGE (Film and Video Technique)
Lighting is also a factor of cinematography and videography. In this domain of film and video technique the other contributing factors are visual effects and editing. Australian director Russell Mulcahy adopted the 'letterbox' technique of cropping the screen at the top and bottom in order to suggest for the television screen the widescreen effect seen in epic films at the cinema. Some of his videos for Duran Duran, Spandau Ballet and Elton John contain this and other distinctive effects which he developed whilst working in the early days of music video with the 'New Romantic' bands (Hayward, 1990, 130). In the Art Of Noise's CLOSE TO THE EDIT there is extensive use of editing to fit the pixillated

sequences of the band with precision to the dramatic beat of the music. Low light time-lapse photography has been employed to document the passing of time in a city in Jean Luc Ponty's INDIVIDUAL CHOICES. The lighting in HARLEM SHUFFLE by the Rolling Stones is also darkened to reflect the visual look of the interior of a night club. A similar look is achieved by graphic means in Sting's BRING ON THE NIGHT. In this video the performers and their club surroundings have been drawn and animated. Parts of King Trigger's RIVER have been shot in a tunnel at night and severe directional lighting has been used to light the figures in the boat as they float down the river. Paul Simon's THE BOY IN THE BUBBLE, Michael Jackson's LEAVE ME ALONE and the Talking Heads' AND SHE WAS were all made by animator Jim Blashfield and all feature the same innovative visual effect of suggesting three dimensional photographic representation in two dimensional graphic form. More sophisticated visual effects are in evidence in The Cars' YOU MIGHT THINK. Here extensive use has been made of computer and video effects. The digital effect of compositing one image with another has been used to deposit an animated dancing cat alongside of Paula Abdul in her video OPPOSITES ATTRACT. Music video, like the Hollywood musical before it, seems to have an affinity for new technology as each new development is willingly embraced and incorporated into its production repertoire.

IMAGE (Visual Style)

The visual style of music videos comprises many layers. Videos may be fitted to the systems of classification developed by Goodwin, Kaplan and Frith. Or they may be compared to generic headings such as narrative, documentary, performance or conceptual. Whether the video has a setting of fantasy or realism is another factor. The mixing of elements from one layer of the visual style with those from another is also a factor to consider in analysis. Although it involves a narrative and examines a young man's sexuality and his relationships with his family, Bronski Beat's SMALL TOWN BOY, for example, uses a documentary format with a socially realistic style. On the other hand Madonna's DEAR JESSIE deals with the fantasy world of dreams and fairies at the bottom off the garden and is shot in a narrative style with animation sequences consistent with this genre.

The semiological aspects of music video offer a rich field of analysis in themselves. The notion that all the imagery in a music video is a visual metaphor for the music is a good starting point. The musicians may be shown simply performing that music or they may be involved in some visual conception of it. Even with basic performance, the choice of location is telling. The often used deserted warehouse, whilst seemingly a cliched choice of location for videos, actually forms part of the musicians professional lifestyle which often involves rehearsal in empty halls and factory spaces (Goodwin, 1993a, 19). In

CLOSE (TO THE EDIT) which is, located in a railway goods yard, the members of the Art Of Noise are led and encouraged, in a pixillated animation style, by a punk child to destroy classical musical instruments with industrial power tools such as jig-saws and grinders. What is being signified here is a clash between two forms of music, the destructive force of punk against classical aesthetics. There are also the messages of the new style of music versus the old, the young child leading the adults, and the notion of making music using power tools as the instruments. In THE WALL by Pink Floyd a school-teacher metamorphosises into a hammer and then multiplies into an entire army of marching hammers making the inference that teachers are like blunt edged tools. Prince's SIGN O' THE TIMES takes its symbolism literally. In this video, apart from the plain coloured background, all of the imagery consists of English words, the lyrics of the song. These words serve a dual purpose. Firstly they represent the literal reading of the lyrics. Their presence on the screen is also timed to their sung duration. It is possible to feel the rhythm of the music by singing the words for the length of time they appear on the screen. Secondly, the words are given a visual significance through the use of design and typography. When Prince sings "Oh Yeh" the first letter of the first word appears quite enlarged then shrinks in time to the fading sound of the letter as it is being sung. The issue of whether the lyrics of the song have been illustrated, amplified or disjointed is another matter for examination. In SIGN O' THE TIMES the lyrics are not illustrated in the literal sense but they are illustrated through the visual distortions they are put through in the typographical sense.

Finally, the use of pastiche is common in music video and has been the focus of much of the postmodern pop video theory. Madonna's MATERIAL GIRL is a classic demonstration of pastiche. Taking the *Diamonds Are A Girl's Best Friend* sequence from her musical film *Gentlemen Prefer Blondes,* Marilyn Monroe is mimicked by Madonna in terms of appearance, performance, choreography and setting. Madonna's intentions are not to plagiarise or even to satirise but rather to imitate and to appropriate. Similarly, Tears For Fears' SEEDS OF LOVE attempts to uncritically recreate the look and sound of late 1960's rock music. The strategy of simulating the look of the same period can be found in Prince's RASPBERRY BERET.

Just as music involves repetition in the form of a refrain or chorus as part of its structure, the images used in music videos are often repeated. This may simply be designed to accompany the repeated passages of music or it may be employed to underline certain sections of the music as in the sight of the army of marching hammers in Pink Floyd's THE WALL. Although the images supporting the theme of the song are never repeated, the rotoscoped images of Elvis Costello singing and playing guitar in ACCIDENTS WILL HAPPEN are repeated throughout the song when he sings the lyrics leading up to the words in the title.

SOUNDTRACK		
IMAGE		

Figure 10. Basic bar sheet design.

Having outlined the various elements which comprise the structural analysis model a few words about the use of the model are in order. Figure 10 is a graphical representation of the model. It is derived from Wilfred Jackson's original design for the 'bar sheet' and has the simplicity of this model showing parallel horizontal columns for the two essential components of the Image and the Soundtrack. Jackson's model had four columns, one each for music, sound effects, dialogue and action, with the last named usually being expanded into several lines to cope with the amount of detail it contained. The model proposed here has the flexibility for further expansion into sub-headings, each with its own horizontal column (Figures 11, 14, 16, 17, 18, 19, 21, 22, 23). The Soundtrack, which in most cases will represent the music, may have an additional column for Other Sounds should these exist on the Soundtrack. Similarly, the Image column may be expanded into five columns, one each for Design, Animation, Performance, Film and Video Technique and Visual Style. Less may be used if not all of these headings are being examined, and, of course, more can be employed for further sub-headings. If all of these main and sub-headings are employed the model, in graphic form, begins to resemble the conventional classical music score more closely than the simple 'bar sheet' model (See Figure 10) with several parallel columns of musical notation required to cope with the number and variety of instruments involved. Another manifestation of this type of detailed score is used as a model for constructing animations in multimedia software.[8] Flexibility in design of the model should be employed in adjusting it to suit the individual researcher and the video under investigation.

Alf Björnberg has also proposed an analytic model for use in the 'structural relationships of music and images in music video'.[9] Björnberg feels that despite the increase in scholarly attention which music video has received it is the music component of the equation which is still poorly done by. He attempts a form of Cholodenkian inversion (making Film Studies a sub-heading of Animation Studies and not the other way round) by placing the soundtrack above the image track in order to reinstate music at the top of the list in the study of music video. This seems to be a reasonable proposition which has also been suggested by both Frith and Goodwin (see Note 5 in this chapter). And even Kaplan's system of categorisation, or at least part of it, is derived directly from the music itself. In asserting that music is the "missing connection" in the study of music video Björnberg, 1994, 52), he puts forward a number of 'analytical dimensions' suitable for the study of music video from a musical basis. These include discursive repetition, demarcation, symmetry, musematic repetition, directionality, motorial flow, dynamics,

sound processes and individuality predominance factor (IPF).

Discursive repetition is concerned with the structure of the musical piece, the sequence of verses, choruses, solos and codas for example. Demarcation is used to measure change in the music in areas such as the melody, harmony, instrumentation, tempo and vocal texture. Symmetry is proposed as the normal form of pop music construction and is put forward in order to investigate deviations from that norm such as prolongation and truncation. Musematic repetition is concerned not with the normally repetitive aspects of music such as percussion and bass, but with repetition of melody, harmony or accompaniment. Directionality is the evolvement of the melodic and harmonic structure of the music over a period of time. This study of the directionality of the music may also involve closure. Motorial flow is a measure of the continued presence of the instruments of the rhythm section such as the bass and drums. Dynamics refers to the dynamics of this music and sound processes relate to the timbral aspects of the instruments and voices and include such techniques as reverberation and echo. IPF is a measure of the individuality of of the music (Björnberg, 1994, 56-59).

Björnberg's analysis involves measuring the presence or absence of each of these aspects in a particular piece of music. If present, a quantitative descriptor is made. The musical structure having been determined, an attempt is then made to establish a reciprocal connection between it and the visual structure. The essential differences between his model and the one proposed here are the emphasis which his places on music over the images, and the lack of any analysis of, or provision for, animated imagery. Whilst supporting the notion that music video is music driven, which is the basis of this thesis, what is problematic about Björnberg's system is that it remains primarily a study of musical structure and how that structure determines the visual structure of a music video. In defence of the system proposed in this dissertation what is of prime concern is the visualisation of the music and not the music per se. Whilst basically concerned with structure like Björnberg's model, this study also has an interest in the content of the imagery supported by that structure. This model does, however, use music as the departure point for the analysis of the images as Björnberg's model does. As a starting point for any analysis, this model may be used to to analyse one section or piece of music and study this in detail. By playing the video and freeze-framing it at two separate rhythmical points, the beginning and the end of a sequence, for example, all of the visual imagery and what it represents can be examined, without having to study the entire video. This model will now be applied in detail to the analysis of three videos.

CHAPTER 4. SLAVE TO THE RHYTHM: STRUCTURAL ANALYSIS OF ANIMATED MUSIC VIDEOS

From within the genre of music video and, specifically, from one of its stylistic features, namely animated music videos, three examples have been selected for analysis. The examination of their structure will be undertaken by disassembling the various layers from which they have been constructed. The three examples of the genre, taken from the first wave of animated music videos, are: TAKE ON ME (1984) by A-Ha, MONEY FOR NOTHING (1985) by Dire Straits, and SLEDGEHAMMER (1986) by Peter Gabriel. Each of these has been listed in the *Rolling Stone* 100 Top Music Videos along with nine others which are either animated, contain animated segments or simulate the properties of animation.[1]

Two of the three selections for analysis, TAKE ON ME and SLEDGEHAMMER, have characteristic elements of what Andrew Goodwin labels the first phase of MTV, 1981-83, the New Pop. Although not belonging chronologically to this period, these videos fit his description of music whose emphasis on style made them ideal for visual promotion via the video medium (Goodwin 1993, 49). Bands such as Ultravox, Spandau Ballet and Duran Duran put their stress on visual style to good use in their videos VIENNA, TO CUT A LONG STORY SHORT and HUNGRY LIKE THE WOLF respectively. These British videos and many like them were easily absorbed by the emerging American music video cable station MTV, whose transmission starting date of August, 1981 Goodwin uses to commence his categorisation of music video. Whilst it can be said that MONEY FOR NOTHING also has elements of the New Pop it seems to fit more comfortably into Goodwin's second phase of MTV. This is the period which followed the first flowering of music video and featured a move toward performance videos in which Goodwin noted exhibitions of musicianship highlighted in close-up shots (Goodwin, 1993b, 52).

At a time when Duran Duran's guitarist was claiming that his choice of trousers was more important than his choice of guitar it was important to some other performers to demonstrate that they really could play. The strong emphasis given to Dire Straits' musical performance in MONEY FOR NOTHING vindicates Goodwin's categorisation despite the dazzling animated sequences.

Although not entirely animated, each of the three videos chosen for analysis makes extensive use of animation set to music, not classical music or jazz as in the past, but pop music. Each video employs a different method of animation: rotoscoping in TAKE ON ME, computer graphics and computer animation in MONEY FOR NOTHING and stop motion, pixillation, clay, model and drawn animation in SLEDGEHAMMER. Each of the

videos succeeded in promoting the music of the artists concerned in terms of the sales of their records and tapes. This is the prime purpose of music video production, the promotion of the artist's musical products. But the medium also has the potential to be an avenue of artistic expression. In the case of A-Ha the video introduced the artists, and in the instances of both Dire Straits and Peter Gabriel it launched new singles.

Music video is made up of images and music, the images being a visualisation of the pre-existing music track. Whether the images are recorded on film or video they and the music are ultimately transferred to the video format for screening on television or on video monitors or projection screens in entertainment environments. Music video is unusual in film and video production in that the music is privileged. It already exists before work is commenced on the making of the images to which the music track will be married. In animation production, too, the production of the soundtrack commonly precedes the production of the images. The soundtrack is completed first in animation production so that the animators have a guide to the length of each sequence, and, in the case of dialogue or singing, to the timing and the mouth shapes which are required to be matched visually. These images in music video are slaves to the soundtrack as they are conceived, measured and edited to suit the theme and mood of the music, to fit precise portions of the soundtrack and to synchronise with its rhythms.

There follows a detailed analysis of each of the three animated music videos chosen for this study, plus a brief examination of the other nine which were included in the *Rolling Stone* list.

SLEDGEHAMMER, Peter Gabriel, 1986, directed by Stephen Johnson.

SLEDGEHAMMER's function is to promote sales of Peter Gabriel products and events such as records, tapes, CD's, the video itself as a collectible item, concert tours and appearances, and Peter Gabriel as a commodity. It is also an avenue of expression for Gabriel's creative persona. This function creates an interesting duality: the simultaneous selling of a consumer product which is itself a form of artistic expression. In analysing this and the other videos, individual aspects of the proposed model will be dealt with first. When dealing with the inter-relationship between the various aspects active at one point in the music a graphic diagram of the model will be used to demonstrate more clearly the layered structure involved.

Lyrics (and Icons)

Beginning with the lyrics of SLEDGEHAMMER it is possible to detect a romantic and sexual theme. (A complete copy of the lyrics and a detailed description of the images in the video can be found in Appendix A.) This is consistent with Simon Frith's findings that themes of love and romance are the mainstay of pop (Frith 1988, 109), and with J.G. Peatman's three categories of pop songs: "happy in love", "frustrated in love" and " novelty song with sex interest". In his research of Blues music Paul Oliver finds:

As in virtually every other genre of folk or popular song, personal relationships predominate in the blues: love, desire, longing, unfaithfulness, separation, desertion, regrets, reconciliation. [2]

Using Peatman's system the song "Sledgehammer" has elements of two of his categories, "frustrated in love" and "novelty song with sex interest", although the latter is really only relevant in a latent respect. The male singer makes repeated offers of availability and amusement and requests for mutual activity from the implied female he is addressing. He reinforces these offers and requests with promises and assurances. He is frustrated in his present situation of separation and wants to restore the love relationship. An examination of the actions described in the lyrics by a selection of suggested verbs shows that the list includes the following words which may be interpreted as having a sexual meaning: *lay down, open up, shed, show, feel, going up and down, doing, bumping, build,* and *coming.* Furthermore, the following lyrics from SLEDGEHAMMER are reminiscent of the use of sexual metaphors found in blues songs and especially similar to the Slim Harpo blues song "I'm A King Bee" :

show me round your fruitcage
'cos I will be your honey bee
open up your fruitcage
where the fruit is as sweet as can be (from "Sledgehammer") [3]
I'm a king bee, baby, buzzing round your hive,
together we can make honey, let me come inside (from "I'm A King Bee") [4]

Both can clearly be read as sexual metaphor. Yet despite the sexual nature of the lyrics Gabriel's performance of them is not direct and more of a playful reinforcement of the sexual/romantic theme. On stage, in his live concert, he was a lot less subtle and resorted to the occasional grabbing of his crotch and making libidinal thrusts during his performance of "Sledgehammer" and another related number "Steam". But this was all in playful parody of rock performers who resort to these actions on stage and in their videos as part of their performance. "Steam" has a similar type of sound and lyric to "Sledgehammer". Both are based around Soul music. In the concert he also introduced "Steam" with the words:

...something hot and wet...Steam! [5]

Looking at the juxtaposition of the video's imagery and the lyrics, however, the sexual overtones are less overt and the reference to fruit more literal (Figure 11):

SOUND	*open up your fruitcage*
IMAGE	The fruit masking his face then turns into a literal face. Apples, grapes, oranges, avocados and asparagus compose the singing face.
SOUND	*where the fruit is sweet as can be*
IMAGE	The fruit whirls around, shrinking and disappearing into Gabriel's face. He swallows a cherry.

Figure 11. Image and soundtrack in SLEDGEHAMMER.

The visual arrangement of the fruit into the shape of a face in this sequence recalls the portrait work of Arcimboldo. Nevertheless, Gabriel is not really singing about fruit. Goodwin comments on the semiological aspects of this video:

Some music videos work with lyrical metaphors...the Peter Gabriel song 'Sledgehammer' has lyrics that play with a series of sexual metaphors, and so in the video clip SLEDGEHAMMER we see a variety of images of reproduction, beginning with the fertilisation of an egg and moving through to a concluding image of the night sky, whose multiple twinkling stars suggest nothing less than a literally universal image of creation (Goodwin, 1993, 67).

Whereas these images point to biological aspects of reproduction, the "fruitcage" sequence refers to the sexual aspects of this process. Gabriel himself has commented on his intention in the writing of the song:

This is an attempt to recreate some of the spirit and style of the music that most excited me as a teenager- sixties soul. The lyrics of many of these songs were full of playful, sexual innuendo and this is my contribution to that songwriting tradition. Part of what I was trying to say was that sometimes sex can break through barriers when other forms of communication are not working too well. There is a phrase by Nietzsche about what con-

stitutes a good book, which he said should be 'Like an axe in a frozen sea'. That trig-gered me off to think of tools, not to put too fine a point on the word. Obviously there was a lot of sexual metaphor there. I was trying to write in the old blues' tradition, much of which is preoccupied with mating activities. The idea was the sledgehammer would bring about a mini-harvest festival (Bright, 1988, 209).

Making sexual references through suggestive wordplay is part of that old blues tradition and has been identified by Charlie Gillett in his research into the origins of rock and roll music (Gillett, 1982, 126). He also refers to the "open sexual content" in the songs of the blues shouters (Gillet, 1982, 127). Paul Oliver found, too, a proliferation of sexual metaphor in the Blues (Oliver, 1990, 97). He quotes as an example Yas Yas Girl's "Easy Towing Mama":

Well, let me be your tugboat, I will tow you 'cross the pond (twice)
Well, I'll take you slow and easy, ooh, well, well, it really won't take me long 6

The director of the SLEDGEHAMMER video, Stephen Johnson, reinforces the sexual interpretation:

The first idea that I had for the video before I involved The Brothers Quay was the fruit theme, which set the style for the rest of it. I took it as a purely sexual metaphor (Bright, 1988, 210).

As well as reinforcing and pastiching the sexual metaphor in the song and the video it is interesting to note Gabriel's stated reference to Blues and Soul music. Another link in this respect was the use of Wayne Jackson in the horn section. Jackson had originally played trumpet for Otis Redding. Furthermore, the trio of black female back up singers in the video makes a further connection with soul music. Goodwin points to this as an example of "authenticity":

Music television clips often use black musicians and audiences to "authenticate" white rock music and/or help it sell in the dance floor markets (Goodwin, 1993a, 116).

On the other hand, one unauthentic aspect of the music in the video production is that the lyrics aren't actually sung but mimed to a prerecorded vocal track. Gabriel moves his cheeks and eyes to the beat of the music and his face jerks as he sings. The synchro-nisation of his lips with the sound of the words he sings is fairly accurate despite the fact that he has been filmed by the stop-motion animation method in which a single frame is recorded, then a slight adjustment made, in this case a change in his mouth shape, then another single frame is recorded, a further change is made in his mouth shape, followed by a further single frame and so on. Using this method it may take eight to ten hours of filming to cover the lyrics which only take four or five minutes to sing in real time.

Animators have been able to reduce the range of mouth shapes required to pronounce all of the vowels and syllables in the English language to seven positions, as shown in Figure 12. Further work is required to determine the timing, that is the number of frames required to match the duration of each vowel and syllable. When Gabriel sings the line *You could have a steam train,* for example, the animators have matched his mouth shapes, consonant by consonant, and the length of time each is held, to the words being sung on the soundtrack.
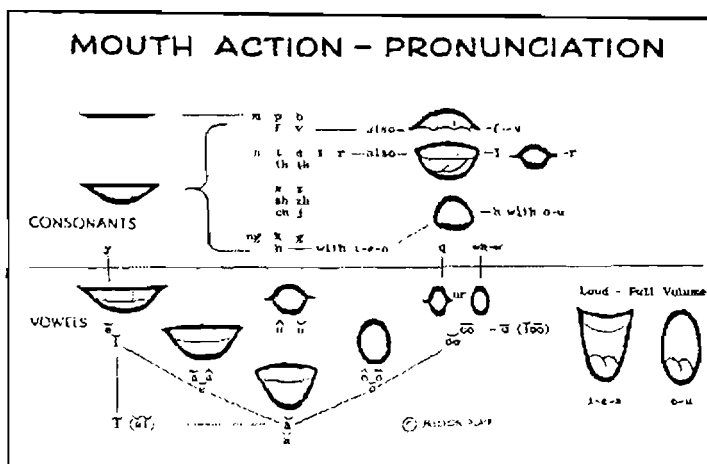
Figure 12. Mouth shapes used by animators to match vocals.

Still drawing on associations with Blues music, Paul Oliver has documented some of the symbolism used by black slaves in the southern States of America last century. Two of the icons used in SLEDGEHAMMER had special meaning to them. Forced to work on the railroads in shackles, the steam train represented freedom, power and escape both from slavery and from the South. Sledgehammers was used to drive in the railway spikes and only really strong men could wield them, so this task usually fell to the young black male slaves. Mississippi John Hurt wrote a song about it called "Spike Driver Blues". The slaves working in the cotton fields similarly thought of the steam train as a means of escape to the industrial cities of the north such as Chicago and sometimes responded to the train's whistle by singing Blues songs. He quotes from a song called "Freight Train Blues" by Trixie Smith:

When a woman gets the blues, she goes to her room and hides (twice)

When a man gets the blues, he catches a freight train and rides (Oliver, 1990, 58).

The lyrics of SLEDGEHAMMER make extensive use of the words I (*I, I'll, I'm, I've, me, my*) and you (*you, you'd, your, you've*). This fits Will Straw's claim that pop songs invariably feature first person narration (Straw, 1993, 11). Gabriel is singing about feelings and desires. There are two participants in SLEDGEHAMMER, the singer, Peter Gabriel, who uses the first person reference twenty six times, and the unseen person to whom he is singing, who is also referred to on twenty six occasions. The interpersonal form *(we, we're)* is referred to twice.

The lyrics express the sexual/ romantic theme through metaphor. *I*, the male, wants *you*, the female, to form a sexual relationship. This male/female duality is played out in the lyrics through the use of male and female objects. The male *steam train* requests the female to *lay down your tracks.* Other male objects referred to in the lyrics of SLEDGE-HAMMER are *bumper car, sledgehammer* and the *honey bee* in search of the female *fruitcage.* Another reference to the sexual theme is found in the lyrics *show for me. I will show for you* which have a 'show me yours and I will show you mine' connotation. There is a strong line of requests and offers with the singer offering endless amusement and the promise to be *anything you need* if only the female will call him, and there is also an assurance that *this will be my testimony, let there be no doubt about it.*

The male *aeroplane* asks the female to *bring your blue sky back.* This request fits the notion of 'getting back together' which Kaplan lists as a basic ingredient of her Romantic category of music video (Kaplan, 1987, 59). However, she places SLEDGE-HAMMER in the Socially Conscious style of videos due largely to its art and avant-garde leanings. She refers to this type as:
... *"socially conscious" or "modernist" (deriving vaguely from rock groups in the 1960s and 1970s that took oppositional stances...* (Kaplan, 1987, 56).

Kaplan argues that this type of video:
...is the closest we have to one modernist tradition in western culture that deliberately positioned itself against the dominant bourgeois society (Kaplan, 1987, 65).

Whereas SLEDGEHAMMER lacks such an oppositional stance as described by Kaplan it adopts some of the visual strategies of modernist artists such as Magritte and Jackson Pollock in its creative enlistment of their visual imagery. The work of these artists and experimental film makers like Méliès and Svankmajer are 'quoted' visually in the animation design of the video. These include the face constructed from fruit which is reminiscent of Arcimboldo's portraits and Jan Svankmajer's animation, itself suggestive of Arcimboldo's paintings, and the blue sky painting which has the appearance of surrealist painting in general and of work by Rene Magritte in particular. The reference to the Jackson Pollock style painting used in the background is another of the many references to art history. Kaplan allows a sub-category of the socially conscious video for these because of her high regard for them:
...the best socially conscious videos of a general kind on the American scene are the rare ones that fit into what we might call the "art" or "avant-garde" video (Kaplan, 1987, 72).

Referring to SLEDGEHAMMER, specifically, she says:

Peter Gabriel's disturbing SLEDGEHAMMER is yet another example of the creative use of the video form. Here Gabriel's face is filmed in stop-motion technique to produce a disorienting, jerky series of images, and the instability of objects becomes the norm; one thing is transmuted into another, often grotesque, form, until at the end even the human body turns into a series of shapes that dissolve into the cosmos, there now being merely an infinite, boundless, and inhuman universe. [7]

SLEDGEHAMMER definitely fits the "art" and "avant-garde" descriptors which Kaplan uses as a type within her Socially Conscious category. Musicians such as Talking Heads and Laurie Anderson have followed this route of making extremely avant-garde videos such as ROAD TO NOWHERE and O SUPERMAN, respectively.

A second theme of renewal or transformation is suggested by the lyrics *I kicked the habit, shed my skin, this is the new stuff, I go dancing in.* These lyrics point to a previous drug addiction and although this is not borne out in the visuals there is a suggestion of rehabilitation from a physical injury. This is developed by the connection of the opening image, or pre-image, of what looks like an X-ray slide of skull with a cerebral haemorrhage (hit with a sledgehammer?) and the later scene in which Gabriel wears his shirts back-to-front (like a hospital smock?) and is surrounded by a group of uniformed women (nurses?). Then there is a third theme which is ambiguous, denoted by the lyrics *going to build that power* and possibly referring to love, or changed life?

At times the images appear to illustrate the lyrics in a literally descriptive way. The opening line *you could have a steam train* is accompanied by an image of a steam train, albeit a toy one, winding its way along a track which has been built around Gabriel's head. Later, the line *you could have a bumper car, bumping* is also accompanied by two toy bumper cars, one either side of Gabriel's head. Although the image seems to be a literal description of the lyric it also acts as a visual metaphor in each case, and there is a playful sense in which the metaphor is conveyed in the use of toy objects, the toy train and the toy bumper cars, and in the cheerful manner and playful facial expressions of Gabriel's performance. Whilst retaining this playful delivery, the images produced to accompany the lyric *open up your fruitcage where the fruit is as sweet as can be* don't act as visual metaphors for the sexual allusions made in the lyric but the lyric retains its metaphorical sense.

Music

Often in the analysis of music video the music itself is ignored and only the lyrics examined, despite the fact that the lyrics are sung and the music may have passages without

lyrics such as the opening and closing sections of a song and instrumental passages within a song's structure. Images are added to this instrumental part of the soundtrack with the music forming the basis for the selection and timing of those images. Goodwin acknowledges that it is sometimes impossible to describe music in words but he argues that it is possible to help comprehend music and the effects of music by using words (Goodwin, 1993, 13). The analytical system proposed in this dissertation addresses this criticism, albeit in some small way, by using the soundtrack as the departure point for the examination of a video.

The music of SLEDGEHAMMER opens with soft, evocative flute music, possibly shakuhachi, the Japanese bamboo flute, suggesting an influence of World Music. There is a delicacy about the mood which is communicated and this is in sympathy with the accompanying visuals of the fragile dance of the spermatozoa. Like the literal images of the creation of life in the beginning of the video, and the many examples throughout of inanimate objects also being brought to life, this sense of animism is repeated with the music. The breath is blown into the inanimate tube of bamboo, the flute, and it produces sound. It comes alive by means of the sound of music. Just as the separate single visual images are animated into life through a duration of time, and these individual images are still, unmoving and lifeless in themselves, the musical instruments, also still and silent, come to life through the laws of physics and the principles of animism. The flute music ends with a loud interruption from the brass and percussion instruments which start to play the basic rhythm of the music which is then heard throughout the song till the end. One wind instrument is replaced by several other wind instruments. The music of creation, the flute, is replaced with the music of the created, the musician Peter Gabriel. There is a definite soul music sound to the arrangement of the brass section linking the music with Soul music just as the lyrics have been playfully linked with Blues music. Rhythmically there is a steady, regular beat throughout with a leisurely paced tempo. Harmonically speaking, the brass instruments play together to form a rich , at times surging, harmony and use is made of a vocal chorus to echo the singer and to create vocal harmony in the second half of the song. The flute rejoins in the middle section and plays in harmony with the brass instruments creating a passage of solo wind instrument accompanied by a group of wind instruments, further echoing the animistic meaning which is rife in this video.

The musical structure of the song consists of the soft solo wind instrumental introduction followed by the rhythmic brass and percussion section's initial burst. Then follows the usual verse/ chorus structure. The first verse followed by the second verse, a chorus, the third verse, a second chorus, the instrumental section which forms a bridge between the vocal sections of the song, a fourth and fifth verse, and finally, a second instrumen-

tal section. There is no firm resolution or conclusion, just a slow fading out of the sound-track. There is a gradual increase in the level of accompaniment as the song progresses. After the initial burst of brass, there is no wind accompaniment during the first verse, only guitars, keyboards and drums. In each successive verse the accompaniment is added to and given more weight, culminating in the return of the brass section. The melody is fairly repetitive with few variations, and is accompanied at times by blues and soul music style high pitched vocal cries and wails.

Performance

It was apparent from his live concert performance that Peter Gabriel sings with a simi-lar technique to an opera singer. His voice seems to rise effortlessly from out of his diaphragm and be projected by his body unlike the typical technique in pop music where the singer sings from the throat and uses a microphone to amplify and project the voice. Despite this vocal agility his voice was full of emotion and feeling. It is as if Tony Mitchell's description of World Music performer Mory Kante's singing style were appropriate for Peter Gabriel:

His singing conveys an effortless passion, which most rock performers have to strain for (Mitchell, 1989, 292).

The ease by which Gabriel's voice seemed to project from his body is simulated in the video where he does not appear to undergo much facial and muscular stress in deliver-ing his vocal performance. One other possible reason for this seemingly effortless deliv-ery is that Gabriel's performance in the video is a performance of mime and not of music. He is clearly only mouthing the lyrics and not singing them. However, what Roland Barthes refers to as the "grain" in the voice and the pleasure of hearing the song sung is relevant here (Barthes, 1977, 181). Barthes compared the singing techniques of two opera singers, the Italian, Panzera and the German, Fischer-Dieskau, and found that whereas the latter was technically correct with his diction and breathing, he lacked the 'seduction' inherent in the Italian's voice. Whereas Fischer-Dieskau's voice demonstrat-ed a faultless technique it lacked the passion of Panzera's.

Gabriel has acknowledged the influence of Soul music on SLEDGEHAMMER and what Charlie Gillet found in his research into the Soul style has relevance to aspects of Gabriel's vocal performance:

The quality all the singers shared, one they borrowed from church singers, was that their voices gave the impression of being controlled, or strongly affected, by their emotions. At times, the singers seemed to miss the note they were reaching for in their passion, not quite achieving it, or sliding past it into a shriek. The listener was deeply moved by the implications of the failure (Gillet, 1983, 225).

Musically speaking, Peter Gabriel's vocal performance has been foregrounded in the music mix and we hear it with enough clarity to be able to appreciate its range from a rasping but steady rhythmical singing sound to a series of high pitched pleading words and the initial awakening cry. Apart from the voices and the instruments there are no other sounds or sound effects, neither is there any speech or dialogue. The vocals are all sung. The wail, the first vocal sound which Peter Gabriel makes in the video denotes the commencement of the vocal part of the music and connotes the birth cry or scream of the Blues' holler.

This music and this video launched the rebirth of Peter Gabriel's pop career. The rhythm of the music can also be associated with the rhythm of life. This is particularly reinforced by Gabriel's visual performance toward the latter part of the video where he appears to march or dance in time with the music in a celebratory mood. He appears happy to have been brought to life by the music and he is so happy to be alive that he sings and dances about it. This type of response is common in Hollywood musicals where whatever mood the performer experiences is commonly expressed through song and dance.

There is a further aspect of the performance which makes reference to Hollywood musicals in the scene when he is surrounded by dancing furniture. Gabriel becomes a bricoleur, that is, an improviser, grabbing and using the props around him, in the typical Hollywood musical fashion of a Fred Astaire or a Gene Kelly, who would dance with a hat stand as a substitute female dancing partner. This type of bricolage involves the adaption of the surrounding props for other purposes and to represent other things. Gabriel stares directly at the camera and provides the direct address manner of delivery also common to the Hollywood musical, television news broadcasts but to few other genres of film and video. In direct address the viewer represents the person being addressed. It's as if the performance is personally directed to the individual viewer. In that sense the use of the words *you* and we can refer to the viewer and to both viewer and Gabriel respectively. The viewer is not actually represented in the frame but is present through an act of substitution. The action of Gabriel singing directly to the viewer, and engaging the viewer's gaze, leads to the notion of the viewer being addressed. The intended commercial outcome of this engagement is the purchase of Gabriel's product by the viewer.

Design/ Animation

The most striking aspect to the design of the video is the animation. Although there is an almost continual parade of props across the screen it is the animation of Gabriel and those props which make the dominant visual statement. The frequent use of 'nursery land' toys or 'cute models,' such as the bumper cars with anthropomorphic faces like *Thomas The Tank Engine* in the video suggests the notion of childlike play and helps to

reinforce the generally playful style of Gabriel's performance. The animation style of the blackboard background of the rollercoaster sequence brings to mind the work of the early animators known as the 'Lightning Sketchers' and also suggests more connotations of play and fun. These artists were vaudeville performers and stood on stage in music halls and made rapid drawings on blackboards, keeping the audience guessing the identity of what they were drawing till its completion and impressing them with their speed and skill. Later, their work was filmed in animation form. The history and practice of animation are referred to, and there are further references to art history and even to pop music history. The train is reminiscent of the design of the train in the Georges Méliès' trick film *Voyage To The Impossible* and is but one of the many toys used in the video to suggest a sense of play. The sleepers used to support the railway tracks have also been used as incremental markers in the spacing of movements for the animation. The design of the bumper cars is reminiscent of the Fleischer brothers animation style with its emphasis on 'cuteness' and moving machines. The magical performance with the cabbage makes a further association between Gabriel, Georges Méliès and the trick films of the Pathe studio in the first five years of this century. The substitution technique was originally used in the trick film of George Méliès, *The Vanishing Woman*, and suggests magical transformations. These trick films, especially those of Méliès, made extensive use of the stop-motion technique but did not develop it into full animation. Instead, selected sequences, rather than each frame, were separated by the stop-motion effect.

Figure 13. Claymation sequence from SLEDGEHAMMER.

Transformation or metamorphosis (or in current computer terminology, morphing) is common to animation. It is one of the central themes and techniques of SLEDGEHAM-MER. Not only are there literal transformations but also symbolic ones. The potentially destructive tool, the sledgehammer, is transformed into a force for creativity, and with it, its violent nature and its maleness are rendered into a softer, more playful quality (Figure 13). The sledgehammer is like a fist and in the live concert Gabriel held his arm like an imaginary sledgehammer and repeatedly struck himself on the side of his head with his fist and then reacted by shaking his head violently as if he really had just been struck by

a sledgehammer. In the video his head jerks and vibrates as if he has been similarly struck by the sledgehammer. The choice of the pixillation animation technique for the video and the resulting jerky head and body movements is most appropriate as it contributes to this effect. The violence is subjugated and transformed into a playful use of sexual metaphor. Referring to the metamorphic/ transformational qualities of the animation in SLEDGEHAMMER Kaplan says:

In this extraordinarily creative video, no objects remain what they seem for long: the video is constructed around the idea of transformation (Kaplan, 1973, 73).

The choice of a sledgehammer also suggests the notion of opposition in that there is creation of life from a symbol of destruction. The use of the sledgehammer to strike the stage is another example of the employment of the destructive function of the sledgehammer to create, and it creates an egg, another reference back to the oft quoted conception theme. This visual joke also suggest the theatrical notion of 'laying an egg' or giving a poor performance and this underlines the playful approach in evidence in the video. The movement of the miniature aeroplanes whilst fixed to the spot represents a further opposition as they are moving and yet remain in the same spot. And when the dead chickens come alive by jumping up and dancing another opposition is suggested. It is as if the dead flesh is filled with life. This act of inanimate or dead material coming to life provides one of the many examples of animism in the video.

In addition to the references to art and animation history, there are also references to theatre and performance with the many entrances and exits which take place in the video, plus the notion of staging and putting on a show for the audience. This is most blatant when the dead chickens do their dance routine on the makeshift stage with egg cartons cut and arranged to appear like stage footlights. The grid marked floor on which Peter Gabriel dances makes visual reference to the grid which is often used by animators to calibrate successive stages of movement, like the spacing of the sleepers of the model railroad earlier in the video. The robot is another reference to animation production techniques in the practice of making articulated models or using articulated mannequins as a guide for the drawing or copying of the movement of the human form.

In the video there are a few references made to pop music industry practice and history. The use of the three girl backing vocal chorus suggests that practice in 1960's pop music of the singer having vocal and visual back up. It also refers to female vocal groups such as The Supremes, the Shangri Las or The Ronettes. In another shot Gabriel's hair becomes slicked down with gel in the 1950's Elvis Presley 'quiff' style. Swarms of people whirl around him at one stage and he is sheltered from them by a group of women. This supposedly represents the pop music industry phenomenon of the fans trying to

reach their idol and being prevented from doing so by the minders. He also undergoes several costume changes in one sequence and this may refer to the common change of image that some entertainers make at various stages of their careers.

The style of the lighting in the video is generally bright, white light which reinforces the toy-like design of most of the props and settings. But in the theatrical sequence of the dancing chickens the simulated source of lighting is provided, quite appropriately, by footlights. In the mirror image or reflected sequence of the frozen head we see, at first, not the direct lighting but the reflection of it; and in the final section of the video the light source is provided by hundreds of tiny stars. As well as being able to see the images clearly due to the bright lighting and use of sharp focus, Gabriel mainly appears in either close-up or mid-shot in the first half of the video, and is always centre screen. In the second half, whilst appearing mostly in full length long-shot, he remains in the centre stage position with the action revolving around him. There is no sign of the other musicians or of any of the instruments, or of any audience. This lighting and this framing contributes to the starmaking strategy in the design and photography of the video. It is all constructed around Gabriel. This is consistent with Rabinovitz's findings that in animated music videos the performer is positioned centre frame, in the middle of things (Rabinovitz, 1989, 107).

Gabriel hasobviously had attention from a stylist, a hairdresser, a make-up artist, and a fashion designer. When his hair is messed up in the roller coaster scene it appears neat in the scene following. This suggests, that, throughout the production of the video, Gabriel received constant attention from the design team to ensure he looked consistently good in every scene. This approach echoes the treatment artists receive in the pop music and celebrity press when being photographed for inclusion in the glossy fan magazines. There, too, the photographer is usually accompanied by a small group consisting of make-up artist, hairdresser and stylist. The magazine editor wants the artist to look photogenic and stylish in the magazine just as the record company executive wants the performer to look good in the video. As both the print and the video media come to terms with digital technology more of this design procedure will take place after the event in post production where skin blemishes can be removed and hair straightened with an electronic stylus, a paint program and a digitising pad. Gabriel's face was changed for a magazine cover appearance by removing a pimple above his right eye and changing the contour of his right eyebrow. [8] Interestingly, Gabriel has made the decision to stop dyeing his hair and project his natural image. This was certainly the case in his live concert where his naturally greying hair did not match the shiny black hair he wears in the SLEDGEHAMMER video, he had a clearly visible bald patch and was a little overweight.

Videos of this complexity demand repetitive viewing and it is this repetition which Goodwin says is a part of the pop music process in which both music and videos have been designed for repetitive consumption. Goodwin describes the "...visually decentred nature of watching music television" as being a result of:

...the sheer speed of the images. In some of the most extreme examples (Peter Gabriel's SLEDGEHAMMER)...*the images move so fast that they are incomprehensible on first viewing* (Goodwin, 1993, 61).

And the director of the SLEDGEHAMMER video, Stephen Johnson, is quoted as working with this in mind:

My opinion was that videos should not be like little features- they should be a different medium entirely...they have to bear up under repeated viewings and still have something to offer. 9

Complex animation sequences, such as there are in SLEDGEHAMMER, are most suitable to this aim. On first viewing, for example, the use of egg cartons for footlights in the dancing chicken sequence of the video may not be noted. When this is discovered, however, on second or third viewing, the viewer is pleasantly rewarded. This is but one example from the rich, densely packed video that SLEDGEHAMMER is.

SOUNDTRACK	silence, then flute music	the flute music continues
IMAGE DESIGN	freeze frame shot of spermatozoa	the sperms start wriggling and moving forward
IMAGE STYLE	no movement, no life, inanimate	literal signs of life denoting animation,

Figure 14. Use of music as an animating force in SLEDGEHAMMER.

Animism

In addition to the numerous techniques of animation employed in the video, this fundamental nature of animation is a dominant theme with numerous examples of dead or static states being made to come alive and moving and the inanimate being made animate. The unfreezing of the freeze frame by the music at the beginning of the video suggests that the music brings the images to life (Figure 14). The juxtaposition within the same frame of the opposing states of life and lifelessness or movement and stillness signifies the fundamental state of animation, of being animate. The initial opening of the eye suggests an awakening or perhaps even a coming to life, especially in light of the preceding biological sequence. There is also a reference here to the process of animation production, of creating life or at least, movement, and of movement denoting life. The image of seminal fluid is a metonym for the the larger concept of the creation of life. The fish rep-

resent a return or repeat of the action of the spermatozoa. The whirling fruit represents inanimate objects coming to life. The series of inanimate objects (a hair brush, a pair of pliers, a corkscrew and a gouging tool) becoming animate, is another suggestion of the idea of animation and a further reference to play. In the sequence where the sledgehammer strikes the clay model of Gabriel's face, the sledgehammer, symbol of destruction, creates life (Figure 13). The spermatozoa patterned wallpaper represents another variation on the procreative motive. When the furniture suddenly begins to move it is as if the dead wood has come to life. At the end of the video when Gabriel exits the room and enters the starry galaxy he suggests that he, the starman, is leaving this world for another, and being reborn again, and perhaps also that it is the completion of one cycle and the beginning of a new one. His action of falling to sleep suggests death, and his transformation into the starman and the action of entering a new universe suggests that he has been reborn into a new life.

Visual Performance

Throughout the many fragmented close-up shots of Gabriel's face employed in the video there is a concentration on his mouth and the singing of the song:
-when he holds up the megaphone it obscures all of his face except his mouth
-even when his face and head are frozen his mouth continues to sing
-when his face is made from fruit his lips continue to sing
-when his face is concealed by the sections of wood one section still opens to reveal his singing mouth
-in the sequence when his face is constructed from clay his face and head fly away leaving his singing mouth suspended in mid frame
-in the waterfall his face is represented by a singing mouth and eyes. All of these instances emphasise the fact that Gabriel is first and foremost a singer with a song to perform, and most of the video is devoted to him either performing that song or the visualisation of some of its lyrics. Overall, most of the lyrics are literally illustrated whilst simultaneously acting as visual metaphors. When Gabriel sings about a steam train we see a model steam train but when he mentions a honey bee we are not shown a literal image of a bee. Instead the notion of a honey bee as a metaphor is introduced. The train is also a visual and sexual metaphor but we are shown its literal image as well as having its symbolism implied. Later, although we don't see Gabriel literally shed his skin when he sings about that, he does remove several shirts.

His performance style is happy and jolly. He dances a lot in the second half of the song and strikes various still poses. He also appears to perform like a magician and a juggler. He smiles a lot even when he looks as if he has been struck in the head by a sledgehammer, resulting in some jerky head movements. This jerkiness makes him appear at

times like an animated puppet. This jerky sense of movement is assisted by the stop frame animation technique by which it has been filmed, and reflects what Roland Barthes has written about physical performance in relation to the Japanese Bunraku puppets:

The Western (naturalist) actor is never beautiful; his body seeks to be a physiological essence and not a plastic one: it is a collection of organs, a musculature of passions, each of whose devices (voices, faces, gestures) is subject to a kind of gymnastic exercise; ... (Barthes, 1982, 58).

In SLEDGEHAMMER Gabriel's performance is in opposition to this. He is more like the puppet, more plastic, less passionate and displays no excruciating muscular tensions. It's as if he is inhuman and doll like. In the larger metaphorical sense he is a puppet, being manipulated by himself and the record industry, being forced or forcing himself into making an eyecatching video in order to sell his CD and his concert tickets, just as a puppet is forced to go through certain motions. There is of course an element of choice relevant to this situation, in that the assumption can be reasonably made that Gabriel has chosen to participate in all of this as part of, and for the benefit of, his career in the popular music industry.

Starmaking

SLEDGEHAMMER aims to underline the star status of Peter Gabriel which is one of the chief functions of music video. Goodwin refers to this process as the "construction of celebrity" and claims it has dominance over any narrative which may be present in a clip (Goodwin, 1993, 99). He takes the view that the promotion of stardom is in fact the dominant narrative in videos. Goodwin warns of:

...the fallacy of interpreting video clips as if they were fictional narratives: we should not do this, because fiction, narrative, and identity in music television are generally located at the level of the star- text, not within the discursive world of the fiction acted out by the pop star (Goodwin, 1993, 101).

This would seem to be a reasonable position to adopt given the commercial function of videos.

The places where pop stars construct their star characters, according to Goodwin, are not only in the videos themselves, but also in their live performances, promotional iconography and media interviews. Perhaps this is why pop performers tend to retain their real and consequently recognisable identity in animated videos and not assume cartoon forms or undergo any form of graphic transfiguration. It is essential that the performer be recognisable and in SLEDGEHAMMER Peter Gabriel certainly remains identifiable despite

all the animated antics that he participates in and which go on around him and all of the transformations he undergoes. His image, throughout the many close-ups of his face in the video, can be identified with the photograph of his face on the cover of the CD 'SO' from which the track "Sledgehammer" is taken and for which the video acts as a promotional device. This identifiable image is carried on the concert posters as well. Each supports the image of Gabriel as a star performer and in the case of SLEDGEHAMMER the package worked. The single reached No. 4 in the U.K. and No. 1 in the U.S.A music charts. The video won the British Record Industry prize for Best British Promotional Video and a record nine MTV Awards from a possible sixteen categories. MTV also gave Gabriel a Video Vanguard Hall Of Fame award for his contributions to the art of the music video. *Variety* carried the headline "Gabriel Pulverizes Field," and it really seemed that the sledgehammer device had broken through any barrier that had previously prevented Gabriel from achieving major star status. At the British awards Gabriel also won Best British Male Artist. Seven years later the video was voted top of the list of *Rolling Stone* magazine's Top 100 Music Videos, thus ensuring added longevity in the form of more plays on video shows and further discussion and promotion of previous and current Gabriel product including CDs and concerts, and his recently released CD-ROM, *Xplora 1.*

Money For Nothing, Dire Straits, 1985, directed by Steve Barron.
Consumption

In this video the imagery is nowhere near as dense as in SLEDGEHAMMER and there is much more use of repetition of images, of lyrics and of music. This use of repetition effectively promotes one of the themes communicated in the video, consumption. It opens and closes with the lyrics *I want my MTV*. This line is repeated several times in the form of a falsetto chorus sung by Sting. The pleading nature of the words is reinforced by the pleading quality of Sting's singing. The vocal style also has a trance-like feel to it, as if the singer is compelled to make this demand. In accord with the compulsion of this singing the video opens with an animated sequence in which a workman is drawn to the television in his lounge room. He watches, mouth agape, as the band, Dire Straits, for whom this video was produced, play the opening chords of the song "Money For Nothing". Then he is literally sucked out of his chair into the television, his body dissolving into images of the band as it passes through the screen. This very dramatic opening to the video works to grab the viewer's attention and has a similar strategy to some of MTV's promotional spots which featured eye-catching animations leading to an animated MTV logo. In this case the station identification is provided aurally with Sting's singing and the line he sings, *I want my MTV*, is taken from an actual MTV promotion in which various pop performers appeared on camera demanding *I want my MTV*. This line is delivered like a very basic, primal need, like a baby demanding its mother or its bottle and stresses the inherent sense of dependency implied by those needs. And it provides identification, not just with the band, but also with the music video cable station and its promotional campaign, targeting the viewer as a potential consumer.

A further reinforcement of this consumption theme occurs a few seconds later when the MTV practice of displaying relevant details of the recording occurs. In the bottom left hand corner of the screen the following text is shown: Dire Straits "Money For Nothing" Brothers In Arms. This represents, respectively, the name of the artists, the title of the video, and the title of the album from which the track has been taken, and enables interested viewers to note down these details so that they will know what to ask for should they wish to go out and buy the CD. Playing with the convention this practice is repeated with the two other sequences from videos by different artists which are also included within this video. Their details, obviously invented, are First Floor "Baby, Baby" Turn Left Magyar Records and Ian Pearson Band "Sally" Hot Dogs Rush Records. Will Straw has referred to this identification practice:

A simple but extremely important factor in MTV's impact on sales, one which was part of its strategy from its inception, was the decision to label songs at their beginning and end (Straw, 1993, 11).

Some different levels of participation in consumption are shown in the video. There is the audience at a Dire Straits concert which is represented as a happy group enjoying the band's performance. This contrasts with the passive state of actually sitting at home watching rock on television. In addition, several consumer items in the form of electrical appliances are featured. The animated workmen sing, in their oft repeated chorus, about microwave ovens, refrigerators and custom made kitchens and, as a direct illustration of these lyrics, we are shown them carrying these items. They also refer to colour television sets and when we see these they are displaying shots from the music video we are watching, MONEY FOR NOTHING. Although most of these consumer items are obtainable by the general public the rock stars remain out of reach and unattainable. They can be consumed as imagery on television, as music on radio or from a CD, or they may be witnessed giving a live performance at a concert venue. But you can't actually get your hands on them and take them home. This act can only be fantasised. Ironically though, Dire Straits are presented as being quite real in the video and it is the workman in their caricatured cartoon style, talking in cliches and speaking with prejudice who represent fantasy. The accessible, realistic video image of Dire Straits in MONEY FOR NOTHING, however, gives rise to the second major theme of the video, self reflection.

Music television

Much of the content of this music video directly refers to the nature of music videos and one of the main vehicles for their dissemination, the cable television channel MTV (although in some countries it is delivered as a program only on non-cable stations). The words of one of the workman:

look at them yoyos,

that's the way you do it,

you play the guitar on the MTV,

that aint working...

are intended to satirise the notion that being a musician in a music video constitutes work. The artists are denigrated as *yoyos* compared with real workers who carry real appliances such as refrigerators and not simply guitars. Commenting on another rock performer the workman continues this parody of the music business when he says:

the little faggot with the earring and the makeup,

yeh buddy, that's his own hair...,

further denigrating the notion and the image of pop performers and implying that they look ridiculous and effeminate when compared with normal people. The sarcasm rises when the workman states that the pop stars are actually paid for behaving like this:

that little faggot got his own jet airplane,

that little faggot he's a millionaire...

Not only do they make money, there is little effort and suffering involved:

let me tell you , them guys aint dumb,

maybe get a blister on your little finger,

maybe get a blister on your thumb...

and they also receive the attention of women:

money for nothing and your chicks for free.

In representing the views of the workman in this way the lyrics paint a mocking picture of rock performers, videos and MTV, and being enclosed in the text of a music video on MTV, there is a clear establishment of a self-reflective theme. Kaplan agrees with this conclusion:

Dire Straits' MONEY FOR NOTHING comments baldly on MTV itself, and on the alternate blandness and sensationalism of videos shown... (Kaplan, 1987, 35/36).

The latter comment refers to the two extracts from the two other videos shown within this video, BABY, BABY and SALLY, one a rather nondescript work showing a singer on location, the other featuring provocative close-up shots of a woman in underwear. These mocking comments from the workman also work in reverse and expose him for the caricatured stereotype that he is.

Kaplan has commented on the self-reflexive aspect of music videos which involves the further display of the video being screened within its own imagery (Kaplan, 1987, 34). The music video being screened on music television may appear on another monitor within the frame. Furthermore, the content of the video may include reference to and/or parody of music videos, the process of their production, and music television. This is definitely the case in MONEY FOR NOTHING as we are presented with a dual narrative of the workmen working and watching a television which is inserted into the frame as a giant screen image. This image features Dire Straits performing a sequence of their video MONEY FOR NOTHING. So the viewer ends up watching a clip of the video within the same video.

Another self reflexive reference is made in the scene where one workman places the other workman's frozen head into a microwave oven. As he programs the cooking cycle by setting the power level, the control panels display the following choices: LOW ROTATION, MEDIUM ROTATION and HEAVY ROTATION. These refer to MTV's play rate schedule, LOW means one play per day, MEDIUM means two plays and HEAVY means that the video gets screened three times every twenty four hours. The workman presses the HEAVY panel, perhaps suggesting that the MONEY FOR NOTHING video has hit potential and so should be played at the most frequent rate. After making his selection and activating the oven the head is replaced by a shot of Dire Straits per-

forming in the video. This shot is electronically inserted into the microwave oven, as if it were a television set, reinforcing the consumption theme (both television sets and microwave ovens are consumer appliances, and furthermore, they physically resemble each other to the extent that watching brightly lit food rotating behind a glass screen in a microwave is somewhat analogous to watching a television screen). It also blurs the respective functions of the two appliances into visual metaphor (the band is hot and the band is cooking i.e. the band plays well and is a popular item, the video is like a frozen TV dinner and the microwave oven looks like a television set). Just as you heat a dinner plate in the microwave for about 4-5 minutes, which is the length of a music video, to make a quick and tasty snack, you can also get a quick hit from consuming Dire Straits by buying their CD, even though the satisfaction may be short lived, similar to the temporary satisfaction of a frozen dinner. This theme that the contents of a microwave oven are analogous to the contents of a television is thus suggested. This view could be applied to BABY, BABY and SALLY, the other two videos referred to in this clip. Like a different recipe or a different frozen dinner the SALLY video could be played, on MEDIUM ROTATION perhaps, for what it lacks musically it makes up for in appeal to the male audience with its shots of a woman in underwear. On the other hand, the softer, more fashionable look of the singer in BABY, BABY may appeal to young female viewers, but only on LOW ROTATION.

Work

The third theme dealt with in the video is that of work. Dire Straits are seen performing at a concert which constitutes part of their work. Appearing in videos is another part of their job. The two animated characters, the workmen, are also seen at work, moving and delivering consumer appliances. They comment on the nature of the band's work implying that making videos for a living is not a real job, such as the one they have to do themselves. It is in fact to be envied because it is so easy and has those fringe benefits. Their work is juxtaposed with the band's. As they struggle along carrying a refrigerator the door of the appliance falls open making their job even more difficult. Meanwhile, in the background, within the same frame, the band are seen performing at a concert. They are hard at work, too, playing the right chords with conviction and trying to create musical and visual excitement. Another contrasting aspect of the portrayal of work in the video is in the level of ease of execution of that work. The workmen move more slowly than the musicians, burdened by the heavy refrigerator which they have to lift. When the door of the refrigerator falls open as they carry it, the awkwardness of this adds to their task. By comparison the members of the band appear to play effortlessly and dexterously. They also appear to enjoy themselves immensely and so take pleasure in their work whereas the workmen look unhappy and complain about their situation. This pleasure has an infectious effect. Because the band seem so happy with their performance it is an

enjoyable experience to watch them play. It is also enjoyable, however, to see the workmen complaining about the displeasure of their work. This is due to their portrayal as amusing, cartoon characters. In this fantasy form they are less credible, not as believable as the realistically portrayed musicians, and so they are viewed less sympathetically.

Fantasy and Reality

The design of the images is interesting in this respect. The band appear as themselves in a live-action photographically real style with just a few added touches of animated colour. Mark Knopfler's headband has been hand coloured for example, in a playful, graphic style similar to that pioneered and developed by Lynn-Maree Milburn and Richard Lowenstein to treat images of Hunters And Collectors in TALKING TO A STRANGER and INXS in WHAT YOU NEED. This is an attempt to make them appear more glamourous than they actually are. The workmen, on the other hand, who really do have the unglamorous jobs, are constructed as highly stylised computer generated, intensely coloured, and appealing animated characters. The latest digital technology available at the time of the video's production has been employed in their design, construction and animation. In relation to this, Philip Hayward has pointed out music video's attraction to the 'whizz-bang' appeal of new technology and special effects (Hayward, 1990, 125-147). A trade advertisement referred to the design studio which created the animated sections of the video, using the Quantel Paint Box, then a novel item in music video production, but standard today (Figure 15). [10]

DIRE STRAITS GAVE RUSHES
MONEY FOR NOTHING.

rushes

Figure 15.Trade ad from *The Face* promoting new technology employed in MONEY FOR NOTHING.

The glamourous pop music business is represented by realistic images whereas the monotonous blue collar work is presented as a fantasy world. This fantasy world extends to the cartoon canon in which characters are immortal, as when one of the workmen becomes frozen stiff from leaning on an opened refrigerator his workmate removes his iced head and simply defrosts it in the microwave oven. And he presumably replaces it as we later see him reassembled, intact and alive in the video. One interpretation of this role reversal is that the real side of rock music is to be found in live performance and not in music videos. In the concert hall the band play live and don't mime to their music as is the case with music video. The audience, too, is real and not a constructed one as may be found in videos and watching videos. The music video world, in contrast, is constructed around the notion of fiction and fantasy. The computer generated workmen are just that, they are not real and exist only as animated characters. They have been designed and created to fulfil a role in this video promotion, and so, stylistically, are appropriately portrayed in animated fantasy form, not in a photographically real form. The irony present in this contrasting portrayal arises from the idea of the workmen implying that their animated fantasy world is real, and that the live action performance world is not.

Starmaking

Although there are many close-up shots of the Dire Straits musicians, in particular of the band's leader Mark Knopfler, there is not the same star-making strategy or construction of celebrity at work here that is evident with Peter Gabriel in the SLEDGEHAMMER video. In MONEY FOR NOTHING the band are primarily presented as musicians. Of relevance here is what Goodwin has noted:

... many musicians are not associated with stardom or characterisation. While these are often faceless figures of anonymous rhythm sections, some acts have "stars" who have been successful without engaging in the construction of personas...In these instances there is little attempt to build characterisation into music video clips, since the bands are being sold first and foremost as musicians rather than characters. Here the star is being sold as an artist. Where musicianship is the main selling point of the act, there are generally two alternative strategies in music video imagery. One emphasises virtuosity through frequent close-ups of performance- more often than not, a lead guitarist's fingers flying up and down a fret board...The other strategy is to adopt a minimal visual presence, replacing images of performance with "artistic" images that often plunder the visual arts (Goodwin, 1992, 112-113).

MONEY FOR NOTHING uses both strategies including shots of virtuoso playing as well as the animated artistic component. We are shown the band's virtuosity as musicians rather than as video performers or actors, and we are presented with the animated characters as

the artistic component of the video. Mark Knopfler feels comfortable speaking the words of the workmen and singing them through the lyric of the song but not in portraying them visually as a dramatic actor. His discomfort at appearing in videos is suggested in a later music clip for the song CALLING ELVIS in which he is entirely represented as an animated puppet on strings. The puppet is constructed in his likeness and the implication is conveyed that he feels forced into appearing in videos and is subject to control and manipulation in them. He does end up cutting the strings and taking control over his puppet self, though, as he would presumably attempt to control the marketing imagery of his band.

Goodwin has mentioned the frequent use of close-up shots of the faces of pop stars in music videos as a means of anchoring the text (Goodwin, 1992, 90), and MONEY FOR NOTHING is no exception to this practice. In one sequence (shots #119-134 inclusive- see Appendix B) there are sixteen successive close-up shots of Mark Knopfler, each from a different angle, but all just of his head. He appears in a total of 28 separate shots or 20% of all of the shots in the video. [11] In addition, he appears in several other group shots of the band. This constant reference to Knopfler's face provides the basis around which the remainder of the video is constructed. Knopfler is located in the centre of each shot. This is consistent with Will Straw's claim that:

Star performer figures remained at the centre of popular music. [12]

It is also consistent with what Lauren Rabinovitz found in her analysis of animated music videos. With this emphasis on the identity and role of the musician in videos the creative talent responsible for the images is often overlooked. At video award ceremonies, particularly, although the directors of videos may receive an on screen credit, the awards are invariably presented to the featured artists, leaving the directors and designers invisible to the public. Simon Frith has commented on this:

Whether as video-art or video-promotion, clips work as self portraits: they present their performers to their fans. The 'author' of the images is taken to be the 'author ' of the music they accompany (this is formalised in the various pop video awards) (Frith, 1988b, 215-216).

This is consistent with the perception of the stars as authors of the Hollywood musicals. People think of the 'Fred Astaire and Ginger Rogers' films, or the Gene Kelly musicals, rather than the directors of them.

SOUNDTRACK	lyrics: *we got to install microwave ovens, custom kitchen deliveries*
SOUNDTRACK	acoustic space: live concert venue for band, interior of store for workmen
IMAGE DESIGN	brightly coloured, hard angled animated characters carrying appliances
ANIMATION (1)	computer animation, awkward, basic movement of characters across screen
ANIMATION (2)	rotoscopic, decorative touches to live footage of band members and instruments
PERFORMANCE	musicians playing live, with ease and skill
VISUAL STYLE	literal illustration of lyrics, performance plus concept, self reflective

Figure 16. Use of multi-layered structure in MONEY FOR NOTHING.

Layered Structure

The multi-layered structure of the video is made visible by the diagram (Figure 16) and points to the necessity for multiple viewings to fully comprehend everything that is going on. In the background of the video the band can be seen playing live but the implication that the acoustic space for the music is of a live recording is not borne out in the production. The music has been recorded in the studio, not live. Also, the singer speaks for the animated character whose lips move in time with the lyrics. This suggests that it is the workman and not the singer who is talking. And, although sung, the line is delivered in a kind of spoken delivery. The acoustic space in which the workmen are located also has different audio qualities to an auditorium. The animated characters have been foregrounded. This gives them the dominant position in the scene. In addition, their brightly coloured design underlines this visual dominance. Within the same sequence there are two styles of video, the live performance of the band and the animated conceptual interpretation of the song. The lyrics have been literally illustrated as the verbal mention of the workmen having to carry microwave ovens is reinforced by visuals of them doing just that. As well as the literal meaning, the lyrics contain a self reflective inference of what it is like to be in a band.

The members of the band move easily in the video compared with the animated characters who tend to slide along rather than walk. This was an early effort at computer animation and even the shape of the characters seems crude by today's standards. The figures have been designed from a series of interlocking rectangular forms resulting in sharp angled rather then smooth contoured shapes. As computer animation technology developed curvilinear design became possible. The design, though, acts as a visual metaphor for the large, outspoken workman. The 'blockhead' design of him, and of his head in particular, is in keeping with the nature of his comments, just as the quieter workman's leaner shape is sympathetic to his more wistful role. A form of rotoscoping animation has been employed to draw graphic effects onto members of the band and to

colourise Mark Knopfler's guitar. The animation is limited and jerky but again this approach suits the bouncy tempo of the music and lends an element of graphic animation to the live-action photographic realism style of the images.

The Real Persona

In order to maintain a realistic representation of the musicians, extensive use of the technique of rotoscopic animation has been employed in the TAKE ON ME video which will be analysed next. In MONEY FOR NOTHING, however, the effect is more cosmetic, bringing a touch of glamourous graphic appeal to the live-action images. As the detailed use of rotoscopic animation doesn't alter the realistic photographic appearance of performers or objects too greatly it is consequently a favoured technique in animated music videos. This is arguably due to the music industry's reluctance to depart very far from identifiable images of its artists in their packaging and promotion in the media.

This preference for maintaining the realistic imprint of the artist in videos contributes to the difference in aesthetics now evident between animated music videos and the animated visualisations of music in the musical cartoons of the 1930's, in particular those of the Disney Studio. As Philip Hayward noted, music videos offer animators and video directors the opportunity to challenge the domination of the aesthetics established by Disney through experimentation with the medium. [13] One such animator, Annabel Jankel, and her creative partner, Rocky Morton, employed the rotoscoping technique in the Elvis Costello video ACCIDENTS WILL HAPPEN, and a similar computerised effect in their film *Max Headroom.* Another director to use the technique is Richard Lowenstein in the INXS video WHAT YOU NEED (animated by Lynn-Maree Milburn). Though affording lifelike representations of figures and movement, and thus being ideal for animated music videos, the technique is not without certain difficulties, as both the Fleischer and Disney animators discovered.

The Disney Studio preferred to use the rotoscopic technique more as a means to an end than as an end in itself. The Disney animators employed the rotoscoping technique as a basic guide to an actor's movements, gestures and expressions. The studio systematically made live-action films of performers to assist the animators in understanding the mechanics of those movements and expressions. Each frame of the live-action film was printed onto photographic paper called a photostat. The animators could study the films and the photostats but were not encouraged to make exact copies of them in their drawings. They were urged, instead, to greatly simplify and exaggerate those movements and expressions and to turn them into caricature.

...whenever we stayed too close to the photostats, or directly copied even a tiny piece of human action, the results looked very strange. The moves appeared real enough, but the

figure lost the illusion of life. There was a certain authority in the movement and a presence that came out of the whole action, but it was impossible to become emotionally involved with this eerie, shadowy creature who was never a real inhabitant of our fantasy world. Not until we realised that photographs must be redrawn in animatable shapes (our proven tools of communicating) were we able to transfer this knowledge to cartoon animation. It was not the photographed action of an actor's swelling cheek that mattered, it was the animated cheek in our drawings that had to communicate. Our job was to make the cartoon figure go through the same movements as the live actor, with the same timing and the same staging, but, because animatable shapes called for a difference in proportions, the figure and its model could not do things in exactly the same way. The actor's movements had to be reinterpreted in the world of our designs and shapes and forms (Thomas and Johnston, 1981, 323).

This is important in understanding the difference in visual styles and preferences between the Disney musical cartoons and animated music videos. If the intention of the Disney animators was to depart from the realistic moves and imprint of their subjects in order to successfully transplant them into the realm of fantasy, then the intention of most pop music animators is to maintain an identifiable likeness of the subject. This real identity of the pop music artist is designed to withstand its relocation into the fantasy world of animation and explains why animated music videos in general and MONEY FOR NOTHING in particular are constructed around live action images, including pixillated and rotoscoped images, of musicians in highly stylised and animated visual surroundings.

Andy Darley has documented the aesthetic developments in computer imaging and his findings have relevance here. He describes both the capability for simulation and the image processing ability of digital technology such as the 'Paintbox' (the same equipment and technique used in MONEY FOR NOTHING) and points to a wider trend toward 'aesthetic realism' and a 'return to representation' (Darley, 1990, 39-64).

Graphic Design
The opportunity exists in animation for the creation of a Utopian vision with the performer ideally lit, made-up, costumed and photographed as a potential idol. The aspiring star is then juxtaposed with the impossible by being placed in a fantasy landscape where graphic shapes come to life and interact with him/her in a subservient and supportive role with the overall aim of starmaking.

In MONEY FOR NOTHING this vision is established by the 1950's style animated living room of the workmen and supported by the dream like drifting feel to the opening bars of the music and by the drugged sounding chant of the lyrics *I want my MTV*. The drum-

mer rattles the dreamy peace of the scene before the shot of the guitar graphically explodes onto the screen. It has a glowing golden line around the perimeter of its body and a pink painted band along its neck, and, swirling above it are graphic swish marks. These are the equivalent of the animator's version of quotation marks, which suggest activity, movement and drama, and in this instance convey the idea of electricity, of shimmering noise and excitement and of powerful music being played. All of these effects provide graphic expression to the chords being played on the guitar. At no time does the guitar lose its identity despite being clothed and surrounded by these stylistic graphic effects which are superimposed electronically onto its photographically realistic representation.

In subsequent shots Knopfler's suit has been outlined in a collection of animated broken white lines. The drummer's drumsticks and wristbands have been coloured and the other guitarist's shoes are wrapped in glowing shapes. Other graphic sparks of music fly up from the keyboard. All of these are what Goodwin refers to (Goodwin, 1992, 91) as embellished postproduction effects and take place during the opening instrumental section of the song, before Knopfler sings the first verse. [14]

At this point the visual effects subside, except for the presence of the animated workmen, as if to suggest that the role of those visual effects was to grab the viewer's attention, and, that having been achieved, the emphasis is transferred to the music, in particular the singing of the lyrics and the highly energised performance of the band. Despite the catchiness of the musical riffs and rhythms and their suitability as dance music it is also important that the lyrics of the song are heard because they carry a message. Later in the video there is a sequence of the band playing. There are no rotoscopic or graphic embellishments at all in this sequence which is further reinforcement of the 'now that we have your attention, concentrate on the musical performance' strategy. And the lyrics form a vital part of the music. In the video imagery, too, the lyrics have been taken seriously as they form the basis for much of the imagery.

Performance

The section of the video without graphics coincides with a more confident and relaxed performance from the musicians. They don't leap about as much and appear in the many close-up shots smiling and enjoying themselves. They are still working away on their performance of the song but are a little less serious and exude the confidence which comes as a result of their professional musical competence. They have established the interest and attention of the audience and now they are maintaining it. This is in contrast with the unhappy expressions of the animated workmen. One has half closed eyes and a downturned mouth, which are both cartoon design techniques for representing a bored

or unhappy expression on a character's face. The other appears angrier with a heavy frown line across his lower forehead, just above his tiny eyes. These effects, small eyes crushed by a frown line with an aggressive mouth, are also cartoon methods of representing and underlining anger in a character. In addition, the character has downwardly sloping corners on his mouth which is a further graphic indicator representing unhappiness. This juxtaposition of happy musicians with miserable workmen underlines the envy of the latter for the lifestyle of the former. The tempo of the music reinforces this and the repetitive lyrics of the song:

that aint working, that's the way you do it,

money for nothing and your chicks for free

become something of a blues style lament, sung regularly and with feeling throughout the number. Eventually, the less aggressive workman starts tapping his fingers to the beat of the music and joins in with his vocal plea of *I want my MTV* as a form of chorus over the *money for nothing* chant. This provides the song with an 'up' ending as the workmen, despite their disparaging remarks about the musicians and the video and music television, conclude by singing the praises of pop videos, the lifestyle of rock musicians and their system of promotion, music television.

In this video there is also a celebration of the rock guitar and of the basic rock ensemble of bass, guitar and drums. Keyboards are included, too, but the song is essentially constructed around a dominant, fuzzy sounding guitar riff with backing from the bass guitar, rhythm guitar and drums. The introductory shot of the drum roll at the beginning of the video heralds a big close-up shot of the lead guitar while the guitar riff is played for the first of many times. This shot also serves to promote the guitar as an important icon in the video and as an integral component of the music. Similar to its visual dominance through the use of close-up shots, the guitar has also been foregrounded in the music mix. However, it doesn't intrude into the vocal track once that commences. The vocals are then given the dominant position on the soundtrack by means of the clarity and volume previously assigned to the guitar.

There is a catchy rhythm throughout the song which is provided by the fuzzy guitar riff which is given driving support by the instruments of the rhythm section: the keyboards, bass, rhythm guitar and drums. In the shots of the band playing, the effect of this rhythm on the musicians can be seen. Not only do they produce the music but their bodies react in a form of expression of it. They dance to the music they play. Dance is one method of visualising music, music video is another. Their movements are in absolute synchronisation with the music whether a physical manifestation of it or simply the physical act required of their bodies to produce it. In any case what is communicated in the video is a group of dedicated and sincere musicians, emphasising their musicianship.

SOUNDTRACK	lyric:*maybe get a blister on your little finger maybe get a blister on your thumb*
IMAGE DESIGN	animated characters in store referring to band on television
VISUAL STYLE	produces effect described by Goodwin as the 'disjunction' of the lyrics

Figure 17.'Disjunction' between images and lyrics in MONEY FOR NOTHING.

The film footage of them playing and experiencing this pleasure appears to have been made during an actual concert performance but the live music which would have been produced on that occasion has been replaced by the recording studio version of the song. This results in a disjunction between the acoustic space (of the recording studio) and the visual space (of the live concert venue) represented in the video. Another example of disjunction occurs when the visual images don't literally match the lyrics of the song e.g. the lyric *get your chicks for free* has no accompanying literal interpretation on the image track, and nor does the line *get a blister on your little finger* (Figure 17). The image of the frozen workman and of his head being placed in the microwave oven has no accompanying literal lyric but it does make reference to the basic properties of animation: the frozen state, as in still life, as in inanimate. And the opposite state is suggested by the action of the microwave oven cooking, as in defrosting, agitation, movement and animation.

Visual Hooks
Use is made of what Goodwin refers to as 'visual hooks' to gain the attention of the viewer. He says that there are three types of these repetitive strategies which are employed in music videos to keep the viewers watching a video and to make them want to see it again and again (Goodwin, 1992, 90-94). The first type is the regular use of close-up shots of the faces of the artists, which is applied in MONEY FOR NOTHING with its many repeated shots of Mark Knopfler's head. Mark Knopfler is the leader of the Dire Straits band, and so it is he who is given many prominent close-up shots in this video just as Peter Gabriel is the dominant figure in SLEDGEHAMMER and the A-Ha singer is given most coverage in TAKE ON ME.

The second type of 'visual hook' involves voyeuristic shots of women which are aimed at engaging male curiosity. Again the MONEY FOR NOTHING video employs this device by means of the images of the woman in underwear in SALLY, the video within the video (Figure 18). This sequence is somewhat 'over the top' and is obviously a parody of the voyeuristic aspects of some music videos. The third type of 'visual hook' involves the marrying of a set visual image with a particular piece of the music and the resulting com-

bination of the two, the sound and the image, which are always repeated together throughout the video with the effect of creating an 'emotional charge' on each viewing. Although there is no specific use of this technique in MONEY FOR NOTHING a similar feeling is provided by the image of the larger workman complaining with the accompanying *that aint working* lyric.

SOUNDTRACK	lyric: *look at that mama she got it sticking in the camera*
IMAGE DESIGN	voyeuristic black and white footage from SALLY video of a woman in underwear
VISUAL STYLE	use of 'visual hook' mechanism to sustain male viewers' attention

Figure 18. Use of 'visual hook' in MONEY FOR NOTHING.

Pastiche

MONEY FOR NOTHING is also an example of pastiche. The video portrays MTV but does not take any stand in relation to it. It parodies it, and there are elements of satire in its parodying. But the parody is mostly blank in that there is no all out attempt to ridicule MTV. It is this type of pastiche which Jameson calls 'blank parody' (Jameson, 1983, 114). Goodwin categorises the use of pastiche in MONEY FOR NOTHING as 'self-reflexive parody' because of its referral to and apparent criticism of MTV (Goodwin, 1992, 162). On closer inspection he finds, however, that it isn't actually critical of MTV. It adopts a neutral position in this respect and so qualifies for his category of pastiche. What the video is critical of is the character of the complaining workman. Aiming the satire at the workman character and not at MTV ensures that there would be no impediment to the video's airplay on that network, as MTV might not wish to condone a video which was critical of it. This was the case with the Neil Young video THIS NOTE'S FOR YOU which took a critical viewpoint of the corporate sponsorship of rock and consequently did not make the MTV playlists. By adopting pastiche rather than parody MONEY FOR NOTHING did get shown on MTV and both the song and the video became hits. The video provoked discussion about its state-of-the-art computer animation and video graphics and was eventually included in the Rolling Stone Top 100 Music Video list, at position No. 67.

Take On Me, A-Ha, 1984, directed by Steve Barron.

In music video a further feature of the type of pastiche analysed by Jameson in contemporary popular culture involves the appropriation of movie plots and this is a feature of TAKE ON ME. At the end of this video the lead singer of A-Ha, Morton Harkett, plays out a scene from the film *Altered States* in which the character tries to get a grip on reality by pounding his body against the walls and floor of a corridor. The scene in this music video looks remarkably similar to the one in the film but once again the intention is not to satirise. The use of this scene contains an element of homage to *Altered States* and to its director Ken Russell. The director of the TAKE ON ME video, Steve Barron, is one of a number of music video directors who treated their work in music television as a means to an end. That end was the direction of feature films and Barron eventually went on to direct a feature film called *Electric Dreams*. This helps to explain the homage given to Ken Russell's film in TAKE ON ME as Barron playfully includes a scene similar to the one in that film. No satire is intended but an intertextual link is made between the cinema and television and between film and music video.

The video is constructed around the idea of a fantasised romance between a female fan and her comic book hero. There is a sub-theme of the construction of celebrity around that hero who also turns out to be a singer in a band. The hero comes to life, reaching from the pages of a comic book into the girl's world and pulling her into the adventurous world of girls' romantic comics. Once inside the graphic world the representation of the hero oscillates between a drawn two dimensional image and a live-action three dimensional image. The girl's own portrayal follows this scheme, culminating with the attempt by both characters to break out of the graphic fantasy world back into the real world. The two worlds are given different visual treatment. Generally, the fantasy world is represented by drawn, animated imagery. By contrast, the real world is represented by live-action cinematography.

This works at a simple level in that photography produces a convincing copy of reality and is therefore real, whereas drawing is stylised and so unreal, or fantastical. Things become more complex, and confused, however, by the inclusion of live-action images within the fantasy sequences. The drawn girl and the drawn singer are transformed into photographically realistic forms and then back again. This works to reinforce the girl's alternating belief and her disbelief about the events taking place. Seeing a real image of her idol convinces her that it is really happening and, and also, that he is really real, and not just an image. This insistence on the authentic identity of musicians is referred to by Will Straw in his comment on the role of the artist in videos:

Video stars must be present in the video narrative-they get to act out the fantasies-but-they must also be seen as they really are, as musicians-the fantasy confirms their reality (Straw quoted in Frith, 1988b, 216).

Kobena Mercer has described the practice in music video of moving between the realistic and the fantastic modes of representation. Citing the Michael Jackson video THRILLER she discerns:

...an alternation between naturalistic or 'realist' modes of representation (in which the song is performed 'live' or in a studio and mimed to by the singer or group), and 'constructed' of fantastic modes of representation (in which the singer/group acts out imaginary roles implied by the lyrics or by the "atmosphere' of the music. [15]

In this video Michael Jackson performs portions of the song in Hollywood musical style as he walks along a street in a studio setting. Later he is transformed into a werewolf and appears in a location setting which features a desolate, graveyard landscape. In the former scenes he is clearly identifiable as Michael Jackson. In the latter scenes, however, with elaborate special effects and animatronically controlled make-up he is completely disguised and his normal persona concealed. This alternation between the realistic and the fantastic modes of representation is evident in TAKE ON ME. There is a central sequence in which the band, A-Ha, perform the song in a studio setting in a visually naturalistic form which is consistent with the majority of animated music videos. The band retain their real identity and this is represented by means of photographic realism. There are, however, additional sequences in this video in which the band members assume an animated means of representation (Figure 20). The animation technique employed is rotoscoping which, as we have seen, results in a highly realistic representation in which the musicians are clearly recognised. Despite being reduced to a line rendering of their features, those features remain readily identifiable.

SOUNDTRACK	lyric: *take on me*
IMAGE DESIGN	drawn and animated Harkett becomes live-action photographed Harkett
VISUAL STYLE (1)	fantasy world becomes reality
VISUAL STYLE (2)	pop musician drops fictive role and asserts real identity as pop musician

Figure 19. Role playing in TAKE ON ME.

Fantasy and Reality

In the case of the lead singer, Morten Harkett, his features have been both softened and feminised with the result that he looks like a very pretty boy. This strategy suits the romantic theme of the video in which the young girl fantasises about the lead singer of the band. Her fantasy involves an attractive, feminised and idealised form of her idol and this is effectively created through the use of the animator's rotoscoped line. Skin blemishes and sweat are omitted in an attempt to transform the human Harkett into a graphic

Adonis (Figure 20). Although he does sweat and struggle in the live action sequences of the video, Harkett is cool and in control in his animated representation. This suits the young girl's fantasy of being carried off by the beautiful pop star. In one scene his animated persona takes her animated persona by the hand and they run off together. On the other hand, in the reality sequences, which feature the live action representations of both of them, life is more of a struggle. Here, animation is being used to denote fantasy and live action photography is being used to denote reality, although this is not consistent throughout the video as some shots, within the fantasy sequences, present both protagonists in the photographically realistic form.

Figure 20. Drawn image of Morten Harkett from animation sequence of TAKE ON ME.

John Fiske has divided the world created in TAKE ON ME into fantasy and representation: *In TAKE ON ME four worlds are represented, each bearing a different relationship to the others along these axes of reality- representation/fantasy. Two main modes of representation present these worlds- photography and drawing. Photography appears closer to reality than does drawing; so, the photographic worlds are less "fantastic" than drawn ones ...the drawn worlds and the photographed world are each divided into two: the "real" world of the heroine (which includes the reading of comic strips) and the "real" world of A-ha (which relates to that of the heroine in terms of a different sort of fantasy). A-ha are both real people and fantasy figures to their fans, hence the designation of them as "real" fantasy. The heroine moves comparatively freely, and at her own will, among all four worlds. A-ha move easily between the representation and the reality of their worlds, but cross to the worlds of the heroine only with difficulty at her will.* [16]

It is somewhat problematic to use the word 'real' as a descriptive adjective for the noun 'fantasy.' The video represents a fantasy world in that it, the video, is a fictional text. The band weren't really playing in a television studio when the young girl walked in. It was a contrived set-up for the video. A-ha are real but in the video they assume a fictive role in the fantasy sequences. Photography does appear to resemble reality more effectively

than drawing does and so animation is regularly used in the screen media to portray fantasy. When photography is used to represent fantasy, however, it can, if it is convincingly done, be more effective at portraying fantasy than animation. Hollywood films regularly use photographically realistic modes of representation, which may incorporate animation and special effects, to convey scenes of fantasy. The dinosaurs of *Jurassic Park* (1993), don't really exist but appear so convincing on screen that fantasy becomes convincing reality in terms of their communication to the audience. It is their photographically realistic style of animation which makes their existence on the screen seem credible. In TAKE ON ME the photographically realistic representation of Morten Harkett in the young girl's hallway makes his presence there seem plausible.

Young Female Fans

Fiske seems to be suggesting in his division of 'reality' into 'reality' and 'real fantasy' that the character of the young girl doesn't really make contact with the singer but only dreams or wishes she could and so can only manifest this contact as a fantasy. This seems to be a reasonable description of the romantic attraction between fan and idol, the former idolising the latter and fantasising about contact between the two. The video does deal with this form of romance and is clearly aimed at teenage girls.

Kobena Mercer has described the process of identification produced as a result of direct address in Michael Jackson's THRILLER:

On the music track, the 'you' could be the listener, since the personal and direct mode of enunciation creates a space for the listener to enter and take part in the production of meanings. In the video, it is the girl who takes this place and, as the addressee of the sexual discourse enunciated in the song, her positions in the video-text create possibilities for spectatorial identification. These lines of identification are hinted at in the opening scene in which the girl's response to Michael's wooing enacts the 'fantasy of being a pop star's girlfriend', a fantasy which is realised in this section of the video. [17]

In TAKE ON ME when the singer sings the line *I'll be coming for you* he is addressing not only the young girl in the video but also all of the young girls who watch the video, and the command *to take on me* is a plea for all of those female viewers to identify with the young girl in the video and to respond to the singer and his band as fans and consumers of them and their products (Figure 21).

SOUNDTRACK	lyric: *I'll be coming for you anyway*
IMAGE DESIGN	Harkett sings directly to camera, in direct address mode, to girl in video
VISUAL STYLE	Female viewers watching the video are included under the word 'you'

Figure 21. Use of 'direct address' in TAKE ON ME.

The 'spectatorial identification' that Mercer refers to is aided by the casting choice and several directorial decisions made in the production of the video. The girl chosen to play the part is young, pretty, but not too pretty, and is situated alone both when she is in the cafe and when she is at home. If she was too attractive she might not seem believable to the targeted audience of young girls, appearing rather as a star performer in her own right. Being seen alone rather than with a companion or part of a group helps reinforce the personal nature of the message contained in the lyric *I'll be coming for you anyway.* She is also presented in a potentially romantic situation, reading a comic book and dreaming of her involvement with the hero of it. There are even two moments in the video when she feels self-conscious about herself. Firstly, when she imagines the hand protruding from the pages of the comic book, she looks around the cafe, clenches at her clothes and presses them against her chest, generally appearing somewhat embarrassed. She also looks to see if anyone else has noticed or is watching her. That embarrassment returns when she finds herself on the floor of the cafe with her crumpled comic book following her adventures in the pages inside of it. On this occasion people really are looking at her so she gets up off the floor, picks up the comic book and runs from the cafe. These self-conscious moments point to the vulnerability a female fan might experience when expressing attraction or demonstrating feelings for a certain pop star and so help cement the feeling of identification that young female viewers of the video might have for the girl in the video.

This identification process is aimed at the female viewer accepting that she could be the girl in the video, the girl who conjures Morten Harkett in to her bedroom. Locating the final scene of the video in the girl's bedroom makes further reference to the private and potentially embarrassing aspects of female fandom for it is in the privacy of her bedroom that young girls put up posters of their pop and movie idols. These images are not intended for public display but for private fantasy or for shared fantasy with like-minded peer group members. The dramatic conclusion to the video when the animated Harkett breaks out of the borders of the comic panel and falls into the girl's apartment demonstrates his intent contained in the lyric *I'll be coming for you anyway* and also points to the apparent sincerity of that lyric. As he pounds the walls to rid himself of his animated form the

young girl watches in disbelief as her fantasy comes true. Her idol has been true to his word and really has come to collect her. With the 'spectatorial identification' process at work all of the young girls watching the video can also believe, through what happens to the young girl in the video, that Harkett has come for them, or would come for them, too. The questions remain as to what extent this process of identification succeeds and how believable the fantasy is for the fans.

Fiske further pursues the reality/fantasy issue in relationship to the girl fans of pop groups such as A-Ha when he ponders the question of whether the girl fans perceive of the pop groups as being real or a fantasy (Fiske, 1989, 126). He makes distinctions between the "drawn" world and the "real" world and says that the former cannot enter the world of the latter in the same way that the latter can enter the former. This suggests that realistic forms of representation are perceived differently from drawn or graphic representations and perhaps also that the realistic form has the edge when it comes to the creation of credible fantasy worlds and I think this argument is convincing. What is less convincing, however, is the suggestion that the fans might not perceive the pop group as being real.

It can certainly be argued that through the medium of music video a fantasy can be created in the minds of fans about an individual artist or group of musicians but when that fantasy motivates those fans to turn up at live appearances of those performers at shopping malls or at concerts to see them "live" a different perception is made. Without the aid of all of the audio and visual control elements available in the production of videos the pop artists appear differently from their video representation. There are questions of scale and intimacy. On stage the artist is much smaller than as presented on video. There are no close-up shots, although a simultaneously presented large screen video of the live performance may carry close-ups of the performer so that those in the audience further from the stage have a chance to see details. And there may be thousands of other people present, not just one person watching the video at home. Despite what fantasies the fans might project onto the artists during these live performances they are essentially watching a live act and so perceive them as 'real'. The fans' projected fantasies may have been created by videos of those same performers.

The videos might also have caused the elevation of those performers to idol or celebrity status in the minds of the fans. Both these fantasies and this perception of idol or celebrity status can be carried along to the live concert and projected onto the performers but they are accompanied by another element which is the spectacle of the "live" performance with its "real" implications, the presence of a crowd of like-minded fans, the noise, the size of the venue and the scaled down appearance of the artists. All of this may

reinforce the video fantasy but it is a different, more "real" experience than that gained through watching the video.

| IMAGE DESIGN | Mix of live-action head and torso of musician with drawn hands and lower body |
| VISUAL STYLE | Tension between graphic and photographic styles of representation |

Figure 22. Mix of drawn and photographic imagery in TAKE ON ME.

Comic Books and Animation

Within the video the "real" representations intrude into the "fantasy" world of the comic book. Shots of the members of the band, represented in the rotoscopic style of animation, have inserts of live-action video imposed on them (Figure 22). Drawn bodies have live-action heads on them resulting in fragmentation and in a curious mixture of normally incompatible modes of representation. This juxtaposition between drawn representations of reality and photographic representations of reality creates a graphic tension between the two. There is also the presence of a glass screen on both sides of which characters may alternatively appear either in the animated or in the live-action video form of representation. This magic screen, made of glass, suggests the television screen in front of which "real" people sit and watch "fantasy" roles or representations of reality. Not only is the glass screen of the video shattered but also the surface and borders of the other type of media and fantasy world presented in this music video, the comic book. To free himself from his drawn and animated representation Morten Harkett breaks out of the formal unit of visual sequencing employed in the comic book, the panel, and, to enable the young girl to escape, he tears a hole in the paper surface for her to climb through back into her real world. The acts of breaking through the screen and breaking out of the panel, and the tearing of the paper surface, suggest attempts to escape from the role of being cast as a player in the video and the comic book. They also reinforce the escapist/fantasy themes featured in both the comic book and the video.

The connection between comic books and animation, only indirectly referred to in the opening sequence of the video, has both graphic and historical elements to it. Many of the first animators were comic strip artists or came from backgrounds in illustration. Both comic books and animation employ drawn graphic techniques, use frames or panels, and have visual narratives. The video begins with a series of static single frames of drawn figures. Each shot, although not animated, is compressed into a suggestion of overall movement through the short duration of time allocated to it and the cumulative effect of all of these short durations edited together into a continuous sequence. The images, with their rough sketch nature, appear to be from a storyboard design for a video.

The use of camera zoom and camera panning add a filmic element to the flat drawings, creating further sensations of movement. Next, the zoom-out technique reveals groups of frames simultaneously. Some of these frames have different aspect ratios to each other which indicates that these images do not belong to a storyboard after all, but to a comic book. Whereas in video production all images are restricted to a 4:3 aspect ratio to fit the dimensions of broadcast television, there is no such restriction in the comics media. The filmic treatment continues and the shot duration steadily decreases until a form of limited animation is reached. The number of images used to construct each sequence is gradually increased until a level of full animation is achieved. This demonstrates the graphic link between comic books and animation, the former a static medium, the latter a dynamic one and so requiring a greater number of images, but both sharing the technique of the visual sequencing of narrative (Figure 23).

IMAGE DESIGN	Rough, line drawings in comic layout
VISUAL STYLE	Connection made between graphic nature and sequencing of comics and animation

Figure 23. Comparison between drawing style of comic and animation in TAKE ON ME.

A further connection between comic books and animation is their sharing of the potential for fantasy. The young girl in the video is seen reading her comic in the cafe. The comic storyline evolves into a romantic fantasy but oddly, at the beginning, it appears to be more like a boys' action comic, involving images of racing motorcycles and a couple of nasty weapon wielding characters in pursuit of the male hero figure. Once the young girl becomes engaged with the narrative and the hero, however, the scenario is diverted into a romantic interlude involving her and him, before returning to the action theme when they are both pursued by the violent characters.

Valerie Walkerdine has studied the role which comic books play in shaping young girls' desires. She says that they connect with that part of girls' lives which deals with the formation of their dreams, hopes, ambitions, fears and desires and that the purpose of the story, the adventure, the fantasy, is what she describes as 'preparation for the prince', as the usual eventual outcome of the comic inevitably involves the beautiful girl being freed from her life of misery by the prince. [18] TAKE ON ME doesn't involve a life of misery, it's more like a brief moment of struggle and fear when both the young girl and the hero figure are pursued by the aggressive motorcycle men. Nevertheless, the hero plays a gallant role in protecting the girl from the nasty pursuers. He takes her by the hand, leads her away from danger and finally makes good her escape through the hole in the paper, thus freeing her. Despite having done all of these things he then follows her into her

domain, *(I'm coming for you anyway)* and he does have the appearance of a handsome hero although he is not, literally, a prince. The young girl's desire may involve an imaginary relationship with her idol and she may cling to the belief that this desire will eventually be fulfilled ('some day my Prince will come').[19]

In her research into girls' comic books Angela McRobbie has found four main themes: romance, fashion and beauty, pop, and personal and domestic life. [20] Each of these themes are covered in TAKE ON ME. The young girl becomes romantically involved with the hero figure, who is quite beautiful in a soft and feminine way. Furthermore, he is a member of a pop group, is dressed fashionably, and invades both her personal and her domestic lives. The video succeeded in the market place by effectively introducing this new band to, and connecting with, the targeted audience of young girls, and in obtaining chart success through the selling of the single. As well as the economic success, the band became sought after by the glossy fanzines, achieved 'heart throb' status with young girls, were in demand for television appearances, and toured internationally.

Soft Romantic Pop Music
Accompanying the finely textured visuals is a similarly softened music track. There is nothing noisy or aggressive about it at all. From the initial tinkling sounds of the keyboards, through the muted drum beat, to the series of soft chords which resolve and conclude the song, the music is pleasantly melodious. The matching visuals are created with sympathetic ambience, totally supporting the music both in mood and in length. This latter aspect confirms Berland's findings that:

A single can exist (technically at least) without the video, but the reverse is not the case. As if in evidence of this, music videos, almost without exception, do not make so much as a single incision in the sound or structure of the song. However bizarre or disruptive videos appear, they never challenge or emancipate themselves from their musical foundation, without which their charismatic indulgences would never reach our eyes. [21]

Harkett's vocals have a falsetto quality but that too has been smoothed out and softened to achieve a lilting, harmonic quality. The instrumentation consists only of keyboards, guitar and drums, and the guitar has been blended into the overall sound thus being reduced to a rhythmic accompaniment compared with the dominant place Mark Knopfler's guitar occupies in the music track of 'Money For Nothing'. The band appear performing the music in a television type studio type setting (as if they were videotaping a music video for the song), which is of course exactly what they are doing, and they mime to the music track recorded in the acoustic space of the recording studio. There are no additional sound effects except for the breaking of the glass screen, despite the many opportunities provided for that by way of motorcycles, tearing paper, cafe sounds and

pounding on walls. Some of these actions have been edited and synchronised with appropriate beats and rhythms in the music and so have a 'stylised' representation.

Considerable disjunction is evident between the lyrics and the images. There is no mention in the lyrics of motorcycle racing, the cafe, the comic book, the dramatic transition of the girl into the fantasy world of comics or her escape from it, nor the metamorphosis of the hero figure from animated form to real persona. It comes as quite a surprise, in fact, to see images of motorcycle racing at the opening of the video because there is not the remotest suggestion of this in the music. And yet these images succeed in setting up the scenario from which the hero emerges. The only lyric that is somewhat illustrated is the line *I'll be coming for you anyway,* suggesting that the young girl's romantic fantasy is not in vain, and that the pop group really is real and that the singer is relating to each specific girl watching, and not just the one in the video.

Despite the disjunction between images and lyrics, the images seem to underline and reinforce the romantic feeling suggested by the music. The soft sound and arrangement of the music is a key element in this. The tinkling flow of the keyboard interlude in the middle of the song forms a perfect marriage with the image of the girl spinning off her feet in love. This is interrupted by the only harsh sound in the video, not music but the sound effect of glass being smashed. The shattering of the mirror/screen effectively interrupts the romantic escapism and reintroduces the narrative of the chase. The music of TAKE ON ME does not represent a hard rock sound like the music of MONEY FOR NOTHING. It is more the kind of soft pop music which is commonly used to express love themes to young girls. And this is exactly what the video succeeded in doing. This attempt by the band and their video to connect with the young female audience was most effective.

The video worked perfectly as a piece of soft, romantic pop. And it communicated with its targeted audience of young girls, creating star status for the band. The effectiveness of music video as a promotional tool was evident in that it had introduced a group of unknown artists and turned them into overnight celebrities. The extent of the success of the video was also marked. Not only was the song a hit on the charts but A-Ha became teenage heart-throbs, receiving extensive coverage in the pop music press's glossy fan magazines. While their success lasted they toured the world and as a confirmation of their status as 'flavour of the month' were chosen to provide the theme song for the latest James Bond film *The Living Daylights.* This honour had previously been awarded to other pop bands achieving commercial success and star status such as Duran Duran for *A View To A Kill* , Sheena Easton for *For Your Eyes Only* and Paul McCartney and Wings for *Live And Let Die.* Their success did not last, however, and they were eventu-

ally allocated the status of 'one hit wonders.'

SLEDGEHAMMER, MONEY FOR NOTHING and TAKE ON ME, taken as a group, display features of the new aesthetics for music set to animation, aesthetics to which each contributed and helped to develop. In all of these videos the pop musicians are portrayed in a photographically realistic style despite occasional departures into more abstract or three dimensional forms such as when the clay model of Peter Gabriel is reshaped and becomes lost in a series of other clay shapes. When this transformation to a less definable form occurs it is generally followed by a return to an identifiable representation of the artist.

Two of the videos, SLEDGEHAMMER and TAKE ON ME, are based on romantic themes whilst the other video, MONEY FOR NOTHING, focuses on a self-reflective theme, making references to rock groups, music video, music television and consumption. Each of the videos refers to popular music. SLEDGEHAMMER draws on Blues and Soul music sounds and themes, MONEY FOR NOTHING celebrates the electric guitar and the joy of live performance, and TAKE ON ME expresses the softer side of pop music and the world of teenage idols and their young female fans.

All three videos rely heavily on animation concepts and ideas to visualise the music tracks from which they originated and on which they are based. Each technique of animation employed is suited to the task of preserving the musicians' identity. The pixillation and claymation of Peter Gabriel, and the rotoscoping of A-Ha and Dire Straits allow each of these artists to retain their identity despite representation in the animated form. And each video makes creative use of the animated medium without jeopardising the successful promotion and sales of the relevant singles, which was the basic intention of their production.

Some Other Animated Music Videos

In addition to SLEDGEHAMMER, MONEY FOR NOTHING and TAKE ON ME nine other videos which are either animated, contain animated segments or simulate the properties of animation were listed in the *Rolling Stone* 100 Top Music Videos. A brief look at these and the animated technique employed, follows.

No. 8- LEAVE ME ALONE- Michael Jackson

Animator Jim Blashfield has used his distinctive technique in LEAVE ME ALONE for Michael Jackson and for AND SHE WAS by the Talking Heads. He also employed it for Paul Simon's THE BOY IN THE BUBBLE and Joni Mitchell's JUST FRIENDS videos which were not included in the *Rolling Stone* list. His technique, whilst heavily animated, allows the artists to clearly retain their identities. Since the images are constructed from photographs and photocopies of them, we never lose track of the fact that we are watching David Byrne or Michael Jackson. There is no figuration of the artist here, just the artist as artist. By comparison, in another Michael Jackson video called SPEED DEMON, made by animator Will Vinton, Michael Jackson is portrayed as a rabbit, after a sequence in which he first appears as himself. This is consistent with animated music video's noticeable distinction from the Disney musical cartoons. [22] In LEAVE ME ALONE an animated style is used in which the artist actually appears or is represented in a photographically realistic style. There is little loss of real identity. The content of LEAVE ME ALONE involves a media type expose of Michael Jackson's private life with the pop star portrayed as a fairground freak. In expressing this, Blashfield makes extensive use of press media reports and speculations about Jackson's on-stage persona and his weird behaviour off stage.

No. 54- AND SHE WAS-Talking Heads

AND SHE WAS employs the same two dimensional graphic style of animation as LEAVE ME ALONE. Set in a domestic environment it features animated household objects which have been orchestrated into a whirling ballet around members of the Talking Heads playing the role of homemakers. Throughout the video singer David Byrne maintains a central position on screen as he performs a vocal commentary on the narrative, using the mode of direct address. Both he and the other Talking Heads are clearly recognisable in the animated landscape.

No. 16- THRILLER- Michael Jackson

This video features state-of-the-art animatronics or real time animation by special effects make-up artist Rick Baker. These effects are based on Baker's work on the film *An American Werewolf In London*, which had the same director as this video, John Landis. When he undergoes the dramatic transformation from his Michael Jackson persona into

a werewolf, the flesh on Jackson's face can be seen distorting as hair follicles grow out of his skin into whiskers, in real time. To ensure a convincing effect off screen operators pumped air into bladders concealed beneath layers of artificial skin and hair covering his face. This type of effect is very expensive to produce and it is worth noting that only an artist of Jackson's financial status could afford it. The entire production ran in excess of 16 minutes and included screen credits so that the work could be eligible for entry, as a short film, in the Academy Award nominations selection procedure.

No. 63-ROCKIT- Herbie Hancock

Animatronics have also been employed in this video. Here they have been used to control life-size puppets. The directors of the video, Godley and Creme, were instructed to limit the appearances of the black artist Herbie Hancock whilst making the video extremely attractive to watch. This was due to MTV's policy at the time of not showing videos of black artists, not even Michael Jackson. So the video concentrates on a room full of animatronic puppets and household objects and Hancock is only seen briefly on a black and white television within the scene. Through careful timing of the animatronics absolute synchronisation of sound and image has been achieved with the effect that a room full of mechanical puppets and objects become a choreographed ensemble, visually echoing the music.

No. 29-CLOSE (TO THE EDIT)- Art Of Noise

This is an example of pixillation, the live-action form of animation made by means of the stop-motion camera. [23] In this video the members of The Art Of Noise violently and systematically attack and destroy classical music instruments under the encouragement of a punk child. It has the appearance of an 'avant-garde art film' and carries the sort of anti-establishment message common to that genre. In this case the values are both musical and economic as represented by traditional classical musical instruments, which are very expensive items. To destroy these with chain saws and angle grinders in the presence of a child is most provocative. The absolute synchronisation of sound and image and controlled sense of timing in which the images are strictly edited to beats in the music make it a powerful piece of audiovisual communication.

No. 30-YOU MIGHT THINK- The Cars

The real identity approach can be seen in the YOU MIGHT THINK video of The Cars. In this video members of the band are subjected to such extreme degrees of computer distortion as digital decapitation. But this is done without the viewer ever seeing any character representation other than The Cars playing The Cars. As in Michael Jackson's THRILLER, Herbie Hancock's ROCKIT, Grace Jones' SLAVE TO THE RHYTHM and CLOSE (TO THE EDIT) by the Art Of Noise, the identity of the performer is never lost even

though it may at times be modified or restricted. The simple story of Ric Ocasek humourously courting a woman is turned into a vehicle for the showcasing of the latest digital computer animation effects, underlining music video's attraction to new television technology.

No. 34-SLAVE TO THE RHYTHM- Grace Jones

This is a strong promotional piece for Grace Jones and features a collage of her work as fashion model, cabaret performer, and participant in television commercials. In the video her image is constantly manipulated by the forces of design, a comment on her role as a professional model whose job it is to make fashion or products look attractive. In this instance she is the product. In the video the heavy emphasis on scenes from her stage show promote this. The video includes one scene in which a photograph of her is cut with a scalpel into tiny strips so that the fragments can be rearranged to form a new image. Again the animated style is one of pixillated live action, a style which enables the performer to retain her real identity whilst not preventing the construction of celebrity around that identity. Through use of this pixillation technique play with timing and manipulation of time is possible.

No. 52-BLACK OR WHITE- Michael Jackson

The animated component of this video involves digital morphing of the faces of approximately twenty people, one to the other, in an impressive display of the latest computer technology available at the time. The aim of the technique is to merge the features of different people by means of maintaining careful registration of the scale of their faces and manipulating the subtle capabilities of the computer's ability to metamorphosise, or morph, as the computer industry has abbreviated the term. The resulting effect is the creation of impossible faces as one merges into another. This technique was used earlier with video equipment by Godley and Creme for their own video CRY. Interestingly enough, Jackson's face isn't included in the morphing sequence but the live-action images of him allow his fans to witness its most recent surgical transformations!

No.72- SHADRACH- Beastie Boys

Referred to as the abstract impressionist version on the videocassette this video is an animated version of the live-action video of the same song. It features a rotoscoped treatment of the band members in a live performance. They remain identifiable despite having been digitally coloured. The figures move in a jerky, pixillated fashion which synchronises with the rhythm of the music. Streaks of light are accentuated as are streaks of colour. Richly textured sections plus swirling sequences of intensely graphic painting are accompanied by drawn images of wild animals. The end result is a feeling of energy created by the live performance. Shots of the audience are included. Despite all of the

graphic activity the figures can still be read as recognisable representations of the band.

All of these animated music videos reinforce the conclusions drawn about SLEDGEHAM-MER, MONEY FOR NOTHING and TAKE ON ME. Each conforms to the practice of maintaining an identifiable persona of the pop artists involved. Their features may be distorted as is the case in the computerised morphing of Ric Ocasek in YOU MIGHT THINK, or the animatronically controlled facial contortions which Michael Jackson undergoes in THRILLER, but there is never any doubt left to the viewer that it is Rick Ocasek and Michael Jackson who are undergoing the metamorphoses. Similarly, the favoured animation techniques employed in these videos are of the type which retain realistic representations of the musicians involved despite any of the animated distortions which they undergo.

All of these videos make extensive use of animated techniques to portray the artists and to give creative expression to the music. AND SHE WAS, THRILLER and YOU MIGHT THINK pursue romantic themes whilst LEAVE ME ALONE, CLOSE (TO THE EDIT), SLAVE TO THE RHYTHM, SHADRACH and BLACK OR WHITE are more self-reflexive. But all of the videos, even ROCKIT with the minimal appearances of Herbie Hancock, actively promote their "authors", the musicians involved. These music videos, plus the three which have been analysed in detail, represent a new form and another method of setting music to animation.

CONCLUSION

In this thesis I have set out to establish the aesthetics of animated music video and to develop a method of structural analysis for them. In so doing I have noted a change in the aesthetics of music based animation established by the Hollywood cartoon studios in the 1930's and 1940's and led by the Disney Studio. I have approached animation studies from a broader base than a purely technical level even though animation history may be read as a history of technology and technique. This has involved the study of philosophical and mythological aspects of animation, with reference to the meanings associated with the word 'animation' that existed long before the film and video form of animation originated. One of these related meanings is the notion of animism as researched by the anthropologist Edward B.Tylor in his studies of primitive cultures. Although animation scholars have picked up the notion of animism and used it as a foil for the mechanistic idea of animation, an intensive study of animism as it is represented in animation remains to be made and is a most suitable topic for further research.

Another of the related areas which Tylor researched, namely totemism and its subset, idolatry, would also make an interesting topic for further study in relation to its application to the worship of pop stars by their fans, and the iconic representation of those stars in tangible idolic form. In his research into animism Tylor also studied the subcategory of anthropomorphism. The widespread use of humanised animal characters in the early musical cartoons has led this dissertation to make connections between the use of anthropomorphism in animation and its use in literature in the fable. Illustrators of fables have given graphic expression to this idea of anthropomorphic animal characters and have been noted accordingly. The study of animation and its links with philosophy, mythology, anthropology, literature, fable, graphics, comic books, film, theatre, music and vaudeville are all suitable topics for further research.

In response to general criticism by leading critics Goodwin, Frith and Bjornberg of the neglect of music in the study of music video I have tried to give specific attention to it by outlining the technical developments and production procedures which helped make the synchronisation of music and animation possible. The dominance of the music in the music video production process has also been pointed out. And in my proposed model of analysis I have used the soundtrack as the departure point for the study of all of the other aspects of a video. The layered structure approach to analysis, whilst easy to use, has the potential to uncover the complex of layers of which some videos are constructed and the relationships which exist between those layers.

I have found commonalities between musical cartoon production and animated music video practice in their willingness to embrace new technology and in their privileging of

music. A further similarity involves the promotion of music, whether it be in the form of sheet music or records, through the animated medium. This mix of commercial intention and artistic expression has led to an interesting aesthetical aspect of music video and attracted the attention of many postmodernist scholars. What has been most telling, however, are the differences in aesthetics between the cartoons and the videos. In music video the dominant forms of animation have been rethought and reworked and in some sense the tyranny of the Disney style has been challenged. By comparing the two forms of musical cartoons and animated music videos the aspects of the new aesthetics developed for animated music video can be summarised.

Figure 24.   Photographically realistic musician in the animated landscape: Mick Jagger in HARD WOMAN

In most animated music videos the artist remains intact, without figuration by the animators, and if so, only temporarily. This is to help with the construction of stardom for the artist which is encouraged by the popular music industry. As a result, animated music video does not resemble very closely those musical cartoons created at the Disney and other animation studios in the 1930's and 1940's. Animated music videos have rarely employed animal characters in the principal roles, a practice common to the musical cartoons. Most often, it is the pixillated live action face of the real pop singer which is animated so as to leave no doubt as to the identity of the star of the video and of the music. In SLEDGEHAMMER it is Peter Gabriel we see, in LOVE IS THE SEVENTH WAVE it is Sting, even though, like Eddy Valiant in *Who Framed Roger Rabbit* he moves through an animated landscape. Unlike Eddy Valiant, who is a character played by the actor Bob Hoskins, Sting plays Sting and Peter Gabriel plays himself, too. In WHAT YOU NEED it is the photographs of INXS which are animated, not drawings of the band, and in HARD WOMAN the real Mick Jagger and his rotoscoped outline pursue a computer animated woman through a computer animated landscape (Figure 24). It's Talking Head David Byrne who sits on the altar in ROAD TO NOWHERE whilst normally inanimate objects whirl around him and it is the real Michael Jackson who pleads to be ignored in the animated video LEAVE ME ALONE. In OPPOSITES ATTRACT it is the real Paula Abdul and not an animated figuration of her who dances with the animated cat character, and the real Hoodoo Gurus who perform alongside animated clay dinosaurs in I WANT YOU BACK.

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This preference for maintaining a photographically realistic representation of the artist in videos underlines the fundamental difference in aesthetics between animated music videos and the animated musical cartoons of the Disney Studio.

When a pop singer does deign to be represented as an animated character it is usually as a human and not as an animal e.g. Madonna in WHO'S THAT GIRL, A-Ha in TAKE ON ME, Elton John in CLUB AT THE END OF THE STREET, the Sex Pistols in OH YOU SILLY THING, Cyndi Lauper in SHE BOP, Paul McCartney in ONCE UPON A LONG AGO, David Bowie in UNDERGROUND, Elvis Costello in ACCIDENTS WILL HAPPEN and ABC in HOW TO BE A MILLIONAIRE. These are not just human characters which they play but actual caricatures or rotoscoped tracings of their star personas. The rarer occurrence in animated music videos of pop stars being represented as animals consists of Michael Jackson who played a rabbit in SPEED DEMON and Mick Jagger a cat in HARLEM SHUFFLE. Michael Jackson played a werewolf in THRILLER but it was the real Michael Jackson wearing an animatronic mask. In DEAR JESSIE Madonna is represented as a fairy, in the design style of the Tinkerbell character from Disney's animated feature film *Peter Pan*.

If the prevailing Disney studio animation aesthetic invariably involved animal characters playing out fables in nature settings, then animated music video production, half a century later took a different route. Instead of drawing upon cartoon animal characters, the potential for maintaining lifelike representations of rock musicians was exploited. Whilst stylistically portraying their music, this preference for emphasising the identity of their artists suited the marketing strategies of the popular music industry. This photographically realistic representation of the artist and the attractive portrayal of their music in promotional videos was of prime importance to the popular music industry.

In common with the musical cartoons, animated music videos are visualisations of predetermined soundtracks of which music forms the basis. Although classical music and jazz music was preferred in the musical cartoons compared with pop music for music video, the technologies and techniques developed for the breakdown of music and its synchronisation with animated imagery were appropriated by music video from the earlier form.

The preferred techniques of animation have differed, however. Whereas the musical cartoons featured the two dimensional drawn cartoon style animation, music video production favoured techniques which don't interfere with the photographically realistic representation of the musicians. Like the musical cartoons, music videos have incorporated new technologies or new methods of executing old tricks, as they have become available. The technique of metamorphosis, once rendered in ink and paint by the Fleischer animators, is now

called morphing and performed digitally without use of any traditional graphic materials at all.

Music video features frequent use of parody and pastiche, and self- reflection as part of its content. Although this was not common to Disney cartoons it was occasionally found in the work of other studios, especially Warner Bros. In animated music videos, however, the reference to aspects of the popular music business, such as those made in MONEY FOR NOTHING, provide a welcome element of humour. Humour is rife in the cartoons but less frequent in music video which has the 'starmaking' of its author as its prime function. Nevertheless, a playful approach to expression is evident in most of the animation used in the videos and this is reinforced by their use of parody and pastiche.

Some of the animators working in music video have tried to incorporate influences from the Modernist art movement and at times have ventured into abstraction. The early experimental animators laid the basis for these stylistic interpretations of music even though most of them were restricted to working with silent film. Abstraction is rarely seen in the musical cartoons which tend to follow a figurative route. But the videos maintain a figurative representation, too, as well as abstraction, by including moving graphic shapes in the same frames as their realistically rendered stars. The first wave of animated music videos reveals this tension between the graphic and the photographic forms of representation. Musicians can be identified playing in animated landscapes or layers of moving graphics are deposited over their realistic image.

This marriage of contrasting modes of representations, the 'real' and the 'stylised', complicates semiological interpretation of the associated images. The soundtrack adds further complication to the growing number of signifiers. Usually consisting only of the music, the soundtrack influences the entire process of generating the images. This is consistent with the nature of the exercise. The popular music industry and especially the musicians in it have perceived music video as a means to promote their products. Animation has been chosen for its novelty value but has also attracted artists with Modernist allegiances who have seen in animation an avenue for the creative visualisation of their music. This has resulted in some extremely artistic uses of the medium.

Postmodern scholars have rushed to analyse the images but, as we have seen, have often neglected the music. This dissertation has tried to reassert the importance of the place of music in music video. It has also tried to examine the nature of animated representations of the music and the relationship that animated imagery has with the music. Hopefully, this research will serve only as an introduction to more a detailed study of the nature of animated music, whether classical, jazz or pop, to follow.

APPENDICES

Appendix A

SLEDGEHAMMER Lyrics (lyrics and layout reproduced from Virgin audio cassette SO: PETER GABRIEL, PGMC 5).

you could have a steam train
if you'd just lay down your tracks
you could have an aeroplane flying
if you bring your blue sky back

all you do is call me
I'll be anything you need

you could have a big dipper
going up and down, all around the bends
you could have a bumper car, bumping
this amusement never ends

I want to be your sledgehammer
why don't you call my name
oh let me be your sledgehammer
this will be my testimony

show me round your fruitcage
cos I will be your honey bee
open up your fruitcage
where the fruit is as sweet as can be

I want to be your sledgehammer
why don't you call my name
you'd better call the sledgehammer
put your mind at rest
I'm going to be the sledgehammer
this can be my testimony
I'm your sledgehammer
let there be no doubt about it

sledge sledge sledgehammer

I've kicked the habit
shed my skin
this is the new stuff
I go dancing in, we go dancing in
oh won't you show for me
and I will show for you
show for me, I will show for you
yeah, yeah, yeah, yeah, yeah, I do mean you
only you
you've been coming through
going to build that power
build, build up that power, hey
I've been feeding the rhythm
I've been feeding the rhythm
going to feel that power, build in you
come on, come on, help me do
yeah, yeah, yeah, yeah, yeah, yeah, yeah, yeah, you
I've been feeding the rhythm
I've been feeding the rhythm
it's what we're doing, doing
all day and night

Description of Images in SLEDGEHAMMER

Fade from from black into a still image of several small white spots in a dark void. After a few seconds of silence which accompanies the still image, the image unfreezes. The small white spots which dance into life can now be identified as spermatozoa or seminal fluid. The camera pans from right to left across the flickering, almost fluorescent spermatozoa. Dissolve into image of the female egg, white and shimmering. Fade to black. Fast fade in on a pair of sperms, one of which appears to be lifeless. The other swims vigorously around, goes off screen, then returns. Image of hundreds of sperm as seminal fluid flowing through the Fallopian tube.

Dissolve into very rapid sequence of egg subdividing, first into two, then into four.

Two quick shots in succession of a foetus growing.

Close-up shot on artery and the blood within it pulsing in time to the beat of the music, followed by a further two shots of a network of arteries carrying the rhythmically pulsating blood flow.

Extreme close-up of human eyelid which suddenly opens to reveal an eye, the black pupil of which dilates and shrinks in time to the beat of the music.

Extreme close-up of finger tapping the side of the temple of a head in time to the music and perhaps feeling the pulse of life and/or the rhythm of music.

Extreme close-up of the corner of a mouth which tightens then relaxes, also in time with the music.

Extreme close-up of an ear lobe which twitches in time to the music. Close-up of an ear which twitches in time to the music.

Close-up of an eye which opens and closes in time to the music.

Big close-up of face, eyes and nose which can be identified as Peter Gabriel's face.

Big close-up of lower part of Peter Gabriel's face (nostrils and mouth). His mouth opens and he lets out a wail.

Camera zooms out to a tight close-up of face, still cropping his hair and chin. His movements are jerky as they have been animated, frame by frame, using the pixillation (or animation of objects) technique.

Camera zooms out a bit further yet still remains tightly framed on his face. The background changes from white to black, one of several dualities or oppositions used in this video.

Many animated miniature aeroplanes fill the background. They move constantly yet remained fixed to a particular spot.

you could have a steam train

if you 'd just lay down your tracks

A toy railroad track grows and encircles Peter Gabriel's head and a toy train winds its way around his face and head then suddenly disappears along with the track.

you could have an aeroplane flying

if you bring your blue sky back

A paper aeroplane makes one revolution around his head and then exits, dragging in a sky blue background and a blue wash across Peter Gabriel's face as it passes.

Gabriel's face becomes covered with a cloudy, blue sky. Then the blue paint disappears from his happy, smiling face and rolls of marbled paper unroll to cover up the matching blue background. Decorative motifs of cut-out paper move up and down either side of his head in time to the music.

all you do is call me

As the rolls of paper are unfurled the camera zooms out to a wider close-up of Gabriel's head. He makes a calling gesture by putting his right hand over his mouth. A small megaphone, smaller than his cupped hand, appears then increases in size till it obscures his face. Blue painted rings radiate out from his mouth to the edge of the megaphone. Then the megaphone shrinks back down and disappears.

I'll be anything you need

A criss-cross safety harness jumps over his shoulders and a blackboard slides in from behind him to form a new background by obscuring the old one. The blackboard is then

given a white chalk background design and, in combination with his movements and his acting, the suggestion is made that he is on a rollercoaster.

you could have a big dipper

going up and down, all around the bends

you could have a bumper car, bumping

this amusement never ends

The safety harness disappears when he wipes his face with a white handkerchief. The blackboard is tipped forward to form a table top and stage for the next background consisting of popcorn and striped sticks of candy. This is an example of one of the many transformations which take place in this video, the wall becoming the floor.

Two cute looking bumper cars with faces on them play around on either side of his head. The cars sing the line *This amusement never ends* along with Gabriel and as they sing a large dollop of candy floss dances over Gabriel's head like an animated wig. The cars look up and watch as a pile of soft plastic sheeting falls onto and then covers Gabriel's head.

Dissolve to Gabriel's head, upside down with a few leaves, also upside down, growing in front of his shoulders over a black background. A few flames burn up from the bottom of the screen.

I want to be your sledgehammer

The leaves disappear out of the top of the frame only to reappear, the right way up, embedded in a block of soil at the top of the frame which is used as a wiping device to wipe the existing inverted image of Gabriel away and replace it with a headless torso of him. A head sculptured from ice quickly grows on the torso in Gabriel's likeness. Here Gabriel is frozen or cryogenised.

why don't you call my name

More flames, longer this time, flare up from the bottom of the screen. The opposition of hot and cold, fire and ice.

Gabriel's face appears through the ice and also appears to be singing.

oh let me be your sledgehammer

A sledgehammer swings into the frame and smashes the ice sculpted head to pieces which fall away to reveal Gabriel's head and upper torso alive. Animated leaves encircle his head then disappear.

this will be my testimony

Several small unidentifiable shining objects radiate out from his head, retreat and disappear behind it leaving a plain black background. This is followed by a piece of crumpled bluish/black satin material which unfurls from behind his head and toward the edges of the screen then shrinks back and disappears behind his head.

A goldfish swims into the frame and after making one tiny revolution swims into his left ear and disappears inside his head. A school of small fish exit from his right ear and

swim offscreen. Two other fish swim into frame, one on either side of his head. They, too, swim into his head through his earholes. Gabriel smiles and four yabbies holding sardines, and two large fish burst from his ears, swim around and then off screen.

The crumpled black satin background returns.

show me round your fruitcage

A banana appears and enters his left ear, the skin peeling off from the pressure of trying to squeeze into his ear hole. The skin falls off and Gabriel, still smiling, catches it. The banana emerges from his other ear intact.

cos I will be your honey bee

The black satin background shrinks and disappears and is replaced by a blanket of plants which form a new background. Gabriel, acting like a magician, produces a cabbage in his hands from out of nowhere. He separates his hands to reveal that the cabbage has been neatly cut into unequal halves. He lifts the halves off screen.

Several pieces of fruit animate themselves around his face, framing it and then masking his face.

open up your fruitcage

The fruit masking his face then turns into a literal face. Apples, grapes, oranges, avocados and asparagus compose the singing face.

where the fruit is sweet as can be

The fruit whirls around, shrinking and disappearing into Gabriel's face. He swallows a cherry.

I want to be your sledgehammer
why don't you call my name
you'd better call the sledgehammer
put your mind at rest
I'm going to be the sledgehammer

Flowers grow and bloom in the garden bed background.

Several pieces of wood enter the frame in front of him and assemble themselves in jigsaw fashion into a complete unit, obscuring him with the exception of a small rectangular opening for his mouth. The wooden piece assembled resembles a maize with corridors, dead-ends and enclosed spaces. A small box walks into the maize, using its hinged lid and base as legs. It is followed by a series of other normally inanimate objects, a hair brush, a pair of pliers, a corkscrew and a gouging tool which gouges into the wooden surface. These objects, having entered the maize, interact with each other then exit.

this can be my testimony

A piece of wood in the shape of the outline of his head swings open to reveal Gabriel's singing face. He yells out.

I'm your sledgehammer

Cut to a clay model of Gabriel's head and upper torso on a thickly painted abstract back-

ground. The use of clay is common in three dimensional or object animation. The paint-
ed background begins to melt and run down the frame. The clay representation of
Gabriel raises his fists, both of which metamorphosise into sledgehammers.

A curtained window grows out of the background as his left sledgehammer hand strikes
his face causing stars, the cartoon expressions of impact, to fly from the point of impact
and a small arm and leg to grow out of that side of his face. A giraffe walks past out-
side the window. Then his right sledgehammer hand strikes the right side of his face cre-
ating more stars and another arm and a leg and head to form a small clay man embed-
ded in his face. The little man wears a fig leaf over his crotch.

The green painted background changes hue to pink. Gabriel's jacket changes from black
to pink to match the background which transforms into a pink, spermatozoa patterned
wallpaper.

let there be no doubt about it

sledge sledge sledgehammer

Suddenly the little man and all of Gabriel's head with the exception of his mouth fly up
and disappear through the top of the screen as if violently ripped off by an invisible over-
head force. The sperm wallpaper pattern is extended to cover his pink jacket. One of the
sperms on his shoulder develops into a little male figure that sits up and slides down his
shoulder and off screen.

On either side of the still singing mouth one black and one white dot grow into two
exclamation marks then transform into the Yin Yang symbol which becomes Gabriel's
head and through which his mouth continues to sing. Water rises up splashily through his
shirt collar displacing his Yin Yang head which metamorphosises into two fishes, one
black with a white eye, the other white with a black eye. The water floods the bottom
portion of the screen forming into an ocean. The view through the window is trans-
formed into a blue sky with fluffy white clouds. It is introduced by being drawn across
the space like a theatrical curtain. A small sail boat enters the screen and sails across the
water. The fish dive into the water creating two splashes, one of which causes the sail
boat to be thrown upwards through the window and into the sky. A yellow sun grows on
the pink wall and increases in size till it fills the background. The ocean turns into a
waterfall up which two eyes fly. The mouth reappears singing in the waterfall then so do
the eyes. Two bodies, possibly female, swim out of the waterfall and position themselves
against two pieces of grafitti, a pink heart and a pink sledgehammer, which draw them-
selves on the yellow background. The waterfall shrinks into a black face which is rapid-
ly revealed to be a clay portrait of Gabriel's head. The pink figure on the left of the screen
pulls the top of the clay head open by the hair and when it is sufficiently open both of
the pink figures dive inside. It closes on top of them.

Several openings appear all over his face and a blue, green and grey coloured pattern
forms over the background. The holes increase in size, eating away at his head till only

his eyes and mouth remain. Then they, too, disappear.

A splash of red paint fills the screen. The eyes return but are immediately spattered by a blob of white paint. More blobs of paint, black, yellow and blue, fall until the background resembles a Jackson Pollock painting. The waterfall bursts through the background from a tunnel like opening in the centre of the screen. Down the waterfall a tiny figure in a barrel descends.

The camera zooms in on Gabriel's clay face which appears in the tunnel. The tunnel transforms into an aura of colour which spreads and envelopes the background. The clay Gabriel's right hand reaches out to grab a real sledgehammer.

Cut to a stage scene with a curtain and spotlight, and a row of footlights made from egg cartons. The sledgehammer beats down on the stage and then swings away to reveal an egg which wobbles and hops then breaks open. A freshly killed, raw chicken jumps out and dances in tune to the music. The chicken pirouettes rapidly then suddenly stops and replicates itself. The pair of chickens do a dance together and finish by leaping into the air and remaining suspended there.

Cut to Peter Gabriel in a similar position on a set with a grid marked floor, a wall covered in floral wallpaper. In the wall there are two windows through which can be seen rustic views. He pixillates in a hovering position above the floor then drops down.

Close-up shot of his face as he happily sings.

I kicked the habit

He pixillates away from the camera into the background then returns followed by six female backing singers who sing the chorus, with echoes of his words.

shed my skin

His jacket and eight shirts peel off him in succession. Cut to overhead shot of him dancing on the grid marked floor. He is joined by the six singing women, also dancing and repeating his lines as a chorus.

this is the new stuff

Cut to a mid-shot of Gabriel and the women singing and dancing.

I go dancing in, we go dancing in

Cut to mid-shot of his legs dancing. The camera zooms out for a wider view of the women singing and dancing.

oh won't you show for me?

and I will show for you

show for me, I will show for you

yeah, yeah, yeah, yeah, yeah, I do mean you

only you

you've been coming through

A decorative pink television on an ornate pedestal slides into the scene. On its screen is a big close-up of a woman's mouth singing the chorus. The television exits.

Seven chairs enter the scene, first one for Gabriel, then one for each of the women. Seated on his chair, Gabriel slides to one side. He gets up to reveal a young girl sitting behind him on his chair. Then by means of the substitution technique the girl disappears only to be replaced by another girl sitting where she was only a frame before. Cut to another overhead shot of Gabriel pixillating around between the six women whilst a series of people substitutions takes place on his chair. Then the seated women pixillate off the screen. Cut to long-shot of Gabriel standing centre stage amidst two circles of pixillating people. Cut to an overhead shot of this action.

A robot constructed from sledgehammers marches into the scene. Mid-shot of Gabriel, still surrounded by people, making robot like dance gestures. Long-shot of Gabriel continuing to dance in this fashion. Some of the black women return, seated on a couch. Then everybody exits stage left except for one man who slides across the floor on his stomach before exiting stage right leaving Gabriel alone in the middle of the floor.

Cut to a mid-shot of the sledgehammer robot standing in front of one of the windows which tilts over at an angle as pieces of furniture pixillate past. Close-up of Gabriel's face, eyes closed, singing.

going to build that power

build, build up that power, hey

I've been feeding the rhythm

I've been feeding the rhythm

going to feel that power, build in you

come on, come on, help me do

yeah, yeah, yeah, yeah, yeah, yeah, yeah, yeah, you

I've been feeding the rhythm

I've been feeding the rhythm

it's what we're doing, doing

all day and night

Zoom out to reveal Gabriel surrounded by pixillating furniture, a hat stand, wheelchair, stool, ironing board, rocking chair, small table, clothes drying rack, TV trolley and a step ladder. Gabriel irons some of the shirts he shed in an earlier scene. Three men, one after the other, ride past on a one wheel cycle. Cut to an overhead shot of this same scene. The cycle riders alternate once more. The furniture closes in on Gabriel and begins to whirl around him. Long-shot of this scene from front angle, the furniture continuing to whirl about him and Gabriel, too, whirls around in the midst of it. Finally all of the furniture leaves except for an armchair into which he flops. The sledgehammer robot also remains. Mid-shot of Gabriel relaxing in the armchair. He yawns in his floral patterned upholstered chair in front of the floral patterned wallpapered wall, and falls asleep.

The chair turns, with its back to the camera, and faces upstage. The camera zooms out. A door appears in the middle of the wall which Gabriel is facing. It is dark outside the

windows. The light in the room goes out. The wall is transformed into a star filled galaxy but the door remains. The dark silhouette of Gabriel can be seen getting up from the armchair. His body is studded with stars as if he is a starman. He walks jerkily to the door and the armchair exits. He opens the door and dances through it into the galactic void. The floor of the room is transformed into a starry surface. As he crosses through to the other side he disappears.

Dissolve to mid-shot of a starman, hammering in time to the fading beat of the music. Freeze frame to form pattern of stars similar to the pattern of spermatozoa at the start of the video.

Fade to black.

Appendix B

MONEY FOR NOTHING Lyrics

I want my MTV

Look at them yoyos

that's the way you do it

you play the guitar on the MTV

that aint working

that's the way you do it

money for nothing

and your chicks for free

ah that aint working

that's the way you do it

let me tell you

them guys aint dumb

maybe get a blister on your little finger

maybe get a blister on your thumb

we've got to install microwave ovens

custom kitchen deliveries

we've got to move these refrigerators

we've got to move these colour T.V's

the little faggot with the earing and the makeup

yeh buddy, that's his own hair

that little faggot got his own jet airplane

that little faggot he's a millionaire

we've got to install microwave ovens

custom kitchen deliveries

we've got to move these refrigerators

we've got to move these colour T.V's

got to install microwave ovens

custom kitchen deliveries

he's got to move these refrigerators

got to move these colour T.V.'s

I should have learned to play the guitar

I should have learned to play them drums

look at that mama, she got it sticking in the camera

man that we could have some

and who's up there, what's that , Hawaiian noises

he's banging on the bongos like a chimpanzee

oh that aint working

that's the way you do it

get your money for nothing

get your chicks for free

we've got to install microwave ovens

custom kitchen deliveries

we've got to move these refrigerators

we've got to move these colour T.V's

listen here now that aint working

that's the way you do it

you play the guitar on the MTV

that aint working

that's the way you do it

money for nothing

and your chicks for free

money for nothing

get your chicks for free

get your money for nothing

get your chicks for free

look at that, look at that

I want my, I want my, I want my MTV

I want my, I want my, I want my MTV

Shot List of MONEY FOR NOTHING

A denotes animation sequence, L denotes live action footage and C denotes that the image has been electronically colourised.

1.   A.   Fade in from black to a television set displaying the MTV logo. The lyric *I want my MTV* is sung in accompaniment to this image.

2.   A.   Workman 1 sitting down into armchair.

3.   A/L.   Television set displaying live action footage of drummer playing.

4.   A.   Dog on floor in foreground, workman 1 in chair in background.

5.   A/L.   Television set displaying live action footage of drummer playing.

6.   L.   Drummer playing on stage at a live concert.

7. A. Dog in foreground, workman 1 in chair in background.
8. A. Overhead shot of workman 1 and dog watching television.
9. A/L. Television set displaying live action footage of drummer playing.
10. A. Pan across room containing workman 1 watching television.
11. A. Zoom in shot of workman 1 watching television.
12. A/L. Television set displaying live action footage of drummer playing.
13. A. Zoom in shot of workman 1 watching television.
14. A. Dog looks up.
15. A. Zoom in shot of workman 1 watching television, this time his mouth opens in amazement at what he is viewing on television.
16. A/L. Zoom in shot of television set displaying live action footage of drummer playing.
17. A. Workman 1 is sucked out of his chair and into the television screen.
18. A/L/C. Workman 1 dissolves into close-up shot of hand playing guitar.
19. L. Mid-shot of Mark Knopfler playing opening guitar chords.
20. L/C. Another guitar player playing.
21. L. Drummer playing.
22. L. Bass guitarist jumps off podium to downstage position.
23. L. Drummer playing.
24. L. Bass guitarist playing.
25. L. Shot over shoulder of bass guitarist revealing audience in background.
26. L/C. Mark Knopfler with colourised guitar, clothes and headband.
27. L/C. Shot over shoulder of Mark Knopfler revealing audience in background, with colourised light beam.
28. L. Mark Knopfler playing guitar.
29. L. Close-up shot of drummer's face showing a serious expression.
30. L. Zoom into guitarist.
31. L. Keyboardist playing.
32. A/L/C. Close-up shot of rotoscoped colourised guitar being played.
33. L. Keyboardist.
34. A/L/C. Guitar.
35. L. Guitarist playing.
36. A/L. Preceding shot on television.
37. A. Workman 2 referring to television.
38. A/L/C. Guitarist playing on television.
39. A/L/C. Mark Knopfler singing on television.
40. A/L/C. Close-up shot of Mark Knopfler singing on television.
41. L. Keyboardist.
42. L. Drummer.

43. A/L. Zoom out from guitarist to reveal workmen 1 and 2.
44. A/L. Audience plus workmen 1 and 2.
45. L.   Drummer.
46. L.   Guitarist.
47. L.   Drummer.
48. L.   Guitarists.
49. L.   Shot of entire band from point of view behind drummer.
50. L.   Close-up shot of Mark Knopfler singing.
51. L.   Drummer.
52. L.   Guitarist.
53. L.   Shot of Mark Knopfler singing.
54. L.   Close-up shot of hand playing keyboard.
55. L.   Close-up shot of drummer.
56. L/C. Shot of Mark Knopfler singing.
57. A/L. Workmen 1 and 2 file past in foreground carrying, first microwave ovens, then a refrigerator, then colour television sets, whilst live shots of the band playing continue in the background in a graphic inset cut into the animated image.
58. L.   Live shots of the band playing in a graphic inset fill the frame.
59. L.   Close-up shot of drummer.
60. L.   mid-shot of drummer with titles superimposed, MTV style:
Dire Straits
"Money For Nothing"
Brothers In Arms
Warnergram Records
61. L.   Inset of another music video with its titles superimposed, MTV style:
First Floor
"Baby, Baby"
Turn Left
Magyar Records
62. A.   Workman 2 gesticulating and commenting on previous shot.
63. L.   Sequence of shots from the First Floor video showing images of band and singer singing on location.
64. L.   Inset shots of Dire Straits' drummer.
65. A/L. Workmen 1 and 2 file past in foreground carrying, first microwave ovens, then a refrigerator, then colour television sets, whilst live shots of the band playing continue in the background in a graphic inset cut into the animated image. Essentially this is a repeat of shot #57 with the exception that the animation has been reversed into a mirror image of the direction of action in that earlier shot.

66. L.   Drummer.

67. L.   Guitarist.

68. L.   Band.

69. L.   Close-up shot of Mark Knopfler.

70. L.   Guitarists enjoying their performance.

71. L.   Band.

72. L.   Drummer.

73. L.   Keyboardist.

74. L.   Guitarist.

75. L.   Keyboardist.

76. L.   Guitarist, clapping.

77. L.   Close-up shot of guitarist smiling.

78. L.   Guitarist.

79. L.   Drummer.

80. L.   Close-up shot of hand playing keyboards.

81. L.   Guitarist.

82. L.   Guitarist.

83. A/ L.   Zoom shot along neck of guitar and zoom out to reveal image as inset into animation.

84. L.   Drummer.

85. A.   Workman 1 singing, camera pans around to reveal workman 2, also singing.

86. A/L. Jittery screen steadies to reveal shots of band playing.

87. A.   Workman 1 leans on a refrigerator.

88. A.   Workman 2 refers to an entire wall of playing television sets.

89. L.   Shots of band playing on screen inset into image.

90. A.   Workman 1 in direct address mode whilst behind him television sets display MTV animated logo.

91. L.   Shots from another music video of a woman wearing panties and stockings with titles superimposed over image, MTV style:
Ian Pearson Band
"Sally"
Hot Dogs
Rush Records

92. A.   Zoom into workman 1 singing.

93. L.   Inset shot of four television sets displaying the "Sally" video.

94. L.   Inset shot of one television set displaying the "Sally" video.

95. A/L. Workman 2 singing and referring to the "Sally" video on the television sets in the background.

96. A.   Workman freezes over with ice.

97. L. "Sally" video.

98. A. Workman 1 continues to freeze over.

99. L. Inset image of "Sally" video.

100. L. Inset image of Dire Straits band playing.

101. A. Workman 2 carrying workman 1's head inside a block of ice.

102. L. Inset image of Dire Straits band playing.

103. A. Workman 1's head rotating inside of a microwave oven.

104. L. Inset close-up image of Mark Knopfler singing.

105. L. Close-up shot of guitar.

106. A/L. Inset shot of Dire Straits playing is placed inside of a microwave oven and the door closed.

107. A. Close-up shot of control panel on the microwave oven showing ROTATION: HEAVY/MEDIUM/LIGHT. Workman 2 presses the HEAVY button.

108. A/L. Dire Straits band, still playing, rotate inside microwave oven.

109. A/L. A different angle of Dire Straits band, still playing, rotating inside microwave oven.

110. A. Close-up shot of dog howling.

111. L. Guitarist.

112. L. Guitarist.

113. L. Guitarist.

114. L. Guitarist.

115. L. Guitarist.

116. L. Keyboardist.

117. L. Drummer.

118. L. Guitarist.

119. L/C. Close-up shot of Mark Knopfler singing.

120. L/C. Close-up shot of Mark Knopfler singing from different angle.

121. L/C. Close-up shot of Mark Knopfler singing from different angle.

122. L/C. Close-up shot of Mark Knopfler singing from different angle.

123. L/C. Close-up shot of Mark Knopfler singing from different angle.

124. L/C. Close-up shot of Mark Knopfler singing from different angle.

125. L/C. Close-up shot of Mark Knopfler singing from different angle.

126. L/C. Close-up shot of Mark Knopfler singing from different angle.

127. L/C. Close-up shot of Mark Knopfler singing from different angle.

128. L/C. Close-up shot of Mark Knopfler singing from different angle.

129. L/C. Close-up shot of Mark Knopfler singing from different angle.

130. L/C. Close-up shot of Mark Knopfler singing from different angle.

131. L/C. Close-up shot of Mark Knopfler singing from different angle.

132. L/C. Close-up shot of Mark Knopfler singing from different angle.

133. L/C. Close-up shot of Mark Knopfler singing from different angle.

134. L/C. Close-up shot of Mark Knopfler singing from different angle.

135. A/L. Door opens on scene of workman 1 and dog in front of television set which is displaying image of Dire Straits band performing.

137. A. Close-up shot of workman 1 sitting up and singing.

138. A. Workman 2 enters frame and approaches the television set.

139. A. Close-up shot of workman 2 looking at television screen.

140. A/L. Mark Knopfler playing guitar on television in animated room.

141. A. Workman 2 singing and gesticulating towards television screen. Workman 1 comes up behind him and repeatedly sings over his shoulder the opening lyric *I want my MTV.*

142. A. Close-up of television screen showing MTV logo (astronauts on the moon with the MTV flag). Pans across room to dog closing its eyes and lowering its head as it settles down to sleep.

Appendix C
TAKE ON ME Lyrics

Talking away
I don't know what to say
I'll say it anyway
today is all I'll take to find you
shine away
I'll be coming for your love O.K.

take on me, take on me,
take on me, take on me,
I'll be gone
in a day

so needless to say,
of odds and ends, but I'll be me
don't let it wait,
slowly learning that life is O.K.
say after me
it's better to be safe than sorry

take on me, take on me,
take on me, take on me,
I'll be gone
in a day

oh the things that you say, yeh,
easy to lie for,
just to blame worries away
I'll be coming for you anyway

take on me, take on me,
take on me, take on me,
I'll be gone
in a day
take on me, take on me,
take on me, take on me,
I'll be gone
in a day

Summary of Scenario of TAKE ON ME

After a series of black and white drawings of motorcycle racing it is revealed that these images are from a comic book which a young woman is reading in a restaurant. Suddenly one of the drawn comic book characters winks at her then extends his drawn and animated arm through the surface of the comic and into the live action space of the restaurant, offering his hand to the girl. Disbelieving this sight, the girl nevertheless accepts his hand and is pulled into the comic book world where her hero alternates in form between an animated representational figure in a narrative story and a live action character who is seen performing as a member of the band, A-Ha. Suddenly the narrative resumes and the couple, (the live action singer in the band and the live-action young woman reader, both now in drawn animated form) are pursued by aggressive motorcycle riders wielding tools as weapons. They flee from the impending danger and attempt to escape. The young woman succeeds in escaping back into the real world. She finds herself on the floor alongside the crumpled comic book which the waitress had angrily screwed up after thinking that the young woman had left the cafe without paying. The young woman looks a little crumpled as well, from her ordeal but she jumps up, grabs the comic book and heads for home. On her arrival at home she resumes her reading of the comic book to discover the outcome but she is distracted by the sight of her comic book hero trying to break through the panel borders of the frame he he has been drawn in of the comic in an attempt to escape his pursuers. And he succeeds. The borders of the frame are transformed into the walls of her home and the video ends with her greeting her hero, now no longer drawn but real, and reunited with her in her bedroom!.

NOTES

INTRODUCTION

1. At the Second Annual Conference of the Australian and New Zealand branch of the International Association for the Study of Popular Music (IASPM) at Southern Cross University, N.S.W in July, 1994, for example, Philip Hayward presented a paper entitled Papua New Guinea music video: a new tradition. In this paper he described the work of one New Guinean music video director named Titus Tillie who clearly does not follow the established English and American practice of cutting shots on the beat of the music and so represents an oppositional style to one of the main themes of this thesis.

2. I have followed Andrew Goodwin's solution to the stylistic method of identifying music video titles so they all appear in the text in small uppercase letters to distinguish them from song titles of the same name which appear in quotation marks. So BOHEMIAN RHAPSODY the music video appears like this, whereas "Bohemian Rhapsody" the song appears like that. Titles of films and television programs appear in italics.

3. Halas, John. *Masters Of Animation*, London: BBC Books (1987), p.9.
   Halas is generally regarded as a spokesperson for the industry for being a key player in production through his studio Halas & Batchelor, for his participation at an organisational level in the governing body ASIFA (Association Internationale du Film D'Animation), and for his numerous publications on animation.

CHAPTER 1

1. Ovid. *Metamorphoses,* (trans. by A.D. Melville), Oxford and New York: Oxford University Press (1986), p. 227.

2. Tylor, Edward B. *Primitive Culture: Researches Into The Development Of Mythology, Philosophy, Religion, Art And Custom, Vols. I and II,* New York: Gordon Press (1974), p. 260. Tylor's research was originally published in 1871.

3. Graves, *The White Goddess: A Historical Grammar Of Poetic Myth,* London: Faber And Faber (1961), p. 69.
   Graves also refers to a verse of Orpheus which implied that the eating of beans was akin to eating the heads of one's parents.

4. Leyda, Jay (ed.). *Eisenstein On Disney,* London: Methuen (1988) p. 44.
   This book is an excellent source for the theorising of animism as an essential component of the theorising of animation. Many visual examples are provided including some from the graphic arts (print cartoons and book illustrations).

5. Leyda (ed.), *Eisenstein On Disney,* pp. 2-3.

6. Fauchereau, Serge. *Braque,* Barcelona: Ediciones Poligrafa S.A. (1987), p 17.

7. Tylor, *Primitive Culture: Researches Into The Development Of Mythology, Philosophy, Religion, Art And Custom, Vols. I and II*, p. 83.

8. Ovid. *Metamorphoses*, (trans. by A.D. Melville), Oxford and New York: Oxford University Press (1986), p.38.

9. Klein, Norman M. *Seven Minutes:The Life And Death Of The American Animated Cartoon*, London and New York: Verso (1993), p.67.

10. Barthes, Roland. *The Responsibility Of Forms: Critical Essays On Music, Art And Representation*, New York: Hill And Wang (1985), pp. 142-143.

11. ibid, p. 146.

12. See Leyda (ed.), *Eisenstein on Disney*, particularly his writing his writing on animism in that volume.

13. Small, Edward S. and Eugene Levinson "Toward a Theory Of Animation' in *The Velvet Light Trap: Review Of Cinema* No.24, Fall, 1989, University of Texas Press, Austin, Texas, p.67.

14. ibid, p.70.

15. Barthes, Roland. *Empire Of Signs* (trans. by Richard Howard), New York: The Noonday Press (1982), p. 58.

16. Deleuze, Gilles. *Cinema 1: The Movement-Image* (trans. Hugh Tomlinson and Barbara Habberjam), Minneapolis: University of Minnesota Press (1986), p.5.

17. Cholodenko, Alan (ed.). *The Illusion Of Life: Essays On Animation*, Sydney: Power Publications (1991), pp 9-10.

18. Erwin Panofsky, "Style And Medium In The Motion Pictures", in Gerald Mast and Marshall Cohen (eds..). *Film Theory And Criticism*, New York: Oxford University Press (1974), p. 160.

19. Adamson, Joe. *Tex Avery: King Of Cartoons*, New York: Da Capo Press (1975), p. 211.

20. Crafton, Donald. *Before Mickey: The Animated Film 1898-1928*, London and Cambridge, Massachusetts: MIT Press (1982), p. 347.

21. ibid, p. 348.

22. Moritz, William "Some Observations On Non-Objective And Non-Linear Animation" in Canemaker, John. *Storytelling In Animation: The Art Of The Animated Image, Vol. 2*, Los Angeles: The American Film Institute (1988), p. 25. The reference here is to the photographer Edweard Muybridge whose sequential studies of human and animal motion are often used by animators as a guide to movement.

23. Klein, Norman M. *Seven Minutes: The Life And Death Of The American Animated Cartoon*, London and New York: Verso (1993), p. 83.

24. Sadie, Stanley (ed.) *The New Grove Dictionary Of Music And Musicians, Vol. 5*, London: Macmillan Publishers Ltd. (1980), p. 399.

25. Fiddy, Dick. *IRN-BRU Pop Video Exhibition catalogue*. London: Museum of the Moving Image (1992), p.5.

26. Jameson, Frederic, "Postmodernism and Consumer Society" in Foster, Hal (ed.). *The Anti-Aesthetic: Essays On Postmodern Culture*, Port Townsend, Washington: Bay Press (1983), p.114.

27. Frith, Simon. *Music For Pleasure: Essays In The Sociology Of Pop*, Cambridge, U.K.: Polity Press (1988), p. 206.

28. Goodwin, Andrew. *Dancing In The Distraction Factory: Music Television And Popular Culture*, London: Routledge (1993), pp. 62-63.

29. Goodwin, Andrew, "Fatal Distractions: MTV Meets Postmodern Theory" in Frith, Simon, Andrew Goodwin and Lawrence Grossberg (eds.). *Sound And Vision: The Music Video Reader*, London and New York: Routledge (1993), p.47.

30. Frith, *Music For Pleasure: Essays In The Sociology Of Pop*, pp. 105-137.

31. Williams, Alan, "The Musical Film And Recorded Popular Music" in Altman, Rick (ed.).*Genre: The Musical*, London: Routledge & Kegan Paul (1981), p.151.

32. Lauren Rabinovitz, "Animation, Postmodernism, and MTV" in *The Velvet Light Trap: Review Of Cinema* No.24, Fall, 1989, University of Texas Press, Austin, Texas, p.105.

33 ibid, p.107.

34. Straw is quoted in Frith, *Music For Pleasure: Essays In The Sociology Of Pop*, p. 216.

CHAPTER 2

1. *Who Framed Roger Rabbit*, directed by Robert Zemeckis, director of animation Richard Williams

2. Gould, Stephen Jay, "A Biological Homage To Mickey Mouse" in Gould, Stephen Jay. *The Panda's Thumb: More Reflections In Natural History*, New York and London: W.W. Norton & Company (1980).

3. Edwin Lutz's book, *Animated Cartoons: How They Are Made, Their Origin And Development*, the first instructional manual on animation production techniques, was not published until 1920. It is interesting to note that at that time one person who borrowed this book from the Kansas City public library because he could not afford to buy a copy was Walt Disney.

4. Solomon, Charles. *Enchanted Drawings: The History Of Animation*, New York: Alfred A. Knopf (1989), p. 30.

5. Thomas, Frank, and Ollie Johnston. *Disney Animation: The Illusion Of Life*, New York: Abbeville Press (1981), p. 322.

6. Klein, Norman M. *Seven Minutes: The Life And Death Of The American Animated Cartoon*, London and New York: Verso (1993) p. 83.

7. Sinyard, Neil. *The Best of Disney*, London: Twin Books (1988), p.18.

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9. Finch, Christopher. *The Art of Walt Disney: From Mickey Mouse To The Magic Kingdoms*, New York: Harry N. Abrams Inc. (1973), p. 70.

10. Blanc, Mel and Philip Bashe. *That's Not all Folks*, New York: Warner Books (1988), p. 82.

11. Care, Ross. "Symphonists For The Sillies: The Composers For Disney's Shorts", in *Funnyworld* No. 18 (Summer 1978), p. 39.

12. Brophy, Philip "The Sound Of Animation" in Cholodenko, Alan (ed.). *The Illusion Of Life: Essays On Animation*, Sydney: Power Publications (1991).

13. Beck, Jerry and Will Friedwald. *Looney Tunes And Merrie Melodies: A Complete Illustrated Guide To The Warner Bros. Cartoons*, New York: Henry Holt and Company (1989), from the first page of the introduction, page unnumbered.

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15. ibid, p. 288.

16. Russett, Robert and Cecile Starr. *Experimental Animation: Origins Of A New Art* (rev. ed.), New York: Da Capo Press (1988), p. 36.

17. Fischinger is quoted in Stauffacher, Frank (ed.). *Art In Cinema: A Symposium On The AvantGarde Film*, New York: Arno Press (1947), p. 38.

18. The Whitney brothers are quoted in Stauffacher, Frank (ed.). *Art In Cinema: A Symposium On The AvantGarde Film*, New York: Arno Press (1947), p. 33.

CHAPTER 3

1. Uspensky, Boris. *A Poetics Of Composition: The Structure Of The Artistic Text And Typology Of A Compositional Form*, Berkeley, London and Los Angeles: University Of California Press (1973).

2. Bakhtin, Mikhail Mikhailovich. (Michael Holquist (ed.)) *The Dialogic Imagination: Four Essays*, Austin: University of Texas Press (1981), p.431.

3. Panofsky, Erwin. *Studies In Iconology*, New York: Harper and Row (1939 and 1962), pp.12-14.

4. Wollen, Peter. (rev. ed.) *Signs And Meaning In The Cinema*, London: Secker and Warburg (1972), p.123.

5. Frith, Simon. *Music For Pleasure: Essays In The Sociology Of Pop*, Cambridge, U.K.: Polity Press (1988), p. 221, and Goodwin, Andrew. *Dancing In The Distraction Factory: Music Television And Popular Culture*, London: Routledge (1993) pp.1-5. In fact, Goodwin opens his book on music video with the chapter heading "Silence! Academics at Work". Frith shares his concerns about a music

based medium being dealt with purely on visual terms. As does Alf Bjornberg whose system of analysis of music videos stems from this neglect.

6.   ibid, p. 65.

7.   McClary, Susan, and Robert Walser, "Start Making Sense: Musicology Wrestles With Rock," in Frith, Simon, and Andrew Goodwin, (eds..). *On Record: Rock, Pop And The Written Word*, New York: Pantheon (1990), p. 58.

8.   See "The Score Menu" in Macromedia's *Using Director,* the manual for Macromedia Director, version 4, (1994), pp. 443-476.

9.   Bjornberg, Alf. "Structural Relationships Of Music And Images In Music Video" in *Popular Music Volume 13/1,* 1994, Cambridge University Press (1994).

CHAPTER 4

1.   *Rolling Stone's* list of "The 100 Top Music Videos", featured in issues no. 490, December 1993, pp. 42-56, and no. 492, January 1994, pp. 60-67 contained twelve animated or partly animated videos as follows:

1.   SLEDGEHAMMER- Peter Gabriel

8.   LEAVE ME ALONE- Michael Jackson

9.   TAKE ON ME- A-Ha

16.   THRILLER- Michael Jackson

29.   CLOSE (TO THE EDIT)- The Art Of Noise

30.   YOU MIGHT THINK- The Cars

34.   SLAVE TO THE RHYTHM- Grace Jones

52.   BLACK OR WHITE- Michael Jackson

54.   AND SHE WAS- Talking Heads

63.   ROCKIT- Herbie Hancock

67.   MONEY FOR NOTHING- Dire Straits

72.   SHADRACH*- Beastie Boys

There is a brief review of these at the end of Chapter 4 in addition to the detailed analyses of SLEDGEHAMMER, MONEY FOR NOTHING and TAKE ON ME.

*There are two video versions of this song, one of which is clearly animated and so is included in this study, and one of which features a live-action treatment.

2.   Oliver, Paul. (rev. ed.). *Blues Fell This Morning: Meaning In The Blues,* Cambridge, New York, Port Chester, Melbourne and Sydney: Cambridge University Press (1990) p. 93.

3.   Lyrics printed from the album *SO*

4.   Harpo, Slim. "I'm A King Bee", lyrics transcribed.

5.   Gabriel, Peter. *Secret World Live,* Double CD, Real World/Virgin Records Ltd. (1993), PGDCD8, CD 1, Track 2.

6.   Oliver, *Blues Fell This Morning: Meaning In The Blues,* p.108.

7. Kaplan, E. Ann. *Rocking Around The Clock: Music Television, Postmodernism, And Consumer Culture,* New York and London: Methuen (1987), p. 74.

8. *GQ-Gentleman's Quarterly,* November, 1993, front cover plus details of cover on contents page. In the cover photograph a pimple above his left eye has been removed.

9. Goodwin, Andrew. *Dancing In The Distraction Factory: Music Television And Popular Culture,* London: Routledge (1993), p.62.

10. *The Face ,* ad for Rushes.

11. Knopfler first appears by himself in the video in shot #19, then in shot #26, #27 and #28, next in shot #39 and #40, then in shots #50, #53 and #56, next in shot #69, then in shot #104, the sequence of shots #119-#134 and finally in shot #140.

12. Straw, Will, "Popular Music and Postmodernism in the 1980's" in Frith, Simon, Andrew Goodwin and Lawrence Grossberg (eds.). *Sound And Vision: The Music Video Reader,* London and New York: Routledge (1993), p.11.

13. Hayward, Philip, "Industrial Light And Magic- Style, Technology and Special Effects in the Music Video and Music Television" in Hayward, Philip (ed.). *Culture Technology & Creativity In The Late Twentieth Century,* London, Paris and Rome: John Libbey (1990), p. 132.

14. The structure of the song is as follows: instrumental section/ verse/ chorus/ verse/ chorus/ repeat chorus/ verse/ chorus/ verse/ chorus.

15. Mercer, Kobena. "Monster Metaphors: Notes On Michael Jackson's Thriller" in Frith, Simon, Andrew Goodwin and Lawrence Grossberg (eds.). *Sound And Vision: The Music Video Reader,* London and New York: Routledge (1993), p. 96.

16. Fiske, John. *Reading The Popular,* London: Unwin Hyman Ltd. (1989), p. 125.

17. Mercer, "Monster Metaphors: Notes On Michael Jackson's Thriller", p. 102.

18. Walkerdine, Valerie, "Some day my Prince will come: young girls and the preparation for adolescent sexuality" in McRobbie, Angela and Mica Niva (eds.) *Gender and Generation,* London: Macmillan (1984), pp 162-184.

19. The song sung by Snow White in the Disney film *Snow White And The Seven Dwarfs,* and based on the Grimm Brothers' fairy tale.

20. McRobbie, Angela and Trisha McCabe. *Feminism For Girls: An Adventure Story,* London: Routledge and Kegan Paul (1981).

21. Berland, Jody, "Sound, Image and Social Space: Music Video and Media Reconstruction'" in Frith, Simon, Andrew Goodwin and Lawrence Grossberg (eds.). *Sound And Vision: The Music Video Reader,* London and New York: Routledge (1993), p.6.

22. The Disney Studio has produced a few animated musical films in which actors are represented in live-action mode and optically composited with animated characters. Examples of these include *Song Of The South* (1946) and *Mary Poppins* (1964) .

In addition, in the film *Fantasia* (1940), the animated character Mickey Mouse climbs the orchestra podium to shake hands with the conductor, represented in photographically real live-action form, Leopold Stokowski.

23. I have seen an alternative version of this video which contains only fragments of this version and is mostly constructed around creative use of collage of a random selection of graphic images and the playful manipulation of three dimensional objects.

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