CHAPTER 6

THREE DIMENSIONS OF VISUAL MUSIC

The abstract animations of canonical filmmakers such as Oskar Fischinger, Len Lye and Norman McLaren may appear to be forbidding and indecipherable to the average viewer, since they are consistent with most of the characteristics of the avant-garde outlined in this book. Visual music does not feature dramatic action or protagonists, and there is no 'goal' in a dramatic sense. Visual events are sequential rather than consequential, and the surface details are more central to the experience than the semantic content in this category of films. Yet, visual music features some of the most accessible films within the avant-garde. As such, the aim of this chapter is to demonstrate how they become relatable by exploiting familiar, native perceptual capacities.

By way of brief definition, visual music has been defined by Olivia Mattis as a broad range of artistic practices, far-flung temporally and geographically but united by the idea that 'visual art can aspire to the dynamic and nonobjective qualities of music' (Mattis 2005: 211). Referring to this category of films as visual music has become something of a misnomer today, because the methods of generating this type of film have developed over time. While pioneering abstract filmmakers Hans Richter, Viking Eggeling and Walter Ruttmann were inspired by Wassily Kandinsky, who sought a visual equivalent to music, alternative structuring systems have since been developed. These include programmatic randomness, repeated layering, poetic structure (e.g. a visual limerick or haiku), repetition and evolution, stream of consciousness, mathematical formula or algorithm, the imposition of limiting rules (e.g. only using certain shapes or colours) and the 'exquisite corpse' system – collaboration where no participant sees the other participant's work apart from the final frame. Even if film artists do not attempt to produce a visual equivalent to music, then, they nonetheless tend to feature non-figurative imagery, which changes and transforms over time.

Following on from the discussion of synaesthesia in the previous chapter, this brief analysis will consider three additional perceptual phenomena and relate

them back to visual music. The first part will consider cross-modal verification, which is associated with synchronization; the second part will explore the use of hallucinogenic vision; the third part will discuss symmetry. The way in which visual music can appeal to familiar perceptual capacities will be illustrated, allowing the spectator to engage the work without requiring specialist knowledge. The central theme that binds these three topics together is that while visual music does not tell conventional stories, it exercises more primitive parts of the human mind by appealing to basic perceptual capacities.

Not every artist who is considered avant-garde should be understood as making their work intentionally esoteric; pioneering experimental filmmakers such as Oskar Fischinger and Len Lye simply approached film from the tradition of abstract painting – an art form in which narrative played no part. Both filmmakers willingly used their skills to produce commercials while retaining their own creative integrity. Fischinger produced commercials for Oklahoma Gas and Muratti Cigarettes, while Len Lye created adverts for Shell Motor Oil, First Savings Bank and other institutions. In both cases it seems apparent they were willing to reach as broad an audience as possible, in stark contrast with Peter Kubelka's far more esoteric *Schwechater* (1958) beer commercial, which was deemed unusable by his patrons.

In the absence of a pop culture for the majority of their respective careers, both Lye and Fischinger used music with broad appeal to accompany their films; jazz and calypso for Lye and popular classical music for Fischinger. We can assume, then, that their films were to be produced for mass consumption and played alongside commercial news show reels and movies, as well as specialist platforms for artists' films.

Cross-modal Verification

This subsection will illustrate how avant-garde filmmakers exploited the detection of synchronization between sound and image as a native capacity that allowed spectators to engage with visual music, and how this technique was also shared by other commercial forms of animation. By way of brief example, consider Len Lye's *Swinging the Lambeth Walk* (1939), Oskar Fischinger's *Allegretto* (1943), John Whitney's *Celery Stalks at Midnight* (1952) and Norman McLaren's *Blinkity Blank* (1955). All films operate on the same basis in the sense that they take abstract shapes, which move, appear and disappear in synchronization with music.

Testament to the pervasive appeal of synchronized sound and movement, experimental filmmakers shared the technique of tightly synchronized sound-image relations with commercial cartoonists. In 'Music and the Animated Cartoon', cartoonist Chuck Jones protested that 'for some reason, many cartoon musicians are more concerned with exact synchronization or "mickey-mousing" than with

the originality of their contribution or the variety of their arrangement' (Jones 1946: 365). Put simply, mickey-mousing refers to the film technique whereby the physical movements of the characters are synchronized with the music – Mickey Mouse was the first character to use synchronous movement in the iconic animation *Steamboat Willie* (1928). With more recent insights provided by cognitive research, the reason as to why animators and audiences were compelled by mickey-mousing, just as they were with synchronization in visual music, might not be as much a mystery as it was in 1946, when Chuck Jones bemoaned the pervasiveness of the technique. The popularity of this technique is due to cross-modal verification.

Psychologist J.J. Gibson stated that when we perceive multi-modally, we seek the invariant properties of an event across sense modalities. If the patterns and rhythms are confirmed across modalities, the information carried by the sound and image is perceived as a single event (Gibson et al. 1969: 113). This is the basis of cross-modal verification. Indeed, the motion picture medium is bimodal – we see and hear the events take place in conjunction with one another. Joseph Anderson comments that the separate streams of images and sounds in motion pictures 'can be so constructed as to meet the criteria of the perceptual systems, thus eliciting confirmation of the unity and veridicality of *filmic* events' (Anderson 1996: 89). Cross-modal verification, then, is a perceptual process employed in everyday life, in which we cross-check the veridicality of our visual experiences with our sonic environment. If a sound and a visual event occur in synchronization, we typically bind both experiences together as part of the same incident.

What is significant about this cognitive skill to a discussion of visual music is that not only do we have the capacity to bridge modalities, but we gravitate towards it. Our sensory systems are compelled to perceive synchronized images and sounds as part of the same event – psychological evolution instructs us to cross-check modalities in order to confirm the veridicality of our perceptions. Lip sync is one such specialized application for us to link sounds and images. For humans – even the very young – we seek speech synchrony, and when we find it we lock our eyes onto the lips of the speaker and our ears onto the sound of their voice, even if we do not know the language they are speaking. The experience of cinema is not something that human evolution could have foreseen – in a movie theatre, however, the desire to bridge modalities between the visual impression of the onscreen speaker and the sound of their voice is compelling enough that we ignore the fact that the sound energy is emanating from a separate source to the mouth of the onscreen figure. In some cases, their voice may be emanating from behind our heads, and this does not seem to undermine the integrity of our experience enough to compromise the experience. Avant-garde filmmakers who produced visual music intuitively understood this, and used audiovisual synchronization as a method to make their abstract films more easily relatable to broad audiences.

Joseph Anderson cites two experiments in which cross-modal verification was tested. In both experiments, infants were used – this is because infants respond with programs for interfacing with the world 'hardwired' by evolution, since they have little time to develop culture-based habits. In the first experiment, a group of four-month-old infants were shown three different video sequences: a game of patty cake, a musical sequence played on a xylophone and a slinky moving between two hands. The films were shown two at a time side by side, out of sync with one another, with the soundtrack for only one of them playing. The young participants spent about two thirds of their time watching the video that had the soundtrack playing (Spelke 1979: 221–35). In the second experiment, lip sync was tested. Ten-week-old infants were shown video footage of an experimenter's face as she recited nursery rhymes. In some trials the experimenter's voice was delayed by as much as ten frames (almost half a second). The participants did not spend as much time looking at the experimenter's face in the out-of-sync condition as they did when watching the films in perfect synchronicity (O'Connor and Hermelin 1981: 315–43).

At their early age, these young spectators had little time to learn about the connections between the mouth and voice, and the link between the movement of objects and the sounds they make. Yet their intuitive reaction was to pay closer attention to the synchronized images. For our purposes, this suggests three things: first of all, cross-modal verification comes hardwired into the human perceptual system rather than something that is developed through culture. Secondly, it suggests that perception is not passive, but rather it is an active information-gathering activity. Finally, as already suggested, it indicates that temporal synchrony is compelling. The infants did not simply revel in the visual and auditory stimulation; they actively sought a connection between the modalities.

In our interaction with the physical world, the seeds of aesthetic experience are always in place – any visual scene can be examined for its abstract quality (e.g. the play of light and colour in a landscape). Our propensity towards cross-modal verification in abstract film, in turn, comes from our interaction with the real world. This may provide an answer to the question that mystified Chuck Jones in 1946 as to why cartoonists were so preoccupied with mickey-mousing – on some level, spectators were (and still are) compelled to bind punctuated moments in the music and the movement of the characters as 'part of the same event'. From here, it is a plausible leap to suggest that the same principle applies to sound in relation to the abstract shapes found in some of the work of Len Lye, Norman McLaren and Oskar Fischinger. Synchronization in abstract animation may be understood as a non-figurative variant of mickey-mousing.

None of the classical artists cited above were rigidly set on synchronization; all have explored alternative image-sound relationships. But they all intuitively understood the appeal of synchronization, and how this would help broaden the appeal of their films in an absence of traditional narrative.

Cross-modal Verification with Oskar Fischinger

The absence of figurative imagery or the most rudimentary of narratives put Oskar Fischinger under pressure to appeal to cross-modal verification as a means of invoking a relatable aesthetic response. He became known for synchronization through the Studie series (1929–1933). William Moritz outlines Fischinger's method for synchronization:

> Oskar marked out the synchronization, which he always determined (thanks to his engineering training) by scratching an 'X' across a phonograph record, then calculating the exact time a certain sound occurred by using a slide-rule to compensate for the diminishing size of the grooves toward the centre of the disc! (Moritz 2004: 36)

Consider Fischinger's *Allegretto,* which is comprised entirely of abstract forms shifting and contorting in tight synchronization with an upbeat jazz composition. The imagery is primarily underscored by two sets of circles that expand and contract, reminiscent of pond ripples. The foreground alternates between sharp angular diamonds and softer forms in a variety of primary colours and sweeping lyrical movements. Occasionally a hail of small diamonds drift down the screen, while at other moments thick angular shapes rapidly ascend towards the spectator, shifting in hue and luminance as they progress. Each shape and movement feels bound to a note in the soundtrack; the sound and the imagery are experienced together in synchronization.

Fischinger's tendency towards synchronization may have in part been driven by his own aesthetic interest and in part by external pressures – but it must have been a powerful drive, considering how laborious the process would have been. However, this was not the only sound-image relationship that interested him. In *Radio Dynamics* (1942) he used no sound at all. *Motion Painting No.1* (1947) was accompanied by Bach's 'Brandenburg Concerto No. 3', but the absence of synchronicity reportedly played a major role in Fischinger no longer receiving grant money from the Guggenheim foundation. William Moritz discusses Baroness Hilla Rebay – the Curator of the Guggenheim foundation and Fischinger's source of funding:

> the Baroness . . . demanded a very precise coordination between sound and image: she actually expected a film like *Allegretto* in which the layered cels provide a perfect analogy to the music, with background rhythms, harmonic arrangements of various shapes and colours, and bravura melodic solos. (Moritz 2004: 124)

Rebay, reportedly 'outraged' by Fischinger's *Motion Painting No. 1* was evidently unable to engage with the work in the absence of appealing to cross-modal verification and also direct equivalents between sound and image. Yet Moritz reports that elsewhere the film was well received – winning the Grand Prize at the Inter-

national Experimental Film Competition in Brussels in 1949 (ibid.: 134). Those receptive to the film interpreted the music as an exuberant emotional backdrop to the act of creativity, as the painting takes form and transforms onscreen in a stream of consciousness, rather than depicting a note-for-note equivalent to the soundtrack. Yet without Guggenheim funding, Fischinger was unable to produce any more films. Audiences were divided on its charms without synchronization – those more receptive to other methods of engagement, such as appreciating the visual impressions on their own merit without synchronization, and witnessing the evolution of one idea to the next, can enjoy an aesthetic response without depending on cross-modal verification as a source of engagement.

The appeal of cross-modal verification and synchronization is not unique to the avant-garde. Rather, it is a timeless expressive tool that commercial filmmakers from the late 1920s onwards up to the present day continue to exploit. All of them intuitively hit upon the expressive power of tight synchronization. After *Steamboat Willie* premiered in 1928, synchronization quickly became standard fare in commercial cartoons. Unlike the stories used during the late silent-era cartoons, such as those featuring Felix the Cat, the onset of synch-sound initially led to paper-thin plot lines. Up until the late 1930s, cartoon stories were invariably used to initiate a party, or an impromptu song and dance. Animated series were musically based – Disney ran the Silly Symphonies, Warner Bros. ran Merry Melodies and Looney Tunes, and MGM ran Happy Harmonies. In both the commercial world and the avant-garde, synchronization proved to be an effective source of appeal.

Hallucinatory Vision

The second perceptual capacity visual music sometimes engages with in the absence of traditional stories is that of hallucinatory vision. In Semir Zeki's '*Inner Vision: An Exploration of Art and the Brain,* he suggests that painters experiment on, and unconsciously discover things about the organization of the visual brain with techniques unique to their skill sets. They work and rework a painting until it achieves a desirable effect. If it should please others as well, Zeki proposes 'they have understood something general about the neural organization of the visual pathways that evoke pleasure, without knowing anything about the details of that neural organization or indeed knowing that such pathways exist at all' (Zeki 1999: 3).

By way of example, Zeki observes that Leonardo Da Vinci commented some 500 years ago that the most pleasing colours are the ones which constitute opponents. Without realizing it, Da Vinci identified a physiological phenomenon later explored by psychologists in the twentieth century called opponency. Here, cells in the visual system that are excited by red are inhibited by green; those excited by yellow are inhibited by blue; and those excited by white are inhibited by black.

More recently, years following the death of Piet Mondrian, it was discovered that the cells of the visual brain, which are considered critical for the perception of form, are responsive to straight lines of specific orientations, and the field of view to which they respond is rectangular. This brings Mondrian's trademark grid-like paintings to mind, and Zeki comments 'It is hard to believe that the compelling relationship between Mondrian's work and the brain's physiology is entirely fortuitous' (Zeki, quoted in Henns 2010: 66). Zeki's model of the artist as a 'neurologist' who explores the organization of the visual brain closely resonates with the model of the filmmaker as practical psychologist as advanced in this book.

Perhaps the most striking parallel between imagery produced by perceptual psychologists and experimental filmmakers was that of the study of visual hallucinations (Figure 6.1), and the work of Oskar Fischinger (Figure 6.2) and Jordan Belson (Figure 6.3). In 'What Geometric Visual Hallucinations Tell Us about the Visual Cortex', Bressloff comments that visual hallucinations are experienced after taking hallucinogens such as LSD, cannabis, mescaline or psilocybin, which are created in the visual cortex (Bressloff et al. 2002: 473). The patterns generated, all of which feature repeated geometric orders, are indicative of the
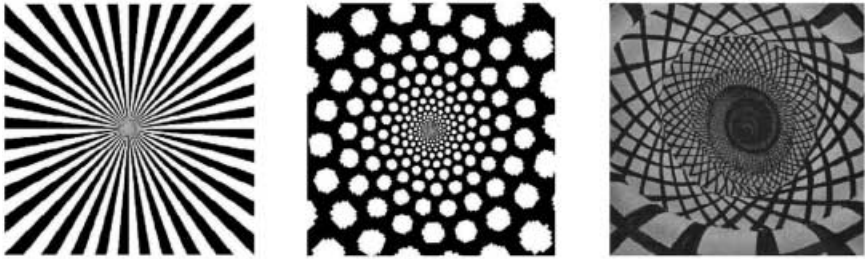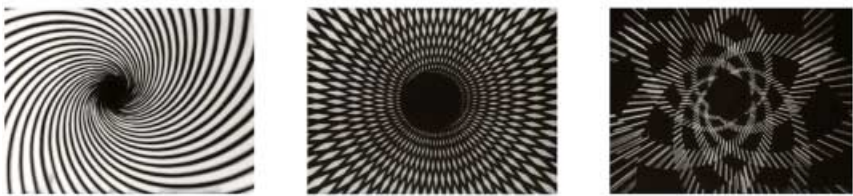

Fig. 6.1

Fig. 6.2

Fig. 6.3

Figures 6.1–6.3. There is a marked similarity between reports of geometric visual hallucinations (6.1) and the imagery in *Spirals* (1926; 6.2) and *Allures* (1961; 6.3). Screen captures by the author.

structure of the visual cortex. These hallucinations, reported by a group of test subjects for Bressloff's study, are re-created in the images in Figure 6.1. The picture on the left depicts a 'funnel image' as reported following ingestion of LSD; the centre picture is a spiral image also reported after ingestion of LSD. The image on the right is a 'lattice tunnel' hallucination following the use of marijuana.

The lines and circles that converge in the centre of the frame in Oskar Fischinger's *Spirals* (1926) (Figure 6.2) and Jordan Belson's *Allures* (1961) (Figure 6.3) are similar enough to warrant the speculation that both artists may have intuitively tapped into some fundamental characteristic patterns that the visual cortex responds to. Both film artists practised forms of meditation (see Sitney 2002: 264; Moritz 2004: 132), and this may have informed their creative inspirations for geometric, rotating, mandala-esque imagery, which can appear when in a deep state of intense meditation. Whether or not they took hallucinogens would be a matter of speculation,[1] but they evidently generated geometric shapes that humans are responsive to in a way that relates to the hallucinations discussed by Bressloff et al. As Zeki would comment, both Fischinger and Belson can be considered neurologists who explored the organization of the visual brain.

Belson stated as much quite explicitly, although he frames his films as a visualization of inner consciousness rather than the visual cortex. He has commented:

> I've always considered image-producing equipment as extensions of the mind . . . The mind has produced these images and has made the equipment to produce them physically. In a way it's a projection of what's going on inside, phenomena thrown out by the consciousness, which we are then able to look at. (Belson, quoted in Youngblood 1970: 160)

Belson refers to *Allures* in particular as referencing human physical perception more than his other films (ibid.: 162). William Wees has also made the connection between Belson's films and hallucinatory vision in another study, which also featured 'explosive and rotational patterns' (Siegel, quoted in Wees 1992: 131). Again, hallucinatory vision features light moving in web-like structures, forming grids and geometrical shapes. A circle frequently features, with its centre corresponding with the centre of the visual field and 'whose peripheries become concentric rings or spirals of radiating dots and lines' (Wees 1992: 131).

Belson was creatively influenced by Oskar Fischinger films he encountered at the initial *Art in Cinema* screenings in 1947 in San Francisco. According to Aimee Mollaghan, the influx of the European avant-garde to America in the post-war period along with the establishment of the *Art in Cinema* screenings, a rise in the practice of Eastern religions, and a rise in the use of perception-altering drugs in search of a transcendental experience, gave way to artists like Belson and also James Whitney. Mollaghan comments that 'The graphic formalism of the German modernist filmmakers [such as Oskar Fischinger] ceded to a more nebulous abstruse spiritualism' that sought to capture and express transcendental experience (Mollaghan 2015: 95).

Taking sense as muse, Belson continued Fischinger's aspiration to simulate and promote states of meditation with images that function as agents for transcendence. The films themselves present the viewer with 'visual, aural and rhythmic equivalents of expanded states of consciousness' (ibid.: 88). However, they take a more immediate, intense form than the 'meditative film' or ecocinematic style as defined in chapter one. They also appeal to inner experience, taking sense as muse in a more literal sense than meditative films, which directly engage the material world rather than re-creating the inner world.

In delving into one's inner-consciousness through intense meditation or perception-altering drugs, bodily sounds and aspects of visual experience become apparent that would otherwise be shut out in normal circumstances. Mollaghan suggests that in *Allures*, a high-pitched electronic sound accompanied by a lower beating rhythm resembles the nervous and circulatory systems. In addition, the film features 'fields of dots and dashes super-imposed over each other [which] reflect the speed and activity of the neural pathways as they enter even deeper into the state of meditation' (ibid.: 89). Of all Belson's films, *Allures* in particular lends itself an expression of the inner world. Simultaneously, Gene Youngblood interprets the film as being themed around the birth of the cosmos (Youngblood 1970: 160). Ying Tan suggests that Belson's films are to be understood as sacred art that express both the micro and the macro; they speak of experience as an earthly human being; they absorb all that have something to contribute to art, such as all religions, cultures, science and technology; they emphasize the intuitive over the intellectual, and despite their calm exterior, they are full of life (Tan 1999: 29).

As an addendum to this discussion of hallucinatory vision through meditation and perception-altering drugs, it should be noted that hallucinations can also be induced through prolonged exposure to stroboscopic lights. This motivated Tony Conrad's *The Flicker* (1966), and Paul Sharits' flicker films such as *T.O.U.C.H.I.N.G* (1968) (Figure 6.4). A similar effect is created in Thorsten Fleisch's more recent *Energie!* (2007) (Figure 6.5). Here, artists do not seek to re-create hallucinogenic vision, but rather invoke actual hallucinations in their audience.
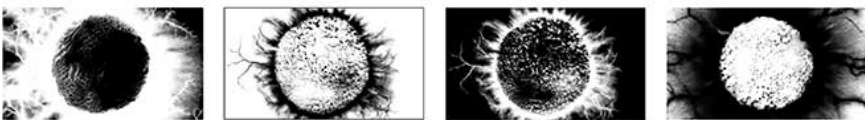

Fig. 6.4

Fig. 6.5

Figures 6.4–6.5. Films such as *T.O.U.C.H.I.N.G* (1968; 6.4) and *Energie!* (2007; 6.5) explicitly seek to create a hallucinatory experience. Screen captures by the author.

Sharits draws inspiration both from esoteric religion and also research on visual perception. He notes that according to the Shvetashvatara Upanishad, during intense sessions of mediation one may see visual forms resembling snow, crystals, smoke, fire, lightning, the sun and the moon. But unlike Belson, he also comments that it is the 'strong, intuitively developed imagistic power' (Sharits, quoted in Russett and Starr 1988: 161) that interests him rather than the mystical symbolism. At the same time, he was also inspired by W. Grey Walter's book *The Living Brain*, in particular a chapter entitled 'Revelation by Flicker' (Walter 1963 [1953]: 83–113). Walter reports that he conducted an experiment to explore epilepsy. He ran a strobe light in front of various participants' eyes, and discovered that in addition to provoking seizures amongst those with epilepsy, he also provoked hallucinations in non-epileptic participants. The visions evoked were comparable to those discussed previously – geometric patterns, either dominated by straight lines (e.g. crosses or diamonds) or curved lines (e.g. circles and vortices).[2]

The cause of flicker-based hallucinations is still a matter of speculation. Walter suggested that the visual system features a scanning mechanism, and the hallucinations are caused by interference between the flicker and the human visual scanning mechanism. Other theories have been proposed, such as that the images are created by spontaneous activity of neurons in the brain misunderstanding the stimulus they are exposed to and are making 'their own hypotheses' (ter Muelen et al.: 2009). Whatever the cause, Conrad and Sharits' contribution to the art of film (deriving from Walter's experiment) is that they invite viewers not to focus their attentions on the contents of the frame itself, but rather on the impression generated by the visual centre of the brain when engaging with their films.

Symmetry

The final perceptual capacity to be considered that visual music sometimes engages in the absence of a traditional story is symmetry, which is interlinked with the previously discussed topic of recurring geometric patterns. Symmetrical imagery reappears throughout art history, from ancient Islamic art to mandalas, the work of M.C. Escher, and kaleidoscopes. A range of experimental films also feature symmetrical patterning. For instance, Pat O'Neill's *7362* (1967) features moments resembling a moving Rorschach test (Figure 6.6), and Ken Jacobs' *Disorient Express* (1996) contains segments where footage of a 1906 train journey has been mirrored down the centre of the screen (Figure 6.7). John Whitney also explored multiple axes of symmetry to create mandala-esque, kaleidoscopic imagery in his later films such as *Arabesque* (1975).
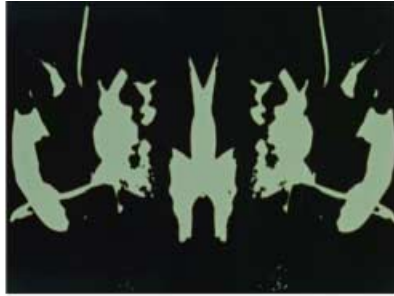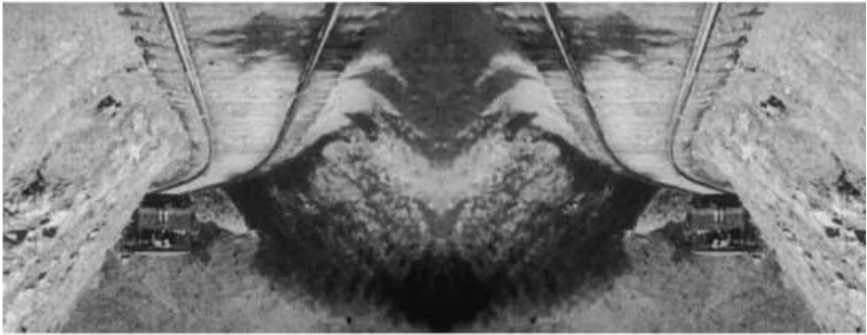
Fig. 6.6

Fig. 6.7

Fig. 6.8

Figures 6.6–6.8.   Symmetrical imagery in *7362* (1967; 6.6), *Disorient Express* (1996; 6.7) and *Delicacies of Molten Horror Synapse* (1991; 6.8). Screen captures by the author.

Humans begin to discern symmetrical patterns during the early developmental stages of visual processing in human infancy. Symmetry pervades nature – most living organisms are bilaterally symmetrical and flowers often feature multiple symmetry axes. Some evolutionary biologists have attributed our sensitivity to symmetry to evolutionary pressure. For example, mate selection can depend on symmetrical facial features, since parasitic infestation (detrimental to fertil-

ity) often produces lopsided, asymmetrical development (Ramachandran and Hirstein 1999: 27). As such, this may account for a built-in aesthetic preference for symmetry.

In addition to an innate preference for symmetry, its detection is also fast and automatic rather than being mediated by cognitive conscious effort (Treder 2010: 1514). It serves as an early warning system to grab our attention to facilitate further processing until the entity has been identified. As well as signifying potential attractiveness, symmetry can also warn us about potential dangers. Michael Bird explains:

> we register the presence of symmetrical features in our field of vision before we realise what we're looking at. Since most living organisms and many natural objects are bilaterally symmetrical, symmetry perception probably has an evolutionary basis – you don't want to stare too long or hard to make out the tiger's eyes amid the tousled asymmetry of the foliage around them. (Bird 2004)

Evolutionary psychologists have suggested that prototypical stimuli like symmetrical objects feel familiar, and as such are preferable to unfamiliar stimuli. This feeling of familiarity is associated with positive affect (Halberstadt 2006: 166–83). When the experience of a film is based on appreciation of surface details above a larger storyline, it perhaps should not be surprising that some filmmakers felt intuitively compelled to explore the expressive potential of symmetrical imagery.

It may also be observed, however, that not all artists value the merit of symmetry. Stan Brakhage has commented that he has an 'abhorrence of symmetry' (Brakhage 2007–8: 121). His film *Delicacies of Molten Horror Synapse* (1991) features symmetrical imagery, and the 'horror' in the title refers to his response to symmetry (Figure 6.8). Why might artists be divided on its aesthetic virtues? One may speculate that the appeal of prototypical, familiar stimuli like symmetrical imagery and also synchronization may broaden the appeal of experimental films by appealing to familiar, native perceptual capacities. Simultaneously, artists within the avant-garde (particularly from the 1950s onwards) actively sought to stretch and expand viewers' range of aesthetic sensitivities by appealing to unfamiliar aesthetic experiences. They offer lessons in perception, to repeat Michael Snow's maxim, which has pervaded this book, rather than retreading the familiar.

Robert Breer, whose film oeuvre began in the 1950s when the avant-garde was becoming more radicalized, commented that while he admired Fischinger in some ways, he also found him 'something of an abomination' (Breer, quoted in MacDonald 1992: 19). Like Brakhage's abhorrence of symmetry, Breer's partial distaste for Fischinger's work may in part stem from his appeal to familiar, 'conservative' perceptual experiences, such as smooth motion, tight synchrony,

graphical formalism, harmonious colour schemes and classical music. The avant-garde, for some, is at its best when it does not appeal to native capacities.

Irrespective of the aesthetic virtues and shortcomings of symmetry in art, its appeal can be placed in the context of native perceptual capacities, alongside the use of synchronization and hallucinatory imagery.

Conclusion

The goal of this chapter was to demonstrate that appreciation of visual music does not always depend on a wholesale rejection of naturalistic perceptions and familiar methods of engagement. In particular, the use of synchronization, web-like geometric patterns and symmetry all appeal to familiar, native capacities. To a general audience these techniques may make the films more appealing, but to those in search of a more radical experience, these techniques may appear banal and unappealing. Either way, their function has been placed in context.

In this instance, a parallel can be drawn between the avant-garde and commercial realms. While the artistic, 'personal' work of Oskar Fischinger and the 'industrial' work of Walt Disney might initially seem to be at opposite ends of a cultural spectrum, their artistic kinship must have been recognized clearly enough to lead to their eventual collaboration on *Fantasia* (1940), which attempted to bridge artisanal and commercial aesthetic traditions. The base appeal of synchronized movement makes a work like the Silly Symphonies cartoon *Skeleton Dance* (1929) closer in spirit to Fischinger's *Studie Nr. 7* than it may initially seem. Indeed, Disney donated films and production artworks to the Museum of Modern Art and also became a trustee in 1944 (Mikulak 1997: 62).

Some experimental films, then, depend less on the development of new aesthetic sensitivities and more on discarding existing skills that spectators unconsciously learn to depend on, such as narrative comprehension and character engagement. Contrary to the assumption that a spectator does not know enough in order to appreciate an experimental film, in some instances the viewer may in fact know too much, and depend implicitly on habits of engagement routinely activated when experiencing a film. Discarding habits of engagement, in some instances, can serve to liberate the viewer, allowing them to focus on the visceral appeal of visual music.

Notes

1. Note that LSD was not discovered until late in Fischinger's career. It was first synthesized in 1938, and first intentionally ingested in 1943 (four years before his final film). As such, it is doubtful that he would have come into contact with it. However, it became tied to the American counter-

culture (and illegalized) in the 1960s. Belson was based in San Francisco for most of his life – a countercultural hub – and he produced an (uncompleted) film entitled *LSD* in 1962. In Gene Youngblood's *Expanded Cinema*, Belson comments that he experimented with peyote and LSD earlier in life (Youngblood 1970: 174).

2. Brion Gysin's stroboscopic flicker device called the 'Dreamachine' (created in the early 1960s) was also noted for taking inspiration from Walter's 'Revelation by Flicker' chapter in *The Living Brain*.