Peer reviewed version

Link to published version (if available):
10.1177/1746847719859194

Link to publication record in Explore Bristol Research
PDF-document

University of Bristol - Explore Bristol Research
General rights

Abstract

Between 1935 and 1938, Mary Ellen Bute began her career as a filmmaker with a series of mostly animated films, including *Rhythm in Light* (1935), *Synchromy No. 2* (1936), *Parabola* (1938) and *Escape* (1938). This article examines how these films offered an innovative, subtle and purposeful investigation of the potentials of animation to create artistic and expressive motion. Paying close attention to Bute's own writing, the article explores how these films related to Bute's expansive vision of cinema as a new form of kinetic art that was both composed and free-flowing. Drawing upon painting, music, sculpture and chronophotography, Bute's work was highly intermedial, investing these arts and media with the dynamic potentials of filmic and animated motion. Tracing how Bute composed motion, displayed motion and used motion expressively, this article aims to develop our understanding of a pivotal twentieth century filmmaker, while at the same time investigating the distinctive ideas of the aesthetics, forms and effects of animated motion that were articulated in her filmmaking practice and theoretical writing.

Expressive Motion in the Early Films of Mary Ellen Bute

In a career that spanned decades, Mary Ellen Bute directed a dynamic series of animated films that explored the aesthetics of motion. Bute's status as a highly significant and innovative filmmaker is well-established: references to her films regularly appear in histories of animated and abstract film; her article 'Light * Form * Movement * Sound' (1941) has been reprinted in major anthologies of both women's writing on film and film manifestos (Lant and Periz, 2006; Mackenzie, 2014); her experimentation with the oscilloscope as an animation device has become a recurring topic in histories

of computer generated imagery; and her most well-known film, *Tarantella* (1940), was added to the National Film Registry in 2010. In-depth studies of Bute's films include Lauren Rabinovitz's (1995) superb account of Bute's career and artistic approach, alongside Cecile Starr's (1976) groundbreaking earlier work.

Yet, Bute's ideas of an art of motion demand renewed attention. The films and writings that stemmed from Bute's creative vision reveal wider implications for how we might better understand motion's diverse aesthetic potentials. Partly spurred on by new technologies for representing and capturing motion, an increasingly wide range of scholarly work is bringing renewed attention to the expressive, affective and aesthetic qualities of motion. While often focusing on the uses of motion within cinema and animation, a more interdisciplinary exploration has also become increasingly evident in other areas, such as architecture, painting and photography (Papapetros, 2012; Zimmerman, 2016; Gunning, 2014). In many respects, as Tom Gunning (2007) and others have observed, this expanded sense of motion returns us to the concerns of the early twentieth century avant-garde.

This article aims to contribute to this burgeoning field of study by examining the distinctive and complex ideas of motion that appear in Bute's early films and writings. Bute's artistic practice was centrally concerned with exploring different expressive potentials of motion. Even before she began making films, Bute was absorbed by the idea of developing a new kind of '*kinetic* art' (1932: 3). Within her films, this kinetic sensibility took on many different forms: from variations of rhythmic patterns to explosions of movement, from the motion of figures to figures of motion, from evoking fluctuating emotions to alluding to cosmological processes. Rabinovitz (1995: 317) writes that Bute's films 'are about the emotional expressiveness of formal compositional elements.' Amongst these elements, expressive motion was vital to Bute's artistic practice.

Bute began her career as a filmmaker with five short films: *Rhythm in Light* (1935), *Synchromy No. 2* (1936), *Dada* (1936), *Parabola* (1938) and *Escape* (1938). While Bute planned and directed these

films, her work was infused with a collaborative spirit. Bute worked closely with Theodore J. Nemeth – who acted as cinematographer and producer – throughout this period. Together they founded 'Expanding Cinema,' a production company devoted to 'the further development of an abstract kinetic visual art' (Bute, 1937). Other collaborators included Melville Webber for *Rhythm in Light* and the sculptor Rutherford Boyd as the designer for *Parabola*.[1] Over the brief period in which these first films were produced, Bute used many different techniques and materials. Her first film, *Rhythm in Light*, combined stop motion animation with 'frame-by-frame drawings' and 'moving objects [that] were photographed in various speeds and lights—ping pong balls, cellophane, Fourth of July sparklers, barber poles' (Starr, 1976: 102). *Parabola* narrowed this diversity to focus on a series of sculptures created by the artist Boyd, enlivening them through animation, shifting viewpoints and changing configurations of shadow and light. *Escape*, Bute's first colour film, departed from the animation of three-dimensional objects, instead using optical printing effects and drawn animation. While later films would continue to explore different production techniques and forms of motion, these early films offered a vivid illustration of Bute's aim 'to find a medium in which movement would be the primary design factor' (Bute, 1954: 264).

Bute's early films were exhibited in a diverse range of sites, including Radio City Music Hall, New York University's School of Architecture and the Museum of Modern Art. Accounts in newspapers and periodicals reflected this breadth of audience address; one review (*Business Screen*, 1940), for example, described how Bute's first two films were 'Suitable for music student groups, art students, electrical engineers, and women's clubs.' Given their different audiences and production techniques, Bute's films can be difficult to categorise. This mercurial quality was compounded by their innovative approach and their place on the margins of mainstream cinema.

In order to simplify their aims for a wider audience, Bute's work was typically situated in two frameworks. The most prominent framework categorized the films as visual illustrations of music. The

films were presented as part of a series called 'seeing sound' and they would often begin with title cards

explaining their aim of transposing music into cinematic form. Bute titled her early films 'synchromies',

alluding to their symphonic qualities, their synchronisation of different aesthetic elements and their

chromatic emphases, with a nod towards earlier artists including Stanton Macdonald-Wright and

Morgan Russell who had used this portmanteau to suggest the musicality of colour painting. Bute's films

were also categorized as 'abstract films'. For example, *Escape* was exhibited by the Museum of Modern

Art's Film Library in 'a chronological survey of representative examples of the abstract film' in 1940,

shown alongside works by Hans Richter, Marcel Duchamp, Len Lye, Fernand Léger and Man Ray

(Weinberg, 1941). Hardly overshadowed by these more established artists, Bute and Nemeth were

described in the *New York Times* (Crisler, 1940) as 'the most finished and coherent of the abstractionists'

shown at this screening. The frameworks of abstract film and seeing sound were not only dominant at

the time Bute was making films; they continue to be so today.[2]

Approaching Bute's films as works of visual music and abstraction is hardly surprising. In

promotional material, speeches, articles and interviews, Bute would often describe them in these terms.

However useful these categories might be, they can also risk minimizing the complexity of the work.

Bute (n.d. a: 1) began an account of her career by simply stating, 'Yes, I make abstract films.'[3] Going on

to describe her work in much more varied ways, many of which were quite specific to her own vision of

filmmaking, this introductory statement hints at a sigh of resignation at the oversimplification of the

wide-ranging term 'abstract'. Similarly, while making frequent references to the interrelation of visual

and musical forms in her films, Bute's approach to 'seeing sound' was multifaceted. Years after the films

were first shown, Bute (n.d. b) expressed her dissatisfaction with the introductory titles that would often

draw attention to the musicality of the film to follow: 'The flamboyant TITLES are sometimes looked

upon as *objects of fun* by students today—They suspect ME of writing them! I did *NOT*. They were

written by the *astute* and *enthusiastic* Manager (Guy Eysell) of the Radio City Music Hall—who *knew his audience*!'

By focusing on Bute's ideas of motion and the ways that motion is used within her films, my aim is not to set aside or deny the importance of abstraction or visual music to Bute's films; nor do I aim to find a new framework which fully encapsulates these films. Rather, I hope to open up new perspectives on Bute's films by moving away from certain longstanding categorizations and closely attending to the subtleties of the films themselves, in conjunction with Bute's own nuanced and complex theoretical ideas. In doing so, I hope to reveal some of the dynamic and multifaceted ways that Bute envisioned motion as a form of unfettered expressive potential. In order to draw out some of the different routes that motion took in Bute's early films, I focus on three interrelated issues. First, I examine the tension between controlling motion in the planning or production of films and the sense of free-flowing motion that appeared within the films themselves. Second, I examine the multiple ways that motion was composed, displayed and shaped within Bute's films. Third, I explore how Bute's use of motion crossed between different arts and media, including music, painting, sculpture and chronophotography. I examine these features of motion through a close study of Bute's early films, alongside her theoretical writings, public statements and interviews. For Bute, the fluid and intangible power of motion resisted containment and inspired creativity. Following the paths of motion in these films can help illuminate not only their rich and multivalent qualities, but also the expressive potentials of motion itself.

Composing Motion: *Rhythm in Light*

Bute's first major statement of her artistic aims was presented in a lecture to the New York Musicological Society in 1932, before she began making films. At this time, Bute was working with Leon Theremin; in conjunction with her lecture he demonstrated 'a device for the free control of light and form in movement, synchronized with sound' (Bute, 1954: 263-264). Bute's talk, entitled 'Light as an Art

Material and its Possible Synchronization with Sound', began with a wide-ranging discussion of major

trends in painting that have turned towards dynamism and abstraction rather than stasis and

representation. Bute (1932: 3) suggested that 'The art of painting has reached a point where it demands

a feasible time element plus plasticity and the medium of light is the next logical step.' The lecture than

shifted to an in-depth exploration of how she envisioned a 'new medium of expression' that 'must be (1)

kinetic, (2) capable of controlled variation, made up entirely (3) of visual materials, (4) and having

principles of intrinsic order in these materials...' (1932: 1) In order to create a kinetic art with 'controlled

variation' and 'principles of intrinsic order', Bute looked to music. As it was 'the only kinetic art of pure

form with a great range of art experience', studying music 'reveals the general processes of

composition, which may be applied to any kinetic art expression taking into consideration the

peculiarities of the artistic material' (1932: 5). Although her background was largely in the visual arts,

Bute (1941a: 4) argued that principles of musical composition were more useful than painterly

techniques because 'the transition from a static surface to an art that develops in time is greater than

the step from one kinetic art form to another, even though they deal with different senses of

perception....' Motion – not imagery – was the material that had to be composed.

　　　While providing a helpful model for composition, music was also quite distinct from a kinetic art

of light. Rather than seeking correspondences between motion, colour and music, Bute (1932: 13)

doubted that there was any inherent relationship between music and visual forms:

> Once we clearly understand that the explanation of harmony between different hues is not due to
> vibration ratios and the possession of common harmonics… nor to any correspondence or direct
> relationship between sound and light physically, nor to any likeness between their physiological
> receptive organs, we are in a position to make convenient use of musical terminology if we wish,
> as a convenience.

Bute's hesitancy in seeing a kinetic art of light as akin to a musical form responds to an important

implication of how different arts and media relate to one another. While intermediality can destabilise

rigid boundaries between arts and generate new possibilities of expression, it can also suggest that one

artistic form takes precedence over another, offering an underlying basis. So, while musical composition could offer useful lessons for composing a kinetic art of light, it should not be taken as determinant. Bute was focused on developing new artistic forms rather than extending existing arts.

While music provided the model, painting provided the inspiration. Reflecting on her beginnings as a filmmaker, Bute (n.d. b) describes an early encounter with Wassily Kandinsky's artwork: 'His non-objective visual *themes*—the way he had varied and permutated; expanded and contracted them—building a stunning visual climax was thrilling!' She continues,

> I thought how glorious it would be if these visual themes could unfold, and permutate and build to this climax before our eyes as Music does for our ears. The painting emerged from the canvas and played in my imagination. I was exultant! But how to do it? How to make the transition from the imagination to the screen?

Bute's first film, *Rhythm in Light*, can be seen as a realization of this inspiring encounter with Kandinsky's artwork—extending the development of visual themes from a static image to a film that unfolds over time.

Following a short credit sequence, *Rhythm in Light* begins by depicting luminous triangles set against a black background. As the triangles move into the frame and spiral around one another, hollowed out circles appear onscreen. In a series of different configurations, these rings revolve, multiply and slowly glide through the frame. Much like a Kandinsky painting put into motion, the film introduces its visual themes of linear and circular forms. But unlike a static painting, these themes create changing configurations of light, shape and space. After beginning with these geometric forms, the film then offers a much different kind of image: a series of parallel lines shifting back and forth, expanding and contracting. These are more rigidly laid out than the preceding images, cutting diagonally across the frame. Although they also move, their linear regularity contrasts with the kinds of revolving, floating and merging forms at the start of the film. These images are followed by a more natural sense of movement, as rapidly rotating circles and spheres quickly flow across the frame, like bubbles. After this brief interruption, the moving parallel lines reappear with different shapes positioned along them. Describing

the Kandinsky painting that gripped her with its latent sense of motion, Bute (n.d. c) commented on how its 'abstractions seemed more and more like neumes and various symbols employed in Musical Notation.' The lines in *Rhythm in Light* indicate a similar sense of musical composition by visually evoking musical bars or piano keys. In this respect, Bute shows a series of images that evoke the creative act that shapes the animation to follow: the film is an animated composition, a rhythm in light. Other early films directed by Bute also begin self-reflexively with images that allude to their composition. *Tarantella*, for example, starts with a sequence that suggests an orchestration for the visual dance that will follow through a pattern of moving lines and small shapes which loosely resemble pianola rolls or punchcards.

After its initial geometric and compositional images, *Rhythm in Light* begins to show arabesques of moving light and amorphous shapes. Revolving, changing and moving within the frame, different shapes and forms begin appearing. At times these become blurred patterns of light. As the film nears its conclusion, more visually dense overlays of shapes begin to dominate, moving in different directions within the frame, projecting kaleidoscopic and vertiginous plays of light. The film culminates with a live action image of erratic streams of light shooting across the screen, cast by sparklers on the edges of the frame. The scene intensifies as a light emerges from the bottom of the frame, casting more sparks and filling the frame with luminosity. This climactic sequence depicts an all-encompassing and dynamic vision of light in contrast to the slowly revolving and more regulated images from earlier in the film. But at the same time, the sequence returns to the visual themes developed at the start: the interrelation of circular forms (the light sources on the edges of frame) and linear forms (the trails of light that shoot across the frame). This continuity with the start of the film is further indicated by two images that follow, lasting only a second. Returning to the basic forms at the beginning, the outline of a square embedded within a circle comes into view. This image quickly recedes into the blackness of the frame. It is followed by a blurred view of the same grouping of shapes in negative, and then there is a fade to

black. With their simple shapes and movements – almost as if they were logos for a production company – these two images offer a coda to the film's intricate development of luminous forms in motion.

In a manner much like what stirred Bute in seeing Kandinsky's work, *Rhythm in Light* projects a permutating and intensifying expression of its circular and linear visual themes, to which it briefly returns at the end. *Rhythm in Light* also reflected Bute's ideas of how a kinetic art of light should control and order motion, with its structured development of movement and allusions to its own composition of movement. While emphasizing a need for some sort of compositional basis, Bute was also wary that this could restrict creativity. A tension between controlled expression and a free-flowing artistic expression was evident in Bute's (1954: 263) description of the results of working with colour organs and other 'optical devices for the projection of color and images' as 'disappointing—amorphous shapes far from the creative expression I was seeking.' For Bute (1932: 4), they lacked 'the power inherent in control of form, the basic plasticity of line.' Animated film offered a much more stable and controlled means for 'creative expression', but the exacting precision and careful planning that was required also limited expressive freedom. She later referred (1954: 264) to her work as a '"cartoon" technique' in which 'the spontaneity of the artist's concept and design becomes extremely attenuated.'[4] Looking back on her filmmaking practice, Bute (n.d. a: 3-4) elaborated on how her early films were done through 'fundamentally a cartoon style' which

> was ungratifying and unsatisfying because I didn't feel it was a direct expression of my ability to project forms on a surface. I was dissatisfied as an artist simply because I had no technique or way of producing a free flow of form for projection. The forms I used were really patterns that had to be re-drawn and fitted in place much like a jig-saw puzzle.

Balancing a 'free flow of form' with a structured composition was a recurring tension in Bute's writing and artistic practice.

This tension is crucial to *Rhythm of Light*. While its climactic images of erratic sparks shooting across the frame is a compositional development of its earlier visual themes, it is also a vivid scene of frenzied and disordered motion. A sense of motion's resistance to imposed order has been an abiding

concern of filmmakers and theorists; Siegfried Kracauer (1960: 97), for instance, wrote of film's capacity to project 'the infinite flux of visible phenomena' as a fundamental value of the medium. Turning from animation to live action, the climactic images of *Rhythm in Light* presented motion that departed from controlled creation to a particularly emphatic image of the 'ever-changing patterns of physical existence' (Kracauer, 1960: 97). Even within the more carefully composed animated sequences preceding this, a similar sense of flowing and changing imagery was becoming amplified over the course of the film, indicating how the unstable flux of motion is not exclusive to live action cinema.

In *The Poetics of Slumberland*, Scott Bukatman (2012: 20) describes the tension between the often systematized or regulated modes of animation's production and its images of 'playful disobedience and plasmatic possibility', which can be seen in examples ranging from the mutable world of *Fantasmagorie* (Cohl, 1908) to the metamorphoses of *The Skeleton Dance* (Disney and Iwerks, 1929). Adapting Sianne Ngai's concept of animatedness, Bukatman (2012: 21) explains how animation embodies tensions: 'Regulation and resistance, liberation and limitation, automatism and autonomy— these are the dialectics in play.' In *Rhythm in Light*, the return to basic forms in motion at the very end of the film reminds us of an underlying order and structure that had become largely displaced by disorienting and dizzying images of light in motion. Bute (1941b) described how her art aimed to create 'a world of color, form, movement and sound in which the elements are in a state of controllable flux'.[5] The phrase 'controllable flux' captures the sense in which motion can be both controlled and freed. Bute expresses a similar set of dialectics in her films and statements on her artistic practice, aiming to balance composition and disorder, control and freedom, in her kinetic art of light.

Figures of Motion: *Parabola*

As well as shaping motion through the composition of a film, Bute would also use images and objects which themselves embody kineticism. Bute's second film, *Synchromy No. 2*, offers striking

examples of such figures of motion. While some of the film's visual motifs allude to narrative elements that were related to its accompanying score, Richard Wagner's 'Evening Star', other visual motifs were designed to accentuate a sense of motion. Some of the imagery suggests liminal spaces, with triangular forms representing archways and linear forms alluding to stairways. These and other geometric shapes were carefully crafted in order to be integrated within the overall visual design and movement of film, with Bute (*New York World-Telegram*, 1936) describing how she 'must mold each logarithmetical spiral or plane in plaster, then color it for the photography'. These geometric sculptures were then animated 'on a little stage the size of a platter' (*Literary Digest*, 1936: 20). The film also uses images to represent other dynamic forms. An article in the *New York Times* (Crisler, 1936) described how Bute's 'working scripts read rather like prose poems of the "Symbolist" school' and recounted their kinetic imagery:

> Pointed Gothic arches, fireworks, a quadrille of stars, a lactescence of nebular materials, the world-plasm from which planets are born, baths of luminous vapor, an upspringing of nightmarish Euclidean symbols, the head of the Winged Victory of Samothrace drifting across a night of delirium, a burst of cellophane, lilies on a fluted Ionic column, an overhead shot of a meeting of the French Academy, the great nebula in Orion, a slightly drunken constellation of marquee lights—these are the typical images which merge and separate, advance and retreat, through Miss Bute's cinematic world.

Rather than depicting natural movement, 'The forms are geometrical, cosmic, faintly vegetative, but never living; in place of chorus girls, Miss Bute will give you a ballet of pyramids' (Crisler, 1936). While the description of Bute's script may be embellished—it is difficult to detect even a suggestion of some of these images in *Synchromy No. 2* or other films made by Bute at the time—the account nevertheless captures a sense of the film's extraordinary imagery, both *in* motion and *of* motion.

Made the following year, *Parabola* took a distinctly different approach – rather than a profusion of images that evoked motion, it restricted itself to the single shape of the parabola as a figure of motion. In the film, a series of sculptures based on parabolic forms were enlivened through animation, mobile framing and shifting patterns of light. The sculptures were made by the artist Rutherford Boyd, who derived their shape from repetitions and modulations of parabolic forms, such as 'two cones, each

composed of over sixty laminations arranged parallel to the slope' (Boyd, 1938: 24). Some of the

sculptures were designed as solid masses, some were made up a series of lines and some were

fashioned by interconnecting different parabolic shapes. Combining creative intuition and mathematical

calculation, Boyd (1937a: 439) saw these sculptures as a way to 'command a new perception, Form in its

greater sense, Form in the abstract.' The film's aesthetic approach amplifies this effect, presenting a

mysterious landscape of abstract forms in an obscure environment of darkness, with the parabolic

shapes sometimes overlapping one another, sometimes set in motion. They take on an array of

figurative connotations, from organic forms such as flowers or shells to modern constructions such as

skyscrapers or bridge cables. At certain points, the sculptures are presented in ways which also suggest

instances of motion, such as the slow movement of stars in the night sky, the moving images of a

zoetrope or the trajectories of illuminated fountains.

As the effect of gravity on projectiles means that they follow a parabolic path, the sculptural

shape was itself a figure of motion. This is poetically emphasised in the opening titles of the film:

> Nature's poetry of motion
> Written with a single line
>> Parabola
> Path of every ball and bullet,
> Headlight's curve and bridge's cable,
> Fountain's jet and falling star
> Always follow this contour,
>> Parabola
> A captive curve, earthbound by gravity,
> Set free by man for all the arts.
>> Parabola

The description of the 'poetry of motion' of the parabola indicates that the film's central visual motif is a

shape which itself embodies movement. In this sense, the film becomes about motion: graphic

representations of motion fill the frame.

An attention to movement as a design principle is also suggested by the specific ways in which

the sculptures were created. Boyd (1938: 24) described how he would repeat a series of mathematical

iterations of the parabolic form with slight variations to create 'proportional intervals' which he would

then sculpt. Boyd (1937b: 3) links this practice to musical composition, writing of how the sculptures

were 'all carved directly from the single curve, the parabola – much I suppose as Bach and other

composers developed their fugues.' Variations on the parabolic form also occurred within sculptures,

resonating with trends in the visual arts such as the overlapping perspective in Cubist paintings.

Alongside such associations with math, music and the visual arts, the modulation of the same form

within the sculptures suggests the basis of cinematic and animated motion: a series of still images with

each one slightly different to the one before in order to give the impression of movement. The relation

between the iterations in the sculptures and the iterations in the successive frames of a film is suggested

at the end of the introductory sequence, which begins with a side view of a ridged parabolic sculpture

made up of dozens of thin parabolic slices. Each slice is animated to lift up and disappear offscreen, like

pages from a flipbook or frames of a film flickering past.

Motion is figured and suggested in multiple ways in *Parabola*: through the mobility of the

sculptures and our view of them, through the representation of movement in the parabolic shape and

through the representation of phases of motion in the sculptural design. This profusion of motion is

related to different arts, entwining sculptural, musical, painterly and cinematic qualities. Moreover, it

also combines mathematical principles with the flux of animated motion. Bute's negotiation of the

tensions between control and freedom in composing motion finds a striking expression in *Parabola*, with

sculptures that are both rooted in the order of mathematics and 'set free' by film.

While *Parabola* clearly reflected Bute's own artistic ideas and practice, Boyd claimed it as his

own work and there was an ensuing dispute between Boyd and Bute over its authorship. The dispute

stemmed partly from a change in the initial plans for Bute and Nemeth to make three films with Boyd's

sculptures: one for Boyd, one for themselves and one for Universal newsreels (Supreme Court New York

County, 1938: 2). For various reasons, only one film was eventually produced, for which Boyd took

credit. In advance of an early screening of the film at New York University's School of Architecture and Allied Arts, a press release crediting Boyd and making no mention of Bute and Nemeth's production company, Expanding Cinema, was sent to the *New York Herald Tribune*. Bute (1938) expressed her frustration in a letter to the dean of the School, explaining:

> It is entirely against our desire to cause any inconvenience to you or any one else in connection with the showing of the sixteenth. But, "Parabola An Abstract Film By John Rutherford Boyd" is entirely inaccurate and incorrect. The production credit must always be given to Expanding Cinema (Mary E. Bute and T. J. Nemeth)... The film "Parabola" is the result of many years of research, experimental work, and invention on our part...

The dispute over authorship eventually became a legal matter. In a deposition (Supreme Court New York County, 1938: 2), Bute was asked, 'When did you first talk to Mr. Boyd about a film based on his ideas?' Bute replied, 'We never talked to Mr. Boyd about a film based on his ideas. We did not bring up the discussion. We brought up a discussion of a film based on our ideas using his models...' While Bute does not go into detail about what these ideas entailed, the film clearly developed many of the concerns circulating around the elaboration of motion that were evident in Bute's creative practice.[6] Developing an extraordinary entwinement of different ways of figuring motion, the film extended her exploration of composing kinetic art to focus on the ways in which a single figure could itself be an image of motion, depicting motion, in motion.

Motion and Emotion: *Escape*

In some respects, *Escape* was a departure from Bute's previous films. Bute (n.d. a: 3) described how it was an atypical film for her as it 'had a literary idea': 'a little story with a plot and a musical background using geometric characters.' Depicting a triangle's struggle against an imposing black grid, set to the music of Johann Sebastian Bach's 'Toccata and Fugue in D Minor', the film creates a strangely dramatic effect from its simple narrative. Like *Rhythm in Light* and *Parabola*, the film focused on geometric shapes that go through various permutations and lively activities, integrated with an

accompanying score. Unlike Bute's earlier films, this was the first to use colour – the complementary

colours of the blue background and orange triangle add to a sense of conflict and visual dynamism. This

was also the first that did not use stop motion animation of three-dimensional objects. The shift into

new aesthetic and narrative directions allowed Bute to rework and expand central features of the earlier

films while also developing ideas of expressive motion in new ways.

  Escape begins with the image of a swirling deep blue background with accents of light, like

shifting storm clouds in a twilit sky. Almost immediately, this image of flowing forms is disrupted as a

thick black line emerges, bisecting the frame and then expanding to fill it with blackness. The blue

background returns, now masked by a number of lines. As the film proceeds, these lines dominate the

image, beginning horizontally, then becoming vertical bars and finally transforming into a grid; they are

set rigidly and symmetrically, encaging the swirl of motion. These lines enlarge within the frame,

stretching, spinning and distorting. Once the grid has established itself, we glimpse the outline of a black

triangle behind it. The moving background is replaced with a static blue background and the film

proceeds to elaborate on the triangle, having changed in colour to a vibrant orange, as its central visual

motif of dynamism. As the triangle becomes increasingly mobile, the grid wavers—its horizontal lines

lose their rigidity and oscillate back and forth, intersecting diagonally to create diamond and triangular

patterns and then bending to form curves. This degeneration of the grid culminates in an image of it as a

swirling form with the triangle still in the centre. After the gridlike geometric structure has entirely

transformed and then vanished, the diaphanous image of movement in the background reappears.

Nearing its climax, the film then presents a new intensity of movement as the triangle repeatedly

approaches and retreats, leaving traces of its previous iterations of motion which themselves spin in the

frame. After a repeated series of increasingly elaborate movements, with variations in speed, the

triangle blurs out to become almost indiscernible and a series of orange bars (perhaps the side angle

view of the triangle) rapidly shoot upwards in the frame. Like the final images of sparklers in *Rhythm in Light*, this conclusion to *Escape* provides a striking explosion of motion.

The film's central form, the grid, is described by Rosalind Krauss (1979: 50) as an 'emblematic' structure in modernist art. A recurring image and visual scaffolding for artists such as Piet Mondrian and Alexander Rodchenko,

> the grid states the autonomy of the realm of art. Flattened, geometricized, ordered, it is antinatural, antimimetic, antireal. It is what art looks like when it turns its back on nature. In the flatness that results from its coordinates, the grid is the means of crowding out the dimensions of the real and replacing them with the lateral spread of a single surface (Krauss, 1979: 50).

The grid is also, Krauss (1979: 57) continues, 'an emblem of the infrastructure of vision' that appeared in the nineteenth century as a means of illustrating the 'physiological optics' of our perception of light and colour; in this respect, the grid represents a 'screen' or 'filter' through which we perceive the world around us. Elaborating on these different senses of the grid, *Escape* is both a film which emphasises an autonomous art removed from the concerns of representation and it is also a film *about* vision in its depiction of forms and colour coming into being from behind a grid.

Bute would also have been well aware of the grid as a compositional tool, both through her background as a painter and through her work with Joseph Schillinger in the early 1930s. Schillinger was an influential theorist and teacher of composition in music and other arts. His extended theoretical work, *The Mathematical Basis of the Arts*, published posthumously in 1948, is filled with graphical representations that resonate with the image of the grid in *Escape*. One section, 'The Time-Space Unit in Cinematic Design,' takes as its starting point the cinema screen represented as a grid of 24 x 24 rectangles, 'a definitely proportioned area with boundaries,' through which various mathematical procedures can shape elements of a film such as motion, illumination and texture (Schillinger, 1976: 430-432). Such graphical and systematic qualities are found throughout Schillinger's work in the 1930s. They provide a model for *Escape*'s grid that divides and orders the frame. But rather than operating as a static shape, the grid degenerates, distorts and disappears in *Escape*. Motion transforms the grid, which

begins to move freely. Like *Rhythm in Light*, *Escape* displays an underlying tension in its animated

projections of form and motion. The grid is an image of a mathematical or compositional system,

figuratively generating the abstractions that follow. This basis is then broken down as the film reaches

its climax. *Escape* develops similar tensions between control and freedom as *Rhythm in Light*, with its

narrative ultimately presenting an unconstrained vision of motion through the grid's deformations and

the 'escape' of the triangle from its ordered constraints.

In its depiction of the triangle's motion, *Escape* also expands on the visual imagery of *Parabola*.

Midway through *Escape*, as the triangle crosses the frame in different directions, successive stages of its

movement remain in view. This creates a stroboscopic effect where multiple iterations of the triangle's

motion are shown within the frame.[7] Whereas *Parabola* uses a sculptural form to allude to stages of

motion, *Escape* depicts stages of actual motion. The effect is the same as Marey's late nineteenth-

century chronophotography, which 'captured ongoing phases of movement and spread them over the

photographic plate in an undulating pattern of overlapping segments' (Braun, 1992: xviii). This radical

new way of showing and seeing motion in time – with enormous repercussions for later artists and

theorists – is transformed through filmic motion in *Escape*. In the last part of this sequence, the triangle

is shown flying across the frame as each iteration of its flight remains onscreen; these multiple triangles

then rotate in space, becoming an image of motion *in* motion. In a wider discussion of images like

chronophotographs which 'portray motion without actually moving', Gunning (2007: 44) observes that

'diagrammatic portrayals of motion strike us very differently from actual motion pictures.' Gunning

(2007: 44) writes,

> Such portrayals of motion recall Bergson's descriptions of attempts to generate a sense of motion
> from tracing a pattern of static points or positions, which miss the continuous sweep of motion. In
> contrast to these diagrams of the successive phases of motion or indications of its pathways, we
> could say… that cinema shows us motion, not its portrayal.

Escape combines both conceptions of motion, visually presenting the triangle in motion and portraying its stages of motion. By then putting these stages of motion *into* motion, the film creates a disorienting and shifting perspective on movement.

Escape pushes the boundaries of movement: from basic shapes in motion to explosions of colour, from the order of a grid to images of its mutability and from the graphical representation of movement to its actual movement. Rather than drawing sharp distinctions between the control and flux of movement, Bute was exploring how these two facets might be entwined. In a short unpublished manuscript (Bute, n.d. d), 'Philosophy of the Kinetic Art Form', Bute extends these considerations to a wider cosmic sense of movement, linking mathematical principles with ideas of the universe in a state of ongoing change.[8] Bute (n.d. d) writes, 'Modern cosmology defines the *universal reality* as a *mathematical process*. This process has been realized in generation, transformation, interaction and degeneration of substantial forms. The analytical projection of substantial processes reveals their mathematical essence.' *Escape* resonates with these concerns, with its two geometric forms each following a process from generation to metamorphosis to interaction and, finally, degeneration. Of course, the movement of the geometric forms in *Escape* is fundamentally different than the movement of the stars, and Bute (n.d. d) goes on to emphasize that 'The *microcosm of art* has its own categories, substances and processes which *correspond* to those of the *universe*. Realization of the universal mathematical processes in categories and substances of the kinetic art forms creates a <u>*new reality*</u>.' Through the artistic composition and presentation of motion, Bute was working towards creating such a new reality through film.

While this approach might seem to be rather obscure and conceptual, particularly as it was based on ideas of cosmology and mathematics, Bute (n.d. d) emphasized how it could carry a distinct emotional charge: 'The *immediate perception* of this reality, through generation, transformation, interaction and degeneration of its components, defines the *emotional content* of kinetic art forms.' In

this respect, the profusion of motion in *Escape* – the mutability of shapes, the shifts in their movement

and an overarching sense of moving towards freedom – are its emotional content. This included the

composition of movement over the course of the film and also extended to considerations of narrative,

with Bute (*Literary Digest*, 1936: 20) expressing an interest in 'Aristotle's idea of poetic motion in the

"Poetics"' before producing *Escape*. Bute's reference to Aristotle may be in relation to his well-known

discussion of how tragedy is an imitation of action, with this complex idea distilled into a sense of how

action itself creates emotional effects. Focusing on 'action' rather than narrative elements, a film could

use motion to directly create an emotional impact. In doing so, the universal reality of processes of

motion is brought down to a human level of subjectivity and feeling.

This suggested further expressive avenues, particularly when combined with emotionally

resonant music; Bute (*Motion Picture Herald*, 1936) described how 'we can have a complete

composition, visual and aural, worked out in harmony and counterpoint... to express comedy, gaiety,

humor, horror or pathos.' Like other filmmakers and theorists who would link the movement of film to

musicality and emotion, Bute saw movement as having enormous potential for emotional expression.[9]

Schillinger (1948: 5) would make a related point, writing that 'Music makes one believe that it is alive

because it moves and acts like living matter. Even Aristotle had observed that "rhythms and melodies

are movements as much as they are actions." Music appears emotional merely because it moves—since

everything that moves associates itself with life and living.' This idea is evident in everyday language.

When we say, for example, that something is 'moving', we can mean that it is in motion (a moving

picture) or we can mean that is emotionally resonant (a *moving* picture). Merging these two senses of

the word, Bute's kinetic art invited an emotional response through its use of movement.

Bute (1954: 263) describes how this idea was an early motivation for her work as an artist: 'It

was particularly while I listened to music that I felt an overwhelming urge to translate my reactions and

ideas into a visual form that would have the ordered sequence of music.' Sensing that the fluidity,

repetitions, transformations and shifts in our thoughts and feelings find a particularly powerful conduit

in music, Bute sought to extend this powerful quality by drawing on the resources of artistic forms –

especially film – which compose or order movement. While the earlier films also communicate this

emotional quality, it is particularly with *Escape* that the depiction of motion becomes emotionally

resonant, with the composition of ongoing change used as a means to invite and evoke an emotional

response.

Conclusion

In a perceptive discussion of Bute's later films, Gregory Markopoulos (1962: 54) concludes by

writing: '"seeing sound," adjusting, photographing, manipulating, more than seven thousand separate

images for each abstronic short. But where one momentous signature?' While Markopoulos is partly

referring to the painstaking technical process behind Bute's filmmaking practice, his suggestion that

Bute's work lacks a singular 'signature' also resonates with the diversity of the films themselves. Bute

(n.d. a: 2) would make a similar point, writing of her work's lack of a cohesive style: 'You can always tell

a McLaren or a Disney. They have set a style. McLaren makes everything look like McLaren, and I simply

don't feel a necessity or desire to do this.' Nevertheless, as she continued to explain, her work did have

an underlying style—one based upon the visual composition of motion. She credits (n.d. a: 2) Schillinger

with contributing to this key artistic development:

> Schillinger became interested in applying and developing a basic mathematical system of
> composition which could be applied to any time form that develops in a time continuity... From
> his theory I was able to take a step forward and apply musical composition. Up until that time
> none of my things had a particular style.... What Schillinger's theory did for me was to help me in
> using light on a static surface and from using light haphazardly. This step is quite a big one.

Moving beyond the direct influence of Schillinger, the visual composition of motion – its unfolding over

time, its articulation through figures and images, and its emotional and expressive powers – offered the

underlying 'style' of Bute's early films. Drawing inspiration from different artistic forms, negotiating

tensions between structured and free-flowing motion, entwining movement with the representation of movement, these films offer a deep and sustained exploration of the aesthetics of motion. Following different routes opened up by this central concern, Bute's work was shaped by the creative possibilities of using motion as an expressive form.

Acknowledgements

Works Cited

American Film Institute (1974) Mary Ellen Bute. *AFI Report, The American Film Institute Quarterly* 5(2): 40-41.

Balio T (1993) *Grand Design: Hollywood as a Modern Business Enterprise, 1930-1939*. Berkeley: University of California Press.

Bendazzi G (2016) *Animation: A World History, Volume I: Foundations—The Golden Age*. Boca Raton: CRC Press.

Boyd R (1937a) Three Types of Design. *Magazine of Art*, July, 434-439.

Boyd R (1937b) Letter to Alfred H. Barr, 30 November. Rutherford Boyd papers, Motion Picture 'Parabola' File, Archives of American Art, Smithsonian Institution.

Boyd R (1938) Parabola—A Study in Light and Form. *American Architect and Architecture*, January, 23-26.

Braun M (1992) *Picturing Time: The Work of Etienne-Jules Marey*. Chicago: University of Chicago Press.

Bukatman S (2012) *The Poetics of Slumberland: Animated Spirits and the Animating Spirit*. Berkeley: University of California Press.

Business Screen (1940) Business Screen's Library Film Reviews 2(4): 32.

Bute ME (1932) Light as an Art Material and its Possible Synchronization with Sound. [unpublished lecture presented to the New York Musicological Society, 31 January 1932]. Mary Ellen Bute Papers, Box 21, Folder 296, Yale University Library.

Bute ME (1937) Letter to Solomon R. Guggenheim, 9 August. Hilla Rebay Records, A0010, Series 2, Administration, Film, Mary Ellen Bute, Correspondence, Box 3048, Folder 14, Guggenheim Archives.

Bute ME (1938) Letter to E. R. Bossange, 10 February. Rutherford Boyd papers, Motion Picture 'Parabola' File, Archives of American Art, Smithsonian Institution.

Bute ME (1941a) Composition in Color and Sound. [unpublished lecture presented for Conference on Color, 10 May 1941]. Mary Ellen Bute Papers, Box 21, Folder 294, Yale University Library.

Bute ME (1941b) Light * Form * Movement * Sound. *Design* 42(8): 25.

Bute ME (1954), Abstronics: An Experimental Filmmaker Photographs the Esthetic of the Oscillograph. *Films in Review* 5(6): 263-266.

Bute ME (n.d. a) Abstract Films. [unpublished typescript]. Mary Ellen Bute Papers, Box 36, Folder 545, Yale University Library.

Bute ME (n.d. b) [unpublished and unpaginated lecture notes]. Mary Ellen Bute Papers, Box 21, Folder 293, Yale University Library.

Bute ME (n.d. c) [unpublished and unpaginated lecture notes]. Mary Ellen Bute Papers, Box 21, Folder 295, Yale University Library.

Bute ME (n.d. d) Philosophy of the Kinetic Art Forms. [unpublished typescript]. Mary Ellen Bute Papers, Box 36, Folder 552, Yale University Library.

Crisler BR (1936) Film Gossip of the Week. *New York Times*, 2 August.

Crisler BR (1940) A File of Abstracts; or How the Film Library's Show Stacks Up with More Concrete Evidence. *New York Times*, 14 April.

Dobson, T (2006) *The Film Work of Norman McLaren*. Eastleigh: John Libbey.

Gunning T (2007) Moving Away from the Index: Cinema and the Impression of Reality. *differences* 18(1): 29-52.

Gunning T (2014) Animating the Instant: The Secret Symmetry between Animation and Photography. In: Beckman K (ed) *Animating Film Theory*. Durham: Duke University Press, pp. 37-53.

Kracauer S (1960) *Theory of Film: The Redemption of Physical Reality*. New York: Oxford University Press.

Krauss R (1979) Grids. *October* 9: 50-64.

Lant A and Periz I (eds) (2016) *Red Velvet Seat: Women's Writing on the First Fifty Years of Cinema*. London: Verso.

Literary Digest (1936) Expanding Cinema's Synchromy 2. 8 August, 20-21.

Mackenzie S (ed) (2014) *Film Manifestos and Global Cinema Cultures*. Berkeley: University of California Press.

Markopoulos G (1962) Beyond Audio Visual Space: A Short Study of the Films of Mary Ellen Bute. *Vision: A Journal of Film Comment* 1(2): 52-54.

Motion Picture Herald (1936) Aristotle's Ideas of Art Finally Reach the Screen, 8 August, 62.

New York World-Telegram (1936) Color, Sound, Light Dance with Harmonious Steps in 'Synchromy,' Art Form Created by Texas Girl, July 20.

Papapetros S (2012) *On the Animation of the Inorganic: Art, Architecture and the Extension of Life.* Chicago: University of Chicago Press.

Rabinovitz, L (1995) Mary Ellen Bute. In: Horak JC (ed) *Lovers of Cinema: The First American Film Avant-Garde, 1919-1945*. Madison: University of Wisconsin Press, pp. 315-334.

Schiff L (1992) The Education of Mary Ellen Bute. In: Pilling J (ed) *Women and Animation: A Compendium*. London: BFI, pp. 16-18.

Schillinger J (1976) *The Mathematical Basis of the Arts*. New York: Da Capo Press.

Starr C (1976) Mary Ellen Bute. In: Russett R and Starr C (eds) *Experimental Animation: An Illustrated Anthology*. New York: Van Nostrand Reinhold Company, pp. 102-105.

Supreme Court New York County (1938) Examination of Miss Bute, 23 June. Rutherford Boyd papers, Motion Picture 'Parabola' File, Archives of American Art, Smithsonian Institution.

Weinberg HG (1941) A Forward Glance at the Abstract Film. *Design* 42(6): 24.

Zimmerman MF (ed) (2016) *Vision in Motion: Streams of Sensation and Configurations of Time*. Zurich: Diaphanes.

---

[1] Bute was part of the same artistic and intellectual currents as her collaborators, as well as those of contemporaneous filmmakers who privileged motion in their work, such as Norman McLaren, Hans Richter, Len Lye and Oskar Fischinger. For example, the lecture she gave to the New York Musicological Society in 1932 discusses and draws upon ideas in Adrian Klein's *Colour-Music: The Art of Light*, written in 1926; McLaren was similarly influenced by this work, years before he met Bute (Dobson, 2006: 27-32). Similarly, Bute (quoted in American Film Institute, 1974: 41) described how she first saw a Fischinger film only in 1938, years after she began as a filmmaker: 'I got a great bang out of Oskar Fischinger's first film that was shown here [*An Optical Poem* (1938)]. A delightful little thing to the *Hungarian Rhapsody*. I'd done some films before then that were quite different, but then I realized that there were other people around the world who were as nutty as I'.

[2] For example, Giannalberto Bendazzi (2016: 128) writes, '"Seeing Sound" was her mission and, in order to achieve such a result, she felt free to combine various techniques... Her abstract films where nevertheless stylistically consistent and original...'; Tino Balio (1993: 402) describes Bute as 'an abstract animator' who was 'interested in visualizing music'.

[3] While the typescript is undated, Bute discusses her use of the oscilloscope in her filmmaking which suggests that the paper was written in the mid-1950s.

[4] Nemeth (*Literary Digest*, 1936: 20) described the production of *Synchromy No. 2* in relation to Mickey Mouse, explaining: 'The difference… is that Disney photographs flat cartoon surfaces, while we have to take shots of three-dimensional models...'

[5] These ideas were not new for Bute. A similar phrasing is used in Bute's earlier lecture (Bute, 1932: 1), but movement and sound are omitted so that only colour and form are noted.

[6] While Boyd expressed considerable interest in the cinematic qualities of the film – writing (1937b: 2) that it 'develops a new theme in kinesthetics' – he was particularly interested in the film's extension of his own underlying educational and artistic concerns; he initially had further plans for how the project might develop, suggesting (1937b: 4) that the film 'can be supplemented with another 500-800 feet of film, a second part which would unify natural "shots," great bridge cables, waterfalls, fountain jets, geysers, projectiles, the spider's web

laden with dew, parabolic headlights and microphones and a simple animated diagram – demonstration of the mathematical properties of this curve. This would complete a cinematic lecture of fifteen to eighteen minutes…' Not only thinking of expanding the exploration of the parabolic form, he continues (1937b: 5), 'This to be followed with another cinematic presentation called 'The Spirals,' in art, nature and the works of man...'

[7] Bute had experimented with stroboscopic effects before making films (*New York World-Telegram*, 1936).

[8] While the 'Philosophy of the Kinetic Art Forms' typescript is undated, the language that Bute uses and the references to cosmology suggest that it was likely written in the mid-1930s; an article from 1936 describes Bute reading two books related to cosmology 'by [James] Jeans—"The Universe Around Us" and "The Stars in their Course"' (*New York World-Telegram*, 1936).

[9] For example, Tom Gunning (2007: 38) describes how Germaine Dulac 'envisioned a pure cinema uncontaminated by the other arts (although aspiring to the condition of music), which she described as "a visual symphony, a rhythm of arranged movements in which the shifting of a line or of a volume in a changing cadence creates emotion without any crystallization of ideas."'