

VISUAL MUSIC

Marit van Rijn studied Comparative Arts and Media Studies at VU University Amsterdam. In her MA thesis (2011) she explored how the intermedial quality of Visual Music bridged the seemingly mutually exclusive Laocoonist aesthetic and the Wagnerian ideal of the *Gesamtkunstwerk*.

Marit van Rijn traces the origin and development of Visual Music, revealing how music and visual art were employed to create a 'pure' cinematic form.

When Walt Disney's *Fantasia* premiered in 1940, it were not only music critics who harshly criticized the feature-length animated film.¹ Feeling that Disney had betrayed the ideal of artistic sincerity in favour of commercial success, animator Oskar Fischinger (1900-1967) declared that he did not want to be credited for, or associated with, this 'geschmacklos' [tasteless] film, and resigned.² Fischinger's abstract animations, governed by principles found in music, were too autonomous for Disney, and had to make way for pictorial- and narrative elements.³ Despite his rejection of the final film, the *Toccata and Fugue* sequence Fischinger worked on clearly owes its spirit to a cinematic avant-garde commonly referred to as Visual Music, of which Fischinger, Walter Ruttmann (1887-1941), Viking Eggeling (1880-1925), and Hans Richter (1888-1976) were the most well-known representatives.⁴

As part of what Karin von Maur defines as the 'temporalization tendency' found in early twentieth century movements, Ruttmann, Eggeling, and Richter shared an interest for displaying fragmented colours and lines in motion.⁶ The transposition to film allowed these artists to replace the *suggestion* of development in their respectively Futurist and Constructivist explorations with an actual *display* of motion. Their works, as critic Bernhard Diebold remarked, signalled the birth of the painted film, liberating cinematography from being merely a device to record stories with – stories that were already well represented in literature and theatre.⁷ This dichotomy between the abstract film and the commercial film is also found in Fischinger's complaint about the typical Hollywood film, which, he said, contained nothing but 'photographed realism' and therefore lacked an 'absolute creative sense'.⁸ In contrast, the abstract Absolute Film, a term used not only by filmmakers to characterise their own works, but by art critics as well, had nothing to

do with banal mass entertainment.⁹ According to Menno ter Braak, the abstract 'musique des images' was based on nothing but 'essentially cinegraphic means'.¹⁰ As Al Rees points out, this distinction is reminiscent of Gotthold Lessing's description of the borders between literature and the visual arts.¹¹ Lessing perhaps most famously uttered the importance of medium specificity in 1766, fuelling an aesthetic theory Sven Lütticken has coined the 'Laocoonist' tradition.¹² Laocoonists claim not only that artists necessarily operate within the boundaries of their given medium, but that borrowing methods from other media inevitably denies, and hence destroys, the intrinsic aesthetic quality of an artwork. Relating this theory to cinematography, Rees explains that the Hollywood master code of the seemingly transparent unfolding of a storyline equalled the traditional narrative painting that modernist critics had identified as a fusion of literature and visual art. The Absolute Film, however, claimed to be part of 'pure' visual art, filling its surface with geometric abstractions of 'clusters of dots, curves and lines'.¹³

Despite bearing connotations of purity, the term 'Visual Music' reveals a hybrid origin. In order to analyse the paradoxical idea of combining two disciplines, music and visual art, without violating 'medium specific' qualities, it is necessary to relate the ideas of Ruttmann, Eggeling, Richter, and Fischinger to their abstract animations.

Ruttmann

Although Léopold Survage had expressed the idea of setting paintings in motion as early as 1914, he never completed his project *Coloured Rhythm* due to financial problems.¹⁴ Instead, Walter Ruttmann's *Light-play: Opus No. 1* (1921) marked the creation of this new kind of art film. The decision to represent objects in motion was the result of Ruttmann's wish



1. Viking Eggeling, *Horizontal-vertical Orchestra I Scroll* (detail), undated, pencil and black wax crayon on paper, 51,5 x 465 cm, printed in *De Stijl*, 4 (1921) 7

to visualize the 'früher nicht gekannte Geschwindigkeit' [unprecedented pace] of his own day and age.¹⁵ This, Standish Lawder convincingly states, lead to a Futurist aesthetic of objects without definitive borders.¹⁶ Although his works were reasonably successful, Ruttmann felt that his art still lacked a crucial element.¹⁷ After completing *Letztes Bild* in 1918, Ruttmann wrote in a letter: 'Es hat keinen Sinn mehr zu malen. Dieses Bild muss in Bewegung gesetzt werden' [Painting has become pointless. This picture has to be set in motion].¹⁸ In order to do so, Ruttmann turned to cinematography, which he described as an essentially optic art form that was primarily concerned with the representation of shapes in motion. By categorizing film as part of the visual arts, Ruttmann stated that, in the past, the medium had been appropriated for the wrong purposes. In an almost pre-Greenbergian manner, he decided to 'cure' cinematography of its external corruption of literature and return to the possibilities and demands of its own material. Abstract forms and their infinite possible variations in colour, shape, and movement, would be the genuine 'Ausdrucksmittel' [means of expression] of film.¹⁹

This new kind of film would, as Ruttmann set forth in his essay 'Malerei mit Zeit' (1919), distinguish itself from static visual art by adding a temporal dimension to abstract signifiers. In order to develop his geometrical forms according to a visual logic based on formal qualities, Ruttmann thought music could serve as a role model. Traditionally, music was considered to be the most pure discipline, in which abstract laws determined the arrangement of its expressions. According to Peter Vergo, music was hence a major source of

inspiration for painters from the second half of the nineteenth century onwards, when the paradigm of painting as offering a 'window on the world' slowly gave way to the idea of painting as an 'object in its own right'.²⁰ James Whistler, for instance, related his compositions to the formal characteristics of music, leading to titles such as *Symphony in White, No. 1: The White Girl* (1862), and *Nocturne in Black and Gold: The Falling Rocket* (1875). Wassily Kandinsky stated that the ideal way of composing visual art equalled the creation of music, since it comprised the subordination of individual elements to an internal structural logic.²¹

Ruttmann placed his films in a new inter-art domain, somewhere 'midway between painting and music'.²² In *Light-play Opus No. 1*, which he described as an 'Optic Symphony', Ruttmann introduces two easily identifiable leitmotifs of curvy and angular forms.²³ As there is no deliberate synchronisation between the imagery and the soundtrack composed by Max Butting, the shapes portray movement foremost through their own dynamics, as they twist, turn, shrink, and expand. Besides these transformations, the forms also dance across the screen, creating patterns that correspond with their outline. Groups of fluent forms, for instance, emphasize their organic look by gently tracing a curvy line as they move from one corner to another, while the triangles rise and descend in a straight line, creating zigzag patterns. The re-occurrence and disappearance of the opposed motifs create a visual pattern of variation, like the structure of varying instruments in an orchestrated composition. After the introduction of the various forms and their distinctive patterns, Ruttmann mixes the shapes to create a more elaborate optical sense of rhythm. These combinations of movement, Al Rees suggests, create a dance of two partners.²⁴

Jeanpaul Goergen assumes that Ruttmann created *Light-play Opus No. 1* by painting mono-coloured and two-dimensional shapes on glass with very fluid paint, and subsequently photographing the changing composition.²⁵ *Light-Play Opus* was considered to be a new kind of film, which, as critic Leonhard Adelt commented, ‘bridged’ the previously considered mutually exclusive domains of temporal music and frozen painting.²⁶ In a similar manner, Diebold reasoned that this type of film did not cross the medial borders but made them disappear, instead.²⁷

Eggeling

Eggeling’s cinematic language evolved from his utopic, Wagnerian aspirations concerning the role of the artist in society. In his article ‘Theoretical Presentations on the Art of Movement’ (1921), Eggeling distinguished between ‘practical art’ and ‘metaphysical art’. The latter would derive from an ‘inner necessity: a sincere desire to create, which came forth from what Fischinger would later describe as the ‘Creative Spirit’.²⁸ Without being affected by external ‘corruptions’, an abstract language would enable the artist to freely communicate metaphysical messages that were important to mankind all over the world.²⁹

Together with Richter, with whom Eggeling had worked from 1919 to 1922, Eggeling wrote a manifesto on the possibility of a ‘Universal Language’ (1920). Although no exact copy remains and Eggeling’s written legacy is limited due to his premature death in 1923, Richter used its basic presumption again in his 1921 article ‘Prinzipielles zur Bewegungskunst’. In it, Richter explains that the identical form perception found in every human being would make it possible to create ‘a universal art as it had never existed before’.³⁰ The pictorial language that every individual would be able to decipher, was based on a kind of alphabet consisting of graphic, linear lines without arbitrary meanings. Starting with the abstraction of natural elements, Eggeling explored a vocabulary of forms wherein every trace of naturalism was lost. These elements were step-by-step remodelled into bigger constructions, creating what Justin Hoffmann describes as a continuous ‘natural language’.³¹ Eggeling’s desire to develop a language based on principles that could be universally understood, resembles, as Hilmar Hoffmann notes, Piet Mondrian’s quest for a spiritual language of ‘objective’ principles. It also hints

at the Suprematist ideals as set forth by Malevich, which included a grammar of fundamental geometric forms that could create a ‘cosmic unity’.³²

To present the development of the pictorial language in a sequential structure, Eggeling and Richter created large scroll drawings. These would eventually become the blueprint for Eggeling’s film *Diagonal Symphony* (1924). The imagery described a path of progression, which Eggeling defined in his article ‘Theoretical Presentations of the Art of Movement’ (1921) as the ‘Generalbaß der Malerei’ [Basso continuo of painting].³³ Like Ruttmann, Eggeling and Richter strongly believed in the possibility of transposing music’s inner laws to dynamic visual art. The structural harmony provided by a steady guidance of chords was one of music’s organizing principles that, according to Richter, proved the possibility of creating an ‘intrinsic continuity and patterning’ that could be used to base the progression of abstract animation on.³⁴ Additionally, the musical contrapuntal motion (a development of two melodic lines in opposite directions) was understood by Richter and Eggeling as a universal principle of contrast, action, and reaction, also found in ‘an image of life itself: one thing growing, another declining, in a creative marriage of contrast and analogy’.³⁵

In *Diagonal Symphony*, abstract, linear white figures materialize and evaporate in the centre of the black screen, as if they are drawn and erased by an invisible hand. The shapes look as though they are lopsided instead of drawn parallel to the borders of the screen, and disappear through diagonal wipes. Music theoretician Bengt Edlund characterized the overall organization of their appearance as a visual sonata. The sonata typically consists of an introduction of (usually two) themes, a development that displays them in several variations, the recapitulation, and finally the coda, in which a variation on the first development is presented.³⁶ In *Diagonal Symphony*, the introduction offers nine motifs that can be categorized as angular and rounded shapes, like in Ruttmann’s *Light-play Opus No. 1*. Before the elements are arranged in the final composition, its parts rhythmically transform and disappear in several variations. The intervals and duration of each ‘shot’ vary, just like the angles and developments of the specific images, until they culminate in a final configuration. The rhythm, as Louise O’Konor explains, is not comprised as the ‘regular beat of a metronomic tempo’, but is made

up of a repetition, as well as a variation, of motifs, which create respectively a visual basso continuo and a sense of counterpoint tension.³⁷ As the two categories are antitheses, the final construction can be understood as the synthesis or recapitulation of these motifs within one composition. After this, the key motif is disassembled in the coda, wherein separate motifs reoccur in variations of angles and in different stages of completion. Altogether, the development of *Diagonal Symphony* resembles the universal phases of birth, development, and decay.

Richter

When Richter was asked to write about cinema as an autonomous discipline, key terms in his essay 'The Film as an Original Art Form' (1955) were 'originality', 'liberation', and 'film as such'. Like Ruttman, he excluded the narration of stories and related elements such as acting and staging from film's medium specific language. Instead, he described his first films as a continuation of his visual art.³⁸ Richter's belief in a kinship between visual art and music, which, according to O'Konor, was inspired by Kandinsky's 'Concerning the spiritual in art' (1911), furthermore led to an aesthetic theory and practice that share many principles with those of Ruttman and Eggeling.³⁹

Richter's conversations with composer and musicologist Ferruccio Busoni were important for his theoretical breakthrough in 1917. Busoni convinced Richter that his compositions were essentially a play between two oppositional motifs, whose combination equalled the syntax of the musical counterpoint.⁴⁰ Inspired by this thought, Richter explored other visual binary oppositions, such as dark-light, big-small, and horizontal-vertical. Their inner tension provided laws that enabled him to create a formal interplay by repeating themes with 'major and minor variations' that could 'control rhythm as well as form'.⁴¹ As mentioned, Eggeling and Richter, who discovered their shared interest in 1918, continued their research together on scrolls. Richter's scrolls, such as *Prelude* (1919) and *Fugue* (1920), present the transformation of simple elements like rectangles and squares to 'their maximum through all kinds of counterpoint variations'.⁴² This visualisation of an inner revolution, Richter recalled, asked for a medial transposition to the motion picture film.⁴³ However, due to their lack of experience in filmmaking, it took much time and effort before Eggeling and Richter

were able to adjust their static visual art to the principles of film.⁴⁴ Important decisions had to be made concerning for instance pace, motion, spatial positioning, and transition between images. Their differences in opinion regarding the 'right' appropriation of cinematography lead to the end of their collaboration in 1920.⁴⁵

Unlike Eggeling, who, as Rees states, used film to record his drawings in time, but did not fully explore the medium of film, Richter decided to give up on the alphabetic *Universelle Sprache* and instead took the celluloid's shape as base motif.⁴⁶ This rectangle could be optically 'pressed together, extended again, horizontally, vertically, diagonally, and so forth'. Hence, Richter did not attribute a mystical meaning to the forms, which derived from the pragmatic decision to deform the screen, themselves. The forms were only parts of a movement, an 'articulation of Time- not Form'.⁴⁷ Whereas Eggeling was more concerned with providing a visual orchestration of lines, Richter took a rhythmic development of composition as the core of his abstract animations.

Rhythm 21 (1923) starts with a demonstration of the base motifs, whose transformation through contrast and analogy suggests counterpoint tension. A contrast of rising and falling would, for instance, cause a white square in the black field to shrink until it finally disappeared completely. A contrast of drawing together and spreading apart caused white horizontal bars in the upper and lower part of the black screen to expand until they merged in the centre, creating a 'blank' screen. In the second section Richter used several strategies to create thematic variations on the motifs. He combined, for instance, static and dynamic elements, altered the tempo of the articulation's development (leading shapes to transform at different paces), combined shapes that developed contrariwise (while one is expanding, the other is shrinking), repeated base motifs in their negative variation, and spatially transferred the articulations by mirroring the compositions. In the final section all articulations are gathered in one composition, which changes rapidly, tension building as in a crescendo, until finally all forms come together in a black square. This square shrinks, leaving the screen blank: the process is completed and can start again.

Fischinger

Unlike Ruttman, Eggeling, and Richter, Fischinger

was not a professional painter when he made his first abstract films. Although Fischinger played the violin and experimented with watercolours, pastels, and oil paintings in his youth, his education in engineering did not forecast an artistic career. Consequently, he did not approach film with a solid aesthetic theory. In his statements, Fischinger recollected that his experimental 'translations' of literature were a crucial first step in his career as an abstract filmmaker. Like Eggeling and Richter, Fischinger made scroll-like graphs. However, contrary to them, Fischinger attempted to transform Shakespeare's works into organic moving lines that 'traced' the development of the story. These experiments were quite unsuccessful. Viewers were not able to relate the imagery to the text, since all representational signifiers were lost.⁴⁸ Diebold suggested Fischinger subvert the horizontal syntax and present his work as 'independent' animation instead.⁴⁹ Following this advice, Fischinger concluded that his lines did not necessarily have to represent a narrative and could create an autonomous flow as well.⁵⁰

To realize an independent type of animation, Fischinger looked carefully to the achievements of other abstract filmmakers. According to his biographer, William Moritz, Fischinger was especially fascinated by Ruttmann's *Light-play Opus No. 1*. Not wanting to imitate Ruttmann, Fischinger experimented with coloured liquids, wax, and solid three-dimensional objects.⁵¹ In his search for abstract shapes that existed in an artistic vacuum, Fischinger also created sequences of psychedelic Op Art-like tunnels (*Spirals*, 1926) and silhouette animations that distorted traditional narrative structures (*Spiritual Constructions*, 1927). Furthermore, inspired by reigning ideas of the 'pure' quality of music, Fischinger found in the laws of music a new structure that released cinematography from the grip of descriptive continuity models and narratives.⁵² Pre-existing musical composition became the guideline for his successful black and white *Studies* (1923-1934), which display a complete overlap of classical music and carefully choreographed abstract shapes.

Study No. 7 (1931) is singled out by Moritz as being the most iconic of the series. Its basic white shapes are structured in accordance with Brahms's *Hungarian Dance No. 5* (1869). Depicting the tempo of the music, rectangles move in groups, and hop and turn like leaves blowing in a storm, controlled

not by the wind, but by the complex, fast-paced music. Whereas short notes are visualised by small blocks moving frantically, the slow passages are depicted by swirling, elegant almond shapes that slowly transform. The intensity of the music is visualised through expanding and contracting shapes. When the music builds up to a crescendo, the forms quickly rearrange until they find themselves in a steady composition. When the music reaches a bombastic counterpoint, the forms expand into what Moritz describes as 'pop-explosions'.⁵³

The same principles are used in *Circles* (1933) as well as in three shorts referred to as *Allegretto* (1936-1943). New instruments are introduced by new shapes that, like musical notes, overlap freely. The complete synchronization of music and imagery reminds one of illustrated music rather than of autonomous optical expressions. Hence, these works deviate not only from Ruttmann's, Richter's, and Eggeling's, but also from Fischinger's later animations.

After working at the Disney Studio, where, in 1940, the *Fantasia* project led to Fischinger resigning, Fischinger's career shows a remarkable step towards autonomous abstraction no longer depending on the 'story' or structure music offers. His changing ideas about the intense relationship between music and imagery become apparent in *Radio Dynamics* (1942), *Mutoscope Reels* (1945), and *Stereo Film* (1952). Their structural development only parallels methods found in music, and no longer translates the specific progression of existing compositions.⁵⁴ *Radio Dynamics'* intertitle explicitly warns that the film has to be screened in silence, since it is an experiment in 'colour rhythm'.

As Fischinger turned his back on the illustrative strategy, statements about his work reveal that he became more concerned with attributing a spiritual value to his animations, and he started to compare his works with Abstract Expressionism. He felt artists should be guided by the 'Creative Spirit'; a rather mystical concept of an abstract force that guides an artist in the process of creating pure art.⁵⁵ His interest for Eastern spiritual theory resulted in him exploring the principles of formal opposites. Films like *Motion Painting No. 1* (1952) solely expressed the development of abstract forms, lines, and patterns, and, for instance, their culmination into 'Oneness'. This does not allow for a translation into worldly images, but, as Moritz describes,

demands contemplation on the activity of colours and shapes in the most absolute sense.⁵⁶

Without ever coming together in an official movement, Ruttmann, Eggeling, Richter, and Fischinger shared an artistic principle that was highly important for their artistic output. Instead of unfolding a narrative by using methods from theatre and literature, these artists brought film into the domain of the visual arts. The term Visual Music does not signify illustrated musical compositions, or soundtracked animations, but an intermedial working method in which artists appropriated celluloid as dynamic canvas and employed formalistic principles of music when composing their dynamic visual art. This opposition is illustrated by the clash between Disney and Fischinger. While both were interested in exploring possible analogies between abstract music and abstract visual art, Disney never let go of the incorporation of, or reliance on, narrative elements, and spoke in terms of story, soundtrack, and illustration. Fischinger's work, however, was ruled by principles of abstraction and the preoccupation with creating a kind of 'pure' dynamic art. Visual art and music were made compatible, but never failed to retain their medium specific characteristics.

1. The complaints of these critics are noted in for instance L. Maltin, *The Disney Film*, New York 1974, p. 44 and E. Leslie, *Hollywood Flatlands. Animation, Critical Theory and the Avant-garde*, London 2002, p. 162.
2. In his severance contract, Fischinger had according to Moritz specified that Disney was not allowed to relate Fischinger's name to *Fantasia*, feeling this film could harm his future career. W. Moritz, *Optical Poetry. The Life and Works of Oskar Fischinger*, Eastleigh 2004, p. 87.
3. Meeting reports which quote Disney's concerns can be found in for instance R. Allan, *Walt Disney and Europe. European Influences on the Animated Feature Films of Walt Disney*, Bloomington 1999, p. 112.
4. *Toccata and Fugue in D minor, BWV 565*, is a piece of organ music by Johann Sebastian Bach. Leopold Stokowski transcribed it for large orchestra for *Fantasia* in 1927.
5. A. Rees, 'Cinema and the Avant-Garde', in: G. Nowell-Smith (ed.), *The Oxford History of World Cinema*, Oxford 1996, p. 98; N. Rifkin & J. Strick, 'Foreword', in: O. Mattis (ed.), *Visual Music. Synaesthesia in Art and Music since 1900*, Los Angeles 2005, exh. cat. Hirshorn Museum and Sculpture Garden, Smithsonian Institution, p. 7.
6. K. von Maur, *The Sound of Painting*, Munich 1999, p. 44.
7. Excerpts from Diebold's statement made in a newspaper article of 1921 can be found in E. Leslie, *Hollywood Flatlands. Animation, Critical Theory and the Avant-garde*, London 2002, p. 46, wherein Leslie on page 47 also writes that for Ruttmann, 'eye music' was 'the confirmation of his answer to his question posed in the *Frankfurter Zeitung* in September 1920: how is film ever going to overcome naturalism?'
8. Fischinger's essay 'My Statements are in My Work' has been reprinted in for instance W. Moritz, *Optical Poetry. The Life and Works of Oskar Fischinger*, Eastleigh 2004, pp. 173-175.
9. Examples can be found in A. Rees, *A History of Experimental Film and Video. From Canonical Avant-garde to Contemporary British Practice*, London 2000, p. 37; M. ter Braak, *De absolute film*, Rotterdam 1931, pp. 9-11; W. Moritz, *Optical Poetry. The Life and Works of Oskar Fischinger*, Eastleigh 2004, p. 85.
10. M. ter Braak, *De absolute film*, Rotterdam 1931, pp. 9-11.
11. Rees, op.cit. (note 9), p. 37.
12. S. Lütticken 2004, 'Undead Media', *Afterimage* (January 2004), [http://www.thefree-library.com/Undead+media.-a0112986563,02-08-2010,19 December 2011](http://www.thefree-library.com/Undead+media.-a0112986563,02-08-2010,19%20December%202011). Other titles of key texts in the Laocoonist tradition frequently refer to Lessing's example of how a poet and sculptur necessarily present the Greek myth of Laocöon in accordance with the characteristics of their chosen medium, such as Irving Babbitt's *The New Laocoon: An Essay on the Confusion of the Arts* (1910) and Greenberg's *Towards a Newer Laocoon* (1986).
13. Rees, op.cit. (note 9), pp. 21-23.
14. Survae published a lengthy statement

- about his experiment in the July-August edition of *Soirées de Paris* (1914), which is reprinted in R. Abel (ed.), *French Film Theory and Criticism. A History/ Anthology*, Princeton 1988, pp. 90-92.
15. W. Ruttmann, 'Malerei mit Zeit', in: J. Goergen (ed.), *Walter Ruttmann. Eine Dokumentation*, Berlin 1989, p. 74.
 16. S. Lawder, *The Cubist Cinema*, New York 1975, p. 57.
 17. Goergen, op.cit. (note 15), p. 19.
 18. Ruttmann quoted in Goergen, op.cit. (note 15), p. 20.
 19. In a letter, written before 1917, Ruttmann enclosed a manuscript titled 'Kunst und Kino', in which he wrote: 'So geht's nicht. [...] Ich glaube an Kunst im Kino. Aber ich bestreite, da bis jetzt ein Film-Kunstwerk geschaffen wurde.' A complete reprint can be found in: Goergen, op.cit. (note 15), p. 73.
 20. P. Vergo, *The Music of Painting. Music, Modernism and the Visual Arts from the Romantics to John Cage*, London 2010, pp. 157-163.
 21. W. Kandinsky, 'Point and Line to Plane', in: K. Lindsay & P. Vergo (eds.), *Kandinsky. Complete Writings on Art*, New York 1994, p. 617.
 22. Ruttmann, op.cit. (note 15), p. 74.
 23. Invitation reprinted in J. Goergen (ed.), *Walter Ruttmann. Eine Dokumentation*, Berlin 1989, p. 78.
 24. Rees, op.cit. (note 9), p. 39.
 25. Goergen, op.cit. (note 15), p. 23.
 26. In the *Berliner Tagblatt*, Leonhard Adelt wrote a review of *Light-play Opus No. 1*, which was partly reprinted in B. Elder, *Harmony + Dissent. Film and Avant-garde Art Movement in the Early Twentieth Century*, Waterloo 2008, p. 123.
 27. 'Die Malerei hat sich mit der Musik vermählt. Die Grenzsetzungen von Lessing's 'Laokoon' sind unbestimmt geworden'. B. Diebold, 'Eine neue kunst. Die Augenmusik des Films', *Frankfurter Zeitung*, 2 April 1921.
 28. V. Eggeling quoted in M. le Grice, *Abstract Film and Beyond*, London 1997, p. 21.
 29. L. O'Konor, *Viking Eggeling 1880-1925. Artist and Film-maker, Life and Work*, Stockholm 1971, p. 48.
 30. A part of Richter's characterization of the manifesto on a 'Universal Language' as uttered in 'My Experience with Movement in Painting and in Film', which he wrote in *The Nature and Art of Motion*, New York: G. Brazillier, 1965, p. 144, is reprinted in J. Hoffmann, 'Hans Richter. Constructivist Filmmaker', in: S. Foster (ed.), *Hans Richter. Activism, Modernism and the Avant-garde*, Cambridge 1998, p. 74.
 31. Idem, p. 75.
 32. H. Hoffmann & W. Schobert, *Hans Richter. Malerei und Film*, Frankfurt am Main 1989, exh.cat. Deutsches Filmmuseum Frankfurt, p. 74.
 33. Parts of Eggeling's article 'Theoretical Presentations of the Art of Movement', which was published in *MA* in 1921 (pp. 88-91) are reprinted in L. O'Konor, *Viking Eggeling 1880-1925. Artist and Film-maker, Life and Work*, Stockholm 1971, pp. 75-76.
 34. H. Richter quoted in S. Lawder, *The Cubist Cinema*, New York 1975, p. 43.
 35. Ibidem.
 36. B. Edlund, 'Musical Conception of Abstract Film: The Case of Viking Eggeling's *Diagonal Symphony*', in: E. Hedling & U.B. Lagerroth (eds.), *Cultural Functions of Intermedial Exploration*, Amsterdam 2002, p. 118.
 37. O'Konor, op.cit. (note 29), pp. 133-136.
 38. H. Richter, 'The Film as an Original Art Form', *Film Culture* 1 (1955) 1, pp. 19-23.
 39. O'Konor, op.cit. (note 29), p. 75.
 40. W. Rotzler, 'Konstruktive Aspekte in der Kunst Hans Richters', in: B. Volkman (ed.), *Hans Richter 1888-1976. Dadaist, Filmpionier, Maler, Theoretiker*, Berlin 1982, p. 44; H. Richter & C. Grey (ed.), *Hans Richter*, London 1971, pp. 37-38.
 41. H. Richter & C. Grey (ed.), *Hans Richter*, London 1971, p. 68.
 42. This translation of Richter's quote in *Köpfe und Hinterköpfe*, Zurich 1967, p. 12 can be found in B. Finkeldey, 'Hans Richter and the Constructivist Internal', in: S. Foster (ed.), *Hans Richter. Activism, Modernism and the Avant-garde*, Cambridge 1998, p. 95.
 43. H. Richter & C. Grey (ed.), *Hans Richter*, London 1971, pp. 41 & p. 133.
 44. S. Lawder, *The Cubist Cinema*, New York 1975, p. 43.
 45. Richter & Grey, op.cit. (note 41), pp. 130-31.
 46. Rees, op.cit. (note 9), p. 42.
 47. Richter & Grey, op.cit. (note 41), pp. 130-134.
 48. O. Fischinger, 'My Statements Are in My Work' (1947) has been reprinted in W. Moritz, *Optical Poetry. The life and works of Oskar Fischinger*, Eastleigh 2004, pp. 173-175.
 49. Moritz, op.cit. (note 2), p. 7.
 50. O. Fischinger, 'My Statements Are in My Work' (1947) has been reprinted in W. Moritz, *Optical Poetry. The Life and Works of Oskar Fischinger*, Eastleigh 2004, pp. 173-175.
 51. Moritz, op.cit. (note 2), p. 7.
 52. Idem (note 48).
 53. Moritz, op.cit. (note 2), p. 213.
 54. When his patroness Hilla Rebay asked Fischinger to create an animation using Bach's *Brandenburg Concerto No. 3*, Fischinger returned once more to abstract imagery set to music. However, unlike in *Allegretto*, in *Motion Painting No. 1* (1947) music and imagery remain unities in their own right.
 55. Fischinger wrote about the dichotomy between mystical and spiritual works fuelled by the Creative Spirit and realistic filmmaking for the masses that would inevitably destroy the 'deep and absolute creative force with substitutes and surface realism' in for instance 'My Statements Are in My Work' (1947), which has been reprinted in Moritz, op.cit. (note 2), pp. 173-175.
 56. Moritz, op.cit. (note 2), pp. 129-132.