

The Future of the Past. Arnheim and Film Today

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ARNHEIM, AGAIN



Exactly fifteen years ago, on June 9, 2007, psychologist of art and media theorist Rudolf Arnheim died in Ann Arbor, Michigan, one month before his 103rd birthday (he was born in Berlin on July 15, 1904). He devoted his entire life to the study of the arts — starting with film in the 1920s — and is the author of *Art and Visual Perception and Visual Thinking* and many other masterpieces that continue to be essential points of reference for generations of students, scholars and professionals in the fields of analysis, criticism and the practice of the visual arts². Arnheim is also considered one of the classic film theorists for his application of the assumptions of Gestalt psychology to film analysis presented for the first time 90 years ago in his essay *Film als Kunst*.³ His radical positions have been criticized in various eras and intellectual spheres, but they are in some respects still valid and are often unwittingly adopted by critics and scholars. As the essays of this special issue demonstrate, a recontextualization and revitalization of Arnheim's film theory and, more generally, a Gestalt approach to the film experience, can be still productive today.⁴

This task has been made easier in the past few years due to a series of publications that have clarified aspects of Arnheim's theoretical project or else further specified some of his philosophical commitments.⁵ For years in film studies there was a standoff between psychoanalytic derived and more cognitive approaches. More recently, we have learned to nuance how to blend an approach that is not afraid of experimentation or quantification with one that can address the perennial problems of more speculative film studies like spectatorship, the gaze, enunciation and embodiment.⁶ The latter, the turn toward embodied approaches to the filmic experience, has largely made this new idea possible. Yet many writers would still be hesitant that there is contained in Arnheim's work or Gestalt theory more largely the pieces of a kind of theory of Gestalt embodiment. In some ways, such a theory would clarify some of the more untenable elements of embodiment theories which in general have been

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adopted as specular reversals of cognitive theory. The body is meant to erase representation, when properly elaborated a Gestalt embodiment might show how the body and its role in filmic experience is still self-conscious because even awareness of the body is a form of consciousness.

The present special issue of *Cinéma & Cie* goes deeper into some of Arnheim's theories, broadening the platform of his work into Gestalt psychology more generally, and addressing question of fit between older theories and newer tendencies.

THE PARTS AND THE WHOLE

A multifaceted and passionate thinker, throughout the twentieth century Arnheim turned his interest to a variety of media and arts — from cinema to photography, from radio to television, from painting to sculpture, from architecture to video art —, applying with rigor and extending with creativity the assumptions of the Gestalt psychology method he learned in Berlin in the 1920s directly from its founders Max Wertheimer and Wolfgang Köhler. In clear opposition to the psychological and philosophical currents dominant at the time, in particular behaviorism and idealism, Gestalttheorie theorized perception as an immediate act through which the mind, in a predominantly innate way, organizes sensible data according to certain laws of 'unification' of single parts into a whole other than their simple sum. Distinct elements of the visual field tend to be perceived as belonging to a single overall configuration by virtue of their similarity, closeness, common destiny, continuity of direction, closure, figure-ground relationship, meaningfulness. In short, the images — or rather some of their qualities — 'communicate' directly with the observer, eliciting a mediation and organization of the visible that the human eye and mind tend to intuitively grasp, supported by their physiology.

Gestalt psychology cannot be reduced to a descriptive theory of optical phenomena, it is indeed a theory of mind based on the elective relationship between perception and cognition. Optical illusions and ambiguous figures (such as Kanizsa's triangle, Rubin's vase, or Jastrow's duck-rabbit) are evidence of the discrepancy between the physical object and its phenomenal perception. For Gestalt psychology and in particular for Arnheim, who applied its laws to artistic phenomena, perceiving is always also thinking, reasoning is also intuition, observation is also invention. The image is traversed by a system of forces which, in the eyes of the observer, make it more or less dynamic, unstable, tending to a momentarily disrupted equilibrium. Thanks to its gestalt qualities, the image expresses some relevant aspects of human experience, including emotions. Grasping the meaning of an image therefore means actively participating in the adventure of its perceptual organization.

An important element of properly understanding Arnheim — and one which is present in the following volumes — is the recognition that although moving forms are phenomenally immediate, it is the spatial, temporal and multi-medial

context that dynamically shifts their meaning. Therefore, there is an inherent provisional and fallible background to any observations made in an Arnheimian manner. His theory is the opposite of a dogmatic formalism and is therefore highly useful in our contemporary context because it links the ultimate meaning of the filmic work to analytic methods that are not reductive.

FORMATIVE FORMALISM

At the turn of the 1920s and 1930s, Arnheim made an original application of Gestalt laws to cinema, a phenomenon of considerable aesthetic importance which, however, had not been studied with a scientific approach until then. There was no better laboratory than cinema theaters to test the principles according to which the eye captures the forces, the vectors, the dynamism, the intensity and all the expressive element of a work of art on the basis of the systemic relationships between the visual elements involved. Also based on a large number of examples collected during his activity as a film critic at Die Weltbühne (a leading periodical of the Weimar Republic), in 1932 Arnheim composed an impressive volume entitled *Film als Kunst* ⁸. The book was soon banned by the Nazi regime due to its author's Jewish origins and a too direct allusion to the similarity between the mustache of Charlie Chaplin's Charlot and those of Hitler in one of his review. Film als Kunst, however, was immediately translated into English and began to circulate in some Italian intellectual circles, in particular among the teachers and students of the Centro Sperimentale di Cinematografia in Rome. Having fled from Germany, Arnheim arrived in Rome in the summer of 1933 and for the following five years was one of the main editors of the magazines Intercine and Cinema. On the columns of these magazines he published a large number of articles on the psychological and aesthetic aspects of film, many of which were signed with various pseudonyms which have only recently been directly attributed. His Italian 'idyll' was destined to end soon: in 1938, the promulgation of the racial laws in Italy forced him to a new escape (first to London and then to New York), which corresponded to a sort of 'denial' of cinema, of which he will return to deal only sporadically or incidentally.¹⁰

Film als Kunst is a tormented and controversial book not only for the political context in which it hardly begins to circulate, but also for its content. It was at the end of the 1920s that the transition from silent to sound was taking place and Arnheim opposed this and other technical innovations — color, the panoramic format — by taking a defensive position on the specificity of cinema. As eminently a visual medium, in order to claim its artistic status, cinema had to avoid contamination with non-original means of expression and to remain autonomous in developing and using its own language artistically. These contaminations were in fact evident concessions to spectacle and commercial success, but above all a fatal reproductive approach to reality, from which the film had to keep away. This 'purist' position remained substantially unchanged over time despite the advances in the art of cinema. In the new edition of the book,

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published in the United States in 1957¹¹, the entire second part was replaced by a series of writings dating back to the Italian period, including the well-known essay *A New Laocoön* (1938) which confirmed his opposition to *talkies*.¹² At the turn of the 1950s and 1960s, however, in the wake of the success of *Art and Visual Perception*, the interest around Arnheim theory of cinema rekindled.

The fundamental assumptions of Arnheimian film theory is that cinema is not a means of simple mechanical transcription of reality, but a reality in its own right which dialogues with the former *by difference*. The transposition of reality on the screen brings out the insuperable partiality of the human eye (and of the camera) in front of the natural world. Arnheim identifies and describes a series of 'absences': the absence of depth, of color, of off-screen space, of space-time continuity, of non-visual stimuli.¹³

Yet precisely from its limitations with respect to reality, cinema has the possibility of being art, as the use of these 'differentiating factors' as 'formative means' allowed the 'cinematographic artist' to make a creative compensation of the gaps. Arnheim therefore describes the artistic use of each factor. First, the possibility of choosing a particular point of view, thus creating a surprise effect from a hiding/revelation dynamic. For example in the opening scene of Charles Chaplin's *The Immigrant*, the rear angle suggests that the character, leaning on the railing of the ship, is feeling bad, while it is later revealed that he was only fishing. On the other hand, Arnheim considers inappropriate and gratuitous - formalist instead of formative - the abundant use of extreme close shots in Theodor Dreyer's *The Passion of Joan of Arc* (1928), a solution that hides action and therefore prevents the viewer's full understanding of the narrative. Second, the possibility of composing the shot by exploiting the 'duplicity' of the image, which gives both the impression of a real event thanks to the illusion of depth, but it is still a two-dimensional image. Thus, for example, in King Vidor's The Crowd (1928) the shot of young John Sims climbing the stairs, already suspecting that he has lost his father, is not only a body that approaches the camera, but also a figure that enlarges by progressively widening towards the angles of the frame, physically and symbolically going towards his adult age. Third, the possibility of expressing inner states or symbolic meanings through the grayscale, lighting and contrast, without resorting to color, as in Walter Ruttmann's Berlin Symphony of a Great City (1927). For Arnheim, the availability of the entire color range is by no means an advantage for the film artist. Indeed, it is the grayscale, in its complex essentiality, that offers the possibility of expressing symbolic contents. It is no coincidence that Arnheim was on the jury of the 1964 Venice Film Festival which awarded the Leone d'oro to Michelangelo Antonioni's Red Desert, a film in which an non-naturalistic use of color is the reflection of the characters interiority. Fourth, the use of the limits of the frame to exclude and then reveal portions of the scene (off-screen space), to 'cut out' and bring a significant detail closer (close-up) or to play with the dimensions and proportions of objects placed at different depth levels (deep focus). The almost-squared aspect ratio in use in the 1910s and 1920s helped the viewer to have a comprehensive view of the action depicted on the screen, which is

instead prevented by the horizontal expansion of the format (as in Abel Gance's panoramic *Napoléon* [1927]). Fifth, the possibility of unnaturally reconstituting the fragments of space and time through editing. Finally, the ability to arouse sound perceptions using only images (in Josef von Sternberg's *The Docks of New York* [1928], the shot of a gun corresponds to the sudden flight away of a flock of birds). Arnheim accuses sound and in particular the dialogue of paralyzing the action, as it relieves the actor from the need to use the body and facial expressions as primary means of communication. Moreover, the absence of the nonvisual world of the senses, allows the film to arouse a sense of vertigo by exploiting the discrepancy between the viewer physical immobility and the camera movements.

The artistic use of these means made it possible to combine form and content: simple aesthetic solutions could immediately express inner states and symbolic meanings. The set of these means constituted the specific aesthetic language of cinema — a system that today we take for granted, but which in the 1930s still had to be described systematically.

Arnheim had already described the developed machine-like money profit orientation of the Berlin cinema industry, and in America saw this expanded in the Hollywood system. 14 Once the talking film could no longer be dislodged from the tastes of the public and the production schedules of the studios, he immediately recognized the new importance of ideological analysis, which was developed in his friendship with Siegfried Kracauer. At the same time, as a keen observer of technological issues, he was considering the consequences to cinema of the improvement of film stocks. Sharper and better emulsions almost required a shift toward realism, while he predicted that the traditional aims of cinema could be satisfied through animation.

A KINOGESTALTTHEORIE

Film als Kunst was therefore a retrospective book, aimed at discussing the effect of technological innovations on the great age of cinema as art. However, the immutability of Arnheim's position over the years, made his theory even more radical (as well as more criticized, especially in its method¹⁵). Despite the intrinsic limitations of Film as Art, in fact, the laws of Gestalt psychology continue to act in our perceptual experience of visual artifacts (as well as in their production), including films. Even without considering this approach as exclusive and exhaustive, but rather in integration with other models capable of explaining more rigorously the complexity of the viewing experience, a filmic Gestalttheorie can still be a productive means of access to the interpretation of film. The evolution of the history of visual media, characterized by the digitalization, the multiplication of screens and formats, the overabundance of images, and the multimedia contamination of languages, have changed the occasions and conditions of film viewing. However, these phenomena have not distorted the basic components of visual communication, nor do they suspend

the duty of a critic, a scholar or a student to describe the communicative and artistic effectiveness (or ineffectiveness) of audiovisual products (cinema, TV series, commercials, music videos...).

The study of cinematographic formative means can still help us today. Film analysis could return to dwell more precisely on the compositional aspects of shots (e.g. off-screen space, camera angles and point of view, shots scale, editing and deep focus) and its dynamics (in terms of vectors, balance, configuration, etc.). Today eye-tracking tools allow us to register and study empirically the viewers' gaze behavior and the dynamics of attention. This approach has the potential to enrich the analysis of the film experience with information on the quality and adequacy of stylistic choices.

The way in which viewers process editing — or what Arnheim called the 'space-time discontinuity' — is inherently a gestaltic activity: in fact, the viewer mentally reconstructs the continuity behind the logic of events despite the fact that there are lacks in space and time, applying the law of 'good continuity', that is, filling the gaps and constituting a whole that does not derive from simple juxtaposition of the shots or narrative chunks. In this sense, editing follows the functions of the mind in tending towards a 'complete' or 'pregnant' — that is, simple, coherent, logically structured — figure. On closer inspection, in drawing attention to the differences between reality and the film, Arnheim legitimized infringements of the rules of continuity (and, more generally, of Hollywood's 'ideology').18 What matters is not balance per se, but the ability of the visual configurations to tend towards it, that is, to make themselves unstable, dynamic, in need of compensation.¹⁹ As Gestalt approach thus identifies and describes the expressive potential of dynamic tension, and even of discontinuity, if this stimulates the viewer's propensity to comprehend the overall meaning of the narrative. Applied to the so-called 'puzzle films' or in general to complex storytelling, this approach allows us to conceive the film as a great mental game whose content is not the narration (or, the content), but the processes activated through the formal elements. An *insight* — another concept developed by Gestalt psychology — emerges as a reconfiguration of the relationship between the fragments in a new, sudden and intuitive way that allows a resolutive vision of a problem. If the film hides a real state of affairs until the last sequence, then there is no *insight*. If, on the other hand, it uses the space-time 'folds' of editing as formal means of expressing a momentarily incomprehensible state of affairs, then it involves the viewer actively in the comprehension of the content of the film. In short, it is likely that Arnheim would have loved Christopher Nolan's Memento (2000) for its formalism in the use of editing (and also for the mixed use of cinematography), but not Bryan Singer's The Usual Suspects (1995) or films that adopt the same type of 'unreliable' narrator.

Among the formative means, the ability of the film to evoke non-visual sensory experiences is one of the most interesting. This affects primarily the negative effects of the dialogue on acting, that Arnheim conceived as mostly a pantomimic activity. Interestingly, contemporary filmmakers have spontaneously rediscovered the power of the absence of speech, when the predominantly

visual medium takes over. For example, Brian De Palma — who had studied with Arnheim for a time at Sarah Lawrence College — remarked that he was 'essentially a silent film director', as he demonstrated with the abundant use of long-takes with little or no dialogue in his films. Furthermore, for Arnheim, the absence of non-visual stimuli affects not only the actor's body, but also the viewer's. The latter, in fact, not only *watches* the movement represented on the screen, but also *experiences* camera movements. Here, the relativity of film expression emerges non only in terms of visual perception, but of the relation, potentially conflictual, between the eye and the body, between visual perception and proprioception and equilibrioception. Contemporary cinema often uses this conflict in order to intensify the viewer's perception. In this case, 'embodied cognition' is the result of a process that includes and strategically uses a 'disembodying phase' of viewer's perception.²¹

In short, Arnheim could be considered as a classical theorist of modern and contemporary cinema. On the one hand, he explained for the first time in a systematic way the aesthetic implications of the film language at the time of its evolution. On the other hand, with his 'differential' theory, he has aesthetically legitimized infringements of the rules of continuity and balance, identifying precisely in the interference to physiological perceptual laws, a vast range of artistic potential that the cinema then naturally developed and that today we can return to observe with its far-sighted gaze.

The orientation of much film scholarship to either avant-garde cinema or an inverted canon of popular culture and the condemnation of the elitist orientation of critique of the Frankfurt school caused Arnheim's approach to appear hopelessly outdated. Yet his argument was intended to be a playbook for those seeking various artistic effects. In that sense, its recommendations were rather uncontroversial. Once one no longer believes in a positivist manner that a prediction of a theory is a law-like certainty, one can begin to see Gestalt principles as tendencies, in interaction with others for unpredictable results. One can almost express the necessity of an Arnheimian filmology as a tautology. It is simply the science of aesthetic effects, presumed by each and every filmmaker for whatever their purpose.

FILM AS ART EXTENDED

As the contributions to this special issue demonstrates, a Gestalt approach to film is still productive today. Indeed, the coupling of Arnheim to Gestalt psychology focuses the film theorist less on Arnheim the *auteur* than on him as a Gestalt psychologist. Consequently, each of the essays contained in this special issue in some sense extends Arnheim's thought to new domains, brings in other aspects of Gestalt psychology that he may have neglected, and reconnects aspects of Gestalt filmological thinking to contemporary trends in thinking.

The article by Maarten Coëgnarts, 'Meaning Potential of Motion Vectors in

Cinema', connects the notion of vectors and directed tension — a prominent feature of Arnheim's post-film writing to his earlier work, creating a useful consolidation of Arnheimian theory, moving vector discourse into film. Vectors for Arnheim create meaning by creating pictorial analogues of existence within artistic works. Following Herbert Zettl (a theorist whose relation to Arnheim would be useful to further explore), there are also motion vectors in cinema: primary motion, secondary motion, and tertiary motion. Armed with such concepts, Coëgnarts pushes Zettl's discussion of motion vectors into meaningful expression with case studies of three films: Akira Kurosawa's *Sanshiro Sugata*, Ridley Scott's *Blade Runner*, and Brian De Palma's *The Untouchables*.

The next essay, Philippe Bédard's 'Points of Anchorage: Exo-centric Images and the perceptual Relativity of Camera Movement', considers camera movement as a kind of illusion. The exo-centric image, wherein a fixed camera registers a character's fixed face and body, while the world moves, are slightly jarring (see Darren Aronofsky's *Requiem for a Dream*, or Todd Phillips' *The Hangover*). Such subjective effects reverse body-space relations, denaturalizing the tacit acceptance of the camera as a fixed eye, recording events of the world. Bédard's analysis usefully moves filmic movement back into the general psychology of ego-centric motion.

Next Maria Poulaki, in 'A Gestalt Theory for "Disorder": From Arnheim's Ordered Chaos to Brambilla's Entropic Art' returns to Arnheim's comments in his 1971 book *Entropy and Art*. This book, an homage to Arnheim's mentor Wolfgang Köhler, tried to place the physicist's notion of entropy, which by then had been overtaken by humanistic popularization, and revisit its meaning for contemporary discourse. Poulaki brings Arnheim's opposition of order and disorder into dialogue with newer approaches from dynamic systems theory (e.g. complexity theory) to the neurosciences. By using the example of the digital endlessly transforming creations of artist and film director Marco Brambilla, Poulaki reminds us of the dynamic emergence and breaking of order in the spirit of the Gestalt theory inspiring Arnheim.

Brambilla's animations are a natural invitation to consider the topic more broadly, which is accomplished in Ryan Pierson's 'Gestalt, Animation and the Culture of Design'. Animation is a natural topic for Gestalt psychologists because experience itself is not regarded as a copy of reality. Accurately geometrically presented stimuli, for example, may not produce the most robust illusion. So too with animation, which though not live-action can be more 'real' than the former. For Pierson it is therefore fitting that Gestalt psychologists ought to have anticipated, and vice versa, been inspired by animators. Each also, for Pierson, participate in a culture of design, which can be construed as a parallel project of arranging senses and populations, a psychotechnics for a sociotechnics.

In line with the reconnection of filmic ideas with larger traditions of Gestalt theory, Massimo Locatelli's 'Paul Fraisse's Psychology of Rhythm: A Case for Filmology?' connects Arnheim to the work on rhythm by Albert Michotte's student, Paul Fraisse (in effect, Arnheim's theoretical 'cousin'). For Fraisse, rhythm follows Gestalt organization but also connects to sensory-motor

activation. It becomes a particularly important way to structure narrative and the comprehension of events, but in a way not even anticipated by Fraisse can also induce both bodily and neural entrainment. It therefore creates an informed link to recent neurofilmological approaches.

Finally, Emilio Audissino addresses the specific case of humor as cognitive restructuring in 'The Aha, Ha! Moment: A Gestalt Perspective on Audiovisual Humour'. Departing initially from observations on music, Audissino considers music to be a 'part' or micro-configuration of a 'whole' or macro-configuration. Incongruity not only among single modal elements but multi-modal elements can lead to humour. The restructuring related to an 'aha' moment can be reconfigured for humour as an 'Aha, Ha!' moment. Humour is indissolubly linked to problem-solving behaviour.

It is the hope of the editors that readers will appreciate the bridges that have been built across the career of Rudolf Arnheim, and from there to broader elements of Gestalt psychology from which a Gestalt filmology can profit. Limited exegesis of Arnheim's works will limit the appeal of his work and understanding of its potential breadth. We encourage scholars to continue to consolidate knowledge and fill in gaps to construct a vigorous Gestalt filmology.



Rudolf Arnheim in *The Responsive Eye* (Brian De Palma, 1965)

Notes

- ¹ This introduction is the product of work carried out in common by two authors, and the result of a single shared process of reflection. As far as the writing of the individual sections of the text is concerned, sections 1, 3, and 4 can be attributed to Adriano D'Aloia; 2, and 5 to Ian Verstegen.
- ² Rudolf Arnheim, *Art and Visual Perception: A Psychology of the Creative Eye* (Berkeley-Los Angeles: University of California Press, 1954/1974); *Visual Thinking* (Berkeley: University of California Press, 1969).
- ³ See Dudley Andrew, 'Rudolf Arnheim', in Id., *The Major Film Theories: An Introduction* (London: Oxford University Press, 1976), 27–41.
- ⁴ A previous attempt of revaluation of Arnheim's contribution to cinema and media theory can be found in *Arnheim for Film and Media Studies*, ed. by Scott Higgings (New York: Routledge, 2011).
 - ⁵ For example, Ian Verstegen, Arnheim, Gestalt and Media: An Ontological Theory (Cham: Springer, 2019).
- ⁶ See Robert Sinnerbrink, 'Phenomenology Encounters Cognitivism', *Projections*, 13(2), 2019, 1–19, <doi: 10.3167/proj.2019.130201>; and Adriano D'Aloia and Ruggero Eugeni, 'Philo-, Neuro-, Post-. Che cos'è e cosa sarà la teoria del cinema', in *Teorie del cinema. Il dibattito contemporaneo*, ed. by Idd. (Milano: Raffaello Cortina, 2017), 9–28.
- ⁷ See for example Adriano D'Aloia, *Neurofilmology of the Moving Image: Gravity and Vertigo in Contemporary Cinema* (Amsterdam: University of Amsterdam press, 2021). For a discussion of Gestalt theory in the context of film psychology, see Maria Poulaki, 'The "Good Form" of Film. The Aesthetics of Continuity from *Gestalt Psychology* to Cognitive Film Theory', *Gestalt Theory*, 40, 1, 2018, 29–44, <doi: 10.2478/gth-2018-0004>.
- ⁸ Arnheim, *Film als Kunst* (Berlin: Ernst Rowohlt, 1932), translated into English as *Film* (London: Faber & Faber, 1933).
- ⁹ See Arnheim, *I baffi di Charlot. Scritti italiani sul cinema 1932-1938*, ed. by Adriano D'Aloia (Torino: Kaplan, 2009). See also Arnheim, *Film Essays and Criticism* (Madison: The University of Wisconsin Press, 1997), originally published as *Kritiken und Ausfsätze zum Film* (München-Wien: Carl Hanser Verlag, 1977).
 - ¹⁰ See D'Aloia, 'Rodolfo Arnheim', Comunicazioni Sociali on-line, 5, 2012, 29-44.
 - ¹¹ Arnheim, Film as Art (Berkeley-Los Angeles-London: University of California Press, 1957).
 - ¹² Arnheim, 'A New Laocoön: Artistic Composites and the Talking Film', in Id., Film as Art, 199–230.
- ¹³ See Verstegen, *Arnheim, Gestalt and Media*, for an insertion of this argument into the Brentanist ontological tradition and its affinity to Roman Ingarden's ontology of the work of art.
- ¹⁴ See Arnheim's comments on the 'Psychology of the Mass-Produced Film', in *Film als Kunst* and the early English translation *Film* (170–181), but absent from the 1957 *Film as Art*.
- ¹⁵ See Noël Carroll, *Philosophical Problems of Classical Film Theory* (Princeton: Princeton University Press, 1988).
- ¹⁶ See for example Meraj Dhir, 'A Gestalt Approach to Film Analysis', in *Arnheim for Film and Media Studies*, 89–106.
- ¹⁷ See for example the relevance of Arnheim's *The Power of the Center: A Study of Composition in the Visual Arts* (Berkeley-Los Angeles: University of California Press, 1982) in Tim Smith's 'Watching You Watch Movies: Using Eye Tracking to Inform Cognitive Film Theory', in *Psychocinematics: Exploring Cognition at the Movies*, ed. by Arthur P. Shimamura (Oxford: Oxford University Press, 2013), 165–190.
 - ¹⁸ For more on this argument, see Poulaki.
 - ¹⁹ See Meraj Dhir, 'A Gestalt Approach to Film Analysis', in *Arnheim for Film and Media Studies*, 90–106.
- ²⁰ On the influence of Arnheim's theory and teaching on De Palma's cinema, see Didier Truffo, 'Brian de Palma avec Rudolf Arnheim', *La furia umana*, 18, 2013, http://www.lafuriaumana.it/index.php/40-archive/lfu-18/74-didier-truffot-brian-de-palma-avec-rudolf-arnheim#sdfootnote6sym [accessed 25 May 2022].
- ²¹ See for example D'Aloia, 'Overturning. Upside-down dissimulations', in Id., *Neurofilmology of the Moving Image*, 143–163, <doi: 10.5117/9789463725255 ch05.>