
The Aesthetic and Narrative Dimensions of 3D Film: New Perspectives on Stereoscopy

Markus Spöhrer

1 Introduction

With the digital revival of stereoscopic films at the end of the new millennium, cinema once again attracted the attention of the public after a very long time (cf. Distelmeyer et al. 2012, p. 7; also cf. Elsaesser 2013; Higgins 2012, p. 196; Heber 2011): Not only that 3D films run incredibly successful with audiences, they are also widely discussed in critical and popular discourses and led to a renewal of the film industry and the modes of production. In addition, academic research in film and media studies, history of technology and sociology of film shows a trend towards the stereoscopic film. Although in the recent past a range of basic research has been provided on the history of the stereoscopic film and the corresponding technological developments (Loew 2013; Günzel 2012; Klippel and Krautkrämer 2012; Drößler 2008a–d; Zone 2012), the production and use of stereoscopic images (Turnock 2013; Tryon 2013; Atkinson 2011, p. 146 et seq.; Mendiburu 2009), consumption and reception (Johnston 2012; Gibbon et al. 2012; Wegener and Jockenhövel 2009) as well as the dynamics of the film and franchise economy (Belton 2012), research on the stereoscopic film in general seems to be underrepresented (cf. Distelmeyer et al. 2012, p. 7 et seq.). This especially becomes evident with respect to the fact that stereoscopic films have existed since early cinema and whilst

M. Spöhrer (✉)

Universität Konstanz, Universitätsstraße 10, Fach 157, 78457 Konstanz, Deutschland
e-mail: markus.spoehrer@uni-konstanz.de

© Springer Fachmedien Wiesbaden 2016

M. Spöhrer (Hrsg.), *Die ästhetisch-narrativen Dimensionen des 3D-Films*,
Neue Perspektiven der Medienästhetik, DOI 10.1007/978-3-658-09422-5_2

there have been attempts to “revive” it ever since, this has long been neglected in academic discourse. Only gradually is the stereoscopic film becoming a subject of historiographical revision¹ and film theoretical and narratological examinations (Jockenhövel 2014; Adler 2013; Isaacs 2013, p. 237 et seq.; Distelmeyer et al. 2012; Prince 2012, p. 183 et seq.; Sandifer 2011; Elsaesser 2010).²

The (pre-digital) history of 3D films is not only a “history of failed attempts” (Jockenhövel 2014, p. 47, trans. MS), but has also been accompanied by critical and academic scepticism (cf. Ross and Gurevitch 2013, p. 91). In 1922 *The Power of Love* (Nat G. Deverich and Harry K. Fairall), the first full length 3D movie, celebrated a fairly successful premiere in Los Angeles and “lead to a first short zenith of 3D film” (Beil et al. 2012, p. 333, trans. MS). However 1920s audiences soon grew tired of the underdeveloped and fault-prone technology, which was based on an anaglyphic colour filter process. In their second phase (1952–1954) three-dimensional films were thoroughly commercially successful. The press however mainly considered the new technology to be a marketing strategy or mere technical “sensationalism” resulting in a variety of aesthetically modest films with unaspiring stories (cf. Klinger 2013). *Bwana Devil* (Arch Oboler, 1952), a film responsible for the “3D boom” in the 1950s and probably the most famous 3D film of this phase, was degraded by professional film critics as an aesthetically and technologically inferior and poorly made “cheap thrill”. Especially its overuse of the “new” stereoscopic effect, particularly the so called negative parallax, was highlighted in numerous reviews as the worst aspect of the film (cf. Paul 2004, p. 229). In fact films like *Bwana Devil* were “cheap, often poorly scripted or achieved, genre ‘B’ movies” (Purse 2013, p. 130) accompanied by advertising campaigns which mainly emphasised the spectacular nature of the stereoscopic effect (cf. Lev 2003, p. 110 et seq.).³ One is left to speculate whether the spectacular nature, which seems to be affixed to 3D films up until today and which supported its negative image in the 1950s, is the reason why for a long time academic discourse did not engage with the narrative and aesthetic possibilities of stereoscopy. Maybe the

¹ However, research on the history of the technological development of stereoscopy was provided much earlier: Hayes 1989; Lipton 1982; Limbacher 1969; Hawkins 1953.

² For the theoretical and media aesthetic aspects of the stereoscopic image see Schröter 2014. Also see Miriam Ross’ and Leon Gurevitch’s research project “Stereoscopic Cinema”, Barbara Klinger’s current book project *The 3D Experiment: Style and Storytelling in Contemporary Stereoscopic Film*, Owen Weetch’s (unpublished) dissertation with the title “*Images in Depth*”: *Spectacle, Narrative and Meaning Construction in Contemporary 3D Cinema* and also Luisa Feiersinger’s current dissertation project with the working title *Raumfilm: Die Erweiterung des Filmraums um die dritte Dimension im digitalen stereoskopischen Film*.

³ For example the movie poster for *Bwana Devil* announced the movie with the slogan “A lion in your lap—a lover in your arms”, which strikingly refers to the “off screen” effects of the film (cf. Zone 2012, p. 13; Hagemann 1980).

assumption that the stereoscopic effect and the negative parallax in particular is merely “artless gimmickry” (Higgins 2012, p. 205), led to a rejection by film critics in the past (cf. Ross and Gurevitch 2013, p. 88 et seq.; Beil et al. 2012, p. 332; Mitchell 2004, p. 204). That such a perspective prevails even in contemporary criticism can be illustrated by 3D’s presumably most prominent opponent Roger Ebert. Not only does Ebert consider stereoscopic films as technologically inferior and a questionable health risk, he also represents the assumption that “[i]t adds nothing essential to the moviegoing experience” (2010) and that “[i]t is unsuitable for grown-up films of any seriousness” (2010, MS).

As early as 1956 George Bluestone describes the (academic and critical) rejection and degradation of 3D films based on such an assumption as a “common error in film criticism” (1956, p. 685), as it needs to be taken into consideration that the medium film itself was subject to such accusations a long time before its aesthetic and narrative possibilities were valued (cf. 1956, p. 685). And in fact, the occasional overuse of negative parallax, the “‘throw everything at the audience’ approach” (Robertson quoted in Atkinson 2011, p. 145), which labelled stereoscopy a device of exploiting “spectacularism” in the 1950s, is only *one* possible form of dramaturgy after all: “There is no such thing as *the* 3D approach, but rather different forms of application and technical realisations, resulting in different viewing experiences and narrative devices” (Jockenhövel 2014, p. 13, trans. MS). Stereoscopy is “a media form in its own right and not [...] a technique generally applied to many media at different times in history and according to different commercial imperatives” (Ross and Gurevitch 2013, p. 83). As a consequence the stereoscopic effect is not (primarily) a special effect, “a mere supplement which is punctually added to the cinematic image, but should rather be considered a generative principle which enables new aesthetic spaces” (Gotto 2014, p. 8, trans. MS). And this does not only apply to contemporary examples of digital stereoscopic films: Despite the technical differences to the latest recording and projection technologies, the stereoscopic effect has been used as a narrative and aesthetic device even in pre-digital 3D films—and not necessarily as a special effect only. This can for example be illustrated by film analyses of Alfred Hitchcock’s 3D classic *Dial M for Murder* (1954) or Jack Arnold’s horror cult movie *Creature of the Black Lagoon* (1954) (cf. Jockenhövel 2014, p. 60 et seq.; Atkinson 2011, p. 145 et seq.; Hall 2004).⁴ As with the use (and introduction) of cinematic sound and colour, it was possible in all phases of 3D film to use the stereoscopic effect as a genuine aesthetic or narrative device, which is capable of “creating additional meaning” (Jockenhövel 2010, p. 112, trans. MS; also cf.; Bluestone 1956, p. 684 et seq.; Eisenstein 1949, p. 39).

⁴ Also see the chapters by Kerstin Rubes and Jens Schröter in this book.

However only recently academic research acknowledges that the digital 3D film is not only a “new representational technology” (Higgins 2012, p. 196) which provokes a revision of the “established parameters of film history and theory” (Distelmeyer et al. 2012, p. 9, trans MS), but also demands for an investigation of the new audio-visual aesthetics as well as the re-evaluation of narratological concepts and terminologies (Jockenhövel 2014; Ross 2012; Atkinson 2011, p. 145 et seq.). Although related studies are increasing, research on the aesthetic and narrative possibilities of the stereoscopic film is still limited in comparison to other fields of film and media studies.⁵ Also taking into account the growing number of thoroughly heterogeneous and interesting stereoscopic films produced during the last years, it comes as a surprise, that with the exception of a few popular films, detailed film analyses of stereoscopic films are still missing in the academic landscape for the large part. As the list of secondary sources on this topic shows, this does not mean that there is no or only little literature about the aesthetic and narrative dimensions of 3D films, particularly as more and more research is published on this topic. However the argument can be made that this research is underrepresented in contrast to other research topics of film and media studies, especially narratological examinations of 2D films.

Thus, *The Aesthetic and Narrative Dimensions of 3D Film: New Perspectives on Stereoscopy* is designed to investigate the aesthetic and narrative space of possibilities of 3D film, which emerges between the (new) technological conditions of stereoscopy and the cultural and psychological mechanisms of apperception. In doing so, contemporary and classic stereoscopic films will neither be considered undemanding as far as aesthetics and storytelling are concerned nor will the stereoscopic effect be understood as a “spectacular” special effect only. Rather, the chapters gathered in this book are based on the premise that the stereoscopic effect adds a “surplus aesthetic value” (Beil et al. 2012, p. 332, trans MS) to the films, which cannot be reduced to presumed spectacularism. As a consequence, in this book, which unites international researchers and perspectives, the aesthetic, audio-visual and “narrative potential” (Higgins 2012, p. 199) of cinematic stereoscopy will be analysed and opposed to those of 2D films. In addition to this the established methods and terminologies of film studies will be critically examined in relation to stereoscopy and put to the test in analyses of concrete film examples.

⁵ Exceptions are the fundamental book on 3D films by Jesko Jockenhövel (2014), the film analytical observations by Sarah Atkinson, the works by Miriam Ross (2011, 2012) and Owen Weetch’s dissertation (see footnote 2).

2 Questions Related to the Narrative and Aesthetic Aspects of Stereoscopic Films

Within the scope of these premises the following aspects and questions are considered relevant: A first obvious step would be to determine the differences between the planeness (or two-dimensionality) of the two-dimensional cinematic image and the three-dimensionality of 3D films and how to describe and analyse them—a question which was already posed by Sergeij Eisenstein in “About Stereoscopic Cinema” (1949) and which he considers fundamental for the discussion of stereoscopic aesthetics. In this regard, Lisa Gotto (2014) suggests that the potential of the new spatial aesthetic of stereoscopy is based on the interaction of the concepts of opening and limiting cinematic space. The negotiation of spatial lines of demarcation consequently leads to what she describes as a “new cinematic perception of space” (Gotto 2014, p. 10, trans. MS; also cf. Ross 2013). As shown in Scott Higgin’s analysis of *Hugo* (Martin Scorsese, 2011) such spatial constructions and effects can support the narrative, set dramatic accents and add to the characterisation of the protagonists of the film: “Hugo (Asa Butterfield) rescues Isabelle and sweeps her into his secret corridor behind the station’s walls in a tracking shot with amplified dimensionality. [...] space expands around the characters to express the exhilaration of their escape. Elsewhere, contrasting depths provide momentary dramatic punctuation, as when Scorsese follows an exchange of shallow shot/reverse-shots between Isabelle and Hugo in the train station bookstore with a precipitous over-head view of the characters narrowly framed between tall bookshelves and beneath a hanging lamp, which spectacularly recede into the frame. The arresting spatial expansion provides a visual beat between the children’s conversation and Hugo’s tense confrontation with Méliès (Ben Kingsley), which follows” (2012, p. 207). Similarly the spatial aesthetics of *Coraline* (Henry Selick, 2009) are used in support of the film’s story. According to Jesko Jockenhövel (2014) Coraline’s psychic state is mirrored in the shift of spatial perception and conception (2014, p. 121), which relies on the stark contrast achieved by alternating an almost two-dimensional planeness with a three-dimensional dilatation of space (cf. Jockenhövel 2010, p. 112 et seq.). In contrast to this, in Patrick Lussier’s *My Bloody Valentine* (2013) the depth illusion created by positive parallax is used as a claustrophobic device; the characters of the film either appear as “imprisoned or cut off from the audience” (Jockenhövel 2014, p. 149, trans. MS). Such “depth-oriented aesthetics” (Higgins 2012, p. 198) need to be examined as a unique stereoscopic aesthetic, distinguishing it from the planar film; an aesthetic that can be functionalised as a narrative means in mutual relation to the narrative context of the film example in question. Additionally, the example of *Coraline* shows, that besides the examination

of the narrative consequences of unique stereoscopic effects, the interaction with the audio-visual repertoires and the aesthetic means of 2D film need to be taken into consideration in any case as well. Obviously in this example the highlighting of the aesthetic and narrative qualities of stereoscopy results from contrasting it with an emulation of two-dimensional spatial conceptions and perceptions (cf. Elsaesser 2013, p. 239). In this respect an examination of the use and arrangement of conventional depth cues of 2D film in relation and contrast to the aesthetic modes of stereoscopy appears to be worthwhile as well (cf. Ross 2012; Atkinson 2011).

Based on such film analyses the question can be raised whether the aesthetic and narrative possibilities of cinematic stereoscopy allow to formulate a “new visual grammar” or a new “cinematic vocabulary” as Atkinson (2011, p. 140), Pennington and Giardina (2013, p. 2 et seq.) and Zone (2012, p. 397) suggest.⁶ Benson-Allot for example considers the “emergence effects” (negative parallax) a *trope* of stereoscopic films (2013 also cf. Paul 1993): As with colour, the use of negative parallax can function as a relocation of a film object into the foreground of the screen (or even “out of the screen”) and thus emphasise the object and attribute special narrative meaning to it. Owen Weetch’s analysis of the use of negative parallax in *The Hole* (Joe Dante, 2009) shows, that such effects can generate narrative meaning; *The Hole* is “an example of an expressive text that deploys stereoscopy to reinforce and accentuate its character-based narrative” (2012, p. 21). If this is the case with classical films as well—as suggested above—this will demand the question wherein the *newness* of these stereoscopic effects is founded. Is it a cinematic grammar which can be formulated regardless of the historical, technological, economical and spectatorial conditions? Or are these mainly “effects” of contemporary (digital) recording and projection technologies? Can these “new” dramaturgical uses of the stereoscopic aesthetic solely be attributed to digital 3D films or can they be observed in earlier film examples as well? Besides narratological analyses of pre-digital 3D films, a re-evaluation and reconsideration of classical film theories and studies on stereoscopic films, such as Münsterberg (1916), Arnheim (2002 [1932]), Eisenstein (1949), Bazin (1953) Anders-Stern (1954), Kluth (1955), Bluestone (1956) or Limbacher (1969) could be insightful.

In contemporary theory, stereoscopy is frequently reflected with regard to its immersive potential both as a media characteristic and a state of audience reception (cf. Higgins 2012; Sandifer 2011; Jockenhövel 2010). While the film industry attributes an unprecedented immersive film experience to the new 3D technology, the critical discourse of media and film studies rather considers stereoscopic images

⁶ Also cf. Sarah Atkinson’s chapter in this book.

to have an inherent self-reflexive element. For example Philip Sandifer argues that “3D film, rather than being immersive, is profoundly bound up in an act of spectatorship whereby the theatre, instead of disappearing, is even more conspicuously visible” (2011, p. 69; also see: Higgins 2012, p. 196 et seq.). However, according to William Paul this “problem” is not new and was familiar to the 1950s critics as well: While the *invisible style* of classical Hollywood cinema generally sought to make technology and the process of production and narration unobtrusive, the stereoscopic effect is a “technology that constantly foregrounds itself, often in the most literal fashion” (2004, p. 229). A narrative analysis could draw on such an observation productively and ask to what extent the stereoscopic effect is used in specific film examples as a means of undermining the cinematic illusion (cf. Bluestone 1956).⁷ Another legitimate question would be how 3D films reflect upon their technological conditions of production by referring to “new ways of seeing” produced by the stereoscopic effect (cf. Jockenhövel 2014, p. 140 et seq.; Grabiner 2012).⁸ For example the stark contrasting of planeness and extreme spatialisation in *Coraline* can be read as a self-reflexive and defamiliarising application of the aesthetic modes of stereoscopy, which can thoroughly be paralleled with the use of colour in *The Wizard of Oz* (Victor Fleming, 1939) as an aesthetic and narrative means of contrasting the real world of Kansas with the fantasy world of Oz: “[As in *Coraline*], in the *Wizard of Oz* the new technology of colour film is not linked to the realistic, but instead to the fantastic world. Here again the new technology as well as a *defamiliarisation* is being highlighted” (Beil et al. 2012, p. 336, trans. MS). However, the concept of immersion as a self-reflexive element in stereoscopic films can also be found on the level of plot: The films *Avatar* (James Cameron, 2009) and *Tron: Legacy* (Joseph Kosinski, 2010) for example pick the “transfer of the body into an alternative, immersive environment” (Jockenhövel 2011, p. 105, trans. MS) and the immersion into a virtual or alien world via a media interface as their central theme.

3 Chapters

Within the frame of such and similar questions, the chapters in this book examine the aesthetic and narrative dimensions of 3D film. This does not imply that the interdependence of the technological, film historical, economical and apperceptive dimensions of stereoscopy must be regarded separately, particularly since these

⁷ Also see Luisa Feiersinger’s chapter in this book.

⁸ Also see Konrad Schmid’s and Sarah Atkinson’s chapters in this book.

determinants condition certain aesthetic and narrative effects (cf. Higgins 2012). However, the chapters do not consider the discourses on the spectacularisation or the “cinema of attractions” (Paul 1993), the historical and technological developments of 3D films and critical and popular reception, economical speculations or sociocultural explanatory models for the “return of stereoscopy” as such without relating to aesthetic or narrative aspects.

The book opens with *Lisa Gotto’s* chapter on the aesthetic relationship between space and time in 3D cinema. According to Gotto, 3D films do not only alter the perception of spatiality, but also relate this alteration to a certain understanding of temporality. While 2D cinema mostly focuses on montage as a sequence of clearly definable shots, stereoscopic aesthetics depart from these structural aspects of form and meaning. This is most noticeable in the tendency to dismiss the fragmenting function of cutting and instead to focus on the long take as a discrete form of expression. As a consequence 3D cinema developed new forms of cinematic language, namely the interlocking of temporal complexity and temporal continuity perceived in a single image. Thus, Gotto’s chapter analyses the resulting aesthetic and narrative possibilities from early cinema to classical cinema right up to digital 3D cinema.

In the next chapter *Jesko Jockenhövel* focusses on the beforementioned long take phenomenon in 3D cinema. Departing from the problem of cutting and depth-of-focus in stereoscopic films, a range of contemporary digital 3D films have created impressive long shots. Despite the fact that 3D films are often considered versatile as far as its forms of expressions are concerned, Jockenhövel argues that due to their technical conditions 3D films have an affinity for such long takes. They serve a range of functions and need to be considered in direct relation to different technical and aesthetic developments of the Hollywood style, especially the use of long shots, an extremely flexible camera and the establishment of CGI. Long takes in 3D films arrange the diegetic world fundamentally and thus contribute to the “world-building” (Jenkins 2006), which is an essential aspect of science fiction and fantasy motives. Based on a phenomenological understanding of the semiotic term *index*, Jockenhövel furthermore agrees with Bazin’s understanding of “realism”, by dismissing the classical concept of the “representation of reality” and instead focussing on the results of experiencing a (possible) reality—an “illusion of reality”.

Sarah Atkinson’s chapter, “Gravity —Towards a Stereoscopic Poetics of Deep Space”, deals with Alfonso Cuaróns critically and commercially successful 3D film *Gravity*. Conceived and written as “A space suspense in 3D,” *Gravity* provides a unique site upon which to progress the establishment of a 3D poetics of stereoscopy. Drawing upon literal “deep space” as the most expanded of canvases

upon which to experiment with the affordances of the 3D palette, *Gravity* evolves and extends a 3D visual system through its innovations in production processes with which to achieve photorealistic perfection. Through analyses of both the screenplay and the final film, Atkinson draws out *Gravity*'s key 3D aesthetics as evidenced within the script dialogue, direction, on-screen performance and the film's resultant visual regime, which include both the presence of some emergent characteristics as well as the recurrence of others. Atkinson moreover shows that *Gravity* can be conceptualised as a reflexive text: On the one hand it is a film about *looking* and on the other hand the film is concerned with reflecting upon current and emerging trends in film production.

Based on the key scene of *Dredd* (Pete Travis, 2012)—the antagonist Ma-Ma falling from a 200 floor skyscraper in slow-motion—Luisa Feiersinger's chapter analyses the cinematic spaces as well as the corresponding perception of space in this film. In the course of a detailed analysis, Feiersinger constitutes what she calls a "spatial narration" of the film. The relationship between the establishment of illusions and the concurrent breaking of these illusions in *Dredd* can, according to Feiersinger, be compared to baroque illusory spaces. This observation is illustrated by the example of Andrea Pozzo's famous ceiling painting *The Worldwide Mission of the Society of Jesus* (1691–1694). The strategies of creating and dissolving immersion which she observes in Pozzo's painting can consequently be adapted to *Dredd* and the medium of stereoscopic film in general. In contrast to professional film criticism, Feiersinger concludes that the stereoscopic effect is skilfully used as a narrative and aesthetic device in *Dredd* and furthermore can be read as a reflexive stylistic device.

Konrad Schmid's chapter deals with the reflexive possibilities of stereoscopic films as well: According to Schmid technological changes are accompanied by a reflexion of the state of technology in the human "view of the world". In the course of the return of 3D film, a medium is provided which deals with this subject in an intensive way—not only because of the fact that the still unfamiliar receptive situation causes the audience to become aware of the technicity of the film itself. On the narrative level the films double the awareness of a technical presence as well, as the protagonists of stereoscopic films change worlds by using new technological inventions and as "handling" technology proves to be a central topic in these films, which is frequently connected to a change of perspective. The films that have been produced within the last years reveal parallels which can be related to a new perspective on technology that attributes technology as constituting and transcending human subjectivity. These cinematic reflections can also be considered as a parallel development to contemporary philosophies of technology. Schmid explicates and verifies this claim using the example of *Pacific Rim* (Guillermo del Toro, 2013).

In the next chapter *Miriam Ross* discusses a reoccurring object of study in stereoscopic media: The human body, particularly the way its contours and volumetric depth are manifested in different ways from its depiction in 2D media. The history of stereoscopic illusions is littered with portraits of the human body and, now that stereoscopy is renewed in the digital era, they are frequently combined with computer generated imagery (CGI), most often in Hollywood blockbusters, in ways that allow entirely new depictions of the human form. Whereas analogue stereoscopy attempted to closely replicate the physical characteristics of a performing body that was placed in front of two cameras, digital stereoscopy is able to create hybrid bodies that belong in part to the performer and in part to digital code, in this instance building upon and reconfiguring the depth relations and visual characteristics of the body. By analysing *Iron Man 3* (Shane Black 2013), *The Amazing Spider-Man 2* (Marc Webb, 2014), and *X-Men: Days of Future Past* (Bryan Singer, 2014), Ross' article discusses 3D films that demonstrate the transformative capacity of human bodies in digital stereoscopy.

Owen Weetch's article "Stepping Out: Victory and Utopia in the 3D Instalments of the *Step Up* Franchise" analyses the 3D dance films *Step Up 3D* (Jon M. Chu, 2010), *Step Up Revolution* (Scott Speer, 2012) and *Step Up: All In* (Trish Sie, 2014). The chapter concentrates on *Step Up 3D* in particular, examining it in relation to Richard Dyer's and Jane Feuer's theories of the classical Hollywood musical. It delineates how the utopia that these films present to audiences is aesthetically accentuated and renegotiated through the 3D effect. It argues that the characters' mastery of the 3D spaces secures their victory in specific dance sequences. By paying close attention to the stereography of the musical sequences of these films, the chapter reveals these films' sophisticated engagement with space, conflict and victory.

Kerstin Rubes' chapter discusses the aesthetic and narrative aspects of a film produced in the second wave of 3D cinema in the 1950s: Alfred Hitchcock's thriller classic *Dial M for Murder* (1954), Hitchcock's only film shot in "3D Natural Vision" (polarisation system). In the course of a detailed analysis, Rubes reformulates and contrasts Sheldon Hall's (2004) and Peter Bordonaro's (1976) analyses of the film. Based on the concept of 3D as "Stilmittel" ("stylistic device") formulated by Jesko Jockenhövel (2014), Rubes' analysis focusses on the relationship between the fictional narrative space and the aesthetic three-dimensional space. Thereby she deals with those scenes in particular that have been disregarded by academic discourse so far, but, according to Rubes, need to be characterised as stereoscopic narrative and aesthetic "key scenes" (Hall 2004).

In his chapter on "*It Came from Out Space: Das Unbewusste des Kinos 1953*" *Jens Schröter* analyses a film which can be associated with the "3D cinema boom"

Die ästhetisch-narrativen Dimensionen des 3D-Films

Neue Perspektiven der Stereoskopie

Spöhrer, M. (Hrsg.)

2016, IX, 208 S. 44 Abb., 22 Abb. in Farbe., Softcover

ISBN: 978-3-658-09421-8