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## The Effect of the Handheld Camera on Narration and Ocularization in the Dogme 95 Film<sup>1</sup>

**Abstract:** This paper aims, based on the method of case study, to investigate how the handheld camera affects narration and ocularization in the Dogme 95 film. The Dogme 95 (hereafter 'Dogme') film is a relatively recent filmmaking movement, which has its own set of strict rules – one of which requires shooting the film with a handheld camera. Regardless of the fact that the utilization of a handheld camera causes specific and recognizable image and movement aesthetics, which can be described as a specific handheld camera style, it is also an indispensable theoretical fact that it very much 'speaks' through narration, in particular through focalization and ocularization, which is also theoretically confirmed by theoreticians of the Dogme film. The two most representative, and most prominent films of the Dogme filmmaking movement are *Idiots [Idioterne]* by Lars von Trier and *The Celebration [Festen]* by Thomas Vinterberg. The Dogme movement, famous for its inescapable and apparent pseudo-documentary filming style – which enables one to ask the question what is here and how is the reality of reality here – raises additional questions, but also provides answers through thoroughly studying the way in which the handheld camera narrates audiovisually and how narration flows in the two aforementioned films. Additionally, it asks whether there is a difference in narration and ocularization, or if it is disabled, and how the handheld camera becomes the narrator, in symbiosis with the character.

**Keywords:** narration; focalization; ocularization; handheld camera; *Idiots*; *The Celebration*; pseudo-documentary; inserted narration

### Introduction

Initially, some basic characteristics of Dogme film shall be outlined, the term handheld camera shall be explained, followed by the author's selected thoughts and commentary on key terms, such as narration, focalization and ocularization, to gradually progress to the main part of the paper, in which the author, based on scenes or

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<sup>1</sup> Considering that for the purpose of this scientific paper certain foreign literature was used, which has not been translated into certain languages, certain parts of the translation are a free translation by the author.

sequences selected from the previously mentioned films, will explore how the freely guided camera narrates audiovisually. For this purpose a case study method will be employed, which shall thoroughly analyze the laboratory occurrence or the process of the scenes or sequences mentioned. As stated above, two subjects (cases) have been chosen for analysis. These contain all required characteristics, by which two crucial questions – how and why – shall be answered in the manner required by the rule of the chosen method in order to conduct a proper study, as presented here.

### About the Dogme film

Dogme 95 is a film movement that began in Denmark, inspired by the desire to return film to its original form – i.e., to purity. The movement's founders are two directors, Lars von Trier and Thomas Vinterberg. On March 13, 1995 they signed the *Dogme 95 Manifesto*, which contains ten so-called Vows of Chastity,<sup>2</sup> to which every director of the genre should comply in his filmmaking achievements. Soon after, more directors joined the movement. Some of the genre's most renowned films include *The Celebration*<sup>3</sup> by Thomas Vinterberg [*Festen*, 1998], and *Idiot*<sup>4</sup> by Lars von Trier [*Idioterne*, 1998]. Based on these two films, a study will be conducted on how the handheld camera affects narration and ocularization in Dogme film, and whether there is a correlation between the two terms. Certain scenes or sequences from the two films will be selected, and based on those, an analysis and identification – i.e., a study – will be conducted.

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2 Jana Hallberg i Alexander Wewerka, *Dogma 95. Zwischen Kontrolle und Chaos* (Berlin: Alexander Verlag, 2001), 9.

The rules of the Dogme 95 Manifesto are as follows:

1. Shooting must be done exclusively at the original spot or location; props must not be brought in.
2. Music is allowed in the film (if an actual band is playing in the scene) but must not be inserted afterwards.
3. To shoot the film solely a free handheld camera may be used.
4. The filming is in color, special lighting is not acceptable.
5. Special effects and filters are forbidden
6. The film must not contain superficial action or murders.
7. Temporal and geographical alienation is forbidden; hence the film takes place here and now (meaning not in the Middle Ages, or a distant future, or in another production world, nor on a foreign planet or an unknown location, etc.)
8. Genre films are not acceptable
9. The film format must be Academy 35 mm
10. The director must not be credited, meaning he must not be mentioned, not in the opening scene nor in the closing credits.

Nevertheless, some Dogme films break a rule or two, which is then contritely mentioned in the closing credits.

<sup>3</sup> Plot: Respected family patriarch and businessman Helge (Henning Moritzen) is celebrating his 60th birthday at the family-run hotel. Gathered together amongst many family and friends are his wife Else (Birthe Neumann), his sullen eldest son Christian (Ulrich Thomsen), his well-traveled daughter Helene (Paprika Steen), and his boorish younger son Michael (Thomas Bo Larsen). Christian's twin sister, Linda, has recently taken her life at the hotel.

<sup>4</sup> Plot: A seemingly anti-bourgeois group of adults spend their time seeking their 'inner idiot' to release their inhibitions. They do so by behaving in public as if they were developmentally disabled.

## Theoretical background

*Film narratology* investigates 'how film tells stories', i.e. general principles of film narrative and representation, plus laws and systems of narration and continuity.<sup>5</sup> The terms *narration* and *narrative* are integral parts of film narratology. A narrative is the only direct, material product of narration, which we directly encounter in analytical, theoretical or observational intentions. Narration, on the other hand, is achieved only through active observational participation and work.<sup>6</sup> According to Genette, *the narrator* (the storyteller) can be either extradiegetic or intradiegetic, depending on his positioning in relation to the world of the story itself. The extradiegetic narrator is outside of the world of the story, while the intradiegetic narrator is within. Furthermore, the narrator can be homodiegetic, i.e. a participant within the story that he narrates, or heterodiegetic, where he does not appear in the story he narrates.<sup>7</sup> Point of view (POV) is the optical perspective of a character, i.e., the narrator (in a broader sense), as the one that sets the shot, the scene, establishes a relationship between characters and occurrences in the fictional world. POV can also be that of the camera (in demonstrative camera work, e.g., André Gaudreault's theories) or of the character when determining and giving orientation in space. It can also function as a basis for establishing an ideological, moral, or emotional attitude towards the occurrences, so it is commonly understood as a perspective, rather than a point of view. In this sense, the establishment of POV is essential for structuring the narrator (extradiegetic or intradiegetic) and his or her activities, as well as for the process of *focalization* and *ocularization*.<sup>8</sup> Genette introduces the term focalization to distinguish the narrator's activity of telling the story from the character, who is looking and observing the occurrences. The focalizer always belongs to the diegetic world, the world of characters and occurrences.<sup>9</sup> Ocularization is defined as what the character sees, and what the camera sees, i.e., the difference between the two findings or degrees of 'subjectivization'. Ocularization can be external (it belongs to the camera, regardless of characters) and the interior (it can always be attributed to the individual but also to the collective character as a subjective view).<sup>10</sup>

## Study of the Dogme film

Particular to the Dogma film is its pseudo-documentary<sup>11</sup> filming style, a concept that historically began with Direct Cinema, Italian Neorealism, continuing onto

<sup>5</sup> Nevena Daković, "Pojmovnik teorije filma I," in *Estetika filma*, ed. Žak Omon, Alen Bergala, Mišel Mari, Mark Verne (Beograd: Clio, 2006), 294.

<sup>6</sup> Ibid.

<sup>7</sup> Ibid, 295.

<sup>8</sup> Ibid, 296-97.

<sup>9</sup> Nevena Daković, "Pojmovnik teorije filma II," in *Teorije sineasta*, ed. Žak Omon (Beograd: Clio, 2007), 194.

<sup>10</sup> Ibid.

<sup>11</sup> A pseudo-documentary film (mockumentary) is the name for a film genre, whose authors try to create the illusion that the viewer is watching a documentary film, and they try to portray the fictional or acted events in the same way a documentary filmmaker or TV reporter would.

Found Footage, etc. The essential feature of the films in question is that they utilize no spatio-temporal jump cut,<sup>12</sup> or merging of several shots, because one of the rules in the Dogme 95 Manifesto states that temporal and geographical alienation is forbidden, and the film must be set in the here and now. This mode of filming gives the movie a sense of reality, so it is also a means to represent the story as it is, given that in this type of film there is no picture and sound processing, editing, or use of lighting allowed. But to better understand and comprehend, and primarily present Dogme film, it is crucial to reflect on certain historical facts.

When, for example, Dogme film is compared to Deleuze's category of films, depending on the type of image, one can underline that strong unity of time and space is present, in order to achieve reality. In opposition to image/time films, time in Dogme films runs linearly. Characters are not just mere observers, as is the case of the aforementioned films, but their action takes place through the process of development. If the film *Idiots* is taken for example, one notices that the characters are not observers, so the hodological space has been preserved once again through the narrative structure, as well as the unity of movement and subject, which was interrupted by the technical aspects of the manifesto. This applies to the seventh rule of the manifest that obliges the film to be shot in the 'here and now', which then enables a linear time structure in the film, while simultaneously limiting any variation in that respect. Bearing in mind that the rules of the Dogme 95 Manifesto were designed to portray the purity of film, free from any sort of editing and post-production, the authors of this movement also wished to demonstrate that good results can be obtained even without standard production methods and techniques. Because the aim of these authors was to depict reality accurately, which is faithfully displayed with the use of a mobile/handheld camera used in these films, very often handheld camera shake was also valued, in order to more faithfully portray reality. Thus, several film researchers, leaning towards psychoanalysis, have proposed the idea that the viewer's identification during the viewing of the film can be compared to Lacan's *mirror stage*<sup>13</sup> theory. What differs is that viewers do not see their own reflection in the film; their first identification is not with the characters or with any other object in the film, but with the point of view of the camera. This identification, which viewers are unaware of, contributes to enhancing their sense of belonging, as it gives them the feeling that they belong to these images passing before their eyes. This feeling is intensified by the movements of the camera, an element found in Dogme films, which create an even stronger sense of reality because viewers do not perceive themselves as separate, but as an omniscient transcendental entity. This sense of reality is complemented by the absence of time and geographic transitions, whereas filming at a single location leads to the merging of the material and temporal, keeping in mind that both sound and images are filmed at the same time. Therefore, filming at one location enhances that feeling, while the use of a handheld camera rounds this experience into one whole, because every shake

<sup>12</sup> Ante Peterlić, *Osnovne teorije filma* (Zagreb: Hrvatska sveučilišna naklada, 2007), 13.

<sup>13</sup> Nitzan Ben-Shaul, *FILM The Key Concepts* (New York & Oxford: Berg, 2007), 110–12.

of the hand is noticeable, as well as scene interruption, plus sometimes the accidental appearance of the microphone in the frame; precisely these things give the viewer the feeling that the action is happening here and now and that it does not differ from the current time. The rule which obliges the camera to follow the action, rather than directing it towards the camera, gives a sense of spontaneity and naturalness because there is no pre-designed camera positioning and shooting angles. Thanks to a portable camera, the action flows naturally following its internal logic, in line with actors' interactions and their relation to the surroundings; the actors can be shot from such proximity that the distance between actors and crew is eliminated.

The fundamental difference in regard to classical narrative is the visibility of the camera in Dogme films, as previously noted. In the classical audiovisual narrative, the camera lives from invisibility because the invisibility of the camera's technique contributes to the illusion of reality. In *Idiots*, the footage indicates someone is present and is filming everything that is happening, out of curiosity or as a hobby. An example: after one questionable event in a restaurant, three members of the 'group of idiots' and one date are getting into a taxi (TC around 0:04:23 to 0:05:51).<sup>14</sup> The camera shows these four characters, plus the taxi driver, in various settings changes, portraying them in a small taxi, while they are talking about the recent event in the restaurant (one to three characters are displayed, simultaneously in one image a maximum of two). Theoretically, one of the protagonists might be the one holding the camera (one of those that cannot be seen momentarily).<sup>15</sup> The camera near the characters dominates the entire film, though not as directly as the taxi rides sequence. Very rarely the camera is assigned to a particular character's point of view, as partially made in the taxi ride scene: the so-called *nobody's shot*<sup>16</sup> generally dominates. Theoretically, someone from the group of Idiots could be the one holding the camera and filming the events – most likely one of the members of the group that is currently not

<sup>14</sup> The film is available here: <https://www.youtube.com/watch?v=i3QCRwEUId4&t=270s>, acc. September 17, 2017, the time codes according to the link. All the information about Timecode (TC) is in [h: min: sec] format. Entering the taxi begins at TC 00:04:23, and the taxi ride lasts to TC 0:04:44. During the taxi action sequence, the date ('Karen') is not yet a member of "the idiot group".

<sup>15</sup> During a taxi ride, the camera is not visible: only in one section when entering the taxi (TC ca. 0:04:28), in the car window there is a brief moment when one can see the cameraman with the camera. Everything suggests that this is a random trail of real production conditions. Thus, for example, there are no scenes in which the cameraman appears as a character, where one camera is held longer or where the footage is thematized. The film does not identify itself as pseudo-documentary in sequences of action. However, scenes constantly appear which interrupt the sequences of the action, and which are implicated as a kind of a delayed conversation. This gives the film at least one pseudo-documentary tendency.

<sup>16</sup> *Nobody's shot*, or *zero shot*, which represents the point of view of no one, mostly referred to as zero ocularization, is in strict contrast to the point of view shot, which can be identified as a character's point of view in the film. Zero ocularization, which can be identified and belong to the body of perception, by installing itself into the very core of the scene is called unfocalized nobody's shot. It is not assigned to the characters. First of all, in the examples where the homodiegetic narrator (in Gérard Genette's categories) carries the story, objections arise because the unfocalizing settings must always contain information that the narrator does not know, and this is why such films belong to 'double focalization' and point to another narrator, by taking control of (audio) visual narration. Most film settings are assigned to this type. <http://filmlexikon.uni-kiel.de/index.php?action=lexikon&tag=det&id=8412>, online movie lexicon of Kiel University, acc. August 30, 2017.

seen because he is filming – which would represent a variable internal ocularization. However, explicit indications of this are not visible. In other sequences, clear zero ocularization is found. Focalization, which is almost equal to ocularization in this particular example, fluctuates in *Idiots* between variable internal focalization and zero focalization. This way of using the handheld camera can be categorized as subjectivization without the subject or as the position of the observer without an observer, i.e., the personalization of narrative without a specific figural task. The latent impression of anthropomorphization of the camera creates an observational void that is either temporarily occupied or not occupied at all.

The film in which the handheld camera in its extreme mobility, despite its proximity, draws attention to the extradiegetic audio-visual narrative instance and zero focalization is *The Celebration*.<sup>17</sup> The central point in the film is the birthday celebration of a hotel manager, Helge Klíngfeldt-Hansen, in a gorgeous house in the countryside. In three speeches at the table, his eldest son Christian informs the company at the birthday party that both he and his sister, who had committed suicide a few months prior, were sexually abused as children by their father. Everyone directly involved, especially Christian's parents and two other siblings, dismiss Christian's speeches as an unpleasant incident, attributing them to his powerful imagination, and continue the celebration. Christian attempts to maintain his accusations, eventually reaching the limits of mental endurance. One example is a sequence portraying the company at the party just after Christian's second speech (TC Second Speech 0:46:43 – 0:47:33 sequence that shows the immediate reaction of the company until 00:48:16), where Christian describes his father as his sister's murderer. The camera is fast, it zooms in, rocks, drives, pauses briefly, jumps from one character to another. In its extreme mobility and its conspicuous portraying, and in spite of its immediacy, the camera refers to the static visual narrative instance and its zero focalization. The visual narrative instance narrates through a combination of the elements of the handheld camera and editing, and communicates information that surpasses the knowledge of the character[s], as here so in other sequences of the film. The camera is the one that exposes the movements of the characters; it points to crucial moments by subtle gestures, and it is always located where an important event or emotional discharge takes place. In this way, the viewer is presented with an evaluative perspective and thus its narration is strongly authorial. The movement of the camera is supported by flexible, relative and unobtrusive editing, which is important for the perspectivization that is mediated through the visual narrative instance via the knowledge of individual characters. This could be interpreted as follows: a visual narrative instance, with the use of a handheld camera and flexible editing, reveals the criminal hypocrisy, which caused Christian's lifelong agony, while at the same time making Christian's tension almost physically tangible. The classical dramaturgical structure is visible in film *The Celebration*, for which one can say that it relies on conventional narrative style, given that it contains

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17 Film available at: <https://www.youtube.com/watch?v=M-YImpkwOxc&t=2811s>, acc. September 17, 2017. Timecodes according to the link.



what Aristotle and Plato called the *unity of action*, which later referred to the unity of time and space. The film itself is metrically divided into stages, i.e. introduction, rising action, climax, falling action, the epilogue, and the metrical symmetry of the film is built by the symmetry or sequence of the events in the story, and such films coincide with the characteristics of the story. The dramaturgy of this film is based on that unity, and when analyzing its dramaturgy, one finds that it contains each of these stages. Thus, the introduction already provides the theme and the conflict of the story, and further on, one comes across the other stages as well. Besides, by analyzing both temporal and causal relationships in the film, one recognizes the classical, dramaturgical structure, so that one, at almost every moment, knows where the action is taking place and can, therefore, understand the causal relationships between the elements. However, there are certain inconsistencies with the classical structure, some of which relate to the absence of coherence rules, as well as the presence of a metaphysical and mystical dimension. This is manifested at the very beginning, when Christian is talking on the phone, but the person on the other end of the phone line remains a mystery. The mystical dimension of several events is unexplainable in regard to the logical cause and effect relationship: in other words, the only purpose of the phone call is to indicate how Christian's revelation is well planned. An example of this can also be found in the situation in which Helen says 'boo' to the receptionist after coming across an extremely important suicide note in a hotel room. This exclamation 'boo' marks a series of intertwined events between Helen, Christian and Michael; this exclamation may well be the cause of events in the adjacent room, if that exclamation can be heard there.

The question that to some extent remains unanswered is: whether films, which through the use of a handheld camera suggest a documentary proximity or anthropomorphization of the camera, may result in an inserted narrative form. The inserted narrative closely depends on, and together with the characters, makes a part of a film's narrative instance. Inserted sequences can be those in which one of the events is commented on in another time, regardless of the camera and characters. Trier's *Idiots* could serve as an appropriate example. The subjectivizing handheld camera, which cannot be ascribed to the observing subject or the personalized narrator, causes the impression of immediate presence. The editing, which puts the film material together, breaks with directness; in some parts there are many highly visible cuts, which represent an apparent break. Then again, there are also many sparser and inconspicuous cuts, which do not break the illusion of the camera being always on and off. So the narrative moment varies between 'simultaneous' and 'unmarked in time', through which the subsequent editing of the displayed tendencies affects the later narration. Inserted into such a pseudo-documentary sequence are 10 sequences of interviews, where one of the two characters participates in the experiment. They sit in front of the camera to inform about the *Idiot* project. The camera lightly shakes as if someone is trying to keep it still. This unknown, but acceptable 'cameraman' could simultaneously be the one interviewing them, but is not visible to the viewer. The interviewees

or the protagonists of the story look straight into the lens as they respond, giving the impression that they are talking to the camera. Characters talk in the past tense. However, the narrative moment cannot always be clearly stated. The question is whether the interviews are taking place during the experiment (during the events being displayed, which cover the entire experiment to its end) or whether they were inserted into the action before or after. This question cannot be answered for all the interview sequences. However, the conversation leads one to the conclusion that the experiment is complete. Hence, this later or subsequent narration, but nonetheless simultaneous narration of the narrative audiovisual instance, must be considered inserted, and not inserted between the moments of the action. Therefore they do not form an inserted narrative within the above-defined concept.

## Conclusion

The case study method was used in this research, and it included two films of the Dogme movement, *The Idiots* and *The Celebration*. The topic of this study is the effect of the handheld camera on narration and ocularization in Dogme film. Based on a detailed research of the topic, for which all the necessary theoretical and historical insights to understand the issues of the presented topic are outlined in the paper, the following conclusion is drawn: there are two main types of functionalization of the handheld camera for the purpose of visual narration: In *The Celebration* the handheld camera readily points to the mediating instance, whereas in *The Idiots* to the group of characters. In *The Celebration* it succeeds, despite the time lag, in attaining the distance necessary to accomplish the evaluative perspective. In *The Idiots* it is subjective and creates an identifying sense of familiarity with the group of characters. In *The Celebration* zero focalization is dominant, whereas in *The Idiots* there is a tendency toward internal focalization. The handheld camera in these films has the tendency for independent, often high-rated, narrative-economic, agitative, extradiegetic audiovisual narrative instance with zero focalization, for the most part. *The Idiots* and *The Celebration* could leave the impression that the handheld camera classifies itself through subjectivization, and in such a susceptible manner assigns itself to the characters or authorially, with the tendency for zero focalization of an extradiegetic audiovisual narrative instance. In *The Celebration* the camera plays (along with the editing) the authorial, and in *The Idiots* a susceptibly personal narrative role. Both narrative positions were constructed without the storytelling narrative instance, in the form of a synchronized narrator, supporting the visual narrative instance. Both films point out how different forms of conversation mediation with the handheld camera in different sequences and films, can result in different camera effects. The handheld camera is by no means related to personal or subjective positions of the protagonists. Both Dogme films restate that the handheld camera can dominate the entire film without being perceived as subjective. But even in films, where the handheld camera perspective is



assigned to a specific character, it may be different: if a camera A) is set to imitate the physiological perception of a character, or B) is assigned to the character using the handheld camera in action. Case A is identified as the subjective handheld camera, and the other group B is identified as pseudo-fictional documentary with the effects of the handheld camera. In conclusion, the effects of the handheld camera can be used authorially in the film *The Celebration*, and both personally and subjectively in *The Idiots*.

## References

- “La celebracion Festen pelicula complete,” YouTube video, 1:40:49, posted by Maria Estefania Aguiar de Moraes. <https://www.youtube.com/watch?v=M-Y1mpkwOxc>. Accessed January 9, 2018.
- “Online filmski leksikon Sveučilišta Kiel.” <http://filmlexikon.uni-kiel.de/index.php?action=lexikon&tag=det&id=6078>. Accessed January 9, 2018.
- “Online Leksikografski zavod Miroslav Krleža.” <http://film.lzmk.hr/clanak.aspx?id=1196>. Accessed January 9, 2018.
- “The Idiots 1998,” YouTube video, 1:49:34, posted by Explania Animations. <https://www.youtube.com/watch?v=i3QCRwEUI4&t=270s>. Accessed January 1, 2017.
- Birr, Hannah, Sarah Maike Reinert und Noël-Jan Thon. *Probleme filmischen Erzählens*. Berlin: Lit Verlag Dr. W. Hopf, 2009.
- Daković, Nevena. “Pojmovnik teorije filma I.” In Žak Omon, Alen Bergala, Mišel Mari and Mark Verne, *Estetika filma*, 291–304. Beograd: Clio, 2006.
- Daković, Nevena. “Pojmovnik teorije filma II.” In Žak Omon, *Teorije sineasta*, 194–205. Beograd: Clio, 2007.
- Daković, Nevena. “Pojmovnik teorije filma III.” In Žak Omon, Mišel Mari, *Analiza film(ov)a*, 289–300. Beograd: Clio, 2007.
- Deleuze, Gilles. *Cinema 1: The Movement Image*. Minneapolis: University of Minnesota Press, 1991.
- Deleuze, Gilles. *Cinema 2: The Time-Image*. London: Continuum, 2005.
- Genette, Gérard. *Die Erzählung – 3. Auflage*. Paderborn: W. Fink, 2010.
- Hallberg, Jana und Alexander Wewerka. *Dogma 95. Zwischen Kontrolle und Chaos*. Berlin: Alexander Verlag, 2001.
- Jost, François. *L’Œil-caméra. Entre film et roman*. Lyon: Presses Universitaires de Lyon, 1987.
- Kuhn, Markus. “Das narrative Potenzial der Handkamera. Zur Funktionalisierung von Handkameraeffekten in Spielfilmen und fiktionalen Filmclips im Internet.” *DIEGESIS – Interdisziplinäres E – Journal für Erzählforschung* 2, 1 (2013): 23–31.
- Kuhn, Markus. *Film – Narratologie. Ein Erzähltheoretisches Analysenmodell*. Berlin, Boston: De Gruyter, 2013.

Pandža, K., The Effect of the Handheld Camera, *AM Journal*, No. 15, 2018, 83-92.

Onega, Susana, and José Langa García Ángel. *Narratology. An Introduction*. London, New York: Routledge Taylor & Francis Group, 1996.

Peterlić, Ante. *Osnovne teorije filma*. Zagreb: Hrvatska sveučilišna naklada, 2007.

Pfister, Manfred. *Das Drama. Theorie und Analyse*. München: Wilhelm Fink Verlag, 2001.

Schmid, Wolf. *Elemente der Narratologie*. Berlin: Walter de Gruyter, 2005.

Shaul, Ben-Nitzan. *FILM The Key Concepts*. New York & Oxford: Berg, 2007.

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