A New Look on Ekphrasis: 
an Eye-tracking Experiment on a Cinematic Example

Abstract:

Taking the modern definition of ekphrasis as a verbal representation of a work of art as a starting point, we try to broaden it in this contribution. We agree with intermediality theorist Lars Elleström that ekphrasis falls into the category of “media representation”, defined as the representation of a source medium in a target medium. We argue that the target medium does not need to be a verbal one and what matters is the energeia, the vividness of the description, leading in turn to enargeia, a vivid image in the mind of the receiver. The energeia-enargeia relation is an aspect that is often neglected in modern theoretical debates about ekphrasis. We believe that there cannot be ekphrasis without a description making the receiver “see” the object with his/her inner eye. At the same time, following Seymour Chatman and Werner Wolf, we argue that description is not a prerogative of the verbal medium and that even the cinematic medium can describe, using different strategies.

In the second part of this contribution, these hypotheses are tested empirically with the help of the eye-tracking technique. A short sequence of Christian Petzold’s film Barbara (2012), which constitutes an example of cinematic ekphrasis, is shown to thirty-three participants. The evidence gathered from the recording of their eye-movements confirms the relevance of the energeia-enargeia relation: the eye activity increases at some particular points of the sequence, points corresponding to the descriptive activity of the camera. Ekphrasis is thus a kind of embodied experience.

Keywords: Ekphrasis, enargeia, cinema, Barbara, Pethö, Yacobi, Elleström, media representation, intermediality, description.
consequences of this long history and of these numerous attempts is that the definition of the concept is unstable, which is reflected in the terminological habits. The new media landscape invites indeed to constantly reconsider the concept of ekphrasis in relation to the different media. Thus, even if it might seem that a new definition of ekphrasis is hardly needed, there still remain aspects to be investigated. One of these is highlighted by Ágnes Pethö: “Ekphrasis has been a much debated question of literature, but its applicability to questions of cinema has not been thoroughly investigated” (2011:294).

In this paper we will analyse an example of cinematic ekphrasis, i.e. an ekphrasis which takes place in film. Our approach, which is experimental, is intended to give new input to a debate that has generally lacked empirical ground. Before we introduce our example, however, we will give a short historical survey of the concept of ekphrasis, trying to position ourselves in the field. At the end of this survey, we will be able to propose a definition of ekphrasis which we believe is methodologically viable and flexible enough to encompass any media.

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Ekphrasis today means, roughly speaking, a verbal representation of a work of art. But the terms included in this definition, “representation” and “work of art”, are controversial in themselves. However, it must be pointed out that even if this modern signification of the concept of ekphrasis stems from Antiquity, it has changed substantially since then. Indeed, as Ruth Webb claims, the classical definition of ekphrasis is “a speech which leads one around (periegematikos) bringing the subject matter vividly (enargos) before the eyes” (Webb, 1999: 11). With reference to Theon, Quintilian or Cicero, to name just some of the ancient sources, contemporary scholars like Ruth Webb (1999) and Janice Hewlett Koelb (2006) convincingly argue that in the original use in Antiquity, there was practically no distinction between ekphrasis and description in general. What counted then was not what was described but how, more precisely whether the description led to what the Greeks called enargeia, a vivid image in the head of the receiver. Enargeia, in its turn, is elicited by means of energeia, that is a “special type of clarity” (Banaszkiewicz & Führer 2014:59). From now on, we will apply this subtle distinction between energeia and enargeia, which is not unproblematic.

According to Webb, it was Spitzer’s 1955 essay on Keats’s “Ode on a Grecian Urn” that “catapulted” the term ekphrasis in its new signification into modern literary theory (Webb, 1999:16-17). In defining ekphrasis as “the poetic description of a pictorial or sculptural work of art” (Spitzer, 1962:72), Spitzer narrowed the original signification of the term and opened the door to the study of a new literary phenomenon, distinct from the ancient ekphrasis and thus from mere description. Most definitions after Spitzer have in common the notion of representation, as we can see: “Verbal representation of a visual representation” (Heffernan, 1991:297); “the verbal representation of a graphic representation” (Mitchell, 1994: 151-152); “the verbalization of a real or fictitious text composed in a non-verbal sign system” (Clüver, 1998:35-36).
If the notion of representation is central in the post-spitzerian definitions, one can observe a decreased importance of the concepts of both *energeia* and *enargeia*. The farreaching results of this development can be seen in Valerie Robillard’s typology of medial interactions which classifies “naming”, “allusion” and “indeterminate marking” (1998:152) as examples of “ekphrastic texts”. Likewise, for Tamar Yacobi the quoting of a name or a title can be an ekphrasis which she defines as follows: “I define *ekphrasis* a form of intermedial quotation: a verbal re-presentation of visual art, which itself represents some first-order object” (2013:2-3).

According to Claus Clüver, this a problematic turn, since *enargeia* is “the chief characteristic traditionally and from the outset associated with ekphrasis” (1998:41). He suggests – referring to Yacobi – that the representation only by name or title, or by a technique of mere allusion, amounts to a loss of *enargeia* and should therefore not be considered as an ekphrasis. *Enargeia* is in his opinion the central aspect in ekphrastic experience, a constitutive property of ekphrasis and hence a criterion of the theoretical definition. Clüver outlines a history of the concept of ekphrasis and quotes the definition of *enargeia* imported from Antiquity: “the power of the text to create visual images, to turn the listener into an observer” (1998:37).

Another aspect worth noting when looking at these definitions is that language appears to be the only acceptable target medium. Such a limitation, which leads to the exclusion of cinematic examples from the field of ekphrasis, can be explained by the common view on description as a verbal phenomenon. This view, however, has been challenged in convincing ways, for example in an anthology on description in different media edited by Werner Wolf and Walter Bernhart (2007). As stated in the preface of the anthology, description is “a transmedial phenomenon applicable to more media than merely literature” (2007:vii). Some scholars have actually tried to expand the definition in order to include non-verbal media as targets. Siglind Bruhn, a theorist combining musicology with literary theory, gives a very broad definition of ekphrasis, calling it a “representation in one medium of a real or fictitious text composed in another medium” (Bruhn, 1999:296).3

A similar expansion has been applied for instance by two theorists, who consider as ekphrases cases where cinema is the target medium. In an article from 2010, Pethö makes a strong argument in favour of cinematic ekphrasis. Building upon Bolter and Grusin’s concept of remediation, Pethö defines ekphrasis as “a case of media being incorporated, repurposed by other media” (2010:213), adding also the condition that the media involved should have an “aesthetic value”. The examples she gives, from Jean-Luc Godard’s movies, are convincing in the way they deconstruct strict boundaries between media, allowing to see cinema as a medium “in between the different art forms and in between media” (2010:211). Thanks to the remediation of poems by Verlaine, Rimbaud, Mallarmé and Valéry, quoted by a voice-over in *Bande à part* (1964) and *Pierrot le fou* (1965), the cinematic image becomes more expressive, argues Pethö, reaching a status beyond that of a simple image.
Laura Sager Eidt makes a similar argument against the verbal media as the only possible target in ekphrasis: “[...] ekphrasis need not be purely verbal. If the goal of verbal ekphrasis is to make the reader see, cinematic ekphrasis can also be discussed in terms of its effect on the audience” (2008:19). Her definition of ekphrasis is thus: “The verbalization, quotation or dramatization of real or fictitious texts composed in another sign system” (2008:19). From a theoretical point of view, Sager Eidt’s most intriguing examples are those from the introductory part, where photographs, not film, are considered as the target medium. Indeed, Sager Eidt considers as ekphrases some photographs by Thomas Struth showing people at museums looking at paintings, since they fulfil the criterion of “quotation” (borrowed from Yacobi) in her definition. It is questionable, we think, whether these are really ekphrases. In fact, for the beholder of the photographs, the paintings are simply represented, without any special elaboration. Actually the focus in the photographs is on the beholders of the paintings, not on the paintings themselves; these are in some photographs even shown obliquely, which affects the possibility for the beholder of the photographs to see them clearly. From the perspective of a verbal context, one could say that the paintings are quoted. In other words, we don’t have here a vivid description, maybe no description at all. We argue therefore that these photographs can hardly be considered as ekphrases. They lack energeia and consequently they have little chances to elicit enargeia in the receiver. Admittedly, the beholder of the photographs might imagine that the people standing in front of the paintings and looking at them also talk about them, but he/she has of course no access to that dialogue. The question whether the photographs represent an ekphrasis, based on the people’s presumed comments on the paintings, is too speculative to be approached here. Struth’s photographs can rather be considered as cases of remediation, as defined by Bolter and Grusin: “the representation of one medium in another” (1999:45) or, following the model proposed by Lars Elleström (2014), “simple representation of media products” as opposed to “complex representation of media products”. According to Elleström, a simple representation occurs when a media product is briefly referred to or quoted in a different media product. The representation is complex, on the other hand, if it is more developed, elaborated and accurate, in other words if a larger amount of media characteristics are transferred from the source medium to the target medium. Elleström acknowledges the place that ekphrasis occupies in the field of the “complex representations of media products”.

If we go back to Yacobi’s definition of ekphrasis, we find it both too narrow and too large, as far as the target medium is concerned: on the one hand, it excludes non verbal media; on the other hand, it includes all sorts of representations, even very simple ones, like quotations and mere allusions. One can criticize the first aspect, the narrowness, by referring to recent contributions on ekphrasis studies which, by going beyond the conventional borders of verbal target media, have proved to be fully relevant and fruitful (for example, Pethő’s studies on cinematic ekphrases, already mentioned, which invite to further developments). The second aspect, the
largeness, can be criticized by questioning what is the specificity of the particular form of intermedial relation called ekphrasis. Supposing that this category has to stand out, why is it so? What justifies the need of this particular category? The challenge, when it comes to reach a consensus about the theoretical definition of ekphrasis, seems to lie precisely in finding the right balance in this oscillatory movement between expansion and restriction. No matter what, it is unlikely that one can answer the questions above unless one finds a sort of lowest common denominator for the examples to be included in the category. At present, however, there is not much in common between the examples discussed by Yacobi and the one we are going to analyse: they seem hardly to pertain to the same theoretical category.

Our point is that in order for a remediation, or in Elleström’s terms, a simple media representation, to become an ekphrasis, some additional conditions have to be fulfilled. We argue that an ekphrasis occurs when one media product (the source, for example a painting) is represented in a different media product (the target, for example a photograph) with a certain degree of elaboration (energeia), including a repurposing of the source – for instance through a semiotic process – and eliciting enargeia in the receiver. With this definition in mind, we will analyse a sequence from Barbara, a film from 2012 directed by Christian Petzold which constitutes an example of cinematic ekphrasis. We will apply Elleström’s intermedial approach and combine it with empirical evidence from an eye-tracking experiment. The first approach gives us the possibility to expand the definition of ekphrasis and to include other target media than only verbal ones. At the same time it offers a stable ground for the delimitation of the concept of ekphrasis and for the possibility to distinguish it from similar phenomena, such as adaptation or media transformation in general. The empirical approach, in its turn, gives us the possibility to test the relation between energeia, as a potentiality in the object (the media product), and enargeia, as an actualisation in the head of the subject (receiver).

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Barbara is set in 1980’s East Germany and tells the story of a physician from a prestigious hospital in East Berlin who, having applied for an exit visa, has been banished to a small country hospital near the Baltic Sea. The department of paediatric surgery where Barbara now works is led by chief physician André Reiser. In order to gain intelligence on Barbara, the official state security service Stasi has ordered André to approach her. Barbara has a lover in West Germany who prepares her escape and she refuses André’s advances and all emotional connections with him. But the two doctors are tied together by their common passion for their work and their dedication to the patients. Barbara takes special care of one particular patient, Stella, a young pregnant woman who has escaped from hard labour in a youth detention center and who is suffering from meningitis. At the end of the film, when the moment for Barbara’s escape finally has come, Barbara renounces to jump in the boat and lets Stella take her place, offering her a new life with her child in West Germany.
Starting at minute 23 out of 105, a very clearly delimited four-minute-long sequence shows us Barbara and André at the hospital laboratory where a reproduction of a Rembrandt painting, *The Anatomy Lesson of Dr. Nicolaes Tulp* (1632), is hanging on the wall. The sequence is clearly framed in the film. It starts after Barbara has asked André if she can see the laboratory and ends when she leaves it. In the next sequence, Barbara is biking on a countryside road. The transition from the inside to the outside is underscored by the soundtrack: from the magic silence of the laboratory (when the ticking sound from the microscope stops, one can hear the characters’ steps, sighs and breaths), to the loud sound of the wind in the trees of the road Barbara is biking along. At the end of the sequence, when André changes subjects of conversation and asks Barbara if she wants him to drive her home, she sighs, blinks and acts as if she woke out of a dream. After Barbara has left the laboratory, the camera goes on lingering on some details of the painting.

The source medium (the Rembrandt original) is transmediated in a new technical medium, presumably a printed photographic paper, instead of a canvas with oil colours on it. Even if their size is different, the two media products are very much alike when it comes to their “sensory configuration”, that is, in Elleström’s terms (2014), the sensorial input (visual, auditory, tactile etc.) that triggers a mental representation and results in cognitive import. For the sake of simplicity, we will thus from now on use the term “painting”, unless the fact that it actually is a reproduction is relevant to our argument.

What is shown in the painting, an assembly of doctors surrounding a corpse during an anatomy lesson held by Doctor Tulp, is commented on by André. At the feet of the corpse stands a large open book, identified by André as an anatomy atlas. Guided by André, Barbara concentrates on one peculiar detail, the left hand of the corpse, strangely the first and only part of the body that has been dissected, as she remarks. It is too large and it is turned the wrong way, looking like a right hand, Barbara says. André claims that the hand is copied from the anatomy atlas and that Rembrandt made this grotesque mistake intentionally, in order to make the beholder of his painting see the dead man, which the doctors in the painting don’t, concentrated as they are on the anatomy atlas. In fact the eight doctors in the painting gaze in many different directions (three of them at the anatomy atlas; two ideally at the beholder of the painting; Doctor Tulp himself at an indeterminate point), but not a single one of them indeed looks at the body of the victim who is lying there: Aris Kindt, a man who has been hanged for theft, as André explains. Taking over the didactical role held by Doctor Tulp in the painting, André explains Rembrandt’s intention; but he remains quite enigmatic about what the painting means. As for Barbara, she leaves the laboratory without saying a word. Nevertheless, the film viewers can easily understand that what André is trying to do is to invite Barbara not to act like the doctors in the painting: the doctors choose to look at the anatomy atlas, even though a human body is lying in front of them, a situation that can be interpreted as an allegory of the dictatorial ideology in the GDR,
where a system of rules neglects and represses the individuals. In this respect one could say that *The Anatomy Lesson of Dr. Nicolaes Tulp* works as a “mise en abyme de l’énoncé”\(^6\), both within the diegetic world, where Barbara’s eyes have to be opened (which eventually results in the decision she makes not to escape but to stay) and for the film viewers, giving them a key of interpretation for the whole story. The fact that the painting shows doctors highlights of course the analogy with André and Barbara, who are doctors themselves. In the GDR, where everyone watches and monitors everyone, no one actually *sees* the other, which leads to isolation and loneliness. Even if it’s not a straightforward matter to establish the original purpose of the Rembrandt painting, one can certainly say that it has got a new or expanded one in the new context of the film, emphasized also by its spatiotemporal dislocation.

The sense of sight, an important motif in the whole film, is particularly stressed in this sequence. As we have said, André’s comment on Rembrandt’s painting deals with seeing and not seeing. Barbara and André are in an empty laboratory where a microscope is the only available instrument and the sequence actually starts with Barbara looking through the microscope lens. They exchange long, silent and meaningful gazes with each other and they get progressively closer to the wall where the painting is hanging, in order to see it better. This emphasis on sight creates a suitable thematic background that announces the ekphrasis, the effect of which, as we will see, can be defined as a dynamic impulse given to the viewer’s sight.

In fact, this sequence could be analysed in terms of its being a kind of *mise en abyme* of the story (“énoncé” following Dällenbach’s terminology). But this does not say much about its peculiarity that lies in the strong visual experience (*enargeia*) it offers the viewer, due to its remarkable vividness (*energeia*). The sequence appears visually strengthened as a result of the encounter between the different media involved. It is important to point out that the intermedial relation here is not just between two media products, the film and the painting. As a matter of fact, the interpretation given by André is a transmediation\(^7\) of a passage in a book by Winfried Georg Sebald, *The Rings of Saturn*, where the narrator’s comment on the Rembrandt painting very much resembles André’s\(^8\). The painting is also represented in the book (which establishes an intermedial relation of its own). The relation between this source medium – Sebald’s book – and the target medium – the film – is a transmediation that can be missed by many viewers, since the source medium is not represented. Sebald’s book, published in 1995, is never explicitly mentioned in the film, which is logic, since André cannot possibly have read it (such an anachronism wouldn’t suit the realistic features of the diegetic universe of *Barbara*).

The intermedial relation between the original Rembrandt and its reproduction invites to a possible interpretation. The fact that the Rembrandt painting, now hanging in the laboratory of a minor hospital in the GDR, still highlights humanistic values and moral agency, just as it does in its original location in Western Europe (the art museum Mauritshuis in The Hague where André wants to go, as he declares), can
be understood as paralleling Barbara’s situation and suggesting what she should do: instead of escaping to the West, she should rather stay and acknowledge the meaningfulness of her job just where she is.

The other intermedial relation is the one between the painting (the reproduction) as the source and the film medium as the target. Since the film is an audio-visual medium, sharing the iconic mode with the painting, the sensory configuration of the source medium is transferred with a high degree of resemblance to the target medium. But due to the insistent movements of the camera, which lingers on some details of the painting; to the zooming effects; to André’s verbal comments and to Barbara’s response to them, one can say that the sensory configuration of the painting is not just being transmediated, but becomes the object of a new representation, by means of which the illusion of the real presence of the source is created for the film viewer. He or she becomes aware on the one hand of the fact that two different media products are encountering; on the other hand, of the fact that the painting is now not just being quoted, but actually described. In fact, one could say that the lingering of the camera corresponds to a sort of highlighted description, which is perfectly in harmony with theoretical views such as Seymour Chatman’s or Werner Wolf’s.

So far we can postulate that three of the criteria in our definition of ekphrasis are fulfilled: the presence of two different media products, the one representing the other; a certain degree of elaboration in the representational process (energeia); the repurposing of the source (the painting getting a symbolic meaning in its association with the political environment and the lives of Barbara and André). In our account of the eye-tracking experiment, we will focus on the fourth criterion, the enargeia.

Let us then have an even closer look at the intermedial relation between the painting (the reproduction) as the source and the film medium as the target. This relation illustrates what Elleström (2014) calls a “complex representation of media products”. According to him, what characterizes this kind of relation is the transformation of some essential features of the source, namely the so called “compound media characteristics”. These are defined as “features of media products that are apprehended and formed when a structuring and interpreting mind makes sense of the mediated sensory configurations” (2014:40). Elleström mentions ekphrasis when discussing the category of complex representations of media products without going deeper into any definitional attempt (this is simply not his purpose in that context). He doesn’t for instance mention explicitly enargeia. Anyway, both his notion of “complexity” and his comments on the transformation of “compound media characteristics” can easily be linked to the energeia-enargeia relation. The complexity can indeed be understood as energeia and the sense-making process, which implies an interpreting mind, can be associated to enargeia.

Since the sensorial modality of film includes, besides the visual mode, even the auditory mode, we could say that this film sequence in Barbara presents also a verbal component and thus illustrates both the traditional notion of ekphrasis, based on the
verbal nature of the target medium, and the modern one, based on the idea that the target medium does not need to be verbal\textsuperscript{10}. The overall visual mode of film could, on the other hand, imply a certain difficulty when it comes to the application of the criterion of \textit{energeia}. Since everything is visual in film, how could one conceive one particular sequence as being more visually stressed than another? In other words, how does the relation between \textit{energeia} and \textit{enargeia} look like in film?

As we have seen, Clüver quotes the definition of \textit{enargeia} imported from Antiquity: “the power of the text to create visual images, to turn the listener into an observer” (Clüver 1998:37). It is worth noting that one should make a difference between “power of the text” (\textit{energeia}) and a receiver’s reaction to the text (\textit{enargeia}). It is the text that endows the reader with a new power, or to put it differently, the text triggers the reader’s latent power to generate images. Language habits within the critical discourse about ekphrasis witness the tendency to anthropomorphize the text, attributing to it qualities or competences belonging to the receiver, thus leading to confusion between \textit{energeia} and \textit{enargeia}. Valerie Robillard for instance, talks about “an artwork’s representative, referential and interactive capacity” (2010:152. Our emphasis). In her model describing different kinds of interactions between verbal and visual arts and including three main categories (Referentiality, Re-presentation and Association), the place reserved to the receiver is unclear indeed\textsuperscript{11}. But as a matter of fact, the receiver’s response should be a crucial part of the theorization effort if the \textit{enargeia} notion has to keep any relevance. We believe that there can never be an ekphrasis unless there is a receiver who has the capacity to experience \textit{enargeia}, on the grounds of \textit{energeia}.

How should \textit{energeia} be understood in regard to film? Does this notion lose its relevance if the object is already before our eyes, as it happens in film, due to the dominating visual mode of this medium? Translated into more general terms, the question would be, to begin with, whether description is a relevant notion in film, as it is in verbal texts. In discussing this issue, Chatman (1990) stresses first the different conditions for verbal media and film as far as description is concerned. Verbal descriptions, he says, proceed by “selection” and achieve specificity, but can remain vague. Verbal descriptions can \textit{induce} but not \textit{dictate} mental images: these are likely to be different for different receivers\textsuperscript{12}. Film, on the other hand, can neither be “specific” nor remain descriptively “vague” since film inevitably shows everything all the time: description in film is an on-going process and selection is normally not achieved. Film can \textit{dictate} images, suggests Chatman (see 1990:40). Having highlighted these differences, however, Chatman shows that they are not as sharp as one could believe. Film has indeed at its disposal techniques which make it possible to create effects similar to those achieved by verbal means. Not only because film is multimodal and uses verbal means, but also because the cinematic “devices” can \textit{imitate} verbal techniques, for example the extreme close-up shots used in \textit{Barbara}. This idea is developed also by Wolf who talks about “intermedial imitation”, meaning the use in one medium of techniques imported from another medium (“the signifiers of the work
[= target] and/or its structure are affected by the non-dominant medium [= source], since they appear to imitate its quality or structure”, 2002:25) 13. In a film like Barbara, the question whether we “see what is put before our eyes” is relevant even within the diegetic universe. In fact, as we have already pointed out, André’s extended comment on Rembrandt painting can be interpreted as alluding to the existential choice Barbara has to make, either escaping or staying, and is intended to push her towards the latter solution. The complexity of this cinematic representation (energeia) lies precisely in the way form and content are tightly linked and in the way different sensorial modes and technical devices work together to create enargeia.

Another issue to be discussed is how we are supposed to measure enargeia. As an attempt to get some information on what actually happens during our film sequence in Barbara, and given that enargeia is not be investigated in the media but rather in the receiver, we conducted an exploratory study using the eye-tracking technique. Our hope was that a number of questions could be answered thanks to the eye-tracking technique, which allows to follow the eye’s movements: these questions will be presented along with the analysis below. Let’s however give first some practical information about the experiment.

Thirty-three Swedish participants (22 females and 11 males) between 18 and 59 years of age (\(M = 26.4, SD = 14.6\)) took part in the experiment14. The participants were not informed of the purpose of the experiment. The stimuli consisted in the 4’03” minute-long clip of Barbara that had previously been dubbed to Swedish. In order not to interfere with the eye-activity, the subtitles were removed15. The experiment was conducted with three groups of participants recorded simultaneously, with the number of participants in one group never exceeding 13. The experimental session lasted around 15 minutes, but no time restrictions were imposed during the experiment. The participants were instructed that they would participate in a study examining how people watch movies. They were also informed that their participation was completely voluntary and that they could stop the experiment at any time. The procedure of the experiment was then explained by the experimenter, but written instructions were also provided during the eye-tracking recording. The participants were instructed that they would see a short movie clip, which they should watch like they would be doing at home, and that they would then fill in a questionnaire about the clip. Having confirmed that they understood the instructions, the participants were seated in front of the eye-tracker and a calibration was started16. The experiment then started with the movie clip, followed by the questionnaire. After the questionnaire, they were instructed of the purpose of the experiment and thanked again for their participation.

Let us now follow when and how the Rembrandt painting is shown in the sequence. What the eye-tracking allows us to notice, actually, is that the painting changes its status before Barbara’s and the film viewers’ eyes. This is a three-step process. For each step, we will formulate some questions or hypotheses and present the answers or the indications provided by the experiment17.
1. The painting is shown a first time after André has directed his gaze towards the wall where it hangs and has said that he wants to go to The Hague, where the original painting is located. During a couple of seconds, a part of the painting, about three-quarters of it, is shown on the upper left side of the screen. The hypothesis, quite expectedly confirmed by the eye-tracking, is that neither the participants nor Barbara notice it. This is not surprising after all: so far, the painting is an uninteresting, non moving prop and the viewers concentrate on the two speaking and moving characters shown in shot reverse shot in the laboratory. This can be classified, following Elleström’s terminology, as a simple representation of a media product, involving a transmediation as well, since a large amount of media characteristics of the source are transferred to the target. Interesting in itself, out of a theoretical perspective, as an example of simple representation, the painting doesn’t seem to arouse the viewers’ interest, as shown by the eye-tracking. None of them indeed pays attention to it (Figure 1).

2. In the next step (1’31’’-1’33’’), the whole painting is shown, on the wall where it hangs with four nails (Figure 2).

Since the painting has now become the object of the camera focus and of the characters’ attention (though not of André’s comment yet), we can presume that the viewers, just like Barbara, now become aware of it and do look at it. This is confirmed, once again quite unsurprisingly, by the eye-tracking. Figure 3 below shows all 31 results of the eye-tracking recording at mid-
minute 1'31'': the gazes are strikingly concentrated on the middle part of the painting, before they start wandering on the rest of the surface.

As we know, according to André, Rembrandt had a precise intention in making the weird mistake about the hand, that is make the beholder see the corpse. The interesting question at this point is then whether anyone (Barbara or/and the viewers) looks at Aris Kindt. One could say that Barbara and the film viewers share the beholder’s role in this precise regard (although this cannot be stated for the whole sequence, as it will be discussed later). Possible previous knowledge about the Rembrandt painting could obviously be a significant aspect here: even though 11 out of 31 participants answer affirmatively to the question whether they knew the painting, no clear connection can be established between their answer and their looking at the body before/after André mentions Rembrandt’s intention with the mistake. As to Barbara, she doesn’t seem to have such knowledge. What the eye-tracking shows is that not all participants look at Aris Kindt: 24 out of 31 participants do. Figure 4 below, a capture of minute 1'32'' of the eye-tracking recording, shows that some gazes are lingering on the corpse.

We don’t have, of course, any eye-tracking result for Barbara, but judging from the indifference she shows and the very laconic reply she gives to André’s wish to go to The Hague (“Apply”, she says, and then she adds: “I have to go”), it is very likely that she doesn’t notice Aris Kindt, nor his hand. The overall conclusion we can draw at this point is that, if André is right in his interpretation, then Rembrandt’s intention is not completely fulfilled, at least not as far as Barbara is concerned: she hardly listens and she definitely doesn’t see. Indeed, for André’s prediction to come true, there is a need for further insistence: once Barbara has been made to look at the painting, it’s now all about making her see it.

3. The transition to the third step occurs at 1'59'' when André asks the crucial question that will launch the ekphrasis: “Didn’t you notice anything? The painting!” (Figures 5 and 6).
Results from recent research in cognitive sciences indicate that our ability to detect visual changes relies not only on our eyes, but also on our bodies and motor sensory systems. This is why, for example, for a visual change to be grasped quickly there is a need for several cues, for example verbal commentaries, motion or the attention of the characters themselves. The hypothesis to be tested by the eye-tracking here is then of course whether the viewers, solicited by André’s mentioning of the painting and his gaze, also look at the painting. The hypothesis is verified: 23 out of 29 actually look before Barbara does. Figure 7 shows that the participants’ gazes are already directed to the painting, while Barbara is still turned towards André.

When Barbara turns around and directs her gaze from André to the painting, at 2'08'', she joins ideally all the participants’ gaze (29 participants out of 29, figure 8).

However, as empirical research results in cognitive psychology show, “although people must look in order to see, looking by itself is not enough”. The key factor proves to be attention (“Visual perception of change in an object occurs only when that object is given focused attention”, Rensink, O’Regan & Clark, 1997:368). During what we call the third step, which is the longest one (1’24” minutes long, between 2’02” and 3’26”), something happens before the viewers’ eyes, thanks to the exploitation of the audio-visual mode of the target medium and its technical potentialities. The wall disappears off frame and the painting is now shown in extreme close-up shots, with focus on details, about 3-4 seconds per detail: the hand (figure 9), the anatomy atlas (figure 10), Aris Kindt and the physicians (figure 11), the physicians (figures 12 and 13).
The close-up shots prove to have a compulsory effect on the participants: as can be observed from figures 14 and 15, all their gazes now concentrate on the details of the hand and the atlas, for example.

What the eye-tracking recording clearly indicates is that the visual activity of the participants is both uniformed and intensified by the extreme close-ups on details. The gaze of the film viewers seems to have no choice but to move along the path traced by the camera movements: these movements, in their turn, follow André’s verbal comment on each detail. There is no reason to believe that Barbara behaves differently, as far as her gaze is concerned, considered that André’s invitation to look at the different details is first addressed to her, within the diegesis. The film viewer’s gaze during the close-ups can therefore be said here to correspond to Barbara’s.

The camera movements concretize visually the ancient idea of “logos perihegmatikos”, or “words leading around” which can be found in Ailios Theon in his Progymnasmata, 1st century CE (Banaszkiewicz and Führer, 2014:52). We believe that the visual activity of the film viewers, which the eye-tracking recording allows to discover, can be taken as an indication of enargeia, the fourth criterion of our definition of ekphrasis (see above). Enargeia is created here by the systematic and insisting lingering on details, both on the verbal and on the visual level. Our cinematic example confirms thus the ancient idea that ekphrasis “should unfold or tell something in all details”, an idea reflected by the very etymology of the word, the Greek verb phrazein (“to speak”, “to show”) and the prefix ek (“out”, “in full”, “utterly”) (Banaszkiewicz and Führer, 2014:52)
An apparently insignificant detail that can be observed at the beginning of our sequence, when Barbara is sitting by the microscope, is that André, who is standing silently by the window, looks at his wristwatch. This trivial gesture might indeed be read as a signal, warning the film viewers that a temporal shift will soon take place, which will bring them from one temporality – the diegetic one – into another – the ekphrastic one. This is even emphasized by the ticking sound of the microscope, which very much resembles the sound of a clock. In fact, during the third step of the process we are describing, between 2’02” and 3’26”, when the camera lingers on the painting, the two characters and the laboratory disappear offframe and the diegetic time seems to have stopped. As a media product not endowed with a temporal mode of its own, the Rembrandt painting gets then a kind of own temporality in the decoding process made explicit by André’s comment accompanied by the camera movements27: this temporal dimension seems to stand apart from the temporal flow of the diegetic time. When the ekphrasis comes to an end, Barbara utters the same sentence as before it started: “I have to go”. The tension between her insisting to leave and André’s staying in the laboratory (as she refuses his offer to drive her home) mirrors the opposition between their different existential postures, until the final change will occur, when Barbara makes her decision to stay and to share her life in the GDR with André.

Let us finally focus on André’s following remark: “Due to this mistake we no longer look through the doctors’ eyes. We see him. Aris Kindt” (figures 16 and 17). This
A New Look on Ekphrasis: an Eye-tracking Experiment on a Cinematic Example

remark is accompanied by a point of view shot, with the camera situated behind the two characters.

The “we” in André’s remark can be understood as including all the Rembrandt painting’s virtual holders, both within and outside the diegetic universe. It’s worth noting, anyway, that, due to the point of view shot, the film viewers actually do quite the opposite of what André says: they look at the painting precisely “through the doctor’s eyes”, that is Barbara’s and André’s eyes. On the one hand, the ideal correspondence between the viewers’ and Barbara’s and André’s gaze is strongly emphasized here. The film viewers can be said to look through the doctors’ eyes both literally (they share André’s and Barbara’s position, facing the painting and they all look at it; no one indeed looks at Barbara and André, see figure 18) and symbolically (just like André and Barbara, they now see Aris Kindt, unlike the doctors represented by Rembrandt, see figure 19):

On the other hand, in spite of this ideal correspondence between intradiegetic characters and viewers, André’s remark underscores rather the distance between them, drawing our attention to the double nature of this ekphrasis, which unfolds both inside and outside the diegesis, being verbal for Barbara, but audio-visual for the film viewers. As we have already mentioned (see footnote 26), Barbara’s and the film viewers’ gazes are supposed to overlap only occasionally, not all the time (this is ultimately confirmed by the fact that the film viewers can go on looking at the Rembrandt painting after Barbara has left the laboratory). But even when this correspondence can be established – that is when the camera’s movements at some points can be interpreted as matching Barbara’s gaze – the camera directs, or guides just the viewers’ gaze, not Barbara’s. In the extreme
close-up shots on details, as we have seen, the laboratory and everything else disappear off frame: this can of course be interpreted as reproducing the full immersion experienced by Barbara, but at the same time, it is certainly a cue allowing or facilitating a full immersion experience for the viewers.

We argue that this audio-visual description of the Rembrandt painting is a good example of cinematic ekphrasis. It is endowed with a symbolic function within this film, which tells the story of how Barbara goes from the rational wish to escape from the GDR to the emotional decision to stay. Guided by André, who takes over the didactic role originally held by Rembrandt through Doctor Tulp, Barbara learns to see human beings (primarily André) beyond the system (the atlas), unlike the doctors in the Rembrandt painting. The ekphrasis transmediates the form and content of the Rembrandt painting, giving it a new purpose: acting on the double level of the character and of the viewer, it gives the former insight and the latter a key for interpretation.

The eye-tracking experiment shows that the Rembrandt painting is just an insignificant prop until the viewer’s attention is drawn to it, both by verbal and visual means. It also indicates the central role of the couple ενεργεία/εναργεία, in the construction of ekphrasis. Several cues are given to the viewer: André’s verbal comment which leads to Barbara’s and thereby the viewer’s clear-sightedness, the camera movements which make the viewer’s gaze ideally overlap with Barbara’s, but which also guide the viewer in his/her discovery of the painting details. The verbal components of this ekphrasis cannot be separated from the visual ones. We believe that the increased eye activity at some particular points of the sequence indicates enargeia. Ekphrasis is thus a kind of embodied experience: the body responds to the elicitations coming from the media product (energeia) and the striking uniformity in the reactions of the participants suggests that the elicitations are compelling, probably due to the combined effect of all the cues.
Notes:

1 Indeed, there doesn’t seem to be any general consensus about the distinction between the two notions. For example, in Plett’s following quotation, enargeia is rather to be understood as energeia: “The enargeia or evidentia of the description thus aims to generate effective images, which depict as present that which is temporally and spatially absent” (2012:12).

2 In discussing the “ekphrastic model”, a variant of ekphrasis referring “to an artist’s hallmark, to a genre’s or a period’s or a school’s distinctive focus, to a visual topos or cliché, all duly generalized” (2013:4), Yacobi quotes some lines of a poem by Auden, where the poet declares that he would “give away all Cézanne’s apples… for one small Goya or a Daumier”. These quotations of names of painters and the representations of their paintings that they are likely to generate in the mind of the receiver (or rather the “knowledgeable reader”, as Yacobi says 2013:4) are considered by Yacobi as examples of ekphrasis. See also Yacobi 1998:24.

3 On her home page, Bruhn explains her aim as “expanding not only, as Clüver does so well, the range of art objects to be transmedialized, but also the range of those capable of transmedializing” (2014).

4 The original Rembrandt painting’s size is 216.5 cm × 169.5 cm. The reproduction in the laboratory can be approximated to 50 cm x 40 cm.

5 As Elleström explains, a sensory configuration can be transformed in the mediation process depending on the technical media at hand: a poem, for instance, is a visual sensory configuration that gets a new sensory configuration when transmediated by a reading voice (2014:14).

6 We use the term mise en abyme following the definition provided by Lucien Dällenbach in his essay Le récit spéculaire (1977). The mirroring effect of this device, that has to do with the basic property of reflectivity, or auto-reference in literature, can concern the “utterance” of a narrative (énoncé in French, that is the text itself), the enunciation of the narrative (énonciation, that is the production of the text, its reception and the context in which both occur) or the “whole code” of the narrative (code, that is the text structure). These terms are borrowed from Roman Jackobson’s communicative model of language. According to Dällenbach, the most common form of mise en abyme, to be found throughout world literature, concerns the utterance.

7 The distinction between transmediation and media representation developped by Elleström (2014) is based on the fundamental difference between mediation and representation. Mediation, a presemiotic phenomenon, is “the physical realization of entities (with material, sensorial, and spatiotemporal qualities, and semiotic potential) that human sense receptors perceive within a communication context” (2014:12). Representation, a semiotic phenomenon, “is the creation of meaning through the perceptual and cognitive acts of reception” (2014:12). Applied to media, the distinction is explained as follows: “Transmediation is at hand when equivalent sensory configurations (sensory configurations with the capacity to trigger representations that correspond to those of a source medium) are mediated for a second (or third, or fourth) time and by another type of technical medium” (2014:20). Media representation, on the other hand, is at hand whenever a medium, that is a representing entity, is represented by another type of medium.

8 Actually, the Rembrandt painting has been commented on in many contexts, especially medical ones (see for example IJpma et al. 2006 and Hove et al., 2008). But the particular
interpretation about Rembrandt’s intention seems to originate from Sebald’s narrator. In the English translation, *The Rings of Saturnus* (1998), the passage is on p. 12-17.

9 According to Chatman “camera movements that have no other motive […] are often purely descriptive. They highlight properties, rather than actions, for the viewer’s attention” (1990:43). See also Wolf’s comment on “panning or travelling cameras” (2007:23).

10 Clüver, however, is not willing to admit that ekphrasis might be applied to other target texts than the verbal ones; for him “in the transfer between sign systems the form most appropriately so conceived is the verbalization of non verbal texts” (1998:45).

11 It seems that Robillard takes the receiver into account just when his/her required competence becomes crucial for an interaction to be understood, for example about the so called “indeterminate marking” that is “the presence of some reference that would not be generally understood as connected to a pre-text, but would be accessible to a viewer (or ‘ideal reader’) who has subject-specific knowledge or a particular ‘cultural memory’” (2010:153).

12 Chatman talks about “the power of noncommitment” as typical for verbal texts (1990:41).

13 The “intermedial thematization” is, on the other hand, according to Wolf, “whenever another medium (or a work produced in another medium) is mentioned or discussed in a text” (2002:24). André’s verbal comments on the painting is an example of “intermedial thematization”.

14 All participants reported having normal or corrected-to-normal vision. Due to technical problems with the recording equipment, two participants out of the initial thirty-three were excluded from the results.

15 That means that the screenshots with the English subtitles used in this article don’t belong to the film version shown in the experiment. We chose to use them here in order to show what André is saying.

16 The calibration was repeated until the accuracy reported by Experiment Center was less than 1.0 degrees of visual angle in both the horizontal and the vertical direction. Eye movement data were recorded binocularly at a sampling rate of 120 Hz using a RED-m remote eye-tracker from SensoMotoric Instruments (Teltow, Germany) using a one-computer setup. The recordings took place in the Digital Classroom at the Lund University Humanities Laboratory. The Digital Classroom is a room with 25 RED-m remote eye-trackers where it is possible to conduct simultaneous recording of multiple participants. The distance from each participant’s eyes to the stimulus monitor was approximately 600 mm. Stimuli were displayed on a Dell P2210 22” widescreen LCD display at a resolution of 1680 x 1050 pixels (475 x 300 mm) with a refresh rate of 60 Hz. The screen spanned 43.2 visual degrees horizontally and 28.1 visual degrees vertically. The eye-tracking system was controlled with SMI iView RED-m (1.0.62), while stimulus presentation, a 5-point calibration, and a 4-point validation of the calibration accuracy were handled using SMI Experiment Center (3.1.116).

17 The time indications refer to the clip, which is, as it has been said, 4’03’’ minutes long.

18 The eye-tracking results show that none of the participants looked at the painting at this moment. 5 out of 31, however, answered affirmatively in the questionnaire when asked if they had. This can probably be interpreted as hindsight bias (defined in psychology as follows: “[…] the belief that an event is more predictable after it becomes known than it was before it became known”, Roese, N. J., & Vohs, K. D., 2012:412).
19 In a different context, that is the study of induced change blindness, Rensink, O’Regan & Clark (1997) show the centrality of the observer’s interest in order to perceive changes in images of real-world scenes. Their experiments show that the difficulty in perceiving a change depends crucially on the significance of the part of the scene being changed, with identification being faster for structures of central interest than for those of marginal interest (see p. 372).

20 We thank the producers Florian Koerner von Gustorf and Michael Weber at Schramm Film for their kind authorization to reproduce here the screenshots from Barbara.

21 There is in fact no clear match between the answers given to question 1 (“Did you know this Rembrandt painting?”) and to question 5 (“André maintains that the mistake make us – unlike the doctors – look at the man, Aris Kindt, and not at the anatomy atlas. Is this what you did? Or did you look at the corpse and at the hand first after the mistake has been pointed out?”): the fact that the participants had previous knowledge of the painting does not imply the fact that they looked at the body before the mistake has been mentioned. There was no question in the questionnaire about possible knowledge about Sebald’s book, The Rings of Saturn, since this particular intermedial relation was not at the core of our interest. However nobody mentions The Rings of Saturn in answering question 5, where this would have been expected.

22 The technical data inform that the 24 participants have one to five fixations of a duration from 150ms to 1784ms.


24 Starting at minute 2 out of 4’03”, only 29 people were participating in the experiment, since 2 participants interrupted mistakenly the eye-tracking recording.

25 This correspondence, or the ideal overlapping of the film viewer’s and Barbara’s gaze at the painting can only be postulated with the extreme close-ups or when Barbara looks in the direction of the painting, this being also shown on the screen. At some points, however, the film viewers have a side view on Barbara and André who are clearly looking at the painting, but this remains invisible for them.

26 In the Instituio Oratoria published around year 95 AD, Quintilian insisted also on the importance of details, in order to create enargeia: “minus est tamen totum dicere quam omnia” (To state the whole is less than to state all the parts)” (quoted by H. Plett, 2012:9).

27 As Elleström notices, “All media are perceived and decoded in time, but that is not the same as being temporal in itself.” (2014:38).

Works Cited:


