Realism in Film: Less is More

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ABSTRACT: What is realism in film? Focusing on a test case of High Frame Rate

(HFR) high-definition movies, I discuss in this article various types of realism as well

as their inter-relations. Precision, recessiveness of the medium, transparency, and

'Collapse' are discussed and compared. At the end of the day, I defend the claim

that 'less is more' in the sense that more image precision can actually have a

negative impact on storytelling.

RÉSUMÉ : Qu'est-ce que le réalisme dans le cas du film? Dans cet article, je me

concentre sur l'exemple de films de fiction en haute définition et avec une haute

fréquence d'images par seconde (HFR, «High Frame Rate»), et je discute divers

types de réalisme ainsi que les relations entre ceux-ci. Je défends la thèse selon

laquelle «moins, c'est plus», au sens où davantage de précision dans l'image peut

avoir un effet négatif sur les qualités narratives.

Keywords: realism, film, High Frame Rate (HFR), precision, transparency,

recessiveness of the medium, Collapse

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1. Introduction

What is realism in film? In this article, I will focus on fiction (documentaries might call for a different treatment). What is a claim of realism in film *about*? Is it about the story that is being told? Is it about the image itself that is being viewed, or something else?

A useful test case for various brands of realism that I will appeal to throughout this article is the case of movies shot and projected in High Frame Rate (HFR) and very high definition, such as 5K, as is the case of *The Hobbit: An Unexpected Journey.* In the case of *The Hobbit*, the frame rate used is 48fps, instead of the standard 24fps mostly used in cinema today but, in principle, movies shot and shown in HFR can use other frame rates up to 60fps or even 300fps (which is being tested for situations where very fast movement is involved, such as sports broadcasts).

As stated in *The Hobbit's* press release, HFR "is closer to what the human eye actually sees." What exactly does this mean? The 'human eye' (actually, the human brain) interprets a succession of static images of a moving subject *as moving* already when shown at 20fps or even 16fps. One way to understand the close-to-what-the-human-eye-sees clause is precisely to take it to mean that a movie shot and shown at 48fps is *more realistic*. This is the notion I will focus on in what follows. I will be raising three questions: first, what is realism in film? Second, is an HFR movie more realistic than a 24fps movie? Third, is an HFR movie aesthetically *better* than a 24fps movie? I will adopt a rather critical stance with respect to the use of HFR in film, and I will answer the third question in the negative, but it's the way to get there and the implications for the first and second questions that constitute the more interesting results.

2. Various Kinds of Realism

There are different ways the term 'realism' can be understood when it comes to film (keep in mind that we're talking about fiction). Hopkins³ provides a very useful and clear list of various types of claims that one could call 'realism' here, and I will loosely

¹ 2012, Peter Jackson. The HFR projection of *The Hobbit* was also a 3D projection, but in this article I will focus on HFR and high resolution, for reasons that will become apparent below.

² http://www.thehobbit.com/hfr3d/faq.html.

³ Hopkins (2016, §2).

follow a part of this list, using in some places the same terminology Hopkins does, while sometimes deviating from it, and sometimes adding to it.

First, 'being realistic' could mean 'being precise.'4 Realism understood as precision is then a claim about the amount of information the viewer gets from what she sees. A very sharp 5K,5 HFR, and 3D image will thus be more realistic than a low-resolution, 20fps, 2D, black and white one, since the former will simply make more information available. In this sense, the image is understood as an 'information-bearer.' The kind of 'information' involved here consists mainly in the level of detail the image provides: for example, a very sharp and detailed image shows us a tiny wrinkle that would not be apparent on a less sharp and less detailed image, so the more detailed image provides us with more information (i.e., information about the existence of a wrinkle). This is a kind of precision that concerns the image itself, but precision can also concern the story that is being told; for instance, a fictional claim that Bilbo Baggins is 125cm tall is more precise than the claim that he is about half the size of a tall human. Such information can be directly provided in the story, where, for instance, a character can precisely refer to Bilbo's height, or it can be, less precisely, visually accessible to the viewer, say, by visual comparison with a human character. Thus, when it comes to precision, there are (at least) two kinds of it: first, precision that concerns the image itself (its definition, sharpness, colour, as well as the frame rate in which the movie is being shot and shown—more on the latter below), and second, precision concerning information that is conveyed by the film, where this information can be conveyed equally well by a very precise image (in the first sense) and a less precise one (in the first sense): the height of Bilbo can be equally accessible in a high-resolution, HFR, 3D projection and in the projection of a low-resolution, badly executed copy. Let us use the terms 'image precision' and 'information precision' for these two kinds of precision, respectively, and let us distinguish them, even though they significantly overlap (more image precision will often entail more information precision (but not vice versa)). If our focus is HFR, it is image precision that we should keep in mind,

⁴ Hopkins also mentions *accuracy*, in addition to precision, as being a possible source of realism; but as he himself acknowledges, accuracy, which is a kind of correctness, does not apply in the case of fiction—a representation of a hobbit cannot accurately or inaccurately (correctly or incorrectly) represent a hobbit, since there are no hobbits.

⁵ The Hobbit was shot in 5K and projected in 2K or 4K.

and as we will see below it has a very high impact on the question of realism in HFR movies.

Somewhat related to image precision, another claim of realism in film concerns the recessiveness of the medium.⁶ In short, this is a question about how much the cinematographic image qua image (that is, qua marks on a surface) attracts attention to itself. A typical case of non-recessiveness of the medium involves accidental imperfections: if there are scratches, or flickering bright pixels, or anything else that disturbs the way the marks on the surface are supposed to be, this will distract the viewer from what she's supposed to see *in* the image (say, hobbits), and attract her attention to what she sees on the surface—namely, a distribution of patches of colour organized in a particular way. This can be of course purposefully toyed with by the movie makers, who can use various kinds of sepia, black and white, or grainy film effects. In such situations, the viewer's attention focuses on the medium—say, on the fact that in the middle of a movie the image switches to being black and white and very grainy—to help a story to be told, for instance, by implying that the scene that is being viewed happened in the past. In such cases, the nonrecessiveness of the medium helps the story to be told. But in general it is recessiveness that movie makers are after, the idea being that one should 'forget' that one is looking at a flat surface with marks on it, in order to see in rather than to see. Thus, exceptions set apart, the more the image itself is recessive, the more realistic the film is, in this sense of realism.

The combination of a very high definition, such as 5K and HFR, gives rise to an exceptionally realistic movie when it comes to *image precision*. HFR plays an important role here, more important than the definition (most HD television screens are also HFR, so the two aspects of the resulting viewing experience are often not distinguished). The image is exceptionally sharp, providing a lot of detail as well as more fluid movement. Indeed, HFR removes motion blur: each frame contains less motion blur because the shutter is open for a shorter interval of time. What about *recessiveness*? When experienced for the first time, a very high definition HFR image clearly attracts attention to its exceptional sharpness, etc. and so it is non-

⁶ Hopkins focuses on recessiveness of form rather than on recessiveness of the medium. For the purposes of this article, it is the latter that is more relevant. My use of the term 'recessiveness' thus differs here from Hopkins'.

recessive: the movie is thus non-realistic in this sense. Some viewers then get quickly used to it, and see such technological improvements as simply improvements; for this category of viewers, the medium thus ceases to be non-recessive, and becomes as recessive as a standard lower-resolution, 24fps cinema image always used to be. Others, however, do *not* get used to it, and find the overall experience disturbing and aesthetically unpleasing. In order to understand why, we must now consider other kinds of realism.

(When it comes to recessiveness, films shown in 4D are a good example of a failure of recessiveness. 4D consists in projecting a 3D and high definition film and in adding wind, water splashes, smoke, seat vibration, and strobe lights, mainly to action scenes. This does not (and is probably not meant to) help the viewer to immerse oneself in the story told; rather, it is often experienced as distracting—while sometimes these distractions are judged as being pleasant, sometimes as unpleasant, they are almost always experienced as distractions. Thus, the 'medium' is here very non-recessive.)

3. High Frame Rate

What do we see when we see a movie such as *The Hobbit*? There are at least three candidates: first, we see a flat surface with marks on it (the image); second, we see actors in hobbit costumes (this is what Hopkins calls the 'events filmed'); and third, we see hobbits (Hopkins refers to this as the 'story told').

The first thing to note here is that we never see these three things at the same time—it takes some switching back-and-forth between the three kinds of experiences to have them all. Richard Wollheim, when talking about still images, says:

What is distinctive of seeing-in, and thus of my theory of representation, is the phenomenology of the experiences in which it manifests itself. Looking at a suitably marked surface, we are visually aware *at once* of the marked surface and of something in front of or behind something else. I call this feature of the phenomenology 'twofoldness.' [...] [N]ow I understand it in terms of a *single experience* with two aspects [...].

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 $^{^{7}}$ Wollheim (1998, p. 221, my italics).

But this does not mean that we have two experiences at the same time; rather, Wollheim talks about one experience with two aspects. In the case of our three candidates, it is clear that we never have three such experiences at the same time. Indeed, one can either focus on the surface *qua* surface, or one can focus on the actors (for instance, on the good or bad way they play their parts), or one can forget about the surface and the actors and simply focus on the story and immerse oneself in it. The latter point is exactly what recessiveness is about when it comes to the surface: when a film is realistic in the sense that the medium is recessive, we typically do *not* consciously see it when we see a movie.

The second thing to note is that in some cases not all of the three levels of experience of a film are present (simultaneously or not). This is where HFR (coupled with high resolution, such as 5K) is a good test case. Indeed, given how sharp, detailed, and fluid the image is—that is, how realistic in the sense of *image precision* the film is—some viewers have trouble getting to the third level of experiencing the movie. In short, the image is so sharp and detailed that one so clearly sees the actors in costumes that this makes it hard to see them as hobbits. The high resolution alone is not the main and only culprit here, since it is HFR that is responsible for what is often referred to as the 'soap opera effect' (soap operas are typically shot at 50fps or 60fps8)—one gets the experience of watching a cheap television program instead of a movie. Thus, many (but not all) viewers of *The Hobbit* as projected in HFR report a very disturbing experience: when watching the movie, they are continuously seeing the make-up and the costumes for what they really are—that is, make-up and costumes—which prevents them from seeing hobbits. Outstanding image precision in association with the 'soap opera effect' are responsible for that. The 'events filmed' are thus represented by the image in such a way that the 'story told' never really becomes available, or at least not without effort, simply because, to put it crudely, the events filmed keep attracting attention to themselves.

This has of course a lot to do with what typical viewers are or aren't used to, and it's a question of *discrepancy* between image precision and the quality of

⁸ Technologically speaking, there is a big difference between capturing an image on a frame of film and projecting it, and capturing an image electronically and transmitting it. TV sets were linked to the power network (60Hz in the U.S., 50Hz in Europe)—this is where the frame rate of 60 or 50 comes from.

costumes, make-up, props, etc. Early movies clearly suffered from the discrepancy: the props, costumes, or, say, alien characters involved in science-fiction movies were easily seen to be props, costumes, and masks. This discrepancy was, at that time, something that viewers were well used to, and when shown at 24fps, this all became entirely acceptable as a representation of a fictional reality: such is the 'magic' of the 'cinematic quality' of a 24fps movie. In the following decades, the discrepancy faded and effectively disappeared. Movies became so well done, special effects, make-up, costumes, etc. became so well executed that-when shown at 24fps (even in HD, 2K, or 4K)—there was rarely any discrepancy at all, and the audience became progressively used to films where forgetting about the image as well as about the events filmed, and focusing only on the story told, is immediate and easy. In the case of many movies, a typical viewer is nowadays actually entirely incapable of distinguishing actors from Computer-generated imagery (CGI) characters, and make-up, costumes, props, and similar never appear to be what they are—as long as the film is not too realistic when it comes to image precision, which is exactly what happens in the case of HFR movies such as *The Hobbit*. Thus, what HFR does is bring back the old discrepancy, which typical viewers are no longer used to. (To counterbalance that effect, props, costumes, make-up, etc. would need to become much better than they are—at least, what they are in *The Hobbit*. Characters such as Smaug—the dragon—do not suffer of this HFR effect for precisely this reason: there is no discrepancy, because there are no dragons.)

4. Realism

What does this tell us about realism? What is at play here is a kind of realism that is close to what Hopkins calls 'Collapse.' Hopkins defines Collapse as follows: "a film is realistic when we see it as the photographic record, not of the events filmed, but of the events that make up the story told." The idea is that the three levels of experiencing a movie Collapse in the sense that the viewer gets directly from the first level (where she sees an image on a flat surface) to the third level (where she sees

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⁹ A good example is the scene in *The Lord of the Rings: The Fellowship of the Ring* (2001, Peter Jackson), where the members of the fellowship of the ring run down the stairs and then run on the bridge of Khazad-dûm. The scene is composed of (i) filmed sequences and of (ii) entirely CGI created sequences, while it is virtually impossible to distinguish between (i) and (ii).

¹⁰ Hopkins (2016, §2).

hobbits), without ever noticing the second level (where there are actors in hobbit costumes). In the sense of Collapse, following what we have seen above, *The Hobbit* in HFR is then a very *un*realistic movie. The situation is then the following: an HFR movie such as *The Hobbit* is *more* realistic when it comes to image precision and *because* of that it is *less* realistic when it comes to Collapse.

Let us avoid a possible misunderstanding: Collapse is not the same thing as transparency. Transparency is a notion coming from the debate about photographic representation, famously championed by Kendall Walton, 11 who claims that photographs allow us to literally see the objects they represent—in this sense, they are transparent. In Walton's view, photographs are produced in a mechanical way and as a consequence they are akin to aids to vision: they are prosthetic devices like telescopes or surveillance cameras that help us to literally see through them. 12 In this view, when I see a photograph of my deceased grandmother, I do actually see her. Transparency, when applied to the case of cinema, is then the claim that when we see a movie—that is, a series of static photographs shown in rapid succession—we literally see through the resulting ('moving') image what was there when the series of photographs was shot, namely, the actors in costumes (i.e., the events filmed). If the transparency thesis is true, 13 we can then articulate the relationships between the

¹¹ Walton (1984, 2008).

¹² "Putting things together, we get this: part of what it is to see something is to have visual experiences which are caused by it in a purely mechanical manner. Objects cause their photographs and the visual experiences of viewers mechanically; so we see the objects through the photographs. By contrast, objects cause paintings not mechanically but in a more 'human' way, a way involving the artist; so we don't see through paintings" (Walton (1984, p. 261)).

[&]quot;Painting and drawing are techniques for producing pictures. So is photography. But the special nature of photography will remain obscure unless we think of it in another way as well—as a contribution to the enterprise of seeing. The invention of the camera gave us not just a new method of making pictures and not just pictures of a new kind: it gave us a new way of seeing. [...] Mirrors are aids to vision, allowing us to see things in circumstances in which we would not otherwise be able to; with their help we can see around corners. Telescopes and microscopes extend our visual powers in other ways, enabling us to see things that are too far away or too small to be seen with the naked eye. Photography is an aid to vision also, and an especially versatile one. With the assistance of the camera, we can see not only around corners and what is distant or small; we can also see into the past. [...] Photographs are *transparent*. We see the world *through* them" (Walton (1984, p. 251)).

¹³ I myself hold a very sympathetic view towards it (see Benovsky (2016)).

first, second, and third level of experiencing a movie by saying that, by seeing the ('moving') image, we see the events filmed, and we see in them the story told.

Transparency is a fourth kind of realism (until now we have seen three: precision, recessiveness of the medium, and Collapse). In this sense of realism, a film is realistic if one literally sees through it real events that happened out there in the world. If the transparency claim is correct, this is then true of all standard photography and of all standard film—except of course when CGI and otherwise added visual effects come to supplement the photographic images, since such modified images are to be understood as paintings rather than as photographs, at least partly. Transparency is a somewhat orthogonal issue to the first three brands of realism we have seen. It is an orthogonal issue because it is a claim about the nature of photography and film (in the sense of a projection of a rapid succession of photographic images), rather than a claim about our experience of film. One way to see the independence of the transparency thesis is to see that it has no implications with respect to the other three kinds of realism we have considered above. If Walton is right and the transparency claim is true, this does not imply nor preclude Collapse, precision, or recessiveness. Transparency is simply a claim about the process of production of photographic images and about a consequence of the nature of this process, namely the fact that such images can act as aids to vision. On the other hand, we have seen the relationship there is between the other three claims: more precision entails less Collapse and less recessiveness of the medium (at least to some extent), as illustrated by the case of HFR.

To come back to Collapse, one way to understand it better is to formulate it as involving a kind of illusion. When Collapse is at work, we are not having an experience of the events filmed but rather we have an experience of hobbits. Of course, since there are no hobbits, we are in this sense having a kind of an illusory experience. It is a voluntarily endorsed illusion, which is actually a result of a controlled use of our cognitive and imaginative faculties in order to get an experience of the story told. When nothing prevents us from doing this—unlike in the case of distractions that can lead to non-recessiveness of the medium or that prevent Collapse, as we have seen in the case of HFR movies—we use our cognitive and

¹⁴ See Hopkins (2008) for a detailed discussion. To avoid possible confusion, it is important to note that I am deviating here from Hopkins' use of the term "Illusion," as used in Hopkins (2016).

imaginative faculties to voluntarily fool ourselves, and the movie we are experiencing thus becomes for us realistic in the sense of Collapse, i.e., in the sense that we see it as a photographic representation of fictional events as if those were real events.

5. In Defence of Collapse

We have seen four kinds of realism in film, and we have seen how three of them interact. Having these kinds of realism in mind, what should we conclude? Should we say that *The Hobbit* is a realistic film? Or should we refrain from such an unqualified general statement and only always talk more precisely about realism of such-and-such a kind (precision, recessiveness, Collapse, transparency)? Indeed, we can say that *The Hobbit* as shown¹⁵ in HFR is very realistic in the sense of image precision, that it is not realistic when it comes to Collapse, and that it is not realistic when it comes to recessiveness of the medium, although this latter kind of realism is very much subject to how much typical viewers are used to such type of images. But, then again, is *The Hobbit* a realistic movie, or is it not? Asked in this way, the question does not perhaps bear much importance—it may merely be a terminological question. But the question that lies behind it is perhaps more interesting: is one of the brands of realism we have seen above more important than the others? Is there one kind of realism that is to be privileged and to be considered as being *the* realism in film?¹⁶

I believe this is indeed the case and that it is Collapse that we should take to be the most important form of realism, when it comes to fiction. Bearing in mind our test case of an HFR movie, the failure of Collapse explains here very well the overall failure of the movie, in the sense that it gave rise to many reactions of disappointment. Indeed, the film simply misses its target: the whole point of a movie

¹⁵ The Hobbit was also alternatively available in theatres in 2D at 24fps.

¹⁶ Hopkins (2016, §3) raises a different question. He asks if there is something common to all of the kinds of realism that we could identify as being a common ground to them all. He asks: "What is the genus of which these [various forms of realism] are the species?" This is a hard question, and Hopkins has a hard (and interesting) time trying to answer it. The reason it is so hard is that, as we have seen, the various forms of realism are very diverse; we have even seen that one of them—namely, transparency—is a completely independent issue. Perhaps this question is too hard. Perhaps, as I suggest doing here, we can get an interesting answer by having a go at the (hopefully) easier question: is one of the forms of realism we have seen to be privileged?

such as *The Hobbit* is to *tell a story about hobbits*. If it doesn't, it simply fails, no matter how skilfully done it is or how extraordinary the quality of the image is. Telling a story is what movies are *for* (keep in mind that I am focusing on fiction here). It's their main purpose and their very reason for existence. James Conant put it nicely: "for something to be a movie it must offer us *glimpses of a world*. [I] the must visually present a world into which it can invite us and in which we can become absorbed."

This is why, in a nutshell, I submit that Collapse is the kind of realism that is more important than the others. Take, for instance, image precision. If a movie fails in this respect, for instance, if the image is not very sharp, as long as Collapse is preserved—that is, as long as one is able to see hobbits in the movie—it can still be experienced as a movie, and serve its main purpose perfectly well. This is not so if Collapse fails. If Collapse fails, the whole point of the movie is lost. We have seen that Collapse is based in a kind of voluntary illusion and in the use of our imaginative faculties. This kind of illusion and use of imagination is indeed what storytelling is all about. This is why an old black and white, low resolution, 2D movie can be *better*, as a means to tell a story, than an HFR movie with outstanding image quality. More often than not, less is simply more: a black and white image with a shallow depth of field can leave more room for imagination and more room for stories to be told/imagined than a very sharp, perfectly exposed, high-resolution image of the

¹⁷ The realism of a fictional film is realism regarding the story told, but of course not realism in the broader sense that the story being told informs us accurately about the world. A fictional film can successfully tell a story, while the story can be utterly inaccurate when it comes to describing real-world events (for instance, a film can successfully tell a story involving historical events, while inaccurately describing them).

¹⁸ Conant (2011, p. 298).

¹⁹ Conant (2011, pp. 302–303) nicely illustrates the idea of "the movie-world" in this way: "[when] the changing shapes and shades of visual light on the screen 'represent' a fade, or dissolve, or a black screen that serves to punctuate a transition between scenes. There is a difference between the following two cases: the case of everything dissolving or going black *in the movie-world* (that is, in the portion of the world of the movie we glimpse in watching the movie) and the case of everything merely dissolving or merely going black *on the screen* (that is, the case in which the dissolve or the black merely forms a part of the grammatical techniques of narration employed by the movie, without itself representing a cataclysm or advent of sudden darkness in the world of the movie). If you were systematically unable to tell the difference between these sorts of cases, then you would not be able to watch a movie—movies would not exist for you."

same reality. Accuracy understood as fidelity to reality is not what counts. Contrary to documentaries, fictional films are not about recording what exists in the world. To stick to our main test case involving HFR, we thus see that motion blur—which is exactly what, on purpose, HFR prevents—is a good thing, similar to how a shallow depth of field is a good thing, or to the way an underexposed scene is a good thing, in order to leave some elements *un*shown and simply imagined.

The whole point of a fictional film is to (i) tell a story, and (ii) allow viewers to immerse themselves in the story told. If Collapse fails, (ii) is lost, and so is one of the very reasons for the existence of the movie *qua* work of fiction. Granted, a story can be conveyed by a movie where Collapse fails—after all, we do get the story about Bilbo when we watch *The Hobbit*—but not in the immersive sense.²⁰ Collapse is necessary in order to have an experience of *only* the story told. When Collapse fails, distractions that prevent full immersion are in place (similarly to what happens in the case of 4D movies; see above). The other forms of realism are not of such importance and do not have such a consequence if they fail. This shows, I submit, that Collapse is the main kind of realism, when it comes to fiction.

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²⁰ Perhaps, this is what happens in a theatre, with live actors in costumes right in front of one's eyes, where the audience can indeed get the story told, and enjoy the experience of it, but in a less (or different) immersive sense.

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