MECHANICAL RECORDING IN ARNHEIM’S FILM AS ART

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I. INTRODUCTION

In his classic Film as Art, Rudolf Arnheim sets out to refute the claim that “Film cannot be art, for it does nothing but reproduce reality mechanically”. The usual argument in favor of that claim, he explains, contrasts film with realist painting, and goes something like this: There’s no doubt that what appears on the canvas depends on the way the painter sees the world, on her particular technique, on the colors she’s using, and so on. It is elements like these that justify aesthetic appreciation. What appears on celluloid, on the other hand, is the result of a purely mechanical process of light rays collecting and transforming into an image. In other words, a camera is merely a mechanical recording device, and for this very reason film cannot be art.

In this paper I want to focus on the key notion of “mechanical recording,” which is at the center both of the argument that film cannot be art and of Arnheim’s response to it. Although this notion has been interpreted differently by commentators, the common tenet is that it is problematic for the view Arnheim is trying to defend. According to Noël Carroll, Arnheim’s notion of mechanical recording is either incoherent or yields an argument that is easily defeated. David Davies, although he considers Arnheim’s argument to be ultimately conclusive, also points to inconsistencies about the way the notion is used. I agree with Davies’ overall conclusion that Arnheim is successful in refuting the claim that film cannot be art. What I want to argue in this paper, however, is that Arnheim’s success actually rests on

1 Arnheim (1957), p. 8.
2 Carroll (1988).
3 Davies (2008).
a consistent notion of mechanical recording. The paper will be divided into two parts: I first present the interpretations of mechanical recording suggested by Carroll and Davies, insisting on the alleged difficulties they represent for Arnheim’s argument. I then propose an alternative reading of Arnheim’s main thesis and show how it resolves those difficulties.

II. WHAT IS “MECHANICAL RECORDING”?

Carroll’s Reading of Arnheim

Mechanical recording plays a very important part in what Carroll takes to be Arnheim’s three “central aesthetic tenets” in *Film as Art*:

(1) art is expression;
(2) art diverges from mechanical recording; and
(3) each art form must diverge from mechanical recording in terms of the peculiar limitation of its medium.\(^4\)

These three theses are respectively labelled the expression thesis, the divergence thesis, and the specificity thesis by Carroll.\(^5\) As he points out, understanding the second and third thesis requires elucidating what exactly Arnheim means by “mechanical recording,” and what can be considered a divergence from it. For the purposes of Arnheim’s refutation of the claim that film cannot be art, however, an argument establishing the divergence thesis is what is most directly needed. Arguably, those who claim that film cannot be art on the basis of a comparison with realist painting are likely to hold the expression and specificity thesis already. What is required to refute their claim that film cannot be art is thus to show that the divergence thesis holds as well, i.e. that cinema does diverge in relevant ways from mechanical recording. And this is indeed what Arnheim apparently proceeds to do, as a substantial part of *Film as Art* is devoted to an analysis of the limitations of the film medium. He insists upon the following features:

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1) Absence of three-dimensionality;
2) Reduction of depth;
3) Absence of color (at the time of Arnheim’s writing);
4) Presence of image boundaries;
5) Absence of space-time continuum; and
6) Absence of non-visual sense experiences.

Part of the problem with this program, however, is that according to Carroll there are three different senses in which the notion of “mechanical recording” can be interpreted in the context of Arnheim’s discussion. The first sense is “something like automatic, that is, not requiring imagination and skill to achieve proper results”. “Mechanical” in this sense is thus to be understood as a metaphor for the unimaginative and the conventional. This is what Arnheim has in mind, Carroll argues, when he explains the notion of characteristic aspect in his discussion of “The projection of solids upon a plane surface”:

Let us consider the visual reality of some definite object such as a cube. If this cube is standing on a table in front of me, its position determines whether I can realize its shape properly. If I see, for example, merely the four sides of a square, I have no means of knowing that a cube is before me, I see only a square surface. The human eye, and equally the photographic lens, acts from a particular position and from there can take in only such portion of the field of vision as are not hidden by things in front. As the cube is now placed, five of its faces are screened by the sixth, and therefore this last only is visible. But since this face might equally well conceal something quite different—since it might be the base of a pyramid or one side of a sheet of paper, for instance—our view of the cube has not been selected characteristically. We have, therefore, already established one important principle: If I wish to photograph a cube, it is not enough for me to bring the object within the range of my camera. It is rather a question of my position relative to the object, or of where I place it [. . .]—the reproduction of even a perfectly simple object is not a mechanical process but can be set about well or badly.

[. . .]There is no formula to help one choose the most characteristic aspect; it is a question of feeling.  

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6 Carroll (1988), p. 31
7 Arnheim (1957), pp. 9-10.
In addition to this metaphorical usage, Carroll points out that “mechanical recording” could sometimes be understood as a “perfectly replicating recording of reality.” An effective mechanical recording device would in effect be some sort of reality duplicator. Every aspect of nature itself would be replicated in the copy. This is what Carroll takes Arnheim to be suggesting when he discusses color:

It is particularly remarkable that the absence of colors, which one would suppose to be a fundamental divergence from nature, should have been noticed so little before the color film called attention to it.\(^8\)

The third and most often used sense can be read as a toned down version of the second: a genuine mechanical recording device would successfully copy not reality itself, but the way we perceive reality. According to Carroll, the vast majority of Arnheim’s examples throughout Film as Art are evidence for this. Thus we end up with “mechanical recording” as:

[1] unimaginative and conventional;
[2] recording reality;
[3] recording the way we perceive reality.

The problem is then to figure out which of these three senses underlies the divergence thesis, i.e. the claim that art has to diverge from mechanical recording. Carroll dismisses sense [2] out of hand: clearly the examples suggest that Arnheim “wants art to diverge from normal perception”,\(^9\) and not from reality as such. But how exactly is mechanical recording related to normal perception? According to Carroll it cannot be a matter of recording normal perception itself, as sense [3] would suggest: this, he claims, just doesn’t make sense:

“[the divergence thesis] cannot mean that art must diverge from mechanical recording of normal perception—no one can mimetically copy my perceptions. My percepts, for example, make no imprint on celluloid.”\(^{10}\)

Therefore one has to fall back to the metaphorical sense [1] of “mechanical recording.” Moreover, Carroll claims this interpretation is well supported by several

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\(^9\) Carroll (1988), p. 76
\(^{10}\) Carroll (1988), p. 76
passages from Arnheim’s *Art and Visual Perception* in which individuals are argued to be trained by education and society to see things in unimaginative and conventional ways.

The problem with adopting [1], however, is that when “mechanical recording” is construed in this way, Arnheim’s argument fails. Recall that under Carroll’s reading, Arnheim’s goal is to show that the divergence thesis holds, i.e. that art diverges from mechanical recording. But assuming that the expressive thesis also independently holds, i.e. that “art is expression,” plugging sense [1] of “mechanical recording” into the divergence thesis amounts to claiming that “Expression diverges from the unimaginative and the conventional.” This, as Carroll points out, is clearly false. For surely there are at least some cases where mechanical recording is actually conducive to expression. Carroll suggests examples such as Warhol’s *Empire* film, an 8-hour continuous shot of the Empire State Building from dusk till dawn, which can be interpreted as unimaginative and conventional recording but nevertheless expresses the “icy deceptively vacant stare of its director”. Carroll also mentions the “raw” and “authentic” quality evoked by mere recording.

On Carroll’s reading, then, Arnheim’s notion of mechanical recording is either incoherent (because it is impossible to actually record perceptions) or incapable of playing its assigned part in the argument (because in some cases mechanical recording actually produces the very effect that only divergence from it is supposed to produce).

*Davies’s Reading of Arnheim*

According to Davies, Carroll has misconstrued what it means for a device to record the way we perceive the world. On Davies’s reading, what a successful mechanical recording would make available to us is not, as Carroll suggests, a recording of actual perceptions, but rather a copy of all the relevant information needed by our perceptual system to experience a specific scene. Looking at the reproduction would thus provoke exactly the same experience as looking at the original. Arnheim’s point, then, is simply that there is an important gap between what film actually is and what film would be if it were the outcome of such a successful mechanical recording. Many aspects of the information that is available to our perceptual system fail to be recorded by the camera. And these failures are precisely what make film a possible art form.

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The filmmaker, because he uses a very imperfect recording device, has to make a number of decisions regarding both what appears on the film and how it appears, and these decisions, like those of the painter, can be grounds for aesthetic appreciation.\textsuperscript{12}

Davies does grant to Carroll, however, that Arnheim is inconsistent about what is meant by “mechanical recording” in \textit{Film as Art}. Most of the time the notion is understood as a recording of “the way we normally perceive the world,” but on occasion it is understood simply as “unimaginative and conventional.”

\section*{III. An Alternative Reading of Arnheim}

Davies assumes that the limitations associated with film result from a \textit{failure} to mechanically record reality. He builds a great deal into what is required for something to count as mechanical recording and then argues that it is because film doesn’t live up to those requirements that it can be art. Arnheim’s strategy in refuting “thoroughly and systematically the charge that photography and film are only mechanical reproductions”\textsuperscript{13} would thus amount to denying that they are genuine mechanical reproductions to begin with. I want to argue that the thrust of Arnheim’s refutation is rather with the word “only.” According to this alternative reading, film indeed \textit{is} a mechanical recording of the appearance of things, but it need not be \textit{only} that.

The process of painting \textit{depends on the artist}, and for that very reason it makes expression possible. There is wide agreement over the artistic status of even the most realist painting because “the way from reality to the picture lies via the artist’s eye and nervous system, his hand, finally, the brush that puts strokes on canvas”.\textsuperscript{14} Cinema is apparently different in that regard: what appears on celluloid does not depend in the same way on what the artist has in mind; the process is in some sense objective, because it can be accounted for by laws of optics and chemistry that are independent of the artist. I think this independence from human intentions is what is meant by “mechanical recording” throughout \textit{Film as Art}. What is central about the notion is not so much a result but the process through which that result is achieved. A painter might produce an image that is indistinguishable from a photograph, but that would not make it a mechanical reproduction. What is at the core of the notion of mechanical reproduction is the very limited role played by human intentions in the process of

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\item \textsuperscript{12} Davies (2008), pp. 178-9.
\item \textsuperscript{13} Arnheim (1957), p. 8.
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reproduction. Hence whether a device can record the appearance of things more or less accurately is not central to its nature as a mechanical recording device. What is crucial is that the recording is made independently of the person who is using the device. Of course recording requires that relevant adjustments be made to the mechanism, and these surely do/can embody certain intentions (that the image be in focus, and so on). However the point is that once those adjustments are made, the camera is able to record reality on its own, independently of “the artist’s eye and nervous system.” This is why some argue that film and photography cannot be art. Arnheim’s response isn’t that film can be art because it fails to mechanically reproduce reality. The point is rather that although the camera is a mechanical recording device it still can be used for artistic purposes. In other words, art is not incompatible with mechanical recording as long as the purpose of the recording is not mechanical recording itself: “Art begins where mechanical reproduction leaves off, where the conditions of representation serve in some way to mold the object”.15 Far from revealing a flaw in Arnheim’s argument, Carroll’s above objection that some mechanical recordings can be expressive is thus the very core of Arnheim’s point.

How then is Arnheim’s insistence on the limitations of the film medium to be interpreted? According to Davies’ reading, the relevant contrast is between what film would be if it were an actual mechanical device and what it actually is. I suggest the contrast Arnheim is after is rather that between intentional and non-intentional (viz. mechanical) ways of reproducing reality. The camera is no less a mechanical recording device because it fails to completely capture the way things appear to us. For surely these failures can be exploited for artistic purposes. But presumably mechanical recording devices could eventually be improved so as to yield much more “realistic” reproductions. Although for Arnheim such perfected devices would clearly make expressive use more difficult, it would not be altogether impossible. Arnheim mentions other capacities of film technique, which result from the very activity of recording, that can be used for expressive purposes16: camera mobility, backward motion, accelerated and slow motion, incorporation of still photographs, fading and dissolving, superimposition and simultaneous montage, special lenses, manipulation of focus, and mirror images. Again the central claim is that non-intentional recording devices can be used intentionally in ways that are relevant for aesthetic appreciation,

15 Arnheim (1957), p. 57
16 Arnheim (1957), pp. 111-27
not that devices that can be used in such a way are not mechanical.

What remains to be explained is why it may seem plausible to read “mechanical recording” in terms of convention and lack of originality. On closer inspection, it appears that out of the six main limiting features of film that are listed by Arnheim, only one is clearly associated with the unimaginative and conventional sense of “mechanical recording”: the absence of three-dimensionality. I think the claim that Arnheim’s use of “mechanical recording” is inconsistent results from a misinterpretation of the notion of “characteristic aspect” that is central to that part of his account. Arnheim’s point about characteristic aspects can be illustrated as a comparison between the two following figures:

The argument may be summed up as follows. The way the camera is placed is central to producing recognizable images. For instance, figure 2 fails to produce the recognizable image of a cube, as we tend to mistake it for a square. However we readily assume a cube is depicted in figure 1 even though only three sides are actually shown. Figure 1 thus presents the (or at least a) “characteristic aspect” of a cube, i.e. a view presenting with greater accuracy what it is to be a cube. Furthermore, Arnheim argues, there is no way to define a “mechanical” procedure that would systematically yield characteristic aspects of what is filmed. Conclusion: film is not mere “mechanical recording.”

As was pointed out earlier, Carroll suggests that what Arnheim means here by “mechanical recording” is to be understood as “unimaginative” and “conventional”:
[.. .] we see that Arnheim rejects the claims that film is simply mechanical because the production of recognizable images can succeed or fail. Recognizable images are not produced automatically, and it takes wit, skill, and imagination to make an object appear in its most characteristic, most recognizable aspect. Discovering an object’s most characteristic aspect is not reducible to a mechanical formula nor is it a machine procedure.\footnote{Carroll (1988), p. 32.}

However, a closer look at Arnheim’s point shows that this reading is completely at odds with the text. Arguably, most of those who casually use a camera do not have the special “wit, skill, and imagination” of a professional filmmaker or photographer. If Carroll is right, this would entail that a great deal of pictures taken by those casual photographers would be hardly recognizable, or at least would often show uncharacteristic aspects of what they depict. Obviously that is not the case. Most casual pictures are not especially witty or imaginative, and yet we easily recognize what they are pictures of. This is because, contrary to what Carroll claims, the “characteristic aspect” of an object is unimaginative and conventional. That is precisely why it can be easily recognized. What is actually imaginative and unconventional then, is the uncharacteristic aspect of an object. Arnheim’s point is that, surprisingly enough, what requires wit, skill, and imagination on the part of the photographer, namely seeing the uncharacteristic aspect of things, is what the machine “itself” would do most easily. If a camera was able to move and take pictures on its own, the chances are they would be very unconventional and imaginative. That is, they would very likely present objects from a perspective we are not familiar with. And the reason for this is simply that on their own cameras would not have a human take on things. From the point of view of mechanical reproduction understood as independent from the filmmaker or photographer, images taken from all perspectives are equally “true.” Every possible angle truly captures what the object looks like from that angle. Arnheim’s contention is simply that some aspects are psychologically truer than others, that is: we more easily recognize objects when they are seen from a specific perspective and distance, which present their “characteristic aspect” for us.
IV. CONCLUSION

Arnheim’s response to the claim that film cannot be art thus rests on a consistent notion of mechanical recording. Moreover, if my account is right, Carroll’s list of the central aesthetic tenets of *Film as Art* needs to be substantially revised. Arnheim does not in fact hold that art must refrain from mechanically reproducing nature (as long as this reproducing is *expressive*). This could be captured by dropping (2) altogether. The third tenet also needs to be modified: “Each art form must diverge from mechanical recording in terms of the peculiar limitation of its medium,” should be replaced by “Each art form must stress the peculiarities of its medium,” since peculiarities need not be conceived as *divergence* from mechanical recording.
REFERENCES


