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**What Can Arnheim Learn from Flusser  
(and Vice Versa)?**

While the work of Vilém Flusser has been fruitfully compared to that of Walter Benjamin and Marshall McLuhan, among others (e.g. van der Meulen 2010) his thought has never been compared to that of Rudolf Arnheim. The reason that a comparison seems fruitful is owing to their broad theoretical commitments. Both are philosophical yet insistent on the relevance of science for cultural and medial reflection. Flusser is faithful to an information theory vocabulary, if he uses it liberally. This inclusive approach is fueled by an interesting demand to balance the raw historicity, feel and unrepeatable uniqueness of a medial moment and which we associate with Heidegger's existential phenomenology, with various instruments of analysis, of subdivision and reduction, whether of society via Marxist categories developed by the Frankfurt school, philosophy and the analytic phenomenology of Husserl, or the contemporary sciences, including physics, mathematics and information theory. Put in this way, Flusser is the link that joins the German-speaking "scientific" tradition of media studies from Arnheim to Kittler.

Biographically, Arnheim and Flusser have a lot in common. Both were refugee Jewish scholars from the German-language tradition. Both had a Latin interlude. Arnheim fled Germany to Italy before settling in the United States and Flusser of course settled in Brazil for many years before returning to Europe. Each was in London in 1940, seeking to leave Europe. Arnheim went to New York and Flusser to São Paulo. I do not mean to suggest that there is any influence from the older Arnheim to Flusser. He doesn't figure in Flusser's library inventory (Reisebibliothek). But it is more instructive to think how two important thinkers arrive at a similar position based on similar, stated desiderata of theory. Framed in this way, the comparison of Flusser and Arnheim is highly interesting and instructive and each provides ways to approach media in complementary ways, which might not occur to the other.

In the following article, I want to sketch the broad outlines of agreement in the thinking of Arnheim and Flusser, beginning with the very purpose of media and its elaboration with different concepts like information and entropy theory. I spend the middle of this paper exploring the agreements and disagreements over how to understand photography. Finally, I discuss the normative element of

media theory as found in both Flusser and Arnheim, with their respective ideas of what we should do with medial knowledge, in their common, broadly Frankfurt school, orientations.

## **A Critically Synoptic View**

Both Arnheim and Flusser were critical of our ongoing medial programming. Each both offer synoptic accounts of general trends of communication and media. As I hope to show, their approaches are remarkably similar, if of course they are very different writers with Arnheim having less of a technological orientation with more emphasis on human cognition and Flusser obsessed with the contemporary moment and broad technological possibilities. Flusser is the great essayist and Arnheim the focused theoretician and we should not underestimate Arnheim's disciplining in the field of psychology whereas there is a strong avant-gardist streak in Flusser's approach that is much more reminiscent of a touring public intellectual like McLuhan than an academic like Arnheim.

Here I think it is useful to distinguish two kinds of theorizing, categorical and individual, which are really only distinguished by level of abstraction. Flusser's concepts are categorical: image, text, technical image. Like McLuhan's categories ("hot" and "cool"), it means little to cite counter-examples that might contradict a general principle. For example, while there were undoubtedly hand-made images that had characteristics of "technical" images (in Flusser's sense) before their official introduction, drawing attention to them does not diminish the importance of the category of technical image. This is the precise benefit of comparing Flusser to Arnheim, because Arnheim hardly ever names categories but he does describe overall cognitive abilities that are trained in different traditions that undoubtedly cluster in different historical junctions. One might say that Arnheim could provide the best counter-examples to Flusser but that is not the point. If their categories/clusters of cognitive abilities align in a significant way, then they help elucidate each other.

Perhaps because of their natural scientific foundation, both Arnheim and Flusser see medial developments as something to be understood in broad outlines, with predictable and reciprocal effects. For Arnheim, it is the nature of any gestalt to be relational. Whatever it gains in one dimension it loses in another. A sharp image gains detail but loses essentials. Thus, Walter Ong's (1982) idea that "writing restructures consciousness" is familiar to this point of view, as is Benjamin's idea that we become aware of media as they become irrelevant. Arnheim (1932 1933) reflected on the silent film at the moment of its eclipse and Flusser notes the sheer amount of writing available increases at precisely the moment it ceases to have any larger significance (Flusser 1987/2011).

It only takes a bit of looking to see that an Arnheim-Flusser comparison is worth undertaking. First, in a manner reminiscent of Roman Jakobson's critique of Mukarovsky's focus solely on messages, both Flusser and Arnheim place communication in a larger 'anthropological' framework. Flusser argues that communication arises from existential needs; communication writ large is the "artificial texture that enables us to forget our solitude" (Flusser 2002:4). Flusser means to stress the social and dialogical nature of basic communication. Arnheim does not speak in such terms but agrees that messages are a premature way to understand communication. Opposing what he calls the *memento* to the *message* (a distinction he first put forward in *Rundfunk als Höhrkunst* of 1936), he insists on the fixity of a memento, requiring presence. You have to be together with the memento to receive its meaning, like an oracle, and it "gives directions, prescribes behavior, facilitates orientation" (Arnheim 1986:99).

Flusser is talking about human communication and Arnheim kinds of artifacts. Once Flusser moves to think of written language and images as technologies, however, he and Arnheim are on the same footing. In a beautiful passage, Flusser notes that "since a human being stretched out his hand to confront the lifeworld, to make it pause, he has been trying to imprint information on his surroundings" (Flusser 1987/2011 18). The notion of making the lifeworld pause is quite close to Arnheim's reflections on media, which explain how images concretize ideas into a spatial form (Arnheim 1986). They might meet in the middle with Karsten Harries' (1982) idea of architecture, strongly indebted to Heidegger, as a response to the "terror of time."

The insistence that communication can't proceed immediately to a kind of information theoretic idea of channel, noise, etc. is reflected in Flusser's stress on *understanding* of media over their *explanation*. Technically, for Flusser the increase of information in a system, so-called negentropy, doesn't make sense in any pure technical form. "It is a problem that touches the essence of man," he says, "and merely quantifying approaches do not grasp it" (Flusser 2002: 20). Information theory can only see communication as an improbability and can't explain the emergence of "galactic spirals, living cells, or human brains" (Flusser 1999/2011: 17) through mere accident and necessity. However, if we *interpret* communication, that is to say, seek first to understand the necessary mechanisms that might make communication possible in the first place, it is not only probable, it actually represents that for which Flusser is constantly on the look-out: freedom.

In *Entropy and Art* (1971), Arnheim stressed the fact that negentropy doesn't get at the heart of the matter when we are talking about the spatial characteristics of a system, which display non-statistical values that are emergent: "Entropy theory is indeed a first attempt to deal with global form; but it has not been dealing with structure" (Arnheim 1971: 21). Arnheim draws similar ethical con-

clusions as Flusser. “Disorder” is not a programmed outcome and does not naturalize catabolic states; in human affairs, order is the norm not the exception.

In these cases, both Flusser and Arnheim want to stop before instrumentalizing concepts. In general, they are resisting the easy cooptation of terms from information theory. This is *prima facie* evidence of a common desire to produce a comprehensive system that can explain its own characteristics and emergence. The rigor of information theory, although welcome, is but a lure and leads to premature results.

## The Technical Image and Apparatus

We can look to our two theorists’ statements about photography – an actual medium – to bring out the nature of the complementarity of the thought of Flusser and Arnheim. This complementarity of each author’s approach will become apparent as we see predictably that Flusser is concerned with the apparatus and its broad, typical characteristics whereas Arnheim is concerned with describing its local effects. In the case of the content of the photograph, which Flusser submerges in favor of the apparatus itself, I will present some arguments that it should be understood, perhaps in a recast Flusserian form.

For Flusser, the photograph is the triumph of the technical image, a mosaic of particles like what Arnheim calls “accidents” (Arnheim 1966). The traditional image under the power of the artist’s imagination has evolved toward the technical image, marked by the mere activity of selection or visualization. In any case, the photographer cannot resist the nature of photography or in his terms the *apparatus*. Thus, Flusser argues that it is the job of the photographer to discover “impossible” pictures, a bit of artifice snatched from the technical apparatus. In *Into the Universe*, Flusser wrote about “people who try to turn an automatic apparatus against its own condition of being automatic” and further that “the photographer can only desire what the apparatus can do” (Flusser, 1985/2011: 19, 20).

In 1933, in the essay that later came to be “The Thoughts that Made the Picture Move,” Arnheim used the phrase that was so liked by Friedrich Kittler, photographic media “are not supposed to resemble the object, but rather guarantee this resemblance by being, as it were, a product of the object in question, that is, by being mechanically produced by it” (Arnheim 1933/1977; Kittler 1986:11). Arnheim returned to photography periodically, most importantly in 1957 in his essay, “Accident and the Necessity of Art,” where he called photography “the encounter of natural accident and the human sense of form” (Arnheim 1966, 170). Even later in 1974 in the inaugural volume of

*Critical Inquiry* he wrote in “What is Photography” that with photography “we are on vacation from artifice” (Arnheim 1986).<sup>1</sup>

Clearly, Arnheim’s understanding of photography can be likened to Flusser’s because the camera packages automatically the raw ontology of the world (even if selected and edited). However, the super-personal nature of photography as found in Flusser is not a part of Arnheim’s discussion of photography. His essays are narrow reflections on the “nature” of photography. Nevertheless, looking back at Arnheim’s research on the sociology of film and radio suggests a potential larger interpretation of what Arnheim is saying, whereby mechanical reproduction favors a kind of mass-produced aesthetic, bringing us closer to Flusser’s concepts of the technical image and apparatus. In withering criticisms from *Film als Kunst* (1932/1933), Arnheim reflects in a section called “The Psychology of the Mass-Produced Film,” on the ideology of popular films: “In film everything happens as it would in real life if all went just as seems right and pleasing to us. What God neglects, man makes up for in his own creations. And he is ingenuous enough to find comfort for real injustices in his make-believe justice; he cheerfully ignores the disparity between reality and appearance” (Arnheim 1933:171).

Arnheim ends by saying that “the truth is that man really likes evil and is born stupid; anyone who wishes to improve the world has to effect his purpose in spite not only of external opposition but especially of himself” (Arnheim 1933:171). This sounds almost Lacanian – surely an interesting topic of further research – and challenges to the idea of Arnheim as a strict formalist (c.f. Arnheim 1944/1954).

Arnheim puts more emphasis on the actual photographer and Flusser stresses the extra-personal qualities of the medial apparatus, Arnheim is close-up and Flusser zooms-out, but they meet in the middle. In sum: Arnheim can talk about technical elements but they are content-filled whereas for Flusser they are neutral. Arnheim asks what we are forced to see or hear and Flusser emphasizes how we cannot escape it. Flusser enjoyed using Kantian analogies and I would like to pursue an analogy from an Arnheimian point of view. For Arnheim, to follow the Kantian view, the technical image is like a sublime experience, which cannot be brought under a category. The image can be both causal and symbolic then because it does not fit in to the Kantian category perfectly, meaning parts of it cannot be brought under the understanding and are therefore symbolic. The surplus is precisely the data (Flusser) or accidents (Arnheim) that exceed imagination.

But it causes Arnheim to part company with Flusser because the latter says quite clearly that the technical image is not ideological and further that photography is not causal – even if a “technical”

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<sup>1</sup> In general aesthetic theory, the most up to date defense of causal realism in photography is probably Dominic McIver Lopes, “The Aesthetics of Photographic Transparency,” *Mind* 112 (2003): 433-448.

(or mechanical) medium. He is quite clear: “The objectivity of technical images is an illusion” (p. 14). Why does Flusser say this? Carrillo and Calderón (2012) take Flusser at face value in a comparison with Andre Bazin and simply accepts the difference between the two authors. I would like, however, to offer a simpler answer. Flusser is actually being quite anti-teleological here. Take the famous debate between Adorno and Benjamin, wherein the latter’s ideas about the diminution of aura would occur with increasing technical development. Today, we use photographs in very auratic ways, digital images on tombstones in Italy, mullahs and Christian evangelicals broadcasting sermons via the internet. Flusser merely wants to discuss the broad characteristics of the medium, not its space-time specificity (which, as noted, opens one up to counter-example anyway). In such a view, any of the medial rupturing instruments – writing, perspective, technical images – *need not* necessarily carry with them certain consequences (even if by their nature they *favor* them).

Even so it is not difficult to see that Flusser is somewhat limiting the political bite of his approach by not recognizing what the broad characteristics accompanying the apparatus of the technical image *today*. With the proper provisos, comments like those that Arnheim make (or Adorno and Horkheimer) are useful in adding a political-economic angle to the medial distinction that Flusser makes. On a more mundane level, I believe also therefore that Flusser should have given some credit to the importation of ontological completeness into the products of photography. He clearly believed that the photograph imported particles and was lacking *form*, not yet in-formation. It is only a step to recognize that these particles or accidents need not carry likeness, a crucial difference. What Arnheim recognized is that the shapelessness was precisely what was crucial about photography. For example, *pace* Flusser, Arnheim noted that the relative unstructuredness gives us too much confidence in photographs, whose veracity still would have to be determined. In this sense, Flusser is absolutely right that in an important sense that the “objectivity is an illusion.” Yet those particles are a new type of latent evidence and objectivity, *contra* Flusser.

Combining the two views together, we might say that photography imports reality and seduces us with its factuality and carries ideological elements (Arnheim) but we should also note that because it is a programmed content it is significantly empty and it is this very moment of reduced options that is political, even more than the control itself (Flusser).

## Arnheim's Cautious Pessimism

Both Flusser and Arnheim have a synoptic idea of the direction that media is taking us. It is not a teleology, but retrospectively it has a distinct pattern and there are particular stresses and strains on the present that foretell the most immanent direction we shall travel. Both theorists, however, read these events differently. Arnheim is a cautious pessimist and Flusser is a cautious optimist. By comparing the two along this last dimension, we are able to conclude a full juxtaposition of their respective positions.

In general, for their sober distance, both Arnheim and Flusser are also suspicious of the pull that commodified technoculture is carrying us. Thus, both are aware of the relational losses that new developments force out and make impossible. For Arnheim it is the loss of the primacy of the spatial, the thought concentrated in a still image, that he laments. For Flusser it is the disciplined engagement with text that is lost, and with it history itself. Flusser sees an idea as the in-formation of matter: “producing empty forms in order to in-form what is amorphous.” At the same time, Arnheim separates shape from form, calling form “the shape of content.” Both are diminishing.

Arnheim sees the constant promises from new media and would knowingly admit that as we move along we seem also to always discover that new media have prospects as artifice, they have potential to become works of art. But he would say that we can't be seduced by either the hope of the benefits of new media, the vulgar technocratic argument, or the artistic possibilities, the redemptive apology. Quickly, in this context of extinguished media-hope, we come to Capitalism itself. New media themselves will never have any primary agential role in social life, which must be addressed at the social and not technological level.

Arnheim's project of coming to terms with the richness of the talking film, the advent of television and radio, was one of what he called “disciplining” them, and of bringing their abundant effects under control (Arnheim 1937/2009). For him, new mechanical media import “accidents” wholesale into their products. For Flusser they import “data.” For both the apparatus becomes automated so Flusser wants to understand how much “freedom” we possess in the case of a programmed medium like photography. In 1974, Arnheim wrote of the “embarrassment of riches” in the contemporary visual media. For Flusser this is the image-flood but more generally is the atrophy of dialogue: “by examining the present day perfection in the functioning of communication, thanks to the unparalleled omnipresence of discourses that make any dialogue impossible and unnecessary” (Flusser 1998, 17; cited in Finger et al. 2011: 91).

Nevertheless, as we shall see, Flusser is optimistic about this development. For Arnheim, however, a cautious pessimism is clearly evident. In a Frankfurt school vein, Arnheim ended *Film als Kunst* by saying that to change media we must change society. We can contrast this with Adorno's contemporary statement that "The social alienation of music is itself a social fact" that "cannot be corrected intramusically but only by changing society" (Adorno 1932). It might seem strange to suggest that the largely apolitical Arnheim might be interested in new social formations. But I don't think Arnheim, who respected disciplinary boundaries in his published work, but had many opinions he didn't necessarily make public, would object.

The upshot is that, due to the expansive and accelerative nature of Capitalism, we should not reserve any advantages to the arts. Rather, we would have to change society for that to happen. Arnheim was aware of the Bauhaus and his teachers visited there. He taught at the unusual New School for Social Research and then had a hand in designing the curriculum at the Carpenter Center for the Arts at Harvard. Arnheim had some experience with utopian educational experiments.

Arnheim was interested in the rejoining of the split between the arts and the sciences. Unlike Flusser, however, he did not think that technical tools would bring them together because the two are fundamentally different. In his review of Nelson Goodman's (1968) *Languages of Art*, Arnheim wrote that, "science employs and consumes sensory data in order to arrive at the principles governing the operations of physical and mental forces. In art, the sensory data themselves are the ultimate statement because what we are made to see and hear lets us experience the play of forces that govern our existence" (Arnheim 1969 698). If an artist makes art with a hologram, or massively parallel computers, matters little because the cognitive activities are still different. Of course, Arnheim believed in a traditional sense of art and science so he did not countenance – or more accurately believed that the payoff would be slight – in moving to new modes of interaction of art and science. Fundamentally, Arnheim believed that conserving a lost idea of art (and science) was more valuable than taking one's chances on what unbridled capital could provide.

### **Flusser's Cautious Optimism**

If Arnheim keeps art separate from science, he was not ignorant of their mixture. In 1986 when Flusser came to the attention of many English-speaking readers with his paper in the journal *Leonardo*, "The Photograph as Post-Industrial Object," Arnheim had been on its editorial board since 1978. He had dedicated a book on entropy and art to his teacher Wolfgang Köhler, who was an acknowl-



edged source for all varieties of systems, non-linear, open system, morphogenetic thought (Arnheim 1971).

Yet if Arnheim was concerned with what doesn't change for human cognition with emerging technologies, Flusser wanted to diagnose the exact contour of a fundamentally new techno-medial arrangement. Indeed, with prescient insight Flusser amply anticipated what we call today the post-Fordist model of late, global immaterial Capitalism. Industry and its "hard" objects are exchanged for the post-industrial and its "soft symbols." The result is the image-flood and the overcoming of linear thinking and historical consciousness, because the technical images that constitute the image-flood are post-historical: "[O]nce there is an image, everything is in the present and turns into an eternal repetition of the same, whether it is about a battle in the Lebanese War or in the Peloponnesian War" (Flusser, 1985/2011: 58).

How does Flusser feel about this? In "To Make Concrete," Flusser writes that, "we have no choice but to leap into the new" because of the advances of science and he recognizes the risks involved. In *Does Writing Have a Future*, Flusser writes that, "it is not a principle of hope that propels us...but rather a principle of desperation" (Flusser 1987/2011). His viewpoint seems to be that new developments develop new cognitive resources and create new forms of sociality that are potentially liberating. Siegfried Zielinski (2004) writes that, "After the ontological experience of Auschwitz nothing could get worse for him. After witnessing what human beings were able to do, Flusser believed in the possibility that machines might be able to do better, at least not to do worse. His philosophy of the media like his whole thinking is deeply rooted in an ethical concept of responsibility for the other and in dialogue with those, who are not identical with us. This concept is familiar to us through the writings of other Jewish philosophers like Martin Buber or Emanuel Levinas. Flusser expanded their ideas of responsibility by integrating a very specific concept of proximity. "The closer somebody is related to me – in space, time, thematically – the more responsibility I carry for him/ her and for myself. Flusser takes the risk and uses the religious term of "Nächstenliebe" (*loving the next*) to name this attitude."

This suggests that we carry on non-linear, post-historical thinking, to see where it brings us. It is uncharitable to compare Flusser's ideas here to internet triumphalism that reached its peak around in the early 2000s. More interesting is to take him seriously and think about new forms of sociality that technology can legitimately engender, at the same time that it makes others superficial.

According to Flusser, it is precisely the technical image that can bridge the gap between understanding the traditional image and the new reality of quanta – almost. The apparatus helps us "grasp the ungraspable, visualize the invisible, and conceptualize the inconceivable" and "consolidate invis-

ble possibilities into visible improbabilities” (Flusser 1985/2001 16, 18). Yet it is useful to pause and reframe Flusser’s argument in more familiar terms, for all “extensions of man” (McLuhan) or prostheses, from microscopes to telescopes, are still instruments of understanding. The question is, then, to what degree Flusser wants to posit thought beyond the human. Arnheim, at least, would ask: how can we become post-historical when we think linearly? Perhaps Flusser believes we will only understand the human if we press its limits further.

## Conclusion

I want to conclude by considering where the cautious optimisms and pessimisms of Flusser and Arnheim, respectively, leave us ethically. To compare the two I do not believe that it is sufficient to rehash the stereotypes of detached rationalism against organic systems (Gochenour 2005). In a standard metaphoric structure of “less rigid=more progressive” Arnheim would lose. Both Flusser *and* Arnheim are dynamic thinkers but it is a question of what one does with a dynamic system. Principally, what is the role of lack, absence and negativity?

Arnheim, as we have seen, is clearly closer to a classic Frankfurt School vein of de-alienating the world. For Flusser it is not so cut and dried. The prior discussion of Flusser suggests that he was close to a theory of post-Marxism and a new idea of immaterial labor. Did he think that the system itself was sufficient to bring about new formations? Although, as Ströhl says, Flusser is definitely on the side of dynamic systems, it is not clear that he is “machinic” in a Deleuzian sense and sees an endless dynamic post-humanization. This is because Flusser’s “discourse” must always be balanced with “dialogue.”

Flusser discusses “net-discourse” as one kind of discourse that can produce genuinely new information, which discourse cannot. Net-discourse, which might be likened to a Deleuzian rhizome, gains in democracy and inclusiveness what it loses in its ability to represent through limitation. Round-table discourse is of course exclusive but can be expected to arrive at genuine results. Networks, instead “absorb everything—conversations, discussions, hearsay, gossip, rumor, idle talk—without making any qualitative restrictions.” Here, Flusser’s point of view articulated in his *Kommunikologie* of the 1970s sounds very close to contemporary media critiques of net activism and “click-tivism” (Dean, 2009; Fuchs, 2013).

In the end, then, it appears that Arnheim and Flusser actually arrive back together, although Flusser has taken a more daring passage through contemporary media prognostication. Both Arn-

heim and Flusser hit a wall at a certain point in endless post-human media elaboration – Arnheim in the limits of the human mind and Flusser in the basic structures of meaningful communication.

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