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Intention in the World of the Apparatus

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Intention in the World of the Apparatus

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Para os meus pais, a minha promessa de um futuro brilhante.

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The Technical Image and Imagination

"Why Do Typewriters Go 'Click'?"

The explanation is simple; Clicking is more easily mechanized than sliding. This becomes clear when cars and film projectors start to go wrong. But this example is inadequate. Because what lies behind the question is: Why do machines stutter? The answer is: Because everything there is in the world (and the whole world itself) stutters. This only becomes clear when one takes a closer look. Democritus already suspected it, but not until numbers, but not letters, correspond to the world. It is open to calculation but not to description. Therefore, numbers have to break out of the alphanumeric code and make themselves independent. Letters entice one into endless discussion about the world and have to be put to one side as not equal to the task. This is precisely what is happening. Numbers abandon the alphanumeric code in favor of new codes (the digital code for example) and they feed computers. Letters (if they want to survive) have to simulate numbers. This is why typewriters go 'click'.[1]

How does the image inform the computer? How is it that the selfie, computer applications such as Snapchat, home-produced Youtube videos, and other visual media that seem to be so quintessential to modern internet culture appear to have come out of nowhere? Fifteen years ago, a description of the amount of shared videos and photos by the individual and the collective would have sounded bizarre, and yet, they have become a significant component to modern life. The answer is that these new modes of decentralized image production did not come out of nowhere, but in fact are at least one-hundred years in the making. Modern visual culture, which is computational and network-based in nature, actually has its roots in the very essence of chemical photography, first developed as a mass-culture product in the 19th century: "the character

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[1] Flusser, Vilém, and Anthony Mathews. "Why Do Typewriters Go 'Click' *The Shape of Things: A*

of the apparatus can be discovered through an analysis of the simple camera, as if in an embryonic state".[2]

The mode of thinking inspired by the photograph, as well as the subject created by the photographic apparatus, have been present since the camera first became available. More than the mechanical components of the camera, we must focus on the ethic inspired by the apparatus which produces technical images, that is, images created by an apparatus which by necessity diminishes human input. Put short: we use the camera, but *the camera uses* us as well.

Through the work of primarily Vilem Flusser I hope to show that current visual culture is actually nothing more than the coalescing of the photographic ethic first inspired by the primitive apparatus that is the photographic camera. The truth is not that images are more computational today, but that there often is a misunderstanding surrounding the *technical* image in general. Technical images are primarily computational. The technical image is an image created by a machine, and by necessity the technical image excises human activity, or at least degrades it in importance.

If we start with the chemical photo, we will realize that although there are a large number of possible photos, this number is in fact finite. The number of possible photos is determined by all of the formal elements, which can be immediately quantized: shutter speed, aperture, angle, focal length, and so forth. A change in just one of these formal elements creates a new photo, hence there is a large number of possible photos programmed within a camera: you can take a photo of a man holding a hat to his face with a 50mm lens, or with a 100mm lens, or with a 150mm lens. If you keep the same

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[2] Flusser, Vilém. *Towards a Philosophy of Photography*. N.p.: Reaktion, 2000. 15. Print.

lens, you can change the shutter speed or aperture in order to create yet another set of possibilities. The large number of photos programmed within the camera is due to the immense variability contained not only within these elements, but also within framing, angles, and so on. But, importantly, the method of the camera is also binary/quantized in its own grounds and in the way in which it functions: the shutter button (Flusser calls it a *key*, and keys control the apparatus) is binary -- on/off. The world of pictures is created through an understanding of the rules of the apparatus: once we control the quantized data that determines photographic apparatus, we can produce *informed* technical images. By informed we mean technical images which are in dialogue both with the rules of the apparatus, but also in meaningful dialogue with the world out there which is being photographed, a world of data points and networks (i.e. non-aesthetic, but rather data-based relations):

> The true photographer, in the sense meant in this essay, is interested (as the chess player) in seeing in ever newer ways, and thus, in producing ever newer, more informative situations. Since its beginnings, the development of photography has been a process through which the concept of information has grown more and more conscious.[3]

The drive for ever more "informational" pictures leads to regular people creating photos such as the picture on the following page:

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[3] Flusser. *Towards a Philosophy of Photography 42*

The above picture shows a type of selfie produced by a Russian teen who climbed a Hong Kong skyscraper.[5] This sort of activity, although perhaps present in previous generations, has absolutely exploded in volume in recent years. The sharing aspect of this type of photography obviously drives this sort of activity. This type of photography expresses the growing "virtuality" of modern life to a breathtaking degree -- the production of the photo is intricately linked to the way in which it is shared. Flusser writes that the image has turned us around: instead of simply looking at images in order to reflect on the world, we've begun to hallucinate in real life as if living within images[6]:

> Images are mediations between the world and human beings. Human beings 'ex-ist,' i.e. the world is not immediately accessible to them and therefore images are needed to make it comprehensible. However, as soon as this happens, images come between the world and human beings. <u>They are supposed to be maps but they turn into screens: instead of representing the world, they obscure it until human beings' lives finally become a function of the images they create.</u> Human beings cease to decode the

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[4] Raskalov, Vitaliy, and Vadim Mahkorov. *What's Up Hong Kong*. 2014. On the Roofs, Hong Kong. *On the Roofs*. Web. 12 Mar. 2016.

[5] Raskalov, Vitaliy, and Vadim Mahkorov. *What's Up Hong Kong*.

[6] Any quotes that are underlined, bolded or italicized, in this document have been added for emphasis.

images and instead project them, still encoded, into the world 'out there,' which meanwhile itself becomes like an image -- a context of scenes, of states of things.[7]

The first chapter will highlight what differentiates the technical images from traditional images, as well as outline the ways in which the technical image anthropomorphizes informational devices while diluting individual subjectivity. The following chapter will define the concepts specific to Flusser's theory of communication and human history, from his particular notion of the abstract, to the necessary steps in the evolution of the image and visual thinking that lead to the world of the technical image. In this way there will be enough accumulated groundwork of Flusser's theories to describe our present day, which Flusser describes as the early phases of a telematic faux utopia, where the technical image is the cornerstone of human connectivity and is indistinguishable from raw data. The power of the technical image of data comes to redefine the relationship between the average person and the production of information. Rather than a passive consumer, the subject is now a creator of information dialectically defined by his relationship to decentralized informational apparatuses, of which the camera is the prototype, and the computer/smartphone is the apex.

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[7] Flusser. *Towards a Philosophy* 7-10.

How are Technical Images Different from "Traditional" Images?

More complex technical images include videos, databases, models, and charts. This is a crucial point: although databases are number-based, and computer-code is language based, the underlying thought that structures the way the computer apparatus works is actually built on the same roots as those of the photographic apparatus. Both are black boxes with certain rules controlled by keys which are engaged by us; our engagement with those keys defines us dialectically. As such, computer culture, even in its non-pictorial iterations, is actually visual culture at its very core. If the concept of a technical image seems foreign, one should perhaps attempt to approach it from a semi-Platonic space. Plato argued that truth resided in forms, and that the things we see are not actually the ultimate examples of their form, but rather a particular nested within several potential subsets of that particular form. [8] [9] For instance, you read this essay on a sheet of paper -- that sheet of paper is, yes, a sheet of paper, but it is not the *ultimate* sheet of paper. It is simply an example (i.e. a degraded singular example of a particular form) of a form *paper*. Technical images are the same; this is a critical point. The computer image (or model or database) are not advanced forms of photography -- they are simply different forms of the technical image which function identically in certain modes having

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[8] Flusser's writing, which is often exhilarating, is extremely odd when looked at from an academic perspective. In perhaps pointing to the fact that academic discourse more or less fails to engage with computational visual culture up until the 1980s (there is some engagement in the society of control and visual thinking present in Deleuze in the early 90s, but even here it is extremely crude), Flusser simply refuses to cite or engage with other scholars, though he is certainly deeply influenced by many philosophers and writers. Flusser addresses this in most of the introductions of his books, but even so the effect of such a technical philosophical book having no footnotes or citations is still bizarre. The one exception is a lengthy reference to Plato towards the end of *Into the Universe of the Technical Image*. See pages 54,141-151 of the same book.

[9] Flusser, Vilém. "To Suffer." *Into the Universe of Technical Images*. Minneapolis: U of Minnesota, 2011. 54,141-151. Print.

to do with their root of having been produced by an apparatus, even if those apparatuses vary in complication from the simplest black-box camera to the most complex super computer.

There is sometimes pushback to this kind of language around technical images in the popular imagination - "it's just a picture! Look! Is this a big deal? Is this the end of the world?" As a result, I feel that it is important to outline the significance of thinking about the technical image. We live in a deeply image-based culture which is, and most will agree immediately, also increasingly more complex, disorienting, and confusing. In my mind, such a complex and defining part of our daily lives (the technical image) deserves not only calm and serenity, but an open minded approach which allows us to slowly work through the fact that a *painting* and a computer graphic are different beasts entirely, despite their potential to represent similar pictorial content. That difference can be quickly summarized as the absence of human activity. The traditional image, in which category we must include cave paintings, canvas paintings, sketches, drawings, and so on, all have one thing in common: they are created by a person. That particular commonality adds one key feature: lack of informational reliability.[10] No matter how photorealistic any of these images are, whenever we examine them we must start from the fact that they come from a person -- the artist that creates the image mediates its transference from the world to the canvas (or cave wall, or paper, and so on). The technical image, on the other hand, has this transference take place almost scientifically: through the use of a pre-programmed, reliably repeatable black box. The simplest of these is the camera, but there are many other such apparatuses. The difference plays out

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[10] Flusser. *Into* 51.

into how much faith we can have in each of these images. Traditional images are by necessity merely interpretive: when we look at them, we see someone's take on a particular scene or object. Technical images, due to their scientific precision, are more like looking through a window. When we see a black and white photo on a negative, we are in fact looking at the physical byproduct of light having been exposed on that negative very precisely. As a result, it is much easier to trust the window of the technical image. Part of Flusser's theory is that as technical images spread, and as we become more and more prolific creators of technical images, they begin to shift from windows into screens. Their reliability and endless possibilities start to send us into an imaginative daze. We begin to live in technical images only -- be these pictures, computers programs, databases, or computer models.[11]

In 1970 Alvin Toffler wrote that we lived in a state of "Future Shock," where things changed so quickly that keeping up was difficult.[12] What can we say of 2016? This is all to say that the most complex technical images, those created by machines themselves in ways which only machines could, evade coherence entirely. Case in point, the following map outlining the US strategy in Afghanistan in 2003:

(Image below, from Galloway, The Interface Effect, Page 79)

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[11] Flusser. *Into* 51.

[12] Toffler, Alvin. "The 800th Lifetime." *Future Shock*. New York: Bantam, 1990. 9. Print.

Afghanistan Stability / COIN Dynamics

WORKING DRAFT – V3

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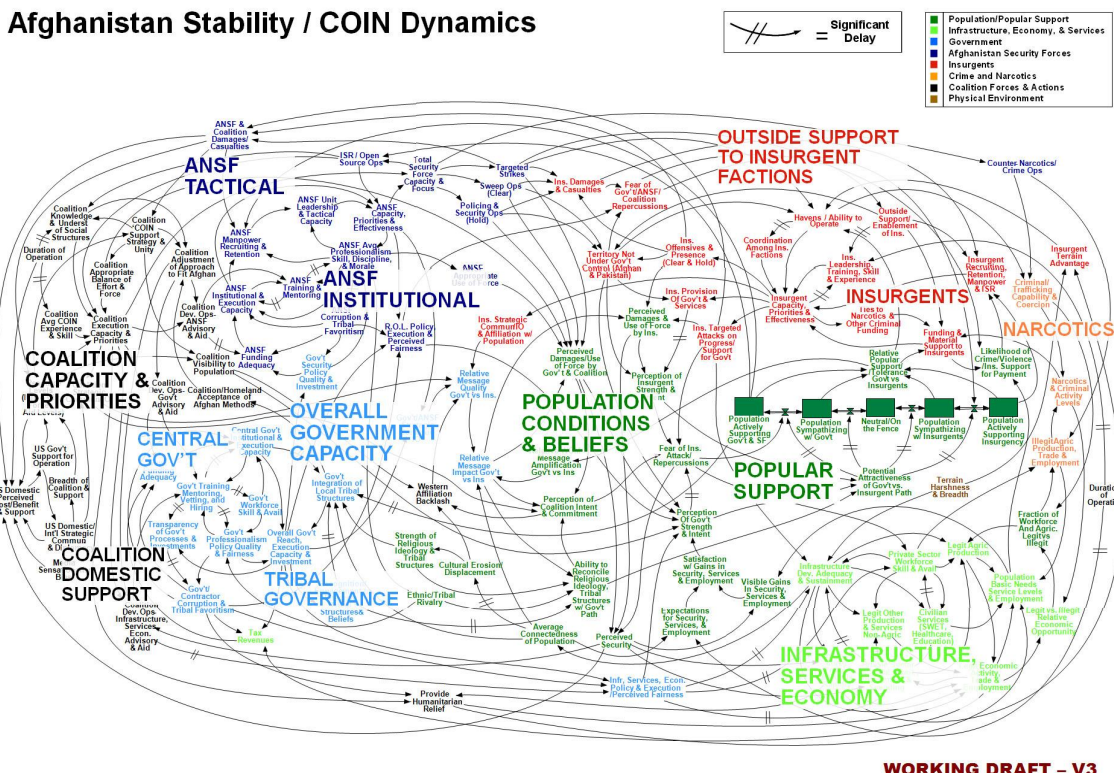
General McChrystal famously declared "When we understand that slide, we'll have won the war." [14] The judgment seems to be quite clear on whether we "lost" or "won" the war... Yet the sheer confusion of the image remains. It expresses, quite poignantly, actually, the fact that we are more than willing to admit total confusion in the face of the sheer and colossal complication created by the power of technical images.[15] Unlike in a simple technical image, say, a photograph, figuration (the idea that the technical image is a "picture" which really "looks" like something) does not play a role in the above

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[13] Galloway. *The Interface* 78.

[14] Galloway. *The Interface* 78.

[15] This map of the internet in Galloway is present next to the Afghanistan PowerPoint displayed in this essay. I found the PowerPoint slide to be more interesting as a technical image, particularly due to McChrystal's quote, which I think explains the mainstream admitted confusion surrounding technical images surprisingly eloquently. More information about representable technical images is available in Galloway, Alexander R. "Are Some Things Unrepresentable?" *The Interface Effect*. Cambridge, UK: Polity, 2012. 78-100. Print.

technical image. Or perhaps it does, but only in a weird, cruel way: the technical image above, in its obtuseness, mirrors our bureaucratic and institutional apparatuses in their creative and exuberant nonsense.

The point is, the technical image above has a purpose quite contrary to "looking like something": its utilitarian purpose is simply to impress vastness and incomprehensibility of the network (we could say apparatus) we call the "the war in Afghanistan." "It is unclear what exactly the slide is meant to convey or indeed if it is meant to convey anything at all... Unlike realism in painting or photography, wherein an increase in technical detail tends to bring a heightened sense of reality (at least in the traditional definition of aesthetic realism that has held sway more or less since the Renaissance), the high level of technical detail visible here overwhelms the human sensorium, attenuating the viewer's sense of reality… effectively neutering its capacity as a vehicle for information."[16] A simplistic response might be to say they look like tangled webs -- though webs don't often contain nodes which themselves are obtuse symbols for vastly complex, themselves likely unrepresentable/possibly incoherent systems, i.e. "Popular Support."

There is a YouTube video created by a sea turtle which eloquently expresses this unworkable, complex technical image. When a diving camera washed ashore in Florida's Key West, a local coast guard picked it up.[17] He eventually found its owner by posting the family pictures found on the camera on various diving forums. Soon, the camera's origin was discovered: Dutch Naval Officer Dick de Bruin who was vacationing in Aruba

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[16] Galloway, Alexander R. *The Interface Effect* 78-80.

[17] Leitner, Florian. "On Robots and Turtles: A Posthuman Perspective on Camera and Image Movement after Michael Snow's La Région Centrale." *Discourse* 35.2 (2013): 263-77. *JSTOR [JSTOR]*. Web. 24 Mar. 2016.

some eleven hundred miles away, lost the camera eighteen months prior.[18] Along the

way, somewhere along Honduras, the camera had an encounter with a leatherback sea

turtle: "The marine reptile appears to have used the traveling camera to shoot a short film,

which Shultz [the Florida Coast Guard] found on the memory card among de Bruin's [the

naval officer's] pictures."[19] The animal must have mistook the device for food and

snatched at it, eventually hitting the release button (the apparatus key): "The clip that the

camera recorded shows how the turtle plays around with it, banging against it, snapping

at it, and keeping it in constant motion. The images that were captured in the process are

rather shaky, as the camera is incessantly performing hectic tilts and pans."[20]

The entire process was automatic from the release of the shutter. Along the

process the shaky and unpredictable footage has no resemblance to human subjectivity,

and yet the video is oddly captivating, having accrued millions of views on YouTube. All

functional steps that happen to the camera are required in order for this video to come

into existence: 1) the camera must be lost, 2) it must be picked up by the turtle, 3) it must

be then found when it washed ashore and finally 4) that video must be posted online. The

apparatus that created this video, then, is not a camera per se, but rather the apparatus of a

global data network, as well as the apparatus (or perhaps, the medium) of the ocean, and

so on, and so forth.[21] Human intention is delinked from these technical images, and yet

they are pregnant with the most fascinating, sublime meaning. These technical images are

pregnant with the presence of a global image network -- the Internet. It cannot be

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[18] Leitner 264.
[19] Leitner 264.
[20] Leitner 264.
[21] Leitner 265.

understood or sympathized with in an anthropomorphized way, because it lacks human intention.

Yet, the video went viral nearly overnight. The marine reptile is barely seen throughout the fifteen-minute video and none of the images that it captures are particularly interesting. Its success on YouTube with a more or less universal (across all age groups and across a variety of nationalities) audience was more linked to its production and the interplay of seemingly unconnected agents than any of the movement on screen. This is understood intuitively – the people watching the film might not be able to verbalize that this is what they find fascinating about it, but that's it: the fact that it was created "by accident" through a complicated interplay of media and networks.

As Leitner eloquently explains, "The sea turtle is an aesthetic object… This renunciation of traditional aesthetics is only possible because of a hybrid network that transgresses nationalities, species, and the divides between organic and nonorganic and between nature and technology. The network consists of a camera and a waterproof case, a sloppy diver, the currents in the Caribbean and the Gulf of Mexico, a sea animal, an altruistic Coast Guard officer, and a global online community."[22] The ocean, along with the Internet, is in fact a sort of *medium* required in order for this video to be produced, much like a negative is required in order to produce a photo. The widespread interest that the video accrues has almost nothing to do with any formalistic or aesthetic portion of the video, but rather with a sublime/structural understanding of how the video was produced, as well as the emblematic nature of the production's fluidity and serendipity. The agents

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[22] Leitner 270.

that acted on the production of the sea turtle's film and brought all of them together is

formless because it is made up of data:

> drawing on the shift from solid to fluid performed by the turtle's film—as fluid inasmuch as they constitute complex systems, and trying to get hold of whoever or whatever determines the behavior of these systems is pointless; there is constantly something slipping through our fingers. This is because the underlying material is formless, a property that not only applies to water but also to data, as Alexander Galloway recently pointed out in connection with attempts to draw maps of the Internet.[23] [24]

In reality, the turtle video is actually not too dissimilar from the way in which certain

human technical images function. The selfie, easily the most emblematic of all modern

modes of network photography, is often produced and interpreted not on strictly aesthetic

means, but rather through the points of shareable data which it contains. Posting a selfie

is about how things look, yes, but it is in fact much more about prostration before the

network and our place within it. In short, we share images not for representational value,

but to tie ourselves into a larger network and what gives us meaning in connection to

particular data points: "Nevertheless, the images that are exchanged on platforms such as

Facebook seem to form part of an aesthetic practice that conceives of them not primarily

as representational objects in their own right but as components of a system whose

autopoiesis is perpetuated through a constant transmitting and receiving of digital

images."[25] Hence the value of a selfie with, say, a famous person – it is a rare occurrence

and therefore something to be shared as highly informational: "on a particular day I ran

into Obama and took a selfie with him." Or a selfie which is shared by many other users,

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[23] This map of the internet in Galloway is present next to the Afghanistan powerpoint displayed in this essay. More information about representable technical images is available in Galloway's The Interface Effect, in the chapter "Are some things Unrepresentable?" pgs. 78-100.

[24] Leitner, Florian. 271

[25] Leitner, Florian. 275

multiplicating its meaning many number of times. Or a selfie taken by a Russian teenager

atop a building. And so I arrive at the fulcrum of my project: my aim is to describe how

the technical image, which is at the very core of our culture today, is in fact a

technologically aided method of thinking (or imagining) which has outstripped our

powers to control it and as a result come to absolutely dominate our lives. Further,

through this domination, the technical image has created a type of visual culture that has

ensnared us silently. Not only are we, in essence, "non-existing" if we refuse to

participate in this global image network but the network and computational visual culture

has evolved and become complex to the point we are often times no longer able to create

meaning within it at all. [26] Rather that meaning is created on a blistering scale by

algorithms which although "dumb" in some sense, are actually able to create things

which begin to confuse us in regards to aesthetic value. A good case in point are Google

Earth Street View images. These are very popular, and quite useful: they are essentially a

series of photos created by cars which drive with full-view cameras perched atop their

roofs. The images created by these cars are often completely uninteresting: a random

street with pedestrians; cars in traffic, etc. Yet here and there certain pictures are picked

up, completely at random, which mirror known aesthetic principles long practiced by

artists, such as in the following example:

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[26] Which, again, encompasses all apparatus-driven human function. Not only photos, but emails, text messages, database driven data activities such as Uber, Seamless, and so on, and so forth.
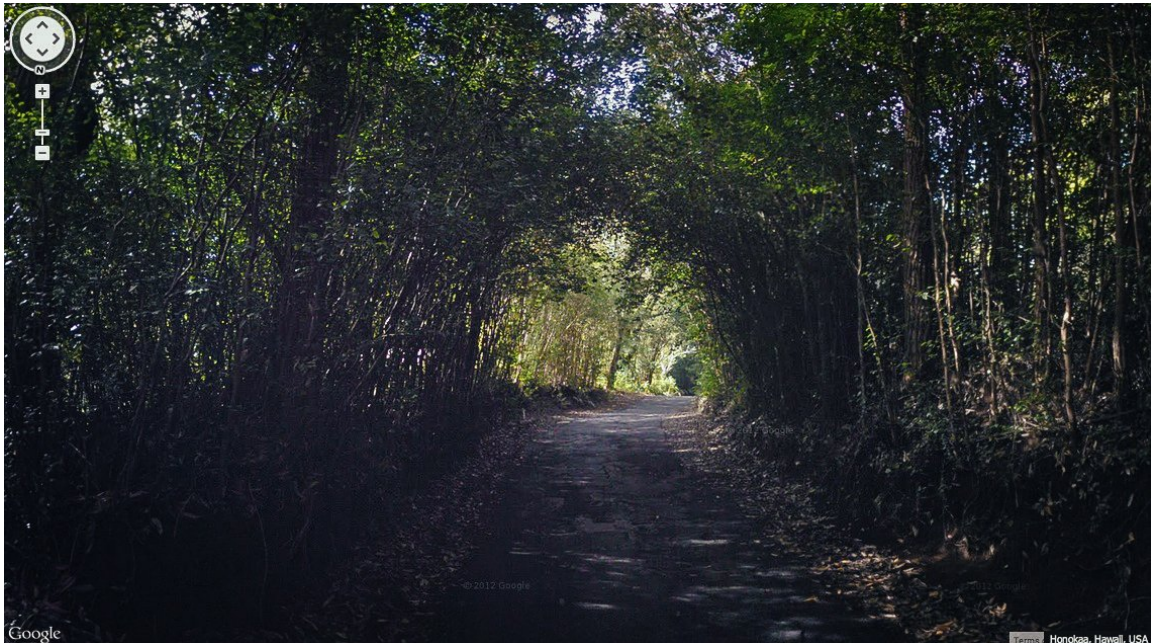
The above image was created by a "dumb" apparatus – it merely took millions of pictures until it arrived at that one.[27] And yet one has a difficult time not aligning the composition, exposure, and narrative inherent in the image according to our long-nurtured aesthetic principles. This might not be so troubling because it is random – literally the idea that a monkey (or machine) taking random pictures will one day take a very beautifully composed masterpiece. Much more troubling is the algorithm based on Google's "Deep Dream" which uses a neural network capable of "machine learning." The Deep Dream system is capable of analyzing particular painter's styles in order to create paintings that mimic it. The following set of images is a scale representing Deep Dream attempting to paint a row of houses in the style of Van Gogh:

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[27] *20 Most Beautiful Google Street View Images EVER!* N.d. *Hifi Public*. Web. 5 Dec. 2015. <http://hifipublic.com/2014/11/26/20-most-beautiful-google-street-view-images-ever/>.

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Although primitive, this neural network has made great strides towards creating realistic, "creative" works of art that, chances are, might pass as man-made in front of all but the most well-trained observers. A researcher with this program writes that their "work offers a path forward to an algorithmic understanding of how humans create and perceive artistic imagery".[29] These examples highlight ways in which domains previously thought to be human are now becoming dominated by machines. Although these example may be scary to some, they pale in comparison to the problems explored by Flusser in the advent of the technical image. For Flusser, the encounter with the apparatus is one that dialectically robotizes man (or woman). The point is not that machines are becoming

[28] *Computers Can Now Paint like Van Gogh and Picasso*. 2015. *Quartz*. Web. 17 Jan. 2016.
<http://qz.com/495614/computers-can-now-paint-like-van-gogh-and-picasso/>.
[29] Murphy, Mike. "Computers Can Now Paint like Van Gogh and Picasso."*Quartz*. N.p., 06 Sept. 2015. Web. 17 Jan. 2016.

more like man, but far more perversely, that the apparatus has made a machine out of man. As a result, the only way in which we are able to create topical, relevant, up-to-date information is by doing it as if we were machines. Hence why it is so easy for computers to mimic our "art forms." Hence why it is so intuitive for a child to understand that the turtle video is interesting due to the way in which it was "made" – outside of any human intention. A nearly infinite variety of bits of meaning and topical information now come from apparatuses that completely excise us – apparatuses that literally have no humans driving them.

But why are technical images so magical to us? Why are we so captivated by them? Why do we feel a need to create them as if by nature? Answers to these questions require an explanation of the entirety of Flusser's conception of information and history, and so will take a while. The quickest way to put it is the following: we went to technical images in order to better express things/events we could not write about or understand, things caught in particles, waves, and modes of movement. These "things" we sought to express are too complicated for words and as a result required the aid of a machine which could capture them. Our use of these machines reconfigured not only our ability to see, but also our ability to understand ourselves without the machine and the technical image (emphasis mine):

> The structure of culture -- and therefore of existence itself -- is undergoing a fundamental change... The magical nature of images must be taken into account when decoding them… It is wrong to look for 'frozen events' in images… Rather [images] replace events by states of things and translate them into scenes. The magical power of images lies in their 'superficial nature', and the dialectic inherent in them… Images are mediations between the world and human beings. Human beings 'ex-ist,' i.e. the world is not immediately accessible to them and therefore images are needed to make it comprehensible. However, as soon as this

happens, images come between the world and human beings. They are supposed to be maps but they turn into screens: instead of representing the world, they obscure it until human beings' lives finally become a function of the images they create.[30] (originally published in *1984*)

By which Flusser means the thrill of creating technical images is such, and so powerful, that it shines a light into a new mode of thinking, one in which images express not only our needs but also our desires. Soon we are caught in a world in which to create images is to express existence itself.

> Human beings cease to decode the images and instead project them, still encoded, into the world 'out there,' which meanwhile itself becomes like an image -- a context of scenes, of states of things. This reversal of the function of the image can be called idolatry; we can observe the process at work in the present day: the technical images currently all around us are in the process of magically restructuring our reality and turning it into a ***'global image scenario'***. (note: the internet as we know it now in 2016) Essentially this is a question of 'amnesia'. Human beings forget they created the images in order to orientate themselves in the world. Since they are no longer able to decode them, their lives become a function of their own images: ***imagination has turned into hallucination.***[31] (published in *1984*)

The problem, then, is that this technologically-aided method of thinking (or visualizing, or "imagi-ning") completely consumes and codifies us, to the point that nothing is relevant which is not image based (or which is not online), including our own perception of ourselves. As a result, the dialectical subject created by the technical image is one who, perhaps in an act of self-defense, denies the power of the technical image in the first place. He might point to a photograph and say "this is an image, is this dangerous?" The correct answer to that question is "Yes, the technical image is dangerous." The technical image, run amok, can erase subjectivity and create a world which is posthuman, that is, a

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[30] Flusser *Towards* 7-8.

[31] Flusser *Towards* 9-10.

world in which that which is truly relevant and truly meaningful is not producible (or

indeed understandable) by people. That is the danger of the technical image: the process

of human intention is at stake. [32]

Technical images inspire us with a particular ethic or spirit. Due to this constant

creation, we easily tire of the mundane and everyday image. We intuitively know that

certain pictures express nothing that has not been seen before. The apparatus calls upon

us to produce technical images that are possible and improbable. Part of the thrill of

photography, which even novice photographers experience, has to do with seeing the

world through the camera for the first time. People innately begin to realize that the

images they produce are not based on a figurative representation, like in the way

renaissance paintings often were, but rather on an innate (if somewhat incomprehensible)

vastness contained in the mechanical method of their production. Which is to say, the

technical image dissolves "subjectivity as such and transfers aesthetic agency from a

human creator subject into a hybrid, dispersed actor network".[33] Put simply: part of what

we appreciate about certain technical images today is simply the way in which they are

the byproduct of a massive, all consuming and seemingly uncontrollable world-network,

of which we are a small particle and out of which we seem to struggle to disentangle

ourselves, and this is based on the way apparatuses work, period. They define us as

creators of 2-dimensional images, images that are free to then travel the world away from

our grasp. If the world out there is made of particles, the camera gives us an easy and

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[32] See Leitner's Sea Turtle essay for the definition of a post-human technical image -- an image created not with any subjectivity rooted in a person, but instead created through a non-anthropomorphic subjectivity spread through technical networks and non-human interfaces. Increasingly, these kinds of images are the ones, which actually express relevant information, and meaning that is topical to our modern data driven world.

[33] Leitner, Florian. 273.

immediate (nearly self-intuitive, when we watch the joy of someone first taking pictures) way of capturing these particles. Put even more simply, and more perversely, technical images are how we communicate not only from person to person, but also in a more devastating and nefarious way: without technical images, we no longer know how we fit in the world, we are no longer able to make sense of the large number of particles which dance in front of our eyes. In fact, Flusser comes to argue that post-technical image we may not fit anywhere at all. Flusser writes that since our digits and our brains are the only requirements to create information through the apparatus, we will eventually be only that: a brain connected to digits connected to machines. But not all is lost: a certain human freedom remains to those who don't desire to be only brains pumping (and watching images) forever. You don't have to watch images all day – there is a way out, which I detail at the end of this thesis. That possibility, one which will likely shock, will be revealed at the end of this paper.

Before that, a short detour: one will enjoy a greater understanding and appreciation of Flusser's theories and scope through a brief understanding of his biography. Although he started as a journalist in Sao Paulo, Flusser eventually became interested in communication, information theory, and the philosophy of photography.[34] Vilem Flusser's scholarly career was international and multilingual. He was born in 1920 to a Jewish family in Prague and escaped the Holocaust in 1940 by fleeing first to London and eventually to Sao Paulo, Brazil. After a bitter disagreement with his father, Flusser left Prague with his girlfriend's family for London. An established member of the community, Flusser's father Gustav was unlikely to budge. Early after his arrival in

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[34] Finger, Anke K., Rainer Guldin, and Gustavo Bernardo. "Migration, Nomadism, Networks." *Vilém Flusser: An Introduction*. Minneapolis: U of Minnesota, 2011. 17. Print.

England, Flusser learned that his immediate family had been sent to concentration camps, including Auschiwitz and Buchenwald.[35] They were all killed there. This left Flusser in a period of extreme depression that was compounded by his move to Brazil.[36] There, Flusser worked at a Czech warehouse for imported goods. In his spare time he wrote to an opinion column in a local Sao Paulo newspaper and submitted articles for philosophy publications. Although depressed over the death of his family, Flusser was happy that he had finally found a life in which he could "work during the day and philosophize through the night."[37] After a few years, he started working in a radio factory, increasing his interest in the philosophy of information and communication. His technical background as well as his many years of self-guided study of philosophy eventually leading to an academic position teaching in the Engineering School of the University of Sao Paulo.[38] This technical background allowed Flusser deep insights into the nature of information and its spread.

Flusser published widely in Portuguese, passing his years with a steady stream of books and newspaper articles. A majority of this early work remains unpublished though it concerns topics such as language philosophy and Brazilian identity.[39] Flusser moved back to Europe in 1973 where he spent a largely reclusive decade while he struggled to understand the technical image and the history of visual culture. The study of information (as well as his personal history in displacement) and its spread led him towards in an interest in the concept of homelessness, not in the physical sense, but in that of those who

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[35] Finger. *An Introduction* 7.

[36] Finger. *An Introduction* 14.

[37] Finger. *An Introduction* 19.

[38] Finger. *An Introduction* 22.

[39] Finger. *An Introduction* 54.

are forced into exile, a group that grew in numbers in the 20th century and which has

become an important political category. By the 1980s, he had finally developed his

mature concept of the camera as the first widely available computational apparatus.

Starting in 1983, with the publication of <u>Towards a Philosophy of Photography</u>, Flusser

became deeply involved in an ambitious project, attempting to conceptualize media

history's rising importance in modern culture.[40] He eventually began to describe a sort of

intense informational homelessness as the quintessential state of man in modern digital

society. Through his study of photography, data, and networks, Flusser is able to predict

the arrival of online services such as Amazon, Google, and YouTube in the early 1980s,

many years before personal computers and home consumer internet were a reality. He

offers a profound observation on the interconnection of media and the way in which

subjects become controlled. Interestingly enough, Flusser was readily adopted in

Germany as a founder of the fledgling discipline of Media Studies, so much so that the

German Federal Cultural Foundation awards a yearly "Vilem Flusser Theory Award" to

media and digital theorists who have distinguished themselves in the mold of Flusser's

thinking.[41] By contrast, the thinker has been virtually unknown in the English speaking

world, though his notoriety has been quickly rising. His books have been translated at an

ever quickening pace. We live in a house punctured with holes, he wrote, a house with

cables which broadcast both in and out, leaving us without any privacy, and hence

without any home. In 1991, he visited the Czech Republic for the first time since leaving

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[40] Finger. *An Introduction.* Xxiii.

[41] Marburger, Marcel René. "Archive." *Vilém Flusser Theory Award 2011.* Federal Cultural Foundation, 31 July 2011. Web. 29 Mar. 2016. <https://transmediale.de/node/12944>.

as a teenager. He died shortly thereafter in a horrific car accident. His body rests in the

New Jewish Cemetery in the city of his birth.[42]

I am deeply drawn to Flusser because I believe that he expresses, unlike any other

writer I have ever encountered, the tenuous position that we find ourselves in as

consumers and producers stuck in our current visual culture. It is to my great dismay that

In many classes I have read things that blatantly and completely ignore this modern state.

Rather than prepare us for an increasingly dangerous and more complex

visual/computational landscape, I've found that the curriculum actually strives to give us

thinking from a previous era -- from an era in which linearity and causality, rather than

particles and energy, ruled. Particularly disappointing has been the way in which many

students, and unfortunately many professors, fail to understand the way in which

aesthetic regimens which guide our taste and culture are fundamentally class based and

therefore determined, rather than real.

And yet most class discussions completely ignore this fact. Students are allowed

to pontificate on paintings, photographs, films, books, as if their mode of thinking or their

thoughts are provenant from their intellectual curiosity or training. Aesthetic modes of

reading art (and the world) are completely culturally codified and socially installed on

students. Art (images) do not exist in a vacuum and are not readable outside of a

particular culture, no matter how broad this particular artifact is. Works of art require an

aesthetic judgment that meets it halfway. Yet students and faculty do not behave as if this

were the case – they take their taste (intrinsically connected to their class) as proof of

their good nature, of their validity and thoughtfulness. What is praised and highly

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[42] Finger, Anke K., Rainer Guldin, and Gustavo Bernardo. *An Introduction.* 26.

regarded in our classes is unfortunately a carefully camouflaged form of obedience. The

obedient, who through their insistence and tenacity nod so much to the point that they

forget and only agree, are highly regarded in our circles. The obedient student is praised

for his appreciation of centuries-old artifacts, artifacts that are derivative of our culture. A

caveperson encountering a painting would likely not have an aesthetic judgment induced

from it. There is little appreciation to the culturally induced aesthetic judgment. But these

students, who in school have been shielded from harm through their obedience, will one

day be face to face with a blistering, violent world in which valuable information is

created not by obedience and acceptance, but by vision and the apparatus[43]. This is to

say: our school is stuck in the past, and Flusser speaks to the future.

Flusser's global image network describes data-driven mediation through images,

and how this mediation comes our functionary qualities. Images are two dimensional and

therefore appear almost magical. Hence they do not capture causality but rather suggest

scenes and relationships between objects caught within it. All of these are simply

"floating" objects which suggest one another. In "life," the cock's crowing is triggered by

the morning – there is a linear relationship which when written about only goes one way.

In a painting there is no causality -- the cock's crowing denotes the morning in the same

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[43] This is not a new problem: "A key question [for Baldessari] was how to contend with the sham of taste—
and artistic subjectivity more generally—as a refuge or antidote to the crass engines of the market." (Kelsey
746). In the 1960s and 1970s much of the American art establishment was celebrating New York school
paintings as a national triumph of individual expression, while a young generation of artists were
developing strategies for disavowing subjectivity and match the operating logic of capitalism:
"a young generation of artists was developing new strategies for disavowing subjectivity. These strategies
took opposing positions on the role of chance. One strategy consisted of miming the strict logic of
administrative calculation. Benjamin Buchloh has argued that conceptual art engaged in such mimesis to
eradicate all vestiges of traditional aesthetic experience and to refuse any compensatory cooperation with
industrial forces. According to this view, conceptual artists, in an act of disenchantment, reproduced the
operating logic of capitalist society instead of purporting to offer a sanctuary of aesthetic delight." I would
venture say that we somehow have regressed, or at least forgotten the lessons from these young artists. I
would also say that the mechanistic, deterministic logic being expressed by these artists was not entirely
that of capitalism alone, but also the utilitarian and machine like logic of the apparatus and its production.

way that the reverse is true, because the painting is a scene that contains these related

objects and events.[44] As a result, images (technical or otherwise) live in a world of

"eternal return of the same," of being stuck and of being in awe.[45] As people begin to live

in a world of images, they turn into "reality" and become confused: they begin to treat the

world as it composed of scenes that are "imagined" in the sense that they function as

images.[46] Nowadays people live not in a causal relation, but in a "global image network."

Certain things which are believed in the internet rupture through the fabric of our lives

with intense violence.

The global-image network creates a user (in Flusser's terms, a functionary) who is

him/herself computational by nature. The functionary is dialectically defined through

contact with the apparatus:

> Technical images are produced by apparatuses. In saying this, one
> presumes the typical characteristic of apparatus as such -- in a
> simplified, embryonic form -- are also contained within the camera
> and can be derived from it…" The camera, as a prototype of the
> apparatuses that have become so decisive for the present and
> immediate future, provides an appropriate starting point for a
> general analysis of apparatus -- those apparatuses that, on the one
> hand, assumed gigantic size, threatening to disappear from our
> field of vision… and, on the other, shrivel up, becoming
> microscopic in size so as to totally escape our grasp…
>
> Is a camera a tool like a needle or a pair of scissors? Tools in the
> usual sense tear objects from the natural world in order to bring
> them to the place (produce them) where the human being is. In this
> process they change the form of these objects: they imprint a new,
> intentional form onto them. They "inform" them: the object
> acquires an unnatural; an improbable form; ***it becomes cultural.***[47]

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[44] Flusser. *Towards a Philosophy of Photography* 17.
[45] See *Into the Universe of the Technical Image* 59.
[46] Flusser. *Into the Universe* 37.
[47] Flusser. *Towards a Philosophy of Photography* 21.

The technical image (of which the photograph is the most defining example), although sometimes pictorial, is essentially mostly mediated data. This mediation is a form of contact between an apparatus-defined functionary and the particles that the apparatus captures. Everyone knows that when they look at a photograph they aren't seeing the *real thing* pictured, but rather an object created as the chemical byproduct of a machine whose sole purpose is to create that object. The apparatuses that produce technical images call upon us to act as its users/functionaries in an almost slavish way. Our job becomes pressing the shutter (or digits of a computer) in order to create highly segmented data points. As a result, the technical image begins to become a more clearly central part of computational society: in an information world where data and information is being created at an absurd pace, the creation of the image through the binary process of pressing and releasing the shutter is the only way in which we can feel that we create meaning ourselves, it is the only way in which we feel relevant. This creation takes place in a, yes, global, but in a sense to a culture that is short lived and brief, one that is data-defined, one that springs not from culturally-determined biases but from ethics which are suggested by the way in which the apparatus works and the way in which the apparatus defines us dialectically. The biases, for instance, which lead certain works of art to rise to prominence within a particular cultural and socio-economic class of people, such as the mostly very narrowly circumscribed tendencies of the upper class. Yet what is the meaning of this meaning we create in this data-driven global image network? What is its purpose? Does it fulfill us? Does it create or shine a light in questions that are profound?

Why is it that, at least in the "developed world", people with free time and without worry choose to work, associate with or leisure around the image? Why are

artists the hippest members of our society? Why is "everyone an artist" nowadays? Why

is it that meaning has been distilled down to the "meme" to such an aggressive degree?

Why is it that entire conversations (rather, scenes and episodes) are suggested by the use

of a familiar image and a line of text that remixes it? People who share and create memes

are remixing all of the possible variations on the information contained within a single

image, and thus mining for further information within an image that seemed as if it was

already spent. This search that users go on, this granular remixing of all particular

readings of a certain image strikes at the very core of the technical image: it is primarily

data, and only pictorial in a derivative sense.

There are certain artists who speak directly to this data-driven, machine mediated

nature of modern visual culture. This is the reason why memes are at the center of our

modern culture: meme-culture is the ultimate granulation of the data-narrative pregnant

within the technical image. Memes are images, videos, or turns of phrase which are

rapidly disseminated through online communities. They often include a reference to a

particular scene or context, and often include a strong emphasis of the applicability of the

referenced scene/context in other places. One common meme practice includes particular

images which denote a certain feeling: one possible example is "Success kid," a meme

which involved a baby clenching his fist as if celebrating something positive. There are

literally thousands upon thousands of remixed versions of this image which repurpose it

for particular events related to individual internet users. Through the meme, internet users

are able to mine images for more and more meaning and context, until the point in which

all of the contexts and possibilities within the particular scene/context denoted in the

meme are finally expressed. This is machine-like behavior: it is as if internet users were[49]

working, in a totally decentralized and unplanned way, to create a database of the entirety

of possibilities having to do with "success" as denoted by this baby.

Through the meme, one image can express an absurd number of situations,

scenes, and contexts. This is essentially the way in which the technical image, and

telematics in particular, work for Flusser. The technical image is an image which contains

within it a variety of contexts, and those contexts can be celebrated by users as they

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[49] McCoral, Greg. "Success Kid." *Know Your Meme News*. N.p., 15 Aug. 2007. Web. 1 May 2016.

remix with each other. An artist that represents this apparatus driven remixing better than

anyone is John Baldessari:

Each hat is, in a sense, the same, but, in a very real and total sense, completely different.

What is important is not the content of the photos, but rather the ethic expressed by the

continuous creation of all of these different photos -- they express the work of the

apparatus in its variations. In fact, each photo is unique and granular, despite being nearly

identical, and for all intents and purpose, almost entirely meaningless. The group

expresses the central tenet of Flusser's thinking: that photos mean not visually, but by the

way in which they define us as readers and capturers of data. In a description of

Baldessari's mode of creation, Robin Kelsey writes the following:

> The aim of the artist was not to be to instruct the viewer but to give viewers information. Whether the viewer understands this information is incidental to the artist; he cannot foresee the understanding of all his viewers. He would follow his predetermined premise to its conclusion avoiding subjectivity. Chance, taste or unconsciously remembered forms would play no part in the outcome. The serial artist does not attempt to produce a beautiful or mysterious object but functions merely as a clerk cataloging the results of his premise.[51]

This makes Baldessari one of the most Flusserian artists. One of his key goals as an artist

is to expose the data-driven nature of our current image cultures. Further, Baldessari,

under the influence of Sol LeWitt, attempts to make himself into a functionary par

[50] Baldessari, John. *Portrait: Artist's Identity Hidden With Various Hats*. 1974. LACMA, Los Angeles. *Lacma.org*. Web. 18 Mar. 2016. <http://collections.lacma.org/node/219512>.

[51] Kelsey, Robin. "Playing Hooky/Simulating Work: The Random Generation of John Baldessari." *Critical Inquiry* 38.4, Agency and Automatism: Photography as Art Since the Sixties, Edited by Diarmud Costello, Margaret Iversen, and Joel Snyder (2012): 746-75. *JSTOR*. Web. 18 Feb. 2016.

excellence, a programmed robotic creator who simply follows rules towards their

ultimate meaning:

> …the artist as clerk carries out a stiff calculus, accumulating
> results that follow inexorably from chosen premises. LeWitt
> imagines the artist as a kind of bureaucratic cog churning out
> mechanically determined outcomes. 'The idea,' he said elsewhere,
> 'becomes a machine that makes the art.' Chance plays no part in
> the process.'[52]

Sol LeWitt is a minimalist artist who essentially created rules that then were transferred

into either drawings or sculptures, prints, etc. "The idea," in LeWitt's words, is how

LeWitt created. He essentially created rules which were then followed to their completion

resulting in some highly-determined, causal object.[53] "The idea," in our current world and

study, is not an abstract set of rules, but it is also programmed. "The idea" for us is the

apparatus – it is with the apparatus that we think. The apparatus is also programmed – it

contains certain rules that accept certain inputs and spit out certain outputs, all according

to a deterministic, causal program. What both Baldessari and LeWitt understood

intuitively is that modernity is algorithmic -- meaning is created through the carrying out

of particular programs or games. As a result, both LeWitt and Baldessari mimic or

recreate the modes of the apparatus, each in their particular way. Note that both are keen

to reference themselves as robots; as being cogs and parts of a program that they are

simply following along. This is not further from our own existence in a global-image

network: we are cogs who accept and spit out images according to (our own as well as

other) programs. The images that we accept and spit out include photographs, databases,

models, and essays, such as the one you are reading. Now, the global-image network is

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[52] Kelsey 747.

exceedingly complicated, far more complicated than the already extremely complicated camera and computer. As a result, there are certain types of meta-level programming far beyond our ability to influence. And, as already put forth, the apparatus itself programs us as functionary users upon our encounter. A large part of whether we are able to escape this world of technical images and their grasp comes down to whether or not we can program ourselves. That is, whether or not we are able to, like Baldessari and LeWitt, to make ourselves into cogs which still know some sort of humanity.

One more extremely instructive work that explains the way in which apparatuses produce, is LeWitt's "Sentences on Conceptual Art."[54] Part of LeWitt's work was to set-up circumstances and rules which then were carried out into a particular object much like the apparatus is its own program which once activated creates the technical image. So that in this sense the artist, now dictated by the necessity for an audience and by the direct monetary value of his work, creates a set of rules after which he or she becomes the clerk of what those rules produced. Sentence 29 of LeWitt's "Sentences on Conceptual Art" states the following: "The process is mechanical and should not be tampered with. It should run its course."[55] In a way, LeWitt intuitively understood the method of creation nascent in his own time: that of a program which carries out its instructions until meaning is created. Through the apparatus, we are all made artists like Baldessari and LeWitt. Whether or not we know it is another question; whether or not we can program ourselves free and away from the tightening grip of these apparatuses and the world they create is yet another.

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[54] Sol LeWitt. *Sentences on Conceptual Art. Altz.* N.p., May 1969. Web. 18 Feb. 2016. <http://www.altx.com/vizarts/conceptual.html>.
[55] Sol LeWitt. *Sentences*

Each of the Baldessari photos is its own set of data, and hence each image is its own remix on the concept, the concept of a man holding a hat over his face. And yet, taking a step back, we see that each picture only gains total meaning when put next to others. All pictures only gain total meaning as a set, a set which in reality has meaninglessness at its very core: it's a picture of a man holding a hat to his face. How many million variations exist? At least as many as there are men and hats, and possibly as many as all of the combinations. In getting entangled and marred in the world of the technical images, we are all become artists; we have all become remix experts. We have all become our very own versions of John Baldessari, and yet are we any different from one another insofar as we are functionaries defined by a decentralized apparatus? What kind of artist is "created" by a machine? What kind of artist is the same as all the others? Why are we so driven by this desire to get to the bottom of all possibilities of the technical image in itself?

It's hard not to envision a world like the one portrayed in the film <u>Wall-E</u>, in which people spend most of their lives confined to their chairs in entertainment consoles. One assumes that from the console, these characters fulfill all their needs, and that any incidental problem is fixed by a robot servant of some sort. We might one day be the same way: In the telematic society, that is the faux-utopian end-point of Flusser's visual culture world, we find ourselves in "a situation in which everyone contemplates images, whether it be to receive, to change, or to forward them on, and in which the cycle of the economy and the process of production takes place behind people's backs," performed by robots.[56] Not everything is perfect, however, as the trade off for this feverish dream of

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[56] Flusser. *Into the Universe* 143.

constant exchange of images is not only the disappearance of our subjectivity, but also

our transformation into a controlled species:

> The scenario, the fable, I propose here is this: <u>people will sit in separate cells, playing with their fingertips on keyboards, staring at tiny screens, receiving, changing, and sending images. Behind their backs, robots will bring them things to maintain and reproduce their derelict bodies. People will be in contact with one another through their fingertips and so form a dialogical net, a global superbrain, whose function will be to calculate and compute improbable situations into pictures, to bring information, catastrophes about.</u> Artificial intelligences will also be in dialogue with human beings, connected through cables and similar nerve strands. In terms of function, then, it will be meaningless to try to distinguish between natural and artificial intelligences (between primate brains and secondary brains). The whole thing will function as a cybernetically controlled system that cannot be divided into constituent elements: a black box. The prevailing state of mind will be reminiscent of the one we experience in our creative moments, the experience of being out of oneself, of adventure, of orgasm.[57]

Technical images, and telematics, are our attempt to overcome death through

information, despite the potential dehumanizing costs. Telematics are how Flusser sees

the endpoint of the global-image network. Telematics are how we will attempt to make

the best out of what in the end amounts to little more than enslavement to the image and

the machines that create it.

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[57] Flusser. *Into the Universe* 161.

Flusser's Conceptions of History, Communication, and Culture

The most important contribution Flusser made was his description of the universe of technical images. But in order to understand what is meant by the universe of technical images, one must first understand the larger scope of Flusser's view of information and history in general. Flusser defines a variety of terms which although familiar sounding, have a very specific definition within his framework of information and subjectivity. This can be somewhat tiresome, but it is worth the effort, as his framework allows for profound insights into the nature of images and visual culture. The simplest way to sum his project is to describe it as: 1) a history of culture informed by a specific definition of information (and also how abstracted this information is from our experience); 2) the apparatuses that create that information; 3) the human relations created by those apparatuses; 4) and the second law of thermodynamics. That is: the universe tends towards disinformation:

> The species Homo sapiens, life on earth, the earth itself will finally follow the world's general tendency to lose information and be dissolved (second law of thermodynamics). And such information decay is more fundamental than information production because information is produced through improbable accidents and decay occurs through probable accidents.[58]

For Flusser, human history consists of the arrival at further abstractions into media in order to make sense of the world through information. When this world becomes too intense or complex to be understood a system is produced that takes the previous into consideration but more succinctly or effectively arrives at random possibilities. Technical images are the final step of these continuous abstractions. Technical images are so

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[58] Flusser. *Into the Universe* 89.

abstracted from our experience that we are in fact almost totally alienated from producing

with them: most of the work is done by the apparatus, which relegates us as functionaries.

Our function is to create informed objects, objects which allow us to resist the second law

of thermodynamics:

> Taken as a system, nature is one in which information tends
> progressively to disintegrate according to the second principle of
> thermodynamics. Man opposes this natural tendency towards
> entropy not only by acquiring, storing and transmitting
> information, but also (and in this he differs from all other
> organisms) by intentionally producing information. This
> specifically human, anti-natural faculty is "spirit," and it results in
> "culture," that is, in objects which have improbable forms, in
> "informed objects."[59]

The second law of thermodynamics is a cornerstone of Flusser's thinking. The law states

that the universe tends towards a state of entropy. Essentially, whenever heat is

transferred between objects, some of it dissipates, or is lost. As that happens there is an

increase in entropy ("randomness") and a move towards further homogeneity of the

universe: "The second law of thermodynamics suggests that the emerging particle

universe tends toward an increasingly probable situation, toward disinformation, that is,

to a steadily more even distribution of particles, until form is finally lost altogether."[60]

A simple way of thinking about this problem is picturing an ink droplet

dissipating through a cup of water: that's simply the most likely statistical scenario, that

the particles of the droplet would go in random directions rather than towards a central,

unified position. Another way of thinking about it considering a room which is very

neatly organized: if anything is moved it is likely that it will be put out of place. A room

which is highly disorganized will probably not change at all if a random object is moved

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[59] Flusser. *Into the Universe* 119.

[60] Flusser. *Into the Universe* 17.

in a random direction: it will likely stay a mess. As a result, the most likely scenario for

the universe is one of total homogeneity, in which particles are spread equally throughout

the universe. In the lexicon in the back of "Towards a Philosophy of Photography,"

Flusser defines entropy as "the tendency towards increasingly probable configurations."[61]

Entropy is guaranteed, and it's essentially informational death. It is coming for us. The

second law of thermodynamics "suggests that the emerging particle universe tends

toward an increasingly probable situation, toward disinformation, that is, to a steadily

more even distribution of particles, until form is naturally lost altogether".[62] This is to say

that, without intervention, heat tends to dissipate between objects and spaces, ultimately

(and inevitably) leading to a world of complete sameness. This infinitely probable state is

one of no information, and hence one without humanity. Heat death is a state of complete

informational sameness, where everything is a soup spread throughout every space: "The

last stage, heat death, is a probability bordering on the inevitable, and this stage can be

calculated in advance with a probability bordering on certainty." Probability is what

connects information, the apparatus, and the functionary, and it is where a breach for

intention (and hence humanity) opens up in the most desperate way. We create

information with the apparatus, and hence open up a space in which we cannot only

express our will against entropy, but also our desire to connect beyond what is

informationless and filled with sameness. With the apparatus, not only do we abstract and

search for who we are in a relentless, particle-filled, data-driven universe, but we also

reach out, we touch from a distance**:**

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[61] Flusser. *Towards a Philosophy* 83.

[62] Flusser. *Into the Universe* 17.

> If one interprets the negentropic tendency of human communication
> instead of trying to explain it, then it appears in a different light. In this
> case, the accumulation of information is not seen as a process that is
> statistically improbable but possible. Rather, it is seen as a human
> intention— not as the result of accident and necessity, but of freedom. The
> storage of acquired information is not an exception to the law of
> thermodynamics (such as in information sciences), but rather, it is the
> perverse intention of a human being condemned to death.[63]

A homogenous universe is one in which particles are spread equally throughout all spaces -- it is by definition a non-informational universe. Flusser would put that things have not been "in--formed," they are the same: "the cosmos is, for us quite spontaneously, an apparatus which contains an original piece of information within its input ("the big bang"), and which is programmed necessarily to realize all of this information by chance, and thus exhaust it ("thermic death")."[64] There can be no history if the system is homogeneous, therefore this state is both post and pre-historic. A final state of entropy is guaranteed. As a result, we are given a way to fight this non-informational world of our certain death. The way in which we fight against it is by informing objects. Informing objects is the ultimate human labor:

> Tools as such are objects which remove other objects from nature
> to put them where we are - in order to produce them. In doing so,
> They change the original form of those objects, impose a new form
> on them; in other words, tools inform objects. The removed objects
> thus acquire an anti-natural, improbable form, and they become
> cultural objects. This productive and informative action is called
> "to work," and its result is called "a work." Some works, such as
> apples, for example, have been produced without having been very
> much informed. Other works, such as shoes, for example, have
> been highly informed in the course of their production: their form
> is highly improbable to animal skins (leather). So, scissors which
> remove apples from trees are tools which inform very little,
> because apples on a plate look very much like apples on a tree; on
> the other hand, needles which remove leather shoes from animal

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[63] Flusser, Vilém, and Andreas Ströhl. "What Is Communication." *Writings*. Minneapolis: U of Minnesota, 2002. 6. Print.

[64] Flusser. *Towards a Philosophy* 56.

> skins are tools which inform very much. Is it thus true that the photographic camera is a kind of needle simply because photographs carry very much information?[65]

This is how the camera and computer come together: despite their differences, the photographic image and computing were actually always joined at the hip. Producing technical images (that is, images created by a machine or apparatus) is primarily a computational process: it involves a user ("functionary") pressing keys in order to puncture particles out of space. The place from which the functionary punctures these particles is many times over alienated, and many times over abstracted from his own subjectivity. But where did that subjectivity start for Flusser? Was there a period of happy triumphant human spirit? This is hardly the case. Flusser summarizes the history of human culture and communication as a series of abstractions and alienations. As a result, the place in which we find ourselves is the most deeply alienated and most abstracted: we have taken several steps away from an immediate connection to the world into a place in which we probe for meaning with machines through the sorting of particles, particles which collide against each other in increasingly random ways, eventually into oblivion.

Flusser abstracts a time during which people live in a state of nature in a similar tradition to Rousseau, Hobbes and Locke. The state of nature is a period during which people have no contact with "information" per se. That is to say, they behave in purely instinctual and unmediated manners -- there is nothing in between them and nature -- no laws, no tools, no conflict other than the immediate danger posed by the physical world. This is the first distinct era of human development and the first step/dimensions of human

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[65] Flusser. *Towards a Philosophy of Photography* 16.

experience.[66] From here, Flusser develops each of the steps that lead towards the

technical image, the apparatus, the functionary, and the modern information society that

we live in today. Each step in the development of information towards today is called a

further "abstraction" from our original existence. Each abstraction, as a result, takes us

further away from the state of nature, while at the same time taking us deeper into a mode

of thinking which allows for a particular type of probing, one which, it seems, allows us

to inform in different ways, even if these ways are more and more tenuous. By inform is

meant gathering within the bounds of a particular abstraction. Flusser often uses the roots

of words as key parts of his argument. Take, for example, his exploration of the roots of

apparatus:

> The Latinate term ,"apparatus" stems from the verb "apparare," which is "to prepare." Latin also contains the verb "praeparare," however; the difference is one of prefixes: "ad" ancf "prae." The most available translation for "apparare" in English would be "to make ready." In this sense, an apparatus would be an object which makes itself ready for something, while a "preparation" would be an object which patiently waits for something. The camera makes itself ready to take pictures, tries to ambush them, is on the lurk for them. This Iying-in-wait for something, this predatory character of the apparatus, must be understood in our attempt to define "apparatus" etymologically. (TAPOP 15).

The same sort of explanation is possible in the realm of the word "inform." To

inform is not only to make information available, but also to gather in an abstract

realm disparate particles that once brought together create new possibilities. The

production of these cultural possibilities is the realm of freedom for Flusser: it is

the realm in which we can fight out mechanization in order to express both our

humanity and need to communicate, but it is also a place in which we can

"sabotage" the apparatus towards showing its inherent machine-like existence.

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[66] Schaefer, Peter. "New Media and Society." *Vilem Flusser's Philosophy of New Media History* 13.8 (n.d.): 1389-395. Print.

With this sabotage we are able to de-humanize the growing informational

apparatus which threatens to out-human us with its incessant and ever more

confusing number of creations.

Each of these progressive inventions alienates us from the world (pure

existence/lack of subjectivity) while along the way losing a "dimension." It is also called

an alienation or mediation from that original experience.[67] By losing a dimension it is

meant that each progressive mode of mediation, although more focused and perhaps able

to contain denser information, is also more compact and directed in its storage

mechanism/media, and hence in its mediative/transformative power. This is to say, the

traditional picture can show you a wolf, but a cave wall cannot quite tell you a

complicated story with much nuance. A text might tell you a story with nuance, but it is

dependent on a linear and thus more abstract mode of mediation. The computer might

show you a story of unimaginable complexity, including data points from the beginning

of time. Yet how abstracted is the computer? What kind of images does it tell and how do

they relate to our original stance as unmediated beings? In short -- the more abstract we

get, the more can be contained within the media we devise. And yet where do we find

ourselves as we tumble into abstractions?

The levels of abstraction that lead to today are as follows. First, the most primitive

humans, before advanced language, experienced the world, strictly as concrete and direct

stimulus. They are "Animals and "primitive" people are immersed in an animate world, a

four-dimensional space-time continuum of animals and primitive peoples. It is the level

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[67] Flusser. *Into the Universe* 8.

of concrete experience."[68] They have no capability for abstraction of information and to extrapolate on concepts. Flusser calls this first level of information, that of the state of nature, a space of unmediated experience. Every stimulus or event is seen as some sort of direct, unfiltered contact. There is mystical thinking, magical thinking, or community other than in an animalistic sense. This is a world of many "dimensions," insofar as nothing is really strange and the only sort of human action is response or instinct. What happens next defines Flusser's study.

Next, imbued with an innate ability to communicate and overwhelmed by the "realness" of their experience, some humans begin to strike for means of mediation in order to make sense of their experience. They first begin to shape tools and materials in the world around them: "The kinds of human beings that preceded us (approximately two million to forty thousand years ago) stood as subjects facing an objective situation, a three-dimensional situation comprising graspable objects. This is the level of grasping and shaping, characterized by objects such as stone blades and carved figures.".[69] This primitive human begins to capture materials from the outer world and mimic their own movements through tools: "Machines are simulated organs of the body. The lever, for example, is an extended arm. It increases the ability of the arm to lift and ignores all the other functions the arm has. It is more 'stupid' than the arm, but it therefore reaches further and lifts heavier loads"[70] [71]

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[68] Flusser. *Into the Universe* 6.

[69] Flusser. *Into the Universe* 6.

[70] TPOP gives a brilliant, concise definition of the concept of the tool in Flusser's thinking: "A tool is a simulation of an organ of the body in the service of work… and work is the activity which produces and informs objects." For example, Flusser finds a pair of sneakers is a highly pregnant informational object, built by a collection of tools and modes of thinking which is slowly spent as we wear said sneakers. The concept of simulation and tools becomes much scarier as we approach the world of technical images and apparatuses. Whereas a tool mimics and ultimately replaces our arm (the lever) or the movement of the arm

The primary way in which they do this is by painting or etching on the walls of caves. But cave paintings have a non-linear, eternal recurrence nature to them. A cave painting showing a fire, a wolf, a few people, and a tree can be read in a multitude of ways, some of them mundane, some of them mystical, neither more right or wrong than the other. One might look at the cave painting and decide that the wolf should be looked at 3 or 4 times for the story to come together. One might decide the wolf is already dead. Neither wrong. So the cave painting does allow previously unmediated humans to use a surface upon which to reflect, that is, upon which to abstract and mediate themselves as a way of understanding themselves and their world. An animal in the forest that might pose a threat, it exists according to its location and its actual presence. A sculpture of that animal (an abstracted, mediated version of the animal), can communicate and point us to its existence, as human mediated shadow of the actual animal, reduced to three dimensions, that of length, width and height. Traditional images such as cave paintings, further reduce the dimensions of communication to two: length and width, allowing us to express more, but further removed from what the animal actually "was." In this way a cave painting could represent an object out in the concrete world as a guide, as a map. But the map is confusing. Just how do we read these pictorial involvements? Just what were these early humans searching for in their drawings? These cave paintings are what give rise to hieroglyphs. The traditional image, for instance, is a "two-dimensional mediation zone between [the subject] and its environment".[72] This mediation, a realm of magic and eternal recurrence, is also a mode of alienation, in that it allows early humans

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(the steam engine), the apparatus mimics and replaces vision and intelligence itself. Before, we were thinkers, now, apparatuses think for us while we peer through them.

[71] Flusser. *The Shape of Things* 51.

[72] Flusser. *Into 6.*

to explain themselves, but only in so far as they remove themselves from the environment which they were trying to explain.

In the next phase, when this eternal recurrence and elusiveness of the cave painting becomes too overwhelming, another abstraction occurs: someone begins to place the pictorial symbols in order, creating a primitive version of linear writing. The most basic example of this would be Egyptian hieroglyphics. Linear writing causes a further level of abstraction and mediation, taking us one step further from our original existence. Linear writing introduces a brand new concept: that of causality. This is "a zone to which human beings owe most of their insights" (Into the Universe, 7). Putting things in order finally allows humans not only to mirror their experience through mediation, but also to get farther and farther away from merely descriptive means of mediation. In losing the dimension of the image, writing allows humans to go beyond the wall, beyond the pictorial. If the statue was once removed, and the painting once more, then writing is thrice removed from the original. Yet writing can go so much further: unlike with the pictorial, the early human writer is no longer tied to concepts that require the two dimensions of the wall. The early human writer has stepped down another level of abstraction, another level of alienation: he is now in a one-dimensional (backwards and forwards) system of information, linear writing. This ability to go in one direction allows the early human writer to probe depths completely unavailable to the drawer. This is a momentous occasion: the birth of history, and the birth of technology. The early writer uses writing in order to make sense of the increasingly complicated cave paintings, but is only able to do so by losing a dimension and by getting further away from them.

Keep in mind that this is a fall by definition: once writing is invented, there is no going back. Just like the invention of cave paintings created a subject which was a drawer, the creation of writing creates a writer: someone who thinks linearly, someone who can abstract away from mere occurrences, someone who can "think." People created writing, and in doing so created a space (or more precisely, a medium) into which they could abstract and therefore have a linear, causal consciousness. For Flusser, nothing from before the creation of linear writing can be truly remembered, first because it's not clear that there was a developed concept of causality prior to writing. As a result, nothing from before the invention of linear writing actually "happened," it "merely occurred" in an unexplainable way. This is similar to the way in which very young children experience the world: they don't yet have a steady consciousness which allows them to abstract causality. As a result, children under a certain age only have two modes of existence: happy and content, or utter, sheer terror. That's because these children don't really understand what is happening, but rather feel it as a horrifying, unexplainable and potentially fatal event. It must have been much the same to primitive, pre-literate humans. The abstraction of writing and the alienation from our experience is what allowed us to explain how things happen, it is what allowed us to look deeper within ourselves, even if only in an alienated, abstract space. It is the birth of history, and as history progressed writing became more and more convoluted, better able to explain causality and abstract concepts, but farther and farther from something that was immediately and directly connected to us. We became confused because of the sheer, terrifying number of sentences, books, and articles. There is a toll on the subject to this continuing investment in linear writing. Writing takes humans into a world where many advancements are

possible: communication from a distance, scientific texts, the gradual compounding of information, the spread and sharing of knowledge. As a result, the level of abstraction (the directions in which they probe and the abstract concepts which they find) becomes increasingly more overwhelming. People become so far removed from their original, unmediated lives that writing becomes their world. People's every moment and care becomes entangled in a severely abstracted, heavily mediated world of linear concepts.

Finally, as a result, humans began to look for a way of making sense of increasingly complicated and abstracted linear texts. This led to the final fall from existence, a final embrace of abstraction, and the final step in mediation: the invention of the apparatus, the first example of which is the camera. When texts cease making sense, the subject alienates himself one last time by losing linearity and condensing into particles: the technical image/camera is invented.[73] The technical image, unlike the writing, is not limited to a linear space. The technical image is, in reality, a deeply concentrated accidental object pregnant with meaning and deception. Just like the linear text allowed man to make sense of a world of confusing and overwhelming separate pictures, the apparatus/camera becomes further alienated and further abstracted by cutting out linearity entirely. The apparatus does not deal with the linear, but rather with the singular. Whereas the linear writer created a history that probed to some depth, the functionary uses the camera/apparatus to probe something even deeper: a mere instant

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[73] By "texts ceasing to make sense" Flusser means something quite profound: he means that texts finally reached a level of abstraction so deep that our minds could no longer bear it. This is easily illustrated by very advanced scientific writing, even that of the 19th century pre-technical image. Certain areas of physics and other hard sciences expressed such disturbing, abstracted concepts that they indeed became dangerous. Case in point: Galileo, Newton, among many other scientists who were deemed dangerous due to their findings. Of course, the logic of linear writing is responsible for the possibility of science, but an immediate conflation between writing and science is actually a mistake, because linear writing is not a root cause, but rather a derivative of the image. Words are images, and logic is image based. It is through images that we abstract into spaces and media, and it is through abstracted images (contained in a medium that is made of something other than its original form) that we are able to think.

captured as data. Whereas the writer wrote, the functionary/data gatherer merely presses a button, and with that captures universes of particles. It is no wonder, then, that the apparatus signals the end of history; the end of linear writing[74]. The button is a disturbing, seemingly simple device that seems to put the functionary/man in control, but this is deceptive. The functionary does not quite grasp the apparatus entirely; even a child can operate a camera. As a result, the apparatus calls upon the functionary to find the possibilities within it to generate ever more random events of improbability. The functionary becomes, as a result, a heavily abstracted user seeking to explain his own life and experience through the use of an apparatus he does not understand which punctures/captures moments of data from an otherwise continuous world. But the apparatus is overwhelmingly complicated, much like the depths of data and existence, which it is seeking to explore.

There is an odd beauty to the way Flusser entangles each mode of information with each of its particular user: the mode of information creates the user. The human who painted caves is a new man; the human who wrote texts became a new man, influenced by the texts and its alienated heft while also probing into worlds far from what he saw with his/her eyes; the human who looks through the camera or types in his computer is yet again a new human, one who sits in front of an apparatus searching for meaning in a vast landscape of data points and abstractions. Each creation of a new media is a deeply

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[74] The death of writing is not meant in a vulgar, idiotic sense: of course you can still write. Of course you can still go into a cabin into the woods and devise some sort of linear text. Of course one can still explain things causally. The point, however, is that we intuitively know that this linear writing **is not longer the realm of what is imminently topical, of what is important**. As a society we already position ourselves in the camp of knowing that linear writing, and the kind of thinking made possible by linear writing, is imminently discardable. Why is there such a craze for STEM fields? Why are the humanities deemed unimportant? Why are we convinced that we will never have a writer like Shakespeare, Milton, or Dante walk the earth again? The reason is simple: **we no longer have a need for them**.

felt, completely transformative loss of dimension and also a moment of creation of a new

man, a man descending a step-ladder which creates for him a new mind, one which

abstracts itself further and further into the next age of information, and a new subject is

called upon at each level. It is worth quoting Flusser at length here:

> According to the suggested model of cultural history, **we are about to leave the one-dimensionality of history for a new, dimensionless level**, one to be called, for lack of a more positive designation, **"posthistory."** The rules that once sorted the universe into processes, concepts into judgments, are dissolving. **The universe is disintegrating into quanta, judgments into bits of information**. In fact, **the rules are dissolving exactly because we followed them into the core of both the universe and our own consciousness**. At the core of the universe, particles no longer follow the rules (e.g., chain reactions) and begin to buzz, **and at the core of consciousness, we try to sift out the calculable basis of our thinking, feeling, and desire** (e.g., proposition theory, decision theory, and the calculation of behavior in actemes); that is, **linearity is decaying spontaneously,** and not because we decided to throw away the rules. And so we have no choice but to risk a leap into the new. And it is truly a risk. For **as waves dissolve into drops, judgments into bytes, actions into actemes, a void appears**, namely, the void of the intervals that hold the elemental points apart and the no-dimensionality and so impossibility of measuring the points themselves. **One cannot live in such an empty and abstract universe**, with such **a dissociated and abstract consciousness**. To live, **one must try to make the universe and consciousness concrete**. One must try to consolidate the particles to make them substantial (graspable, conceivable, tangible)[75]

In short, we make that consciousness concrete by reaching out with the apparatus, by

grasping particles and making them into technical images. The entire history of human

culture and information, along with its abstractions (and its users) are as follows: 1) the

original man, who only interacts with his environment; 2) the cave painter, who can see

the magic and eternal recurrence of the traditional image, but who eventually becomes

overwhelmed by the images and places them next to each other in an effort to make sense

of them, creating 3) the linear writer, who has abstracted himself into a world of one

dimension, of the line, a line which is not contained by two dimensions, and which

therefore can probe places which are abstract, surreal, perhaps even terrifying, bringing

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[75] Flusser. *Into the Universe* 15.

the man a glimpse of things he cannot see with his eyes but which he knows inform the very essence of his existence, and finally, the 4) functionary, a media user who has abstracted further from the linear dimension, and who now uses the apparatus in order to probe an increasingly more disturbing and deeply alienated place: that of data and particles. Much like the writer, the functionary knows that the data is meaningful, and that it is bringing him closer and closer to the thing he was trying to explain. Although more alienated than ever, the functionary is living in a world of deep, cohesive, overwhelming reality: data is unquestionable. This is why we feel compelled to inform with the apparatus: we know that the way it informs is completely bulletproof. The apparatus is a machine, and hence human subjectivity is subtracted from it; we inherently trust pictures more than paintings. The particles gathered by the apparatus are overwhelming, celebratory. They allow us to come into contact with each other in ways, which are nearly absurd when one stops to think it through. One can take a picture and immediately have it appear across the world. That sort of transmission is what telematics is about. It is about gathering abstracted particles towards a mutual play that celebrates our ability to coexist and engage in a dialog in images. It is as if we are picking from an infinite harvest of particle information.

Data, here meaning raw data and not its interpretation, does not have a human element. Data is produced by the apparatus, and is therefore eminently trustworthy. Finally, unlike the previous steps of alienation, which called upon the new media user to behave a certain way, data creates a slightly more nuanced world. Because the tool of data is the apparatus, which is a black box with its own, immutable scientific rules, the user is now defined more violently and more forcefully than ever before. Yes, the writer-

human was defined by writing. But the functionary is defined in a completely suffocating and disturbing way, because, unlike the pen, the apparatus has a mind of its own. The apparatus gathers data in a way that is not entirely controllable by the user. As such, the user is now more under control than actually in control. The functionary has the intuitive understanding that he is grasping at meaning through the technical image, which should not be limited to the image produced by a camera; the spreadsheet, the database, the computer screen are technical images that also control the functionary and impel him towards further probing. The functionary also has the intuitive understanding, however, that in gathering data he is in a world of utter and bizarre abstraction, looking at points which seem to come from a nearly infinite and inexhaustible set of points, the entirety of experience and time.

The Faux Telematic Utopia of the Technical Image/Superbrain

Whereas the linear text makes sense of the traditional image; the camera makes sense of the linear text and as a result of science, logic, and history, which were born with the linear text. But the level of abstraction of the apparatus allows it to reach much farther than the linear text. Case in point, the apparatus has allowed scientists to reach into the depths of the history of our universe, taking "technical images" (be these pictorial or merely data points) which reveal concepts which would be utterly baffling to the cave drawing man or the early linear writer. Yet the steps in abstraction have allowed us to reach a point not only of more concrete knowledge (data gathered by apparatuses), but crucially the apparatus has also taken us towards a point of complete and total alienation. The modern functionary intuitively knows that he does not understand the apparatus, be it the computer or the camera, and that no matter how hard he tries, he will never exhaust the data contained within the apparatus. Yet the apparatus, which has a mind of its own and which impels the functionary towards abstracted exploration, beckons the functionary. The apparatus then controls the functionary. It asks the functionary to keep probing, probing into an increasingly murky sea of possibilities, facts, and connections. According to Google CEO Eric Schmidt, every two days we created the same amount of information that was created from the dawn of time up to 2003.[76]

Yet it feels as if we aren't getting closer to any sort of end or totality. In fact, with each passing year new methods of apparatus use, creation, and data gathering are created. As a result, the functionary (i.e., the modern human who uses the internet and a smart-phone) is called upon by an apparatus he/she does not understand in order to create more

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[76] Healing, Nicole. "Understanding Big Data." *BCW*. Business Computing World, 25 June 2010. Web. 29 Nov. 2016.

and more data, the use of which is not clear or illuminating… And yet there is an odd, exhausting pleasure to the experience, in which the modern functionary is controlled by the apparatus and still wants more. The brilliance of the apparatus is not that it forces us into control, but rather that it creates a world in which we only find meaning by being under control. To not be on the internet, to not be searching databases and sending versions of ourselves in databases is, in a very real and unavoidable way, to not exist.

The traditional image is mediated by something that is ultimately one step removed from the world of experience and data: human subjectivity. This is to say: in order for a painting to exist physically, it must first be painted. In order for a painting to be painted, it must first go through the subjectivity of a human being, and hence be interpreted and changed from whatever situation or concept originally inspired it out in the "unmediated" world of existence and the real. The technical image removes the human element. The human involvement is relegated to a completely marginal and ultimately miniscule role: that of pressing the shutter or key. As a result, the technical image is inherently trustworthy. When you see an image taken by a photochemical black and white camera, the "thing" you are seeing in the paper is a physical byproduct of a definite, robust, and unchanging object: the apparatus. The difference between the traditional image and the technical image is the following: the technical image requires the absence (or relegated) presence of the human. The technical image requires that we accept that true, topical meaning to our world is now created in our absence. A second line of criticism is that the picture can be played with or otherwise tricked into showing something that is not there. But this is patently false, because the point of the technical image (the "photographic picture") is precisely that it is not pictorial, that it is not image

based but rather based on data. Because it is based on data, and because of the growing

connectivity and ability of the different cybernetic apparatuses, production of information

has moved farther and farther away from human control. As a result, this monumental

amount of information, which is at once difficult to comprehend, is also increasingly less

and less human. They are abstractions completely alienated from our understanding, both

in scope and in their origin:

> The technical image is one produced by an apparatus. Apparatus, in turn,
> are products of applied scientific texts, making technical images indirect
> products of scientific texts. The historical and ontological position of
> technical images is different from the one occupied by traditional images
> precisely because they are the indirect results of applied scientific texts.
> Historically, traditional images were anterior to texts for tens of thousands
> of years, and technical images succeed to I advanced texts. Ontologically,
> traditional images are first-degree abstractions, since they were abstracted
> from the concrete world. Technical images, for their part, are. third-degree
> abstractions; they are abstracted from texts, which- in turn are abstracted
> from images which were themselves abstracted from the concrete world.
> Again historically, traditional images may be called "pre-historical," while
> technical images may be called "post-historical," in the sense suggested
> previously. Ontologically, traditional images mean phenomena, while
> technical images mean concepts. Deciphering technical images implies a
> reading of their position.[77] (TAPOP, 10)

What you see when you look at a black and white film photo is not an image, but rather

the result of light hitting a photo-sensitive material and then being exposed to chemicals

for the precise amount of time needed for the material to resolve in a way which is visible

to our eyes. Hence the idea that a manipulated image is still "true" -- it is showing us the

byproduct of a technological process. Whether or not that technological process took

place in one, two, or three steps, multiple exposures, collages, or otherwise, is immaterial.

The same is true of 3D models and technical images which are not taken by a film photo

camera: they are the byproduct of a technological process which expresses the

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[77] Flusser. *Towards a Philosophy* 10.

relationship between data points. The data points in the case of the film photo are: camera location, camera angle, shutter speed, lens length, exposure time, framing decision, and so on. Each variation in one of those attributes creates a new technical image, a new set of data points. To say that a 3D image created by a computer, say, an AutoCAD model, is less "real" than a film photo is preposterous: as the byproduct of a set of technological processes and relations, the AutoCAD image is closer to its abstract self (i.e. its existence as data) than the film photo is, which was alienated through the process of being developed.[78] Both are technical images. To say that something which is closer to its nature (the AutoCAD image) is "faker" than something which looks more like the real world to us (the black and white photo) is intellectually lazy.

It is the sign of someone that wants to believe that a photo (a technical image) is just a photo because it looks like something we know and understand. In fact, anyone that knows anything about photography knows that color photos are *less* real than black and white photos, because the color in color film has nothing to do with color in real life, and everything to do with different chemicals being used in developing a different type of film. As a result, color in photos never look like real life, because they are real life, but rather another technological abstraction. Black and white photos, on the other hand, are closer to real life, because they are less technological abstracted. Hence the haunting and powerful, "real" nature of black and white photos, which look much more real than color photos to those who are willing to look closely enough. Looking closely means looking beyond what is just right in front of your eyes, and looking into the processes that created the object before you. Anyone that looks like that cannot come to the conclusion that a

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[78] Flusser. *Into the Universe* 49.

photograph is "just an image," just like that person looking closely cannot come to the conclusion that painting and a technical image are the same: they are different levels of abstraction probing towards a completely different level of knowledge. To make a final point and exhaust all sense of doubt, one must simply accept that the black and white photo as a technical image is not pictorial, despite the fact that it looks like that and that it'd be easier for us if that were the case. Things are not what they seem. The photo is data; and the pictorial illusion is a mediated byproduct of that data. We are subservient to these processes as functionaries.

As functionaries, we have certain drives and tendencies, but our choices are severely limited: we can only take photos which are possible. The number of possible photos is large, but it is not infinite:

> Considering the camera (or any apparatus, for that matter) from such an angle. we can see that it is meant to produce symbols. It produces symbolical surfaces according to some prescription contained within it. The camera has been programmed to produce photographs and every photograph is the realization of one of the virtualities contained in that program. The sum of those virtualities is large, but not infinite. It is the sum of all those photographs which may be taken by this camera. Granted a camera may take almost infinitely the same or similar photographs, again and again and again - but this is not very interesting. Such photographs are "redundant": they carry no new information; they are superfluous. For our purposes, we can forget such redundant photographs. restricting ourselves to informative photographs alone; thus. the majority of "snapshots" as such are here eliminated from consideration.[79]

But why are informational technical images to be desired? Why are they something worth dedicating our lives to? The answer is simple: survival. By gathering these particles (by informing them) we can create accidental (more on this later) objects which go ever

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[79] Flusser. *Towards a Philosophy of Photography* 18.

slightly against entropy. Technical images, in their deeply informed character, are negentropic: they negate entropy. Were we to wait in an entropic state for the apparition of a photograph, we would be waiting a long time. And yet the apparatus can create a large number of technical images instantaneously. It is as if the apparatus fights entropy: it creates these accidents of information in blazing speed, sorting information in a state of high tension, going against the uninformed state of entropy. In his faux-utopia (faux because it is a place in which we are completely consumed by images, and therefore barely human), Flusser predicts that we will celebrate this negentropic tendency:

> For the first time, people will be in a position to methodically generate information, and not only empirical information, using a technology modeled on perception. Information will then surge like a rising tide against entropy. If we define human beings by their negentropic tendency, then this is when they will become truly human for the first time, that is, players with information; and the telematic society, this "information society" in the true sense of the word, will be the first genuinely free society.[80] (ITUOTI, 94)

We puncture these particles in order to create technical images, abstractions which we probe in order to understand a certain type of historical alienation, the alienation that arises when the world becomes composed of particles and data rather than linearity. Hence the lack of true literary geniuses today. Despite a world population far exceeding that of the late 1500s, and despite a greater than ever ease of access to information, we have yet to give birth to another Shakespeare, Dante, or Cervantes. The reason is simple: important information is no longer created linearly, but rather captured out of the ether through apparatuses that puncture particles into informed images.

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[80] Flusser. *Into the Universe* 94.

Computation; the use of technical images; these are extremely abstracted, deeply

alienated states for Flusser. He believes us to reside in a state of flabbergasting confusion,

a period in which we find ourselves to be frantic producers of accidental objects which

give us purpose, and have pregnant within them the possibility of communication and

survival, but which send us in a frenzy and come to define us in ways that threaten our

subjectivity and indeed our freedom:

> There are signs everywhere that we are fast approaching a
> cybernetically governed society, that society, in fact, has already
> begun to change into a cybernetically governed one. There can be
> no doubt that the structure of the emerging society increasingly
> resembles that of a brain. The notion of technical images as a kind
> of secretion of a global nervous system, the dreaming of a
> superbrain, comes to mind. And these secretions, these dreams, can
> be grasped as the cybernetic governance of brain function. In short,
> the notion that arises here is that of a dreaming global brain
> controlled cybernetically through technical images. That would be
> a metaphor for the telematic society, and it may not even be so
> metaphorical as it first appears.[81]

By control, Flusser doesn't mean propaganda in the ideological sense; that in which some

evil party is controlling us. Rather, he means instead that our relationship with our world

and indeed ourselves is now mediated by apparatuses that critically narrow our range of

experiences and possibilities. In Marx, a crude way of explaining alienation is thus: in

some prehistoric time, man had a direct connection with the earth -- if he wanted

something, he simply plucked it from a tree or found it somewhere.[82] In an alienated

world, man no longer has a connection to earth, but rather is connected through a

machine: the machine interfaces with the earth, while man interfaces with the machine.

Man presses buttons instead. This dialectical relationship is somewhat mirrored in

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[81] Flusser. *Into the Universe* 125.

[82] Bramann, Jorn. "Marx on Alienation." *Marx on Alienation*. Frostburg University, 2009. Web. 19 Mar. 2016.

Flusser, only we are alienated not from mother earth, but from our own subjectivity: we begin to think through the apparatus, mainly because the apparatus teaches us to see the world through it.

Conclusion

We can press all the keys we want, but we cannot press keys which do not exist. Gilles Deleuze, in a late essay titled "Postscript to the Societies of Control", gives a broad and far less developed warning against these mechanisms of control. His own theory with regards to control will be further analyzed later in this essay, but for now I'd like to quote one specific Deleuze passage having to do with the ephemeral nature of control. Control works precisely because it is an illusion of choices, choices which make us feel like an "artist" (emphasis mine):

> Types of machines are easily matched with each type of society—not that machines are determining, but because they express those social forms capable of generating them and using them. The old societies of sovereignty made use of simple machines—levers, pulleys, clocks; but the recent disciplinary societies equipped themselves with machines involving energy, with the passive danger of entropy and the active danger of sabotage; the societies of control operate with machines of a third type, computers, whose passive danger is jamming and whose active one is piracy and the introduction of viruses… It's a capitalism of higher-order production. It no longer buys raw materials and no longer sells the finished products: it buys the finished products or assembles parts. What it wants to sell is services and what it wants to buy is stocks. This is no longer a capitalism for production but for the product, which is to say, for being sold or marketed. **Thus it is essentially dispersive, and the factory has given way to the corporation…** Control is short-term and of rapid rates of turnover, but also continuous and without limit, while discipline was of long duration, infinite and discontinuous. **Man is no longer man enclosed, but man in debt.**[83]

Yet, this limited, alienated, abstracted condition is one in which there is a sense of possibility, an utopian possibility, even. Up until a certain point in our history, information was centrally controlled: books, television, etc. Flusser writes that with the

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[83] Deleuze, Gilles. "Postscript on the Societies of Control." *October* 59 (1992): 3-7. Print.

rise of the apparatus, even with all of its alienations, a new possibility emerges: that of the telematic society.

Flusser describes two potential societies ruled by the apparatus:

> One moves toward a centrally programmed, totalitarian society of image receivers and image administrators, the other toward a dialogic, telematic society of image producers and image collectors.[84]

Flusser claims that the telematic society is an utopian world in which communication through technical images allows us to connect without having to respond to a central authority and to live in a highly functional way. A telematic society is one in which the power of image creation contained in the apparatus is harnessed towards human communication. The benefit is that society becomes more democratic. Rather than simply accepting information from a centrally controlled power (say, the church, or a government), we can now be creators who work together. This is a utopian of a certain sort: rather than passive receivers, people become creators. The problem arises with the question of control and programming. Through the mechanism of the apparatus we are made robotic, and as a result get caught in an immense, never-ending web of sharing remixed images, a process Flusser calls both orgasmic and at the same time horrifying, because we cannot escape it. Hence the faux utopia – we are no longer passive receivers of information, but at what cost?

This is ultimately a faux-utopia -- its possibilities are, in some ways, desirable. Compared to a centrally controlled information society, in which the average citizen is simply a suffering, passive receiver of information, the telematic society, with all of its rich visual culture and dialogic possibilities is more like a "fever dream." In this dream,

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[84] Flusser. *Into the Universe* 4.

we are reduced to the bare necessities of the apparatus (we become the ultimate

functionaries), and as such are reduced to our digits (which point) and our brain, which

remixes. The connection is so dialogic and so immediate that it is felt as an orgasmic

immediacy, as if the entire world was a "global network."

In this utopian world, there are two possibilities left to the functionary who is self-

aware: he can either carve spaces within the apparatus which short-circuit it, creating a

rift that allows human intention, which Flusser calls "freedom," to ooze out of the blind

spots of the apparatus. Another possibility is to commit suicide. Without any recourse but

to disappear into our digits and brain, we are left with no alternative way in which to

express our freedom. Flusser explains that everything that is not needed will be done

away with. In order to be in a telematics world, all that is needed is our brain and our

digits. Our brain imagines, remixes, and accepts images, while our digits point towards

particles and press keys, be these keys on cameras or terminals. As a result, we will

shrink to the bare essentials: we will be brain and digits sitting in terminals, connected in

a constant and ecstatic torrent of image-based conversations which will function as if part

of a neural network. The world will be a brain oozing images into existence, and we will

be small particles dreaming of these images. There is an option, but it is an option of

infinite and tremendous darkness (emphasis mine):

> Medicine (economy) should be the means of alleviating suffering
> when it does so to delay death and where the suffering cannot be
> alleviated, to remove the body. In a dialogically ordered society,
> death could no longer be distinguished from suicide: the decision
> to put a suffering body down—euthanasia—would be made in
> dialogue (e.g., between a doctor and the one who is suffering).
> I chose the example of medicine not only because it is so striking
> but above all because it emphasizes the cerebral nature of
> suffering. As long as corporeal processes (or economic processes
> of any sort) do not enter into consciousness, as long as they

> proceed automatically, they can and should be ignored. To become interested in one's own liver function, or in one's morning toast, is to miss a chance to produce pictures. Should there be a programming error (the liver is forcing itself into consciousness by being painful or the burned toast by tasting terrible), one would feel obliged to reprogram, in cooperation with others. <u>And when it becomes clear that such reprogramming is getting on people's nerves (especially those nerves engaged in making pictures), there is an option to say no, to exercise one's veto option and forget everything (die). For one will not be forgotten: artificial memories see to it that what was once called the "I" is stored so that it can be dialogically changed.</u>[85]

We start from the premise that the apparatus creates a new human, the functionary, a person that is impelled to operate the apparatus in order to probe for particles and data. The apparatus punctures particles and data out of the existing world, in a way that is technologically predicated and utterly reproducible. Because the apparatus impels us, it controls us. It asks us to be functionaries. Let us call this world the society of control. In the society of control, "we find ourselves no longer ascertainable by means of causal but only by means of functional explanations… because the photographic universe has programmed us to think in a post-historical fashion".[86]

History seems to have stopped, in the way that we thought about history before the photograph. The reason why history has stopped is because the amount of data has become utterly overwhelming. The additions which are made to the collected data points captured by technical images are informational and transmitted in scattershot and seemingly random ways. People feel lost -- they feel as if they operate the apparatus and yet never get ahead of it in any way. Apparatuses robotize humanity – they have a set of priorities built into them, and it is this "rigid, unintentional functional automaticity [that]

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[85] Flusser. *Into the Universe of the Technical Image* 147.
[86] Flusser. *Into the Universe* 77-78.

needs to be made the object of criticism".[87] The darkness behind the technical image, for

Flusser, is that the functionary has to act by algorithm – hardly a spiritual enterprise:

> This results in a broader definition of a photograph: It is an image
> *created and distributed automatically by programmed apparatuses*
> in the course of a game necessarily based on chance, an image of a
> magic state of things whose symbols *inform its receivers how to
> act* in an improbable fashion.[88]

The world of the technical image is one where our sense of our humanity has been

threatened. It is a post-historical and nearly post-human world. This mechanization or

functionarization of the human leads Flusser to argue that a "philosophy of photography"

is necessary: "the task of a philosophy of photography is to reflect upon [a] possibility of

freedom – and thus its significance – in a world dominated by apparatuses; to reflect

upon the way in which, despite everything, it is possible for human beings to give

significance to their lives in face of the chance necessity of death".[89] For the functionary

there is only one mode of freedom in such an alienated environment: to press a shutter

and find his own intention within a mechanized and functionally determined universe.

Intention is a "criticism of functionalism in all its anthropological, scientific, political,

and aesthetic aspects".[90] The philosophy of photography involves being able to program

not only against the apparatus, but to fight the programming that the apparatus attempts

to pin on us. Whether the telematic society will have any room for human freedom or not

depends on our ability to program ourselves and the apparatus. The celebratory aspects of

sharing technical images with one another require that we program ourselves away from

the complicated tangles of the apparatus.

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[87] Flusser. *Towards a Philosophy of Photography* 74.
[88] Flusser. *Towards a Philosophy* 76.
[89] Flusser. *Towards a Philosophy* 82.
[90] Flusser. *Towards a Philosophy* 77.

But not all is so easy. What makes matters worse for Flusser is the fact that the apparatus so violently redefines human activity, all the while being the last place in which humans can express their "humanity." The apparatus does not present itself as an easy space for human connectivity, but rather as an object that redefines human activity from the start. Hence Flusser's project starts from a dire necessity to dominate the apparatus, all the while navigating the new domain of human activity that the apparatus immediately imposes. The apparatus is fraught with traps. Its excitement beckons us to just create mindlessly. The goal, for Flusser, is to understand the apparatus as both the bearer of our destruction and the unlikely (and extremely improbable) domain of our salvation. But the apparatus, in its vast structural complexity, offers an immediate pleasure which seeks to undermine human intention. Without the proper understanding of the apparatus and its ability to create a (near mindless) functionary, humans are left to an empty pleasure of simply creating and creating, but this creative process is actually destructive: out of their amateurish ignorance, the unthinking functionary simply creates banal, uniformed, useless objects. This is the domain of the kitsch (emphasis mine):

> The maker of snapshots is different from the true photographer in that he takes pleasure in the structural complexity of his toy. In contradiction to the true photographer, as well as to the chess player, **the amateur photographer does not search for "new moves,"** for real information, for the improbable; on the contrary, **he would prefer his own function ever more and more through increasingly automated camera procedures**. The automation of the camera, which to him is opaque, **inebriates him**. Clubs for amateur photographers, for example, are places where **intoxication** with the impenetrables of camera complexities occurs, places for "trips"; **they are post- industrial opium dens**.[91]

For a functionary to find intention in the apparatus is, in short, resistance. Telematics is the celebration of resistance through communication and democratic acceptance of one

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[91] Flusser. *Towards a Philosophy* 58.

another. But it is a celebration in images, in a constant torrent of over-sharing and remixing. Whether that is a benefit or not, is up to each functionary to decide.

In order to re-discover our humanity after we have become functionaries, we must probe with the apparatus within the nature of the apparatus itself, in order to reveal that although it determines us, there is more to use than to simply <u>function</u>, there is the possibility to use the apparatus in order to highlight human intention and in doing so to self-program. The functionary resists by functioning in spaces where the apparatus begins to fail. The use of photography is crucial to Flusser's - and our - project because the photographic apparatus is the first of its kind; the first apparatus which re-configures the human primarily as a functionary. All further apparatuses dealing with technical images, among which we might include computers, databases, smart-phones, video-games, VR-devices, and so on, function from the same premise as the photographic camera: the human is no longer a full-fledged agentic thinker, but rather a passive explorer whose only input is to press buttons or keys grasping particles. As a result, finding freedom within the photographic apparatus may lead us into new ways of thinking as to where freedom may exist in further technical image apparatuses:

> ...if such a philosophy of photography were to succeed in its task, this success would be of importance not only in the realm of photography but also for post industrial society in general. The photographic universe is only one among many apparatus universes, and it is not the most dangerous one at that… **the photographic universe may serve as a model for post-industrial existence in general,** and that therefore**, a philosophy of photography may serve as a point of departure for any philosophy which has the current, as well as the future form of human existence as its subject.**[92]

> In those spaces, the human finds solace in the realization that there are things the human grasps that the apparatus was not designed to understand

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[92] Flusser. *Towards a Philosophy* 54.

or capture. Those who resist control are those who attempt "to create a space for human intention in a world dominated by apparatuses" (75). These functionaries seeking freedom are attempting to elude control. The camera demands that its possessor (or he possessed by it) **constantly shoot photographs**, constantly produce **redundant pictures**. This photographic mania - of the eternally reproduced, **of the repetition of sameness** (or of similarity) - reaches a point where the snap shooter feels blind if deprived of his camera: **drug addiction**. The snapshooter **can no longer see the world** unless he looks at it through a camera and through the categories of the camera program. He no longer transcends the camera, **but is devoured by its greedy function**. He becomes the camera's extended automatic shutter release. **His behavior is an automatic function of the camera itself.**[93]

The photographic, but in reality computational society described above is a realm of control. Through the abundance and ubiquity of the apparatus, people have come to expect a world of constant and immediate connection. This is how they are controlled – through ubiquity and through the dialectical determination that the apparatus contains. Yet people feel an odd freedom in always pointing, in always snapping, in always being connected. They adapt to this flood of informed objects. People want to point; they want to click. Their desire is to capture, to round up, to give meaning, which they know in truth lies not in what they see, but in the massive and unending movement of near infinite particles, which they feel, but do not understand.

The move towards constant connection and constant creation through the apparatus, is one of total and complete desperation. We know this intuitively. A further problem arises once we realize that this flurry of mindless apparatus driven activity doesn't actually help, other than in a superficial psychological way, that of being able to say "I have searched, I have produced, and therefore existed." Un-informational objects, be they databases, photos, videos, or otherwise, are actually profoundly harmful. They obfuscate. They rise towards our eyes in a sea of sameness, nonsense, and despair.

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[93] Flusser. *Towards a Philosophy* 41-42.

Mindlessly created objects come back with a vengeance and threaten to suffocate us past

their point of use (emphasis mine):

> Engaged against the degenerative cycle nature–culture–waste–
> nature, against the decay of information, human beings devise
> more and more durable supports, for example, plastic bottles
> instead of glass ones. But perversely, this halts the degenerative
> cycle not at the point of remembering but at the point of waste, of
> forgetting. The plastic bottle is discarded just as quickly as the
> glass one but lasts longer before returning to nature. Waste
> accumulated in this way contaminates the environment, seeps back
> into culture, and threatens to flood it with recycled, half-forgotten
> things, with kitsch. In answer to this threat, sciences of the
> discarded, such as ecology, archaeology, depth psychology, and
> etymology, have arisen alongside the sciences and humanities.
> **They seek to recall the half forgotten, to master the discarded
> material, a typical posthistorical problematic**.[94]

Posthistorical also means that, through joined use of the apparatus, one is now able to be

in constant re-imagining of the past. One is able to not only experience the past through

images, but also to remix the past with new information. Hence posthistorical; outside of

a history, because everything is immediately stored and immediately made accessible

anyway. Such an existence is *inherently* alienated. Nonetheless, in the society of control,

telematics is the only form of freedom left to us. Telematics is the democratic embrace of

the cybernetic exchange of technical images as our fundamental purpose now that we

have been made into machines by the apparatus. Through our ever-increasing march

towards abstraction, we have arrived at a place in which meaning can only be created in

our alienation: in order to see we must cover our eyes with lenses and screens.

Flusser provides the "categorical" study of control by describing the history of

media leading up to the apparatus. This proposes an idea of what resistance or freedom

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[94] Flusser. *Into the Universe* 109.

within this system looks like: an affirmation of human intention through the use of the

mechanizing informational apparatus that controls us. Put more simply: we are enslaved

by the apparatus when we begin to use it; (it dialectically forces us into the position of a

functionary), and the only way out is to embrace this functionary status in a search for

freedom:

> What is involved here is not the classical problem of alienation, but an existential revolution for which we do not have any historical precedents. To put it brutally: what is involved here is the challenge of reconsidering the problem of freedom in an entirely new context. This is what a philosophy of photography would really address. If everything has had a cause, if everything will have an effect, if everything is "conditioned," where is there any room left for human freedom? All the answers to this question might be reduced, if radically simplified, to a common denominator: The causes are so extremely complex, and the effects are so extremely difficult to see in advance, that man (this limited being) may easily behave as if he were "unconditioned." Within our new context, however, the problem of freedom must be posed differently: If everything comes about by chance, and if everything comes to nothing, where is there any room left for human freedom? It is within this climate of the absurd where a philosophy of photography must formulate its question concerning freedom.[95]

By necessity, functionaries that resist have to be about the productive power of the

apparatus, and finding a way to harness that power towards crystalizing intention.

> A philosophy of photography is necessary if we are to lift photography into full consciousness. To do this is necessary because photography may then serve as a model for freedom in the post-industrial context. Thus, the task of a philosophy of photography is to show that there is no room for human freedom of photography is to show that there is no room for human freedom in the realm of the automated, programmed and programming apparatus; and having shown this, to argue how, despite apparatus, it is possible to create room for freedom. The task of a philosophy of photography is to analyze the possibility of freedom in a world dominated by apparatus; to think about how it is possible to give meaning to human life in the face of the accidental necessity of death. We need such a

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[95] Flusser. *Towards a Philosophy* 79.

philosophy because it is the last form of revolution which is still accessible for us.[96]

In *Postscript on the Societies of Control*, Gilles Deleuze writes of a historical shift from

societies of discipline, associated with Foucault, into decentralized societies of control.

Control takes us away from spatial management and towards an ominous reality of

distributed informational programming, just like Flusser describes. One wishes Deleuze

had read Flusser prior to the essay, so that Deleuze's language would be more precise.

Deleuze's essay, first published in 1992, shares Flusser's near-messianic view of our

current digital landscape – instead of our bodies being forced into a particular institution

(of which prison is the best example), we are being constantly programmed:

> Control is short-term and of rapid rates of turnover, but also continuous and without limit, while discipline was of long duration, infinite and discontinuous. *Man is no longer man enclosed, but man in debt…* The conception of a control mechanism, giving the position of any element within an open environment at any given instant (whether animal in a reserve or human in a corporation, as with an electronic collar), is not necessarily one of science fiction.[97]

Today many young people even defend the NSA's transgressions, claiming that they

have done nothing wrong and so do not fear being spied on: they *want* to be controlled.

They welcome it. They willingly sign up for more digital training in the forms of games

and social networks that trivialize the spying process. Deleuze comments that "many

young people strangely boast of being 'motivated'; they re-request apprenticeships and

permanent training. *It's up to them* to discover what they're being made to serve"[98].

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[96] Flusser. *Towards a Philosophy* 81.
[97] Deleuze, Gilles. *Postscript* 6.
[98] Deleuze, Gilles. *Postscript* 6.

Deleuze is clear: there is a new system of control that has emerged out of the apparatus, and it is the duty of young people to stand up against it.

Deleuze sets up a call to arms here: his work in this essay is to present the (now) irrelevance of Foucault while calling upon these subsumed "young people" to be aware of and to stringently resist that control. Having passed the torch on, Deleuze is unclear as to what this resistance may look like, but it is abundantly clear that it must be resisted. I ask for a brief digression: Deleuze is extremely upfront about his shortcomings in the essay. Given a greater space for constructive narrative one ought to explore the meaning of a 5 page essay which announces a new, troubling age all the while absolutely refusing to interpret or react in a deliberate way against the fetters of that new age. How is it that academics are allowed this space? How is that academics are allowed an open, semi-transparent space of discourse in which they are allowed to explore systemic landscapes all the while refusing to address their full-meaning and their own places within them? This is all to say: yes, there is a society of control that is evident to those who have kept a finger to the pulse of image (and therefore digital) culture. But what might the academic do about it? Can he do more than simply shine a light on it? Can an academic who attempts to do more even find a space to do so? Or is the academic destined (as we are often told) to complete, banished irrelevance which then grants his institutional advance. All of this to say: the time and mental bandwidth afforded academics allows them in turn to closely study social and institutional changes. That time and mental bandwidth, however, is acquired at the cost of doing the things necessary in order to advance in an institution, in other words, it is acquired at the cost of becoming institutionalized. Is he/she who is institutionalized capable of really resisting (in the mode of Deleuze and

Flusser)? Is it not a tiny bit unfair of Deleuze to ask a mythical "young people" to resist changes in a tide so massive and complicated that they require a philosopher in order to be found? Why should young people, in their own right, not turn the tables on the philosopher: why does the philosopher and the academic not resist? Is the philosopher and academic even capable of resisting?

The unfairness of Deleuze's question aside, we are left with his call to arms, which is unequivocal: control must be *resisted* – "there is no need to fear and hope, but only to look for new weapons".[99] What these weapons would look like, on the other hand, is hard to say. Since control is dispersed, resistance will not be against a space or particular institution, but against a *logic* and a *program* (two menacing subheadings of the essay). Control is decentralized because it is not a place like a school, but rather an ethic: control is what happens when people sit in front of their computers or thumb through their phone. This relationship to digital devices dialectically creates particular types of controlled subjects. Flusser calls these functionaries, whereas Deleuze calls them "dividuals." Dividuation is a process of "dissolving individual identity into distributed networks of information," much like what happens in contemporary society through the use of social networks, tracking websites, data auctions, etc. Everyone one comes in contact with computers, one is asked to become a little more computer-like – to think in terms of databases, networks, etc. Dividuation is also made clear through a comparison between factories and corporations. Factories, the worksite of discipline, have a clear geographical location, and have goals firmly rooted in space, whereas "the corporation is

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[99] Deleuze. *Postscript* 4.

a spirit, a gas".[100] Clearly Deleuze is outlining the shapes of a world dictated by the digital. When we are treated as dividuals, there is a supreme form of alienation occurring: instead of being treated as ourselves, we are met as data. Information is, therefore, at the core of control. One obvious case of dividuation is the increasing simplification of expected discourse. Facebook, for instance, asks users to *share* (disperse) and *like* (approve), and very little else. This latter idea is easily quantifiable, being that it is binary (1/0).

Resistance will have to be informational, or at the very least *against* the informational. More than likely it would also have to strike at the root of the devices that prop up the society of control.

In a conversation with Antonio Negri titled *Control and Becoming,* Deleuze gave another hint: "the key thing may be to create vacuoles of non-communication, circuit breakers, so we can elude control."[101] How successful is a "circuit-breaker" to a distributed *logic*, however? Isn't Deleuze's vision of control somewhat simplistic, given Flusser's more robust examination of the mechanisms of control? For instance: how do vacuoles of "non-communication" interact with the dialectical relationship between functionary and apparatus? How does one continue to explore particles without the use of an apparatus? Is Deleuze actually suggesting that people retreat into caves or mountains and completely exit modern existence? The answer is no; Deleuze's suggestion is that we "short-circuit" control by creating broken routes through it feels like a mere pebble on the road. Were Deleuze aware of the mechanisms described by Flusser, he would know that

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[100] Deleuze. *Postscript* 4.

[101] Deleuze, Gilles, and Antonio Negri. "Gilles Deleuze in Conversation with Antonio Negri." *Generation Online*. Futur Anterieur, Spring 1990. Web. 02 May 2016.

the problem is systemic, and not content based. Misinformation will do nothing when the

problem comes from decentralized, ubiquitous apparatuses that create an ethic. There are

obvious reasons to be dubious: does a circuit-breaker not assume the inner workings of

control by necessity? Should resistance not be more systematic? We have the basics:

resistance is necessary, should be informational, and it is against a dispersed program.

Further, we are told that the work of resistance should be left to "young people." What

now?

  The answer is given to us by Flusser: be happy with the "celebration" that is

sharing images into eternity, or commit suicide. The negative freedom of refusing to

enter this world of cybernetic control should not be underestimated. In fact, it may soon

become the only freedom we have left.

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