Deleuze, Bergson, and a Document Scanner: Investigating Duration and Perception

Abstract

In this arts-based exploration, the author experiments with non-standard time registers and perception via the possibilities opened up by the unconventional use of a hand-held document scanner. Thanks to the technical configuration of the scanner, the artist is able to alter the time period spent on the different aspects of the object as it is scanned, creating images that alter our normalized perception of time. In addition, by directly scanning objects (rather than documents or images), the resultant scan is one of detailed ultra-specificity of parts of the object nearest to the scanner, while the remainder of the objects quickly fade to out-of-focus. Drawing especially on Bergson and Deleuze, the artist explores the theoretical implications of such unconventional duration and micro-perception.

The handheld document scanner is about 9"x1"x1". To scan a document, you hold the scanner horizontally at the top of a page and then roll the scanner vertically down the page.

I started a few years ago by scanning skewed papers on my desk. I moved further and scanned up including my arm This led me to try scanning things other than documents (see Figure 1). My arm, the couch, a collection of documents or book covers (rather than just one). I found out a few things as I experimented.

The handheld document scanner has a long, illuminated strip (that lights up the object to be recorded) next to a long transparent window (where the image is recorded). Next to these is the long rollerpin. As I attempted to sweep the scanner down my arm, I realized that the rollerpin probably needed to spin in order to tell it to scan. My first attempts involved me just trying to roll the pin along my sleeve and skin. However, it was difficult to get the pin to roll in this way. In subsequent attempts, I decided to manually spin the pin with my thumb as I moved the scanner at an approximately consistent speed over and near the object to be scanned. Based on the images I received when I uploaded them to my laptop, I confirmed my suspicion that there is a timing link between the spinning and the creation of the image. The rollerpin tells the scanner how quickly the document is being scanned. That is, a ratio is established between how fast the rollerpin is rolled and how much the image is scanned. As the roller rolls, the scanner assumes that much distance is covered and uploads enough image to fill that distance. This ratio allows for the image to be created at a 1:1 ratio to the original; vertical stretching or shrinking is avoided. A time signature is established.

It is this time signature that I found interesting. What happens when the time signature is no longer the 1:1 ratio established between the roller and the image? If we could speed up the roller while moving the scanner at the same pace, the image would presumably stretch - more time is taken in per vertical inch of original. Conversely, if the roller is slowed, we would expect to see the image compress vertically, registering less time per linear inch of original. A variable rate of movement would create variations of vertical stretching/shrinking.

By spinning a length of thread around the roller pin, I was able to create more consistent difference between the speed of the roller and the speed with which I moved the scanner over the object to be scanned. That is, with the wrapped string, I could unroll it and spin the roller faster and more consistently than when I spun it with my thumb. Plus, the tip of my thumb did not appear repeatedly in the image as it had previously. I played with a greater difference in speed between the roller and the movement of the scanner. By spinning faster, I created images where more time accumulated into the verticality of the image. The effective duration of the image was longer, the image was vertically stretched.
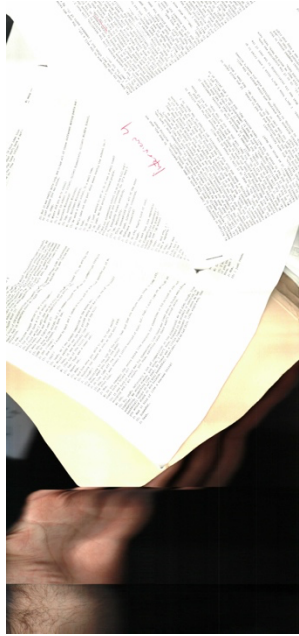
I also did the converse, moving the scanner faster and spinning the pin slower, creating a faster or shorter effective duration of the image, the subsequent image being vertically compressed. I also played with varying the the speed of the roller, creating varying durations in the image. Often the change in speed appears as a horizontal stripe (a border) between these different speeds. The eye, not being used to these sudden changes, establishes a sort of visual break between the speeds.

The other aspect of the scanner that I noticed and experimented with is the specificity of the resulting images. If the scanner is held too far from the object it is scanning, the scan appears blurry or disappears into white. However, when the scanner is held extremely close to or touching the object, the resulting image is amazingly specific. Pores and hair follicles and individual threads become visible. The image is ultra-specific compared to a regular photograph. The small details are captured and enlarged, taking up more visual space in the image. In addition, the depth of field is extremely small, so that any part of the object that is not near touching the lens of the scanner is blurred. This has the effect of forcing one's attention to the minute details of the image that are clear. The shaved hairs, the wrinkles in the skin become the focus of the image rather than the overall shape of the subject.

Combined then, what we have is an ultra-specific image of details that vary in vertical duration. As a viewer, our gaze falls on apparent slices of material arranged in somewhat of an order to create an overall distorted image of the whole subject. This becomes especially apparent in the images of my face. The tip of the nose or the curve of the chin suddenly come into bright focus while retaining a serial, yet uneven, order with the remainder of the scan.

Theoretically, we have a heightened awareness of duration and the micro-specific aspects of daily experience. The images seem to ask: Why are normal photographs so uniform in their representation of time and aspects of the subject? Can life be envisioned as different periods of times interacting with specific aspects of our world? Do we spend varied duration on the detailed material aspects of our life? always invents. Every perception is a creative activity culminating in the production of an event of change." (Massumi, 2011, p. 27)

Figure 1. I started a few years ago by scanning skewed papers on my desk. I moved further and scanned up including my arm This led me to try scanning things other than documents.

The modified scanner constructs a modified perception. First, while doing the actual scanning, perception is altered by the anticipation of the image capture (Author, in press). I imagine an increased attention as I spin the rollerpin faster, increasing the intake of that part of the object. I imagine a fleeting attention as I swipe past the object, barely moving the rollerpin. The speed of the rollerpin serves as a proxy for amounts of perception. I imagine the image I am producing. Second, when looking at the scan produced, we see the image as if this perception across time has been laid down inside it (see Figure 2). There are areas where slices of the object repeats themselves continuously, producing what seems to be a stretch of the original object. Conversely, sudden jumps from one slice of the object to the next seem to skip or minimize entire areas of the object. The effect of the image is that we perceive certain parts of the object increased in attention, while others are merely skipped over. We perceive a stretching of time, not just of image. We feel as if somehow part of perception itself has been captured: Where we spent increased attention yielded increased space in the image. Where we barely noticed is barely represented in the image. It is as if the common glances we take, varied in their attention and duration, are recorded creating a sort of visual representation of the varied flows of perception of which Bergson speaks.

"… [T]here is no feeling, no idea, no volition which is not undergoing change every moment: if a mental state ceased to vary, it's duration would cease to flow. Let us take the most stable of internal states, the visual perception of a motion-less

Figure 2. when looking at the scan produced, we see the image as if this perception across time has been laid down inside it.

Figure 3. Increased speed of the roller = increased time = increased space = increased perception, a sort of vertical, repeated meditation on a particular aspect of the image. Decreased speed of the roller = decreased time = horizontal lines and jumps = juxtaposition and jarring of perception, a sort of coming to attention after a daydream.

object. The object may remain the same, I may look at it from the same side, at the same angle, in the same light; nevertheless the vision I now have of it differs from that which I have just had, even if only because the one is an instant older than the other." (Bergson, 1907/1998, pp. 1-2)

Within these images, it is as if these repeated visions of the motionless object are laid down, side by side, as new yet continuous iterations, "as living things, constantly *becoming*" (Bergson, 1889/1960, p. 231, emphasis in original). In this way, the images, while distorted, in some ways seem to have a greater honesty about them. The image produced does not attempt to be a transparent or true representation of the object pictured. After all, "pure perception exists only in theory" (Bergson, 1896/2004, p. 59). Instead, it produces an image of an object stretched and chopped across time, the time of life passing. Increased speed of the roller = increased time = increased space = increased perception, a sort of vertical, repeated meditation on a particular aspect of the image. Decreased speed of the roller = decreased time = horizontal lines and jumps = juxtaposition and jarring of perception, a sort of coming to attention after a daydream (see Figure 3).

"When we see an 'object' 'out there' we are seeing a semblance of our own life's passing…." (Massumi, 2011, p. 27).

Where the images may seem to jump, to harbor disconnections and discontinuities, to come into sharp focus amidst a blur, it is obvious that they "stand out against the continuity of the background on which they are designed, and to which indeed they owe the intervals that separate them." (Bergson, 1907/1998, p. 3) If we see portions of the image as distinct, those distinctions are cut out of a "flux of fleeting shades merging into each other" (Bergson, 1907/1998, p. 3) (see Figure 4). In the images we can see this cut out of a flux (Deleuze, 1966/1988) in at least two ways, by the horizontal striping which indicates differences in which the intervals of perception were taken in, and in the strong fading to a blur of the foreground to the background. Within the images, out of the flux and flow which is a continuous scan — a sort of extended moment or "duration" — out of this comes "invention, the creation of forms, [and] the continual elaboration of the absolutely new." (Bergson, 1907/1998, p. 11)

"The bodies we perceive are, so to speak, cut out of the stuff of nature by our perception, and the scissors follow, in some way, the marking of lines along which action might be taken." (Bergson, 1907/1998, p. 12). The scanner here, as a tool of perception, normally cuts out stuff in order to return to us a properly scaled reproduction. The original program was designed to modify light into an image that represents a singular moment despite the fact that the image is taken over an extended moment. The arbitrariness of this design is exposed and modified as the image is repurposed to cut out stuff in a different manner, one that varies with the flow of

a pull of string on a rolling pin, one that varies with a different perception that therefore takes up different actions that are possible. New perceptions, new forms, new actions all work on each other to co-create a new mode of experience. This creation of forms has radical implications, for "all our belief in objects, all our operations on the systems that science isolates, rest in fact on the idea that time does not bite into them." (Bergson, 1907/1998, p. 8) But, "Wherever anything lives, there is, open somewhere, a register in which time is being inscribed." (Bergson, 1907/1998, p. 16) Within the image, we come to question the independence of the subject/object from the experience of time. The image is no longer cast as a conglomeration of successive moments into an apparent singular moment, into an apparent singular object. Instead we infer that the object has somehow a deep sense of time embedded within it and that this time is "no longer something thought, it is something lived." (Bergson, 1907/1998, p.10)

Precisely in their refusal to (re)produce a singular time-object (as ostensibly in a snapshot), the modified scanner images produce an undermining of our sense of time and perception, and, most radically, our sense of what constitutes an object.

What we hope, then, is that these images move the viewer to see "tendencies" (Bergson, 1907/1998, p. 13) and "directions" (Bergson, 1907/1998, p. 16) that evidence "an unforeseeable
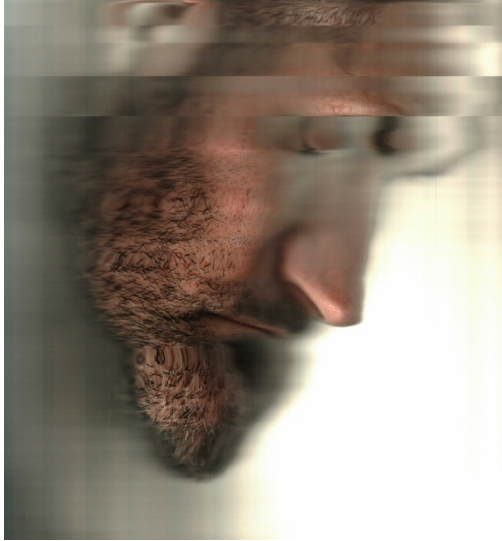
Figure 4. If we see portions of the image as distinct, those distinctions are cut out of a "flux of fleeting shades merging into each other" (Bergson, 1907/1998, p. 3).

creation of form." (Bergson, 1907/1998, p. 45).

What we have is a scanner/human/object "assemblage" (Deleuze & Guattari, 1980/1987). To be more exact an arm moves a hand which moves a scanner while at the same time another hand pulls the string to roll the roller on the scanner, activating the light and the image capture device. Combined with the concepts and practices, the whole process constructs an "apparatus". Thus, as Barad notes, we are not merely reconfiguring the image of the object, but rather are engaged in a process where the object, the scanner, the body, the string, etc. all "reconfigure" and "intra-actively materialize" each other. The "material-discursive field of possibilities" is remade though the "material-discursive practices" of the apparatus. (Barad, 2007, p. 170) The resulting images are evidence of an iterative process, an agency (Barad, 2007, p. 178), that co-constructs the concept and object differently. The new reconfigurations of subject and object are results of a different "agential cut" (Barad, 2007, p. 178).

By foregrounding this apparatus, by exhibiting a "camera-consciousness" where we "make the camera felt", we move to a place where "the question of knowing whether the image was objective or subjective is no longer raised" (Deleuze, 1983/2005, p. 76) (see Figure 5).

Foregrounding and modifying the process of "capturing" (creating) an image implies that the subject's perception and the reality of the object can not be separated. "Thought and thing, subject and object, are not separate entities or substances." (Massumi, 2011, p. 34)

The images make us question the independence of the object from our perception. While the images could simply be seen as aberrations or distortions of an external object, they seem to also convey another truth. When we look at them, "what we experience is less our objects' confirmed definitions, or our own subjectivity, than their going-on together — their shared momentum." (Massumi, 2011, p. 33) As Barad states, "We don't obtain knowledge by standing outside the world; we know because we are *of* the world. We are part of the world in its differential becoming." (2007, p. 185) The scanner process is one that evidences "dynamic (re)configurings of the world through which bodies are intra-actively materialized…. "(Barad, 2007, p. 170).

The images do not turn back to reclaim the object as a representation, they do "not reappropriate the origin. The latter is no longer in itself." (Derrida, 1967/1978, p. 295) The revised relationship "includes a difference within itself…so that one can no longer point to the existence of an original and a copy." (Deleuze, 1968/1994, p. 69) This difference "permits us to efficaciously, rigorously, that is, discreetly, to exit from closure." (Derrida, 1967/1978, p. 295)

These materializations, like the horizontal lines in the scanner images, do not move smoothly from one form to another. "Becoming is not pure continuity. It is a continuous dephasing, carrying a process across thresholds." (Manning, 2013, p. 20) As we move vertically in the image, we

continue a process across timezones. Leaps and jumps occur. We are jarred with sudden juxtapositions and lulled with iterative stretches. "Non-conductors" jolt us into realization of the world as a "pure many". (James, 1907/1978, p. 68)

These images are the outcomes of small interventions in daily life, "little modifications… torn from the brute and mechanical repetitions of habit…" (Deleuze, 1968/1994, p. 294) I do not claim that they are great Art. They are minor art, art with a small "a", art that foregrounds a "dynamic form of life" (Massumi, 2011, p. 45). The image is less important than creating processes that problematize our relation with the world around us. This does not diminish its importance, "for there is no other aesthetic problem than that of the insertion of art into everyday life." (Deleuze, 1968/1994, p. 293) Ideally, these are small modifications that beget other small modifications, ones that aim to add up to "an art without works…. the art of life itself." (Derrida, 1967/1978, p. 183)

Figure 5. By foregrounding this apparatus, by exhibiting a "camera-consciousness" where we "make the camera felt", we move to a place where "the question of knowing whether the image was objective or subjective is no longer raised" (Deleuze, 1983/2005, p. 76).

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