(Mind the Gap)
Elias Wessel's *Ereignishorizonte* (Event Horizons) and the Thermodynamics of TikTok

You may think you are one of the lucky ones. Possibly you have found ways to avoid falling into the black hole-like-abyss that is the flickering electronic pulse of TikTok. You may think you are in control of your phone and how it behaves—or how you think you behave with it. But have you asked, where do I end and where does my technology begin (physically, ideologically, culturally, and geologically)?

As an anthropologist looking at the intersections of cultural knowledge systems and the values that are at play in the technical reproduction of knowledge, I have frequently fallen into the (gaps) to explore the tensions that arise between our human/object/digital ways of being (Isaac 2009, 2015, 2022). Over the past decade, there has been a debate around digital technology and media's capacity to connect, democratize, polarize or separate individuals and societies (Cameron *et al.* 2010; Mihelj *et al.* 2019). There is mutual agreement, however, about how social media now influences societies beyond ways in which it was first imagined as a platform for peer-to-peer communication. Growing evidence has also arisen showing how information technology and media companies have purposely employed, as well as hidden the affectatious power of social media to continue to fuel this kind of unbounded expansion across age-groups, cultures, and continents. Defining what is "tech-driven" versus "people-driven" may be an issue of semantics. Identifying where the agency of digital designers/users begin and end, however, and where this technology appears to have a life of its own, has been a critical point of interest in my work (Isaac 2022).

Wessel's *Ereignishorizonte* (Event Horizons) is an astute photographic materialization of how we are surrounded by and absorbed into or "framed" by social media. He addresses not only the "gravitational flow" we undergo as we use it, but how this is analogous to the laws of thermodynamics and, therefore, the cyclical forces of energy of our Universe. His central focus is TikTok—the extremely popular app for people to create, share, and consume short-video content. TikTok's influence and power has become increasingly significant as it is seen to fuel the "splinternet"—a new phase in which individuals and governments must adaptively grapple with the social and legal responsibilities that digital apps have presented to our world(s). According to Andreas Schellewald, TikTok has "already been downloaded more than 2 billion times, making it one of the most downloaded apps of the last decade" (Schellewald 2021:1437). TikTok has also become the subject of study in terms of how it defines the "gratification niche" (Scherr and Wang 2021), as well as how it affects our brains (Su et al 2021). Chris Stokel-Walker discloses research looking at the attention spans of 2,000 people at the beginning of the millennium and then again 15 years later, revealing "our ability to concentrate on one thing before our brain switched off dropped by a third, from 12 seconds to eight" (Stokel-Walker 2021:73). He attributes this to "the rapid rollout of home computers, the advent of YouTube and the iPhone, and the rise in availability and fall in

cost of affordable home broadband internet" (ibid 73). And this was before TikTok was introduced with its algorithmic content feed that has been likened to "digital crack cocaine" (Koetsier 2020; Schellewald 2021:1437).

During the pandemic, many of us experienced the exponentially potent algorithmic viral energy of social media that collided with our mandated antiviral lockdown. This is the Universe we now live in—caught between endless uploaded memes and TikTok videos, between the enchantment of technology and disillusionment of a working democracy; between the technological haves and the technological have nots. Caught betwixt online orders and delivery vans, between self-control and a world structured by human impulses via pulses of digital technology. Worlds in which some live online, while others live gerrymandered by lines.

In the same way tech companies use your data to feed their economic engines, Wessel is asking you to imagine yourself as the electric current and fuel that is feeding these growing and polarizing forces. *Ereignishorizonte's* potent space and what I refer here to as the (gap), is about people and things caught between being and becoming—never fully realizing themselves or their desires for control *or* equity. Wessel's photographs skillfully explore TikTok as a black hole of *becoming*. He momentarily captures the mobile phone's TikTok display and removes its center in order to ask, if we stop and pull back the layers, if we remove the pulse, what have we become? Or more accurately, what are we becoming? *Ereignishorizonte* also highlights the (gap) that provides us with an opportunity to halt this "gravitational force*"* by removing the middle/the message. He changes our experience of TikTok from being one about content feed, to one of reflection on ourselves—now potentially aware of our state of being in-between. The (gap) forces us to recognize that TikTok's essence is tied to its liminality. In contrast to TikTok, however, *Ereignishorizonte* asks you to use your imagination to fill the gap. Now what are you?

Wessel also intentionally uses media and materials to physically interrogate the nature of TikTok. His methodology of photographing, copying, reprinting and tearing out the center is also one of transformation—from one state to another, from one medium to another, from electricity to wood-fiber-rag-paper and, therefore, from one state of being to another. When we see photographs fade or decay, we are reminded of how they are not only pictorial disruptions of the visual flow of time, they are subjects to it. Wessel astutely plays on this idea of photography as the materializing of time—as well as societies possible wasting of it (and our planetary resources), and this has become a critical thesis in his work. Capturing the life and death energy flows of mobile phones surfaces in his *Schöne neue Welt* (Brave New World) series. Here*,* he documents erratic electric pulses as these phones are purposeful destroyed, revealing how life forces can be analyzed via the process of photography. According to Wessel, the photographic medium (negative, print, digital pulse) is both an indicator of the concept of time, as well as an index of our social/individual/political time.

Images that effectively communicate the photographic materializing and materiality of time include Linda Connor's series from the archives of the Lick Observatory in California. Included in this is a contact print made from a broken glass negative of a lunar eclipse titled 'September 3, 1895, gelatin silver print' (Greenhough and Nelson 2015) [Fig 1.]. Conor's process of reassembling the glass negative and using natural light to create the print reminds us that the glass negative is just one material phase in the cycle of energy transformation. Like Wessel's work, this image forces us to think about how photography not only communicates the passage of time, it participates in it. There is a poignant sympathy between Conor's print of the cracked glass plate and *Ereignishorizonte*. Both convey first and foremost their material being, and the ways in which this can be fractured or torn, thereby heightening our awareness of the pace or halting of these transformational processes. As Greenough and Nelson observe, the link between the photographic medium and planetary time is also central in these astronomy images, providing "a thought-provoking dialogue between science and art, and cosmological time and human history" (Ibid 64). Similarly, the photographic re-materializing of time and space appears in the 'Snake That Swallowed its Tail' by Christian Widmer [Figs. 2 and 3]. Widmer uses the 1980s Kodak disk camera negatives, not only because this technology evokes a particular phase in photographic equipment marketed at families and, therefore, their cycle of photographing the same rituals each year (Christmas, Easter etc.), but the circularity of the negative forces the viewer to question a purely linear reading of photographic time. His reference to the concept of the ouroboros emphasizes the nature of photographs as media that are revisited/reprinted/recirculated and transformed time and time again. Moreover, the circle also, like *Ereignishorizonte* has at its center a space—the unimagined (w)hole.

In *Ereignishorizonte* Wessel compels us to ask, are we overwhelmed by TikTok because we are subconsciously aware of how fast these transformative processes of energy are occurring? Just like harnessing the electric pulse of digital technology, the harnessing of the power via steam energy is recognized as having entirely altered people's perceptions of time and space in the industrializing world of the 19th century (Shivelbusch 1986). Society's reaction to its invention was similar, with many thinking that moving on trains at these new high speeds would be dangerous to the human body. Should we not interrogate photography *and* social media as a similar world altering human harnessing of energy?

According to the laws of thermodynamics, energy can be transformed from one form to another, but it can never be destroyed. These laws also follow the principle that the total amount of energy and matter in the Universe remains constant, merely changing from one form to another (Atkins 2010). As biological organisms, humans are viewed as open systems in which our energy is exchanged between us and our surroundings, such as cell phones, digital media, and TikTok. Interestingly, according to these same laws our Universe is understood to be a closed system, because "the total amount of energy in existence has

always been the same" but that "the forms that energy takes, however, are constantly changing" (Moskowitz 2014).

Ereignishorizonte is Wessel's means of getting us to think about gravitational forces in this digital media system, much like black holes, which are places in space "where gravity pulls so much that even light can not get out. The gravity is so strong because matter has been squeezed into a tiny space. This can happen when a star is dying" (Nasa 2018). Wessel's aesthetics of the empty white center (gap), however, requires us to also consider white holes, which like TikTok, are radical and controversial. The definition of a white hole in space should give you pause when thinking about *Ereignishorizonte* as an exegesis on energy transfer:

> A white hole is a bizarre cosmic object which is intensely bright, and from which matter gushes rather than disappears. In other words, it's the exact opposite of a black hole. But unlike black holes, there's no consensus about whether white holes exist, or how they'd be formed. The process starts when an old massive star collapses under its own weight and forms a black hole … But then, quantum effects occurring around the surface of the black hole halt further collapse to a singularity, and instead begin to gradually turn the black hole into a white hole that's spewing out the original star matter again. (Matthews Science Focus Magazine)

Ereignishorizonte potency comes from its ability to conceive TikTok and social media as a form of power/energy. Wessel's direct reference to black holes, as well as his inference of white holes skillfully locates us at the center of our Universe, alerting us to how everything cycles through different forms of matter (and mind). Does it matter if the speed of energy transformation is rapid like TikTok's pulse of imagery? Or if it is as slow as a dying star which takes millions of years for us to see? Have we grappled yet with how the most popular app of our present day is named after a human-made technological device for the measurement of time: i.e., clocks—tick-tock? *Ereignishorizonte* is a penetrating visualization of how energy circulates within our Universe (physically, ideologically, culturally, geographically and thermodynamically). It is also an incisive commentary on (our) time and what we chose to do with it.

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