# **Ripple Affect**

## Affective Turns of Body and Image

Sebastian De Line

Artist contribution - September 24, 2015

Sebastian De Line reflects on how affect appeared to spread across a large demographic following the events of Charlie Hebdo in January 2015 that started with two gunmen forcing their way into the Paris headquarters of the magazine and opening fire. In order to rethink subjectivity and difference, he questions the image documentation and exposure surrounding this event and prompts us to ask what happens when the image is cut or edited. This essay is part of *Open!* Co-Op Academy 'did you feel it?' [www.onlineopen.org/did-you-feel-it].



Figure 1: CBS News, video still, 7 January 2015.

When Spinoza thought about what a body can do, he left open a passageway to reconsider the potentiality of what bodies can become. As he put it, the body moves and rests depending on how it is affected by another body, and this next body's state of rest and movement are influenced by a third body, creating a three body relationality. This brings up two notions of Deleuzian fluidity, <sup>1</sup> which I draw from Spinoza: 1) What is a ripple affect? and 2) When an image flows from person to person, is it also a body?

The situation of image documentation and exposure surrounding the events dubbed #jesuischarlie supply a source to contemplate these questions. On 11 January 2015, images emerged across international news and social media describing a large demonstration that had taken place in Paris following the shootings of satirical cartoonists and journalists employed at Charlie Hebdo. The march was attended by 3.7 million people who came from various countries across Europe, including forty world leaders walking

arm-in-arm.

The first subchapter in this essay is entitled "Ripple Affect," taken from the colloquial term "ripple effect" – denoting the ripples that spread across water when an object is thrown in. With ripple affect, however, the object is an image and its "affect." It is then transformed into one of the three Spinozian bodies – transferring affect from person to image to person in a continuous stream of social media output. Not only is the single image or source image shared, but new altered versions of the images are designed in response to the original. There is also a video still taken from a surveillance camera recording of one of the shootings outside of the building that houses Charlie Hebdo's editorial offices (fig. 1). The image is taken seconds before a police officer is shot while lying on the ground. His hands are outstretched in a pose of surrender. Public execution comes to mind, particularly images of beheading during the French Revolution. This leads to questions regarding decapitation or public displays of punishment as an affective apparatus.

In the following subchapter, "The Decomposure and Recomposure of Affect in Image Editing," I analyze three successive images. The first (fig. 3) is a Reuters news photograph of world delegates marching for freedom in Paris taken shortly after the shootings. The next two are editorial alterations of the original (figs. 4 and 5). These new versions are reworked imitations which posit new subjective relationalities regarding sociopolitical dynamics of gender in hegemonic positions. 2

The next subchapter, "Bodies within Bodies: The Somato-image," focuses on the meaning of the somato-image and questions how an image performs as a body in relation to at least two other bodies, <sup>3</sup> as propositioned in Spinoza's *Ethics* (1677). <sup>4</sup> These bodies, the image maker, somato-image, viewer / sharer or counter imaginer can produce a ripple affect through the content they elicit which can steer or provoke certain reactions.

In subchapter four, "Fourth Body Relationality: Ripple Affect Viewed through a Which-slit Experiment," I overlay the notion of ripple affect with Niels Bohr's double-slit physics experiment, queered by philosopher and physicist Karen Barad. Following Spinoza, philosopher Brian Massumi's three-body problem in relation to affect is thereby extended into a four-body problem by way of a panopticon in quantum physics.

The conclusion, "Emotion: Matters of Quantum Patterning," is an attempt to rethink affect or how emotions are influenced in relation to Barad's theory of quantum particle patterning. The essay entangles the (haunt)ontologies of medieval literature and philosophy scholar Nicola Masciandaro alongside those of Barad, Spinoza, and Gilles Deleuze and Félix Guattari, without attempting to escape that entanglement. Jacques Derrida coined the term hauntology in Spectres of Marx (1993), where it has come to describe a lingering that is neither present nor absent, neither dead nor alive within ontology. While Masciandaro speaks of the spectre of the body, whose story of resistance lives on in another body taking its place after its execution, Barad considers spectres as particles appearing and reappearing in different patterns, when being monitored by a device and recorded in a historical timeframe. Taking these two purviews into account, Deleuze's assemblage can be used to scale up these patterns to relate bodies who are moving, crossing or gathering in various sociopolitical spheres. He and Guattari's tracings of micropolitics with respect to sexual, gendered and racial subjectivity reveal the spectres I aim to amplify when discussing their lack of voice within a Eurocentric reaction to (what has become commonly known as) terrorism without specific qualification of these various situations. Rather than trying to escape entanglement, I ask the reader to accept it - not as complacency, but as recognition of one's position within it.

#### Ripple Affect

Entanglement, in and of itself, is a Baradian term which the philosopher-physicist points to as the interlocations of matter and meaning in the here, there, now and then. To examine this further, she developed the which-slit experiment to track particle behaviour that creates both single wave and multiple wave (diffraction) patterning. When considering this experiment in terms of affect, her work opens up the potential of what emotions and affect may be. This study becomes especially useful in defining ripple affect as a transference of affect from body to body in a wave-like motion, a non-linear movement. In other words, ripples form on the surface of water when waves come into contact with other waves or matter. It is energy moving in an orbital motion that causes these waves to form. Ripple affect is thereby a form of diffraction, both singly and multiply waved.

In Gabriel Tarde's *The Logical Laws of Imitation* (1888), the nineteenth-century sociologist relates progress to a mode of collective thinking, such as how scholars and inventors share academic and scientific findings, building on the next person's contribution of successive discoveries. <sup>5</sup> What is particularly useful in regard to image making and affective transference is how Tarde describes the individual brain's use of a "fixation of images" when interchanging ideas or opinions. <sup>6</sup> Digital media theorist Tony D. Sampson reflects on the relevance of Tarde's thoughts on this collection of images that the brain sifts through to our understanding of the Internet and the culture of social media – as well as affect in general – with his book *Virality: Contagion Theory in the Age of Networks* (2012). Sampson notes that Tarde's view on microrelationality (one of two scales representing the intersection between matter and event or "relationality" within micro and macro societal spheres) as a fixture of congruence and difference of desires within a social structure, can be helpful in understanding the spread of affect through media sharing or what constitutes the ripple:

[The] repetition of desire spreads out through the mostly unconscious associations and oppositional forces of imitative social encounter. [Tarde] explains social relationality accordingly as composed, decomposed, and recomposed by imitative radiations of desire, appropriated by social inventions, and coming together in the shape of shared beliefs, sentiments, and performances. <sup>7</sup>

In traditional twentieth-century media, the role of the professional journalist or news photographer took an immanent position in constructing social opinion through the spread of images. There was less access to alternative media sources then, especially concerning global sociopolitical affairs. Yet while contemporary social media networks raise accessibility, they also stratify virtual and physical domains where people meet to share and debate images and texts. These new networks imitate or invent ever newer versions of themselves, passing on affective images in a contingent flow. For an image to successfully transfer affect to another, it must produce a rather high crest of emotional intensity. One way to produce intensity is to produce a form of extremism within the image. This extremism can trigger moral or ethical beliefs and perspectives when in contact with microrelational differences, 8 especially when the image is viewed as a "contagion" in macrorelational values. 9 When an image stirs up enough energy or affect to impact desire among large bodies of people by attacking shared value systems (for example, religious values), the spread of its recompositions increases. Affect will thus reproduce itself from various angles or points of view, decentralizing the specificity of recorded history, and spreading in various directions, bouncing off each other, reacting to, moving away from or toward, in a (not necessarily symmetrical or predictable) wave pattern.

A laboratory study published in 2002, "The Ripple Effect: Emotional Contagion and Its Influence on Group Behavior," provides quantitative examples of how emotions affect

group behaviour, producing an overarching mood or what they call a "group affective tone." Subconscious or automatic responses are known as "primitive contagions," the machinic drives that override reason or criticality in response to affect. Affect can thus be transferred from person to person, like a cold or flu, operating on a more invisible level. This is why affect's chain reaction is often compared to a contagion, theoretically. Bypassing consciousness or critical thinking, affective material that is sensed by its audience, stimulates an immediate physiological reaction. Massumi pointed out that it takes a half second for the brain to react to stimulation on an EEG machine. Significant brain activity is registered 0.3 seconds before a decision that is made 0.2 seconds after the body picks it up. This happens at the epidermal level. The skin picks up sensation, transferring signals to the brain to then be able to make a decision.

To date, most evidence for emotional contagions comes from the automatic, primitive contagion approach, which focuses on the subconscious and automatic transfer of emotions from person to person. This primitive contagion occurs through a very fast process of automatic, continuous, synchronous nonverbal mimicry and feedback [...]<sup>10</sup>

The effectiveness of mass media images and their ability to mobilize groups of people in a short amount of time, largely depend on this psychological process of primitive emotional contagion. For an image to be successful in its transference of affect, it must operate on an automatic and subconscious level, while remaining universal enough so that many people can relate to it, overriding clear subjective differentiation. Subjective differentiation is the ability to critically and reflectively position and or distance oneself with respect to an event: I am this person, gendered, racialized, positioned in society within my own particular strata or privileges or lack there of and therefore agree, disagree or react in a different way to this event, regardless of my initial, automatic, emotional response. I register what is happening on an emotional level, rethink the situation using criticality, then reformulate a more informed opinion.

What is key here is how the image affects desire, triggering a person to question or respond. Should an image be too generic in its representation, the viewer may feel less affected, responding to its banality and flattening out the dispersion of affective flow. It has less traction in stirring a large ripple affect because the image is not convincing enough to override our consciousness. We've seen it too many times before or we find fault in the image – that adds to its discountability. When an image's context is highly specific or subjective it may produce a primitive contagion, but for a smaller audience, enticing limited ripple affect. For mass media to mobilize a large-scale affective contagion, the image needs to bypass the viewer's ability to reason, so they respond automatically from an emotional base.

Looking at a video still from surveillance coverage of the Charlie Hebdo shootings broadcasted on international news channels, one can empathize with the victim in the image, a person who is about to be shot in front of the viewer.

It is important to consider how a viewer's morality can trigger a primitive emotional contagion. The incident, captured on film, becomes a form of public execution. It is an execution that the viewer has not been warned of in their voyeuristic participation, thereby appealing to automatic drives and flooding the senses. A feeling of powerlessness can emerge in the viewer whose gaze implicates them as witness. Sitting in the safety of their home, the viewer watches the murder of a person who appears innocent (hands raised in a pose of surrender). Yet they are unable to alleviate the situation. This loss of power is harnessed through a universal ideal of moral forgiveness and justice beckoning the viewer to sympathize with the victim. The motives of the shooter are extricated from the situation. Their subjectivity and contextualization remain unspoken, while moral opinions of violence take centre stage. This situation is further aggravated by the fact that the victim is a French authority figure (a police officer), one who is being called into question by people operating outside of known and accepted systems of law.

Noting that the victim is an authority figure is necessary to differentiate the position of the viewer. Depending on one's belief system with respect to authority, one may empathize to varying degrees. The information is shared or responded to with the promise of multiple potential interpretations or recompositions. One belief system may, for example, hold that the symbolic death of its perceived oppressor, the police officer, offers a release of tension. Another belief system may supersede the victim's position in society as a law enforcer, appealing to the unclothed/disarmed human beneath. The image of a person who is depoliticized becomes an empathetic tool, more easily digestible than chewing on a dense narrative of hegemonic stratification, the gristle of society's economic, gendered, sexualized and racialized divisions. Conversely, a belief system may align itself with authority, symbolically depicted within the image. The viewer may feel safe when in the presence of a police officer, and therefore feel more vulnerable with the violent eviction or absence of her or his presence. To the executioners who administer justice within the image, religious beliefs trump the supremacy of sectarian state law.

From a race perspective the figure of the police officer becomes an archetypal symbol in response to #jesuischarlie: a Twitter hashtag was also developed in which Ahmed, the officer's name, replaced Charlie. Where Charlie served to unify a public bearing a mantle of freedom of speech, his whiteness beckoned response from those Europeans who cannot see themselves in his image. It is an image both racialized and gender-signified in European history. Whose freedom of speech? Who is the hero(ine) of Eurocentric ideology? Additionally, when considering both racial and authoritative constructions of the #jesuisahmed identity, should a person feel disinclined to align with Ahmed's position of power as law enforcement? His position was dislocated from the subaltern (the unsung grandmother of colonial history which has no privilege to wield her power) and further marginalization lead to other symbolic recompositions. 11 His position has a complex relationship to power: his racialized body as a French Muslim potentially takes away some of the power he gains from being a man and a police officer. Particularly given to the intensified anti-Islamic sentimentality, governmental embellishment of terrorist mythology and xenophobia or animosity toward migration in Europe - #jesuisahmed became one of many other hashtags to add more visibility to the complex social embodiment of Othering. New characters were sought out as the story unfolded. A Muslim employee of a kosher supermarket hid shoppers in a freezer to save them from becoming hostages when the shooters took shelter after fleeing the Charlie Hebdo office. 12 Whether it was coincidence or premeditative to choose a kosher supermarket remains unknown. What can be said is that it created "estuaries" of the ripple affect. From the convergence of these overlapping currents, intersectional sociopolitical identities continued to emerge. The grocer, a person of colour, became another archetype in a complex narrative that questions the mode of ethical deliberation in determining who is a good European citizen.

#### The Decomposure and Recomposure of Affect in Image Editing

How can a viewer voice opinion when an affective contagion is undesirably transferred to the body?

Before considering the image as a cut / sutured body through an operation of photographic editing that empowers the viewer to become a maker who constructs their own version of contemporary reality, it is useful to go back a couple of centuries to the French Revolution. At that point in time, etchings were the primary form of affective images in journalism. Masciandaro's work on decapitation imagery during medieval and early modern periods is an early predecessor of this process of affective images. He backs up Spinoza's idea of third body relationality: the body in motion or at rest, influenced by a second body in motion or at rest, influenced by a third body in motion or at rest. 13 Masciandaro uses this orientation toward his concept of multiplicity as a result of a duplication of heads, viewing the emergence of heads as phantoms. When a head is severed, resistance is not cut off. A new body replaces the fallen and the spirit of resistance lives on in the next. As the blade strikes the present is severed, becoming a potentiality of opinions. There is then no past. Beheading severs the space around an event, producing in its before the presence of something that already has / can happen in its after the presence of something that did not / never stops happening. The synthesis of this duration produces the idea of a multiplication of the beheaded's head. 14 Every time the body is killed, a witness may transform herself into a fighter for the cause. The head is replaced by myriad zombie heads ready to take up its place, haunting both executioner and witness. The cut intervenes in the construction of the surrounding events in play. It is an opening not a closure. The context of a situation, the where, why and will to tell a story of oppression lingers in every moment, simultaneously within, past, present and potential future as a phantom.

Sampson frames the multiplication process in terms of a Tardean imitation of decompositions and recompositions of social relationality: in other words, there are three main ways to multiply, involving a process of destroying, copying and/or altering the original. <sup>15</sup> A person in the act of destroying, directly emulating or transforming an image, is not only informed by the image's capability to evoke emotion in the viewer, but by the speed at which the image is transferred. Should the viewer have ample time to deliberate on the image's various facets, they may choose to hate the image and destroy it. A second witness to the image's destruction may feel prompted to create a newly potent image in its wake. In another scenario, the viewer may align their own politics or opinion with that of the image's depiction and (interpreted) message, thus directly copying and redistributing it – liking and sharing. Or the viewer may react to it with a desire to transform and recompose the image into a preferred state of representation.

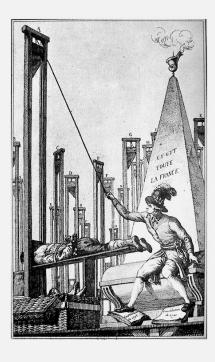


Figure 2: Hector Fleischmann, La Guillotine en 1793, 1908.

If the head were to be considered as an image being cut, replicated and transferred, how does the operation of incision and suturing of opinion from a visual perspective take place?

Multiplication of new heads can be understood within the context of image making by analyzing the sequence of three #jesuischarlie photographs (figs. 3, 4 and 5) which enact all three of Sampson's relational criteria (composure, decomposure and recomposure) described previously. The original photo shows a frontal depiction of the march. Without an aerial view, the millions of participants who actually attended the demonstration, trailing behind government officials, fall out of frame. The central focus in the image emphasizes a reestablishment of systematic supremacy, namely governmental control.



Figure 3: Original image, "A la marche républicaine," *REX*, 11 January 2015, Paris.

In quick succession following this first original image (fig. 3), two more images were published. Both present the same photograph, but are abruptly cut and reposited: bodies are missing; a disembodied appendage still clutches its neighbour; the backdrop of the street emphasizes its emptiness. The "decapitation" of the image serves to alter representation, removing unwanted bodies and mediating the potentiality of intimate proximity.

The next images (figs. 4 and 5) call into question what realities emerge within an image.



Figure 4: *HaMevaser*, Photoshopped image, "A la marche républicaine" with female delegates removed, 11 January 2015.

The second image in the series (fig. 4) was composed by an ultra-orthodox Jewish Israeli newspaper called *HaMevaser*, which covered the Charlie Hebdo story. The original image was altered in order to abide by a law [*Halacha*] that this branch of Judaism considers would have been violated had it shown the original image intact. The law in question describes conduct appropriate to certain social encounters, known in Hebrew as *Shomer Negiah* meaning to "touch" someone of another gender. <sup>16</sup> A person of more reformed Jewish beliefs or nonsectarian beliefs might have disagreed with the construction of this image – in which women were removed – deeming it misogynistic. To a law-abiding ultra-orthodox believer, however, such a photo of women and men holding hands might itself have been breaking law. What is interesting in this case in relation to image formation is how the image operates and affects. When following this Halachic train of thought, consider how touch is transferred from the gendered body of the people being photographed to the image and then to its viewers, holding or touching the image. This would imply that the image is not a conductor of gender but that it also has a body, one with its own gender. (Perhaps this would have made Spinoza chuckle.)

As it is difficult to establish a proposed gender of an image, I will forgo this question and turn to the next implication: in order for affect to transfer from body to body, it must possess a sentient ability. Rather than relate the image to a human body, perhaps this "being" is sentient: a non-human creature such as a plant, <sup>17</sup> animal or other entity on the scale of micro-perceptible cellular fields, <sup>18</sup> which are invisible to the eye. Barad refers to this phenomenon as transmateriality as in the way that she describes time as a body. <sup>19</sup> If

time is a body then so too can image be a body, for an image is an embodiment of time.

In response to *HaMevaser*'s image, *Waterford Whispers News*, an Irish satirical newspaper, published a photograph removing all of the men (fig. 5).



Figure 5: Waterford Whispers News, Photoshopped image, "A la marche républicaine" with male delegates removed, 14 January 2015.

The ripple affect of response adds an adjustment to reality rather than freezing history in a frame of supposed accuracy, a maxim of the modern age of photography. What is apparent is not a traditional journalistic position of capturing reality, but an operation on a presumed wound existing within the body of the image that is damaging a specific belief system. The corpus of the image is cut or Photoshopped (decomposed) and recomposed into a new, chosen, edited reality, different than the one depicted within the first image. Rather than an image that is imperceptibly doctored, passing for an accurate staging of known reality, this tactic chooses to let its opinion-making position be known. Reclamation of power to claim the image and recompose it into a desired body takes precedence over harmonious aesthetics. This unharmonious aesthetic opens up a potentiality for marginalizations to become embodied, viewed and empathized with through the transference of affect. The *Waterford Whispers* image in which only female authority figures exist offers a reality that represents both the present and future. While the present is depicted by the scarcity of women in power, the future potentiality is one in which male power is eliminated, where the females rule the world.

There is something refreshing offered to the interrupted world of this recomposed image. One gets tired of looking for clarity within the murky waters of slick, perfect images of wrinkle-free, athletic and wealthy bodies flexing their domination muscles. The world that *Waterford Whispers* points to is one that hasn't been figured out. It's an imperfect start with plenty of accessibility for the viewer to insert themselves into the space it proposes. In *Media-Bodies and Photoshop* (2012), Australian media and cultural studies scholar Meredith Jones points to the unabashed "cut" of image manipulation as direct or transparent in its opinionated "devising" of the message:

[A] protest against Photoshop's "believable" images would be more in line with the argument that digital manipulation of photographs creates unrealistic body-image expectations. ... That argument, logically, should embrace rather than rally against images adjusted to look "unnatural" in Photoshop because in those images there is less "deception", less attempt to make people believe that the figures represented are

in any way real. Photoshop, as we know from its use by artists, is able to create dreamscapes and fantastical bodies. <sup>20</sup>

The dreamscape or fantastical bodies described by Jones and what I propose as somatoimages or images as bodies sets up considerable debate within scientific discourse. If the image is a flat thing, a rendering or container of event or idea, then how can it emote?

#### **Bodies within Bodies: The Somato-image**

What is a somato-image? In short, a somato-image is an image as body. It is a body, undeterred by inanimate flatness, yet sweats, bleeds, agonizes, rejoices, verbalizes and swells with affect. Affect, after all, needs a body to contain itself and evoke emotion. It cannot be rendered cold and lifeless. Therefore, the body, unlike a simple container is a complex system of relationality and automatic functions. What Spinoza proposed in stating that the motion and rest of a body is affected by a second body, and that this second body is affected by a state of motion and rest in a third body, refers to both a relationality of bodies and affective flow. Ripples, waves or electrical currents oscillate through the body to a somato-image (compose), extending to another body (duplicate); the third body may (recompose) new somato-images, casting a stone or inserting an opinion into a macrorelational pool of discussion. <sup>21</sup> This produces a multiplicity of ripple affects, its number of "estuaries" are determined by the various ways in which viewers recompose the image, producing a spawn of new images to be shared as far afield as possible with new audiences.

It is not only the bodies depicted within the image that possess an affective quality, but the image encapsulating them. Should the image's context move into an abstract realm, its message becoming more opaque, affect can still emerge and spread virally. When the editor crops, encircles, cuts, moves or removes its organs or other entities living within the image, the body-as-image oozes affect regardless of the author's conscious intent. When the content within an image can be felt or perceived by its viewer as a conscious decision by the maker, the image beckons the viewer to make moral or ethical opinions. Perhaps this is why an image becomes particularly charged when the person constructing it performs an act of reality (such as the filmed beheading of a journalist for the purpose of media dissemination) specifically staged outside of the image, only to be embodied beneath its derma-surface (Massumi's skin response to affect). Perception of reality or truth moves from being binary to polymorphous within image construction. Just as a human body has seven layers of skin, the somato-image has multiple thinly operative layers, which are made more visible through Photoshopping. When these layers are cut or edited, the space that billows out beneath them causes them to swell up like open wounds. Air comes into contact with these unforeseen surfaces and its affect can give rise to both singular and pandemic contagions. The image is spread from body to body causing potentially new pathogens of resistance or affirmative transferences in desire. With every new opinion inserted within an image, a new pathway for affective contagions can emerge, spreading different opinions. Think of an Internet meme or YouTube response video that copies and alters a previously viral source. It is a desire-machine that has the potential to perform beyond our own bodily cycles of time, for it lives within this time and that of its own relation: 22 a time within the image, outside of it and of that which perceives it. Further, these mutations of time embodied by the somato-image are subjectively related to the viewer who perceives their epistasis. 23

Expertise is not called for, nor is it a prerequisite. However more the amateur hand (of the image cutter) wields opinion, however more the operating theatre of photography and image making becomes humoured (bloodletting) of its own paralysis of normativity. This bloodletting of a somato-image is not restricted to tragedy, it can also be extracted by comedy. Reactions to the shootings of satirical cartoonists at Charlie Hebdo – arguing in defence of the newspaper's infamous reputation to incite and inflame prejudice through

remarking on orthodox religious devotees, women, people of colour and queers within French society – described the shootings as an attack on freedom of speech. Humour was touted as a device used to make light of heavy subject matter within the sociopolitical realm. Yet humour can be used as a powerful tool to gather public opinion. Given the power to distribute a message to thousands of people, most would prefer to be laughing at the joke rather than the butt of it. In this case, those laughing would be doing so from a self-aggrandized and Eurocentric perspective.

Both the amateur as the persona of image cutter, and amateurism as an aesthetic strategy, need to be considered regarding the recomposition of imagery. And this is not only a road to resisting normativity. The bespoke handling of a seductive image can generate a positive behavioural response when its opinions are guided in healthy directions within anti-oppressive movements. It would be ill-conceived to delegate a hyperaesthetic realm to neoliberalism alone. Unpolished punk aesthetics have no political positioning anymore as a marker of resistance. Skepticism by more traditional leftist counterpoints to use more slick affective imagery in decentralizing hegemony would do well to consider using multiple methods of gaining opinion and growth in solidarity through various demographics. The indistinguishable signifiers between left and right confuse or trick the viewer into thinking they are backing leftist proposals when progressive packaging is used to conceal conservative messaging. The message is what one must listen to intently and scrupulously in order to see beyond how affect is harnessed to sway the middle ground. Looking at the wider context is thereby necessary to decipher the image's underlying message.

Collective assemblages have the potential to produce new medicines of change, change through subjective complexity and a greater capacity to empathize with these complexities. A person's ability to empathize with more intensified differences or in cohabitual paradox (sharing space with animosity toward people while living with this tension) while relating to an Other, adjusts the perception of distance. Can we live with or alongside hostile difference? Relationality becomes quantified by an increased fractalism (such as wave patterns) while closing the gap on difference through creating greater variance. If difference becomes commonplace, then it is no longer different, but variant. Increasing variance will bring this meta-relational factor together, while producing more energy. Adversely, it may also produce accelerationism (the belief that accelerating capitalism will trigger radical social change) and all the baggage that comes with its futurist, fascist or vampiric capitalist party-crashers. 24 What increased fractalism will do is create more contingent variance. Contingent or unpredictable variance produces depolarization, breaking open binaric sociopolitical systems, such as pro-choice vs. pro-life or Demcrats vs. Republicans, socialization and rigid self-policing. If there is no more normativity to judge or be judged by, all that remains is us and our communities based on empathetic value systems.

#### Fourth Body Relationality: Ripple Affect Viewed through a Which-Slit Experiment

Fractalism can be exemplified as a wave pattern or what is known in physics as diffraction. <sup>25</sup> Does ripple affect operate similarly to Barad's elaboration of diffraction or wave phenomenon, while being monitored by a surveillance device within Bohr's double-slit experiment? Barad researched a phenomena known in quantum physics through monitoring the "double-slit experiment" which scientists have been struggling with since the early nineteenth century. Thomas Young, Bohr and Albert Einstein were among many who ventured to understand what happens to photon / particle patterns. Barad's work addresses this phenomenon from a philosophical point of view, while using science to ground philosophy. Her work on diffraction especially is integral in understanding the potential of ripple affect. Barad writes:

Diffraction has to do with the way waves combine when they overlap and the apparent bending and spreading out of waves when they encounter an obstruction. A familiar example is the diffraction or interference pattern that water waves make when they rush through an opening in a breakwater or when stones are dropped in a pond and the ripples overlap. <sup>26</sup>

The double-slit experiment measures quantum light particles through a device which shoots them through a screen that has two side-by-side slits in it, through which the particles can pass, hitting a wall behind it and leaving a pattern. One pattern looks similar to the silhouette of the two slits, two bands of particles side-by-side. The other is a wave pattern, known as diffraction or what could be called in layman's terms part of a ripple effect. There are many factors that make up this experiment, but what is particularly relevant to the concept of ripple affect is that the patterns formed are affected when they are being monitored and their data collected. They deviate when their patterning is being watched and recorded. This all happens on a quantum scale, between electrons.

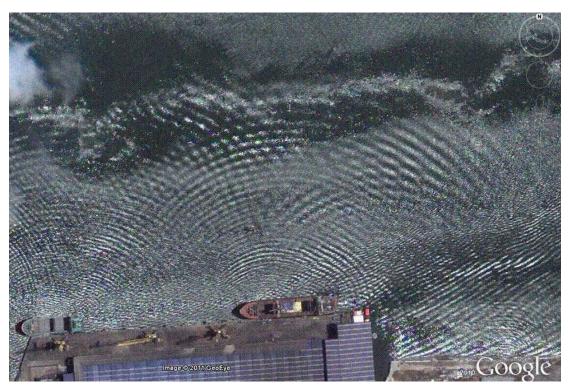


Figure 8: Image of wave diffraction, Google.

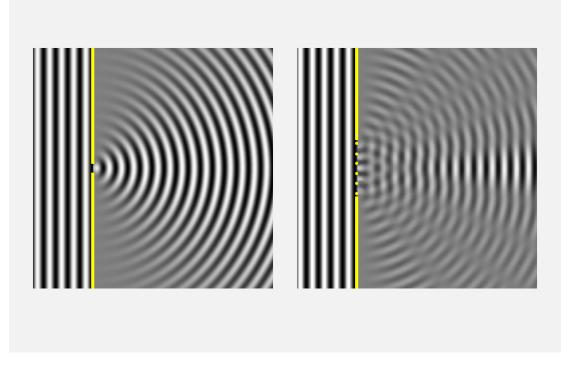


Figure 7: Diffraction wave pattern.

The application of this experiment to a situation regarding the relationality between bodies and affective image raises a series of materialist questions stemming from one major concern. The concern follows classical logic: the body, being made of matter, acts such as quantum matter because a body is a system where a spectrum of scale resides (from atomic to skeletal). We are atoms. Therefore we behave as atoms. Only we can reflect and articulate our own observed behaviour. But do atoms have subjectivities? Can they reflect and articulate their behaviour? Why do atoms reserve themselves from exhibiting diffraction when being monitored? Do atoms embody consciousness? What does this tell us about our own group behaviour while we're being monitored?

If two bodies, take you and I for example, are affected by a third body such as a racist image or article, triggering two subjective reactions, then how is the ripple affect stirred? One of us is angered and takes a quantum leap, passes the image on to friends, then a protest is organized. The other body is also affected but concerned that they will be monitored by governmental authorities and possibly face punishment. Yet their opinion of the racist image is not forthcoming. Massumi refers to this triangulation in physics known as the "three-body problem" to account for chaos and differentiality in affect theory, connecting to Spinozan principles of relationality which Massumi extensively developed.<sup>27</sup> In their own way, each body creates movement toward collective assemblage. Even the most remote person will have contact with non-human animals or outside stimuli that affect their behaviour and choices. These collective assemblages overlap. And these overlaps occur in society regardless of the severity of difference. We perform social engagements such as working in the same company, or standing in line at the supermarket. But before each of us chooses a destination (double-slit portals), deliberation is made on these various social contracts, which are agreed upon and can be broken. A recording device acts as a fourth body, prompting reaction to its presence and the encoding of our behaviour.

Michel Foucault's panopticism sets up this situation of fourth body relationality. <sup>28</sup> If response to panopticism operates on an electron-size scale, such as in the Bohr experiment, and a person follows this contingent train of thought, then a body's response to affect can thus be mediated or manipulated given the subjective person's own cognizance in recognition of the device. It is not the fact that the body is being monitored that triggers it to perform deviantly. Perhaps it is an atom's being and positioning in time that causes a rupture when attempting to fix the body within a documented history – a rupture in both time and becoming, allowing the body to spill over an obstacle, playing out conformativity rather than entanglement.

Time, when it is not being fixed (for example, when data is collected) is in movement. Such as in the way a photograph captures a fixed moment in time. It produces a rendering of time in a rested state. A body at rest as Spinoza put it. (An elder of mine once told me that he never allowed his photograph to be taken because it would steal a part of the soul.) In an interview with Barad, she elaborates on her which-slit experiment, explaining that it produced a new quantum physics problem left unaccountable: the phenomenon of how atoms deviate when their movements are documented. Her results proved that what is known as "the past" can be changed. An event in the past cannot be returned to an exact state of its original course before encountering obstruction, but it might reform its representation of collective assemblage with its rupture stitched back together.

Dis/continuous as Barad would say. <sup>29</sup> She also calls for greater attention to ethics with respect to fluidity of time. If one can redo the past, one can act harmfully, all the while knowing that it could potentially be erased and remade to look as it was first perceived:

Being attentive to ways in which we are re-doing, with each intra-action materially redoing the material configurings of spacetimemattering. The past and the present and the future are always being reworked. And so that says that the phenomena are diffracted and temporally and spatially distributed across multiple times and spaces, and that our responsibility to questions of social justice have to be thought about in page: 13 / 18 — Ripple Affect

### terms of a different kind of causality. 30

When a racialized body, the body of a woman, the trans body, the queer body, the non-normalized body, takes into consideration a situation of Othering, of violence toward its being and calculable dangers it must navigate by making quantum leaps. If race is socially constructed, then it is through this constant mediation of overlapping here-nows and there-thens that play out in the decision-making process of the racialized body. When historical violence overlaps with present violence which then overlaps with the potentiality of violence, the non-normative body makes such quantum leaps, daily. <sup>31</sup> This is the difference between a body who does not know or mediate the overlappings of *spacetimemattering* and mitigation of violence. <sup>32</sup>

It does not preclude a set destination or course of action but one must take into consideration various possibilities beyond a fourth body of encounter before acting. Unlike the double-slit experiment where electrons stick to the detection-screen in order to observe their patterning, ripple affect is fluid. That is, in the same way that water molds itself into cracks or seeps and spills over continuously, thwarted only by gravity or momentum. Ripple affect, although it may rest, awaits that which recomposes its motion.

#### **Emotion: Matters of Quantum Patterning**

If it is determined that the somato-image is a body, then what is affect? Barad determines that matter and time are entangled, <sup>33</sup> they are intra-active <sup>34</sup> or what could be called eversionary. <sup>35</sup> Eversion is different than subversion in that subversion implies that it remains within the hierarchical system it subverts. Eversion turns inside-out or outside-in. It does not leave hierarchy intact, it turns the entire system inside-out. A particle can approach two slits, split itself into two particles, go through both portals, then rejoin on the other side. Or it can pass through just one slit. It can bounce off another and produce diffraction. When time is in a state of motion, matter flows in motion. When time is measured, matter plays dead and waits for the observer to erase any record of its patterning, before it reemerges in collective assemblage.

Affect, however, is much more often studied in its singularity, how one person is affected. In order to understand affect, one must rethink emotion. Perhaps emotions are patterns such as particle patterns: various patterns of matter bouncing off the folds and inner walls of the body. Each pattern produces a particular vibration from all the bouncing like sound waves or water. The body carries water. Certain patterns feel complex and others feel sensuous. As this inner pattern hits the walls of the body causing an emotion, this body also in motion, comes into contact with other bodies, who also have their own patterns of inner quantum matter bouncing about. Sometimes these vibrations meet at a high crest creating an intensity (affect) or accelerated frequency, speeding up the process of the intra-action. For affect to subside, one must choose rest instead of motion. Rest is not arrest, for time is in a state of becoming.

The somato-image is an interruption or change of course within ripple affect, caused by digital editing, or the insertion of new opinion. Cutting together / apart, <sup>36</sup> as Barad coined the term, can affirm an understanding of how the Photoshopped image operates when it is cut or edited and reassembled together to form an abstracted image. It is sutured together. A past, reclaimed or appropriated, its subjectivities operated on by a viewer and redistributed into motion, into the flow of affect. It would appear to be hauntological, <sup>37</sup> Derridean by way of its reflexive tracings, tracing the scars of the incision. The rolling heads of Masciandaro's haunting words come back to mind. One is left with ethical questions yet again. It seems innocent enough to doctor a photograph, to inflict harm upon an image. Yet, through the (re)distribution of affective images depicting violence, one must then enter a debate of content warning. Does the viewer have a right to

know if the material they are consuming potentially inflicts emotional injury? Do they have the right to choose when and how to mediate affect?

I think it is good practice in ethics to extend care when distributing content. One's belonging is not hinged on complacency toward normative social or state violence.

What interested me in following the events of Charlie Hebdo was how affect appeared to spread across a large demographic, like a chain reaction. In this same event, another point of interest revealed itself, a Photoshop war between three newspaper sources, each showing a version of the same image, but two were drastically changed. This prompted the question of what happens when the image is cut or edited. One image in particular was amended in order to follow a religious tenet. This seemingly orthodox tenet provided a paradoxically philosophical proposition, allowing the image to become something other than an object: a body. And thinking of the image as a body, as a somato-image, wasn't so farfetched. In quantum physics it has been proven that atoms display unpredictable behaviour when recording their movements. Their deviant behaviour calls into question their consciousness. It is a phenomenon seen throughout nature, from plants to animals, matter appears to be sentient, to react to affect. When comparing the Photoshopped images of the Charlie Hebdo march, to an image of a public beheading during the French Revolution by Hector Fleischmann in the 1908 etching, La Guillotine en 1793 (fig. 2), ripple affect can be charted through subsequent recomposing and redistribution. Next to that, the role of the image editor takes on a more prominent role in contemporary sociopolitical practices in comparison to traditional media. How many manifestations can immerge from a single image? This increase in the complexity to communicate about subjectivity and variance forces us to rethink difference. If we remove difference from the x vs. y binary axis, multiplicity becomes less polarized. Ripple affect can therefore spread out, producing estuaries beyond the original opinion being imitated.

At the mouth of a river, where the stream meets ocean tide, fresh and salt water collide forming an estuary. For affect to emerge, this collision needs to take place. The collision causes both fresh and salt water to merge. The estuary splits from the river's initial vein, causing branches of flow. Ripple affect is thus the emergence of such estuaries. Yet it cannot only be characterized as such. Interruptions within the ocean, such as the casting of stone, produce new ripples or tracks of opinion to take motion. It is not the river itself, nor the ocean which is affect. These bodies of water, the micro and macro of society, are in continual relationality with one another. Whether one drops a stone into a river or an ocean, one sees the reverberations bounce outward, signaling presence – a presence only felt when one is in proximity to it. But what one does when the ripple passes through them remains contingent on that ripple, even in its wake, however fleeting or lingering its passing.

**Sebastian De Line** is a Chinese-Métis artist, born in Canada and residing in the Netherlands. His scholarly interests include indigenous philosophy, sovereignty, new materialism, and queer and feminist theory.

#### **Footnotes**

- 1. In Gilles Deleuze and Félix Guattari's *Anti-Oedipus*, fluidity is defined as "continual material flow (hyle)." Hyle is the Greek word for "matter." Deleuze and Guattari go on to say that, "associative flow must be seen as an ideal thing, an endless flux, flowing from something" and that "hyle in fact designates the pure continuity that any one sort of matter ideally possesses." Gilles Deleuze and Félix Guattari, "The Machines," *Anti-Oedipus: Capitalism and Schizophrenia* (New York: Continuum, 2004 [1972]), 38–39.
- 2. See Didier Debaise, "What is Relational Thinking?," *INFLeXions*, no. 5 (2012), <a href="www.inflexions.org">www.inflexions.org</a>.
- 3. Somato-image is a term related to the Latin word *somato* used in medicine to mean "relating to the body." Somato-image is used to describe the image as body. "Surgical Terms," *ANZ Journal of Surgery*, www.anzisurg.com.
- 4. "Body cannot determine mind to think, neither can mind determine body to motion or rest or any state different than these, if such there be." Baruch Spinoza, *The Ethics*, "Part III: On the Origin and Nature of the Emotions, Proposition II" (1677), <a href="https://www.yesselman.com">www.yesselman.com</a>.
- 5. "Progress, then, is a kind of collective thinking, which lacks a brain of its own, but which is made possible, thanks to imitation, by the solidarity of the brains of numerous scholars and inventors who interchange their successive discoveries. (The fixation of discoveries through writing, which makes possible their transmission over long stretches of time and space, is the equivalent to the fixation of images which takes place in the individual brain and which constitutes the cellular stereotype-plate of memory.)" Gabriel Tarde, *The Laws of Imitation*, trans. Elsie Clews Parsons (New York: Henry Holt, 1903 [1890]), 148–149.
- 6. Ibid., 149.
- 7. Tony D. Sampson, *Virality: Contagion Theory in the Age of Networks* (Minneapolis: University of Minnesota Press, 2012), 18. 8. Ibid., 19.
- 9. Ibid., 7.
- 10. Sigal G. Barsade, "The Ripple Effect: Emotional Contagion and Its Influence on Group Behavior," *Administrative Science Quarterly* 47, no. 4 (December 2002): 647.
- 11. I refer to Sneja Genuw's notion of subaltern in relation to affect beyond its often cited Western definitions. See Sneja Genuw, "Subaltern Empathy: Beyond European Categories in Affect Theory," *Concentric: Literary and Cultural Studies* 35, no. 1 (March 2009): 11–30, concentric-literature.url.tw.
- 12. See Natasha Bertrand, "A Supermarket Employee Hid Several People and a Baby in the Freezer While a Store Was under Seige," *Business Insider UK*, uk.businessinsider.com.
- 13. My first encounter with the concept of three body relationality, as propositioned by Spinoza (see note 1) was explained by Brian Massumi at his public lecture, "Virtual Ecology and the Question of Value: Exploring the Relationship Between Value, Abstraction, Force, and Potentiality," Dutch Art Institute, 18 June 2015, www.dutchartinstitute.eu.
- 14. Nicola Masciandaro, "Non Potest Hoc Corpus Decoralli: Beheading
- and the Impossible," in *Heads Will Roll: Decapitation in the Medieval and Early Modern Imagination*, ed. Jeff Massey and Larissa Tracy (Leiden, NL: Brill, 2012), 31.
- 15. "Although singularities clearly 'come together' in a topological diagram as an extension into space, they remain in a state of intensive molecular flux (becoming) ... Deleuze's assemblage theory, like Tardean sociology, argues that it is the composition of singularities that determines the whole." Sampson, *Virality*, 8.
- 16. See Chaviva Gordon-Bennett, "What is Shomer Negiah?," <u>judaism.about.com</u>.
- 17. See Peter Tompkins and Christopher Bird, *The Secret Life of Plants* (Noida, India: HarperCollins India, 2000), <u>www.scribd.com</u>.
- 18. See Claude Bedard, Helmut Kroger and Alain Destexhe, "Modeling Extracellular Field Potentials and the Frequency-Filtering Properties of Extracellular Space," *Biophysical Journal* 86, no. 3 (March 2004):

#### 1829-1842, www.cell.com.

- 19. Transmateriality is about the state in which matter moves through potentialities of being, knowing and coming together. Karan Barad, "Re-membering the Future, Re(con)figuring the Past: Temporality, Materiality, and Justice-to-Come," keynote lecture, Feminist Theory Workshop, Women's Studies Department, Duke University, 2014, www.youtube.com.
- 20. Meredith Jones, "Media-Bodies and Photoshop," in *Controversial Images* (New York: Palgrave, 2012), 6.
- 21. A quote by Alfred North Whitehead on thought: "Like a stone thrown into a pond it disturbs the whole surface of our being. But this image is inadequate. For we should conceive the ripples as effective in the creation of the plunge of the stone into the water. The ripples release the thought, and the thought augments and distorts the ripples. In order to understand the essence of thought we must study its relations to the ripples amid which it emerges." Alfred North Whitehead, *Modes of Thought* (New York: Free Press, 1968), 36. 22. "[T]here is always a flow-producing machine, and another machine connected to it and interrupts or draws off parts of this flow..." Deleuze and Guattari, "The Machines," 5.
- 23. See Patrick C. Phillips, "Epistasis- the essential role of gene interactions in the structure and evolution of genetic systems," US National Library of Medicine, Nat Rev Genet. 2008 Nov: 9(11): 855–867, <a href="https://ncbi.nlm.nih.gov">ncbi.nlm.nih.gov</a>.
- 24. See Simon O'Sullivan, "The Missing Subject of Accelerationism," *Mute*, 12 September 2014, <u>www.metamute.org</u>.
- 25. See Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham, NC: Duke University Press, 2007), 97–106.
- 26. Ibid., 28.
- 27. See Brian Massumi, "Navigating Movements," www.brianmassumi.com.
- 28. See Michel Foucault, *Discipline and Punishment: The Birth of the Prison* (New York: Random House, 1995), 195–230.
- 29. Karen Barad, "Quantum Entanglements and Hauntological Relations of Inheritance: Dis / continuities, SpaceTime Enfoldings, and Justice-to-Come," *Derrida Today* 3, no. 2 (2010): 240.
- 30. See Rick Dolfijn and Iris van der Tuin, "Matter feels, converses, suffers, desires, yearns and remembers," in *New Materialism: Interviews & Cartographies* (London: Open Humanities Press, 2012), <a href="mailto:quod.lib.umich.edu">quod.lib.umich.edu</a>.
- 31. Barad, "Quantum Entanglements and Hauntological Relations of Inheritance," 247.
- 32. Barad, Meeting the Universe Halfway, 243.
- 33. Barad, "Quantum Entanglements and Hauntological Relations of Inheritance," 244.
- 34. "Intra-action is a key concept of agential realism (Barad 2007). In contrast to the usual 'interaction', the notion of intra-action recognises that distinct entities, agencies, events do not precede, but rather emerge from / through their intraaction. 'Distinct' agencies are only distinct in a relational, not an absolute sense, that is, agencies are only distinct in relation to their mutual entanglement; they don't exist as individual elements. Importantly, intra-action constitutes a radical reworking of the traditional notion of causality." Barad, "Quantum Entanglements and Hauntological Relations of Inheritance," 267.
  35. Eversionary is a term I use which comes from eversion: the process of turning inside-out or outward. Eversionary relates to Karen Barad's which-slit experiment where the detection device collecting data influences with behaviour or particles and diffraction. Time and matter become eversive.
- 36. Barad, "Quantum Entanglements and Hauntological Relations of Inheritance," 245.
- 37. See Mark Fisher, "What is Hauntology?," *Film Quarterly* 66, no. 1 (Fall 2012): 16–24.

### Crosslinks

'did you feel it?': <a href="www.onlineopen.org/did-you-feel-it">www.onlineopen.org/did-you-feel-it</a>

## Tags

Activism, Aesthetics, Affect, Image

This text was downloaded on August 24, 2025 from *Open! Platform for Art, Culture & the Public Domain* www.onlineopen.org/ripple-affect