Between Emergence and Emergencies: An Introduction to the Special Issue 'Media, Materiality, and Emergency'

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In late 2019 I was asked by the editors of *MAST* journal to put together a special issue based on questions of media and materiality, a few months before the start of the COVID-19 pandemic. I had been immensely interested in the relationship between the materiality of media, the concept of emergence, and the kinds of emergencies that might be seen to threaten the annihilation of the current assemblages of matter. These were a set of ideas that I was starting to tinker with based on my interest in Alfred North Whitehead and Gilles Deleuze and the way they can be used to think about the emergence of novelty in a non-deterministic world. "Let's put together an issue on media, materiality, and emergency," I said, rather pleased with myself at the etymological connection that I'd made between 'emergence' and 'emergency,' which I thought could provoke some interesting media philosophical enquiry in the context of contemporary and historical crises (in other words, *emergence* is the process that can bring things into being, but *emergencies* could be seen as threats to existence, or at least our so called 'normal' experiences of existence). In this sense, this would be a project that involves thinking about process, becoming, and novelty hand-in-hand with the loss and the perishing of 'actual entities' that accompanies process. Who would have known that the topic would

become so timely and would open so far beyond its intended scope, which, in relation, might have originally been, I have to admit, fairly narrow? The current global emergency brought about by the novel coronavirus pandemic now reconfigures the way vast swathes of the globe use communication media to relate to others, to remain insulated from the outside and to create what Peter Sloterdijk once called 'spheres of immunity.' It therefore seems like a good time now to start asking questions about how the materiality of media is related to the emergence of catastrophic events, both in terms of the current global pandemic, the deep structural inequalities and racism that it has exposed, but also in terms of the climate crisis and other contemporary emergencies that we are still living with. The two interrelated questions that frame this special issue stem from these concerns. They are: *How do emergencies change the way we use or think of media and mediation?* and *How does media and mediation change the way we think of emergency?*

The materiality of media has been at the center of a brand of media scholarship and media art practice that holds the position that objects such as transistors, capacitators, typewriters, gramophones, celluloid, cathode ray tubes, and liquid crystal diodes impact on the conditions for communication, the conditions for representation, and in turn the conditions for knowledge. Those usually invisible things—objects and technical processes that make images, sounds, and written texts possible—are for people interested in this brand of scholarship precisely those things that are fundamental to understanding the efficacy of media content in general. The invisible side of media culture is made visible by media theorists that look to uncover the implicit, 'behind the scenes' processes that underpin aesthetics and the mediation of relationships and in turn the development of a so-called culture. This same invisible side of

media is also made visible by artists that show us how media can be understood or made to act differently in the face of emergencies.

Media is commonly situated as the 'inbetween' of bodies—and perhaps this is one reason it has become so important during the current pandemic. Media is the thing that allows a movement between two poles. It is the material that makes possible the movement of data, over space (transmission) or over time (storage). A sender and a receiver, one and the other, stand at either sides of a divide and communicate via a medium. In this sense, media might, following Sybille Krämer's reading of Habermas, be considered as erotic, connecting material bodies, providing the conditions for the emergence of material assemblages, as a receiver grasps and pulls into itself data that is transmitted from a sender. Of course, media may undertake the opposite role, as Krämer also points out, dividing matter into separate bodies, keeping the sender and receiver at a distance (creating 'immunity,' rather than 'community'). Media arts practice and media theory in the most general sense has been about asking questions about these functions of mediation, which connect, divide, and express material conditions.

Another approach to questions of materiality and media has focused on the hardware of media, particularly with respect to the way it may provide the framing for discourse, social relationships, and experience in general. Friedrich Kittler perhaps most famously said that "media determine our situation" (*Gramophone* xxxix), pointing to the impact of technical media on the conditions for discourse in the 19th and 20th century. Or, as Daniel Miller argues, often it is the invisibility of material objects that give them their power. Miller writes, "Objects are important not because they are evident and physically constrain or enable, but often precisely because we do not 'see' them. The less we are aware of them, the more powerfully

they can determine our expectations by setting the scene and ensuring normative behavior, without being open to challenge" (5).

The question that interests me—and that I am happy to see has spurred on so many modes of enquiry in this special issue—is: what is the relationship of materiality and emergence? We might ask, following Deleuze, how do new things come into the world? But also, what older things are put at risk? We might ask, following Whitehead, how can we chart the creativity of the world as though an arrow, as a process that resists deterministic terms? How can we start thinking about the state of *emergence* (where new information enters the world) by looking at the conditions of *emergency*? How should we start to think of the materiality of media and the way it embodies information when the very materiality of the world seems to get thrown into flux? How can we think about the world as both *a becoming* and *a perishing?* In the introduction to this special issue, as a precursor to the following creative and thoughtful essays that it has been such a pleasure to collect, I want to first set up some of the context for the discussion of materiality and media that follow. Secondly, this introduction will outline the way I first conceptualized the term 'emergency' when I was crafting the Call for Papers in early January, months before the scale of the COVID-19 emergency became apparent.

It is no surprise that in the context of the COVID-19 pandemic, illness and contagions are a recurrent feature in the artistic and theoretical responses collected together in this special issue. However, this is by no means the only topic addressed. In fact, in this special issue the authors predominately avoid the 'Covid Now' rush to understand the present. Instead all the essays and practice-based studies in this issue explore the ongoing conditions for contemporary emergencies and the ways that media culture is implicated in and can be used to reflect on the

multi-faceted crises that are emergent within the contemporary world. For example, Iain Taylor, Sarah Raine, and Craig Hamilton's paper on COVID-19 and the UK live music scene inquires into the impact of COVID-19 on gigs, but also, more than this, discusses the spatial materiality of music itself. The realities of COVID-19 are importantly addressed in their paper, but so too are the spatial conditions that have given character to the current crisis in the live music industry. The other piece in the special issue that most explicitly engages with the COVD-19 pandemic is Jernej Markelj's far-ranging interview with Tony D. Sampson. Their discussion addresses viruses and modes of contagion but also the 'dark refrain' of far-right populism and social media. Much more than the current state of emergency due to COVID-19, Markelj's conversation with Sampson addresses the political and relational conditions of contagion in general. Wendy Haslem's paper also discusses the experience of the closing of borders in Australia in order to combat the spread of the virus, but she uses her writing about COVID-19 alongside the devastating Australian bushfires of 2019 and the experience of the immersive installation *Borderless* by teamLab in order to unpack questions of borders, transmission, and immunity, inspired by Krämer's already mentioned work in the area of media philosophy.

The broader topics of illness, technologies, and politics are further explored in Marcos Serafim's art project *Autoimmune,* where a machine learning algorithm is used to generate images that bring into question the misinformation that circulated along with the AIDS epidemic. Like the Markelj and Sampson interview, this work puts into relief the relationship between images, technology, illness, the distortion of public communication, and contagion. Jason Geistweidt in his *Twittage* project also deals with issues around the instability of communication and social media. In *Twittage* he uses a computer program to pull text and

images from social media streams in order to create an overlaid collage of images that appear like a pentimenti. The work itself probes the programmability of rules and media temporalities, using the ephemerality of social media posts tagged with words such as 'fake news,' 'isolation,' and 'loneliness' to create ghost-like, abstract compositions.

As well as the topic of bodies and communication technologies, there is a reoccurring theme in a number of the essays that address concepts of borders and the processes of border crossing. Irina Troconis and Alyssa Quintanilla each in their individual contributions to this special issue discuss the attempted crossings of the USA-Mexican border and the memorial traces of those people that have lost their lives in the desert. Quintanilla's essay offers a close reading of Craig Freeman's *Border Memorial: Frontera de los Muertos*, while Troconis, also referencing Freeman's augmented reality (AR) work, amongst others, explores questions of mapping, space, and affect. In both essays there is an emphasis on loss, memory, and the ongoing traces of the lost within space (both virtual and actual). Kathleen Williams's essay in the special issue also address movement and loss by focusing on questions of affect but in a different context and set of circumstances. In her essay Williams discusses the informational *and* affective assemblages of media devices in the search for Malaysian flight MH370. In her piece, Williams reconsiders the relationship between media technology, air travel, and the natural world, using the circulation of passengers and planes around the globe to discuss the global flows of information and what happens when this incredibly controlled, planned, and ordered system breaks down.

Expanding on the focus of movement, borders, and struggle, several authors provide new perspectives on the refugee crisis by focusing on the movement of messages and people over land and sea, along with the records of forced migration and their mediation. Christian

Whitworth's essay "Catastrophe in a Bottle" uses a close reading of the work of Ellie Ga to think through issues to do with the inscription and transmission of messages, along with Karen Barad's formulation of 'intra-action' and 'diffraction' to provide a new perspective on what he calls the ethics of exclusion. Similarly, using the set of material relations assembled in art practice as a tool for thought, David Barry's essay in this special issue explores how new German theater has responded to the refugee crisis and racism emergency.

In this special issue there is also an emphasis on media temporalities and the ecological crisis. The media arts practice of Gloria Lopez-Cleries and Sive Hamilton Helle explores the both metaphoric and literal entanglements of digital representation and the natural world, through metaphors like the cloud but also through the very real extraction of rare earth materials associated with the production of computers. Dominik Schrey writes about the glaciers of the Europe Alps, around 1850, arguing that they should be understood as a 'becoming media.' Schrey considers the various ways that glaciers have been represented, as aesthetic objects, as rationalized thermometers of the planet, and as storage media, exploring the various temporalities entangled in these material objects.

What these essays and media art projects show us, as we leap from emergency to emergency, is the way that these emergencies aren't easily or simply resolved but instead pile up in the present. To illustrate this, the philosopher Michel Serres lists the catastrophes of the 20th century—the century that he sees being the worst of all. In *Hominescence* he writes:

> Europe's cyclical suicide in 1914; the globalization of war; the eradication of peasants
> in the Western countries, a doing away with that began with their useless sacrifice
> during the first world conflict; the devastation of colonial countries; the twin
> totalitarianism of the Soviet Union and of fascism in its three versions, Francoist,

Mussolinian and Nazi, which dominated Europe and the century from 1917 to 1989; the

Final Solution and the extermination camps; the atomic bombs of Hiroshima and

Nagasaki; the birth and putting to death of the third and fourth worlds; the gigantic

farce of subcultures issuing from totalitarian ideologies first and from the capitalism of

the United States next, this latter all the more saturated with dollars for starving

humanity while watering it with gobs of ugliness. (255)

These catastrophes have not ended. The events continue, they accumulate, we continue in their

aftermath; it is, as Serres tells us, an illusion if we think that they are over. The events are

regressions, disorders, and turbulences that stand against our ongoing hominization and that we

must push against in processes of transformation (*Hominescence* 255-6). We might say that

these emergencies are what make us struggle, suffer, and in short become excruciatingly

human. They ask us to invent new sites of hospitality and new ways of dealing with a crisis. As

the emergencies (all of them, not just the most recent) continue, the role for media theory and

art practice can only be to ask about the material conditions for living amongst this turbulence

and to begin to start to chart these new possibilities for hospitality and community (as well as

immunity).

Material

In the field of philosophy, the term materiality brings to mind a number of recent shifts in

thinking about the human and humanism in general amongst non-human actants. One of these

theoretical shifts is represented by the term 'new materialism,' first appearing in the 1990s.

Another is represented by the work in speculative realism and Object-Oriented Ontology,

which became popular around the mid-2000s. Both of these shifts seem to speak to a larger

attempt in philosophy (and of course in other fields, too) to think beyond the human and to

include other material entities in our deliberations about the world (see, for instance, Latour; Serres, *The Natural Contract*; Haraway; DeLanda). Anthropocentrism is replaced by thinking through human and non-human assemblages. For the speculative realists, agency was to be found in both human and non-human objects, with all things seemingly placed on the same ontological level (see, for instance, Harman; Morton). In terms of new materialism, a key question is about the formation of subjectivity amidst not only linguistic structures (à la the linguistic turn) or social structures (à la social constructionism), but also through and in combination with material entities in the world. For the new materialists, the plateau on which one stands in order to see themselves as a subject is not just produced linguistically nor by social structures alone, but also materially; by thinking through the intersection between biological bodies, non-biological objects, and social structures, the new materialist thinkers offered philosophy a way to reconsider the subject as co-constructed within these assemblages. In developing new materialism as an approach that touches the fields of philosophy, media studies, feminist theory, art history, and art practice, theorists such as Karen Barad, Rosi Braidotti, Elizabeth Grosz, and Jane Bennett have been vital.

While recent media art and media theory indeed draws upon approaches found in post-humanism and new materialism, the focus in the field of media studies on the materiality of things also goes back a good deal further. The field after all is based on the careful study of either the devices themselves that embody, transmit, and store information, or their social, political, economic, and epistemological effects. As John Durham Peters puts it, "media are our infrastructures for being, the habitats and materials through which we act and are" (15). Or as Sean Cubitt states, "mediation is the ground of relationship, the relationship that precedes and constructs subjects and objects" (*The Practice* 2). Media matter precisely because their

"mattering constitutes the knowable, experienceable world, making possible all sensing and being sensed, knowing and being known" (Cubitt, *The Practice* 2). At least since Marshall McLuhan, there has been a tendency of thought in the field that explores not the signals, signs, or images that circulate in media culture, but rather the material conditions for that circulation. The hardware of storage, transmission, transduction, and the material processes of data processing for many was at the center of analysis.

McLuhan famously claimed that the human senses were extended by technology. Just as the use of sticks could extend a person's reach and the use of knives could stand in for the teeth, so too could media technology, according to McLuhan, allow bodily capacities to be enhanced (*Understanding* 4). For McLuhan technologies of seeing and hearing meant that humans could have eyes and ears in distant locations. The possibility of a networked electronic environment meant nothing less the extension of the human central nervous systems. Later Kittler would pick up McLuhan's thought on the relation between human senses and technical media and suggest that media actually limit, rather than extend the human, offering a revision to this approach based on his research into the genealogical roots of media apparatuses and his study of the relationship between technical media and the military. Kittler argued that media limit the scope of what can be seen, heard, or felt based on their technical capacities and the range of experiences that they are able to include in discourse (*Optical* 29). Although Kittler and McLuhan reach different conclusions, both of these thinkers established a set of methods for media scholars and artists that are intent on, as mentioned above, exploring the intersection between material bodies, both human and non-human.

A similar approach to materiality has been taken with regard to studies of contemporary digital media, perhaps as a reaction and opposition to the supposed immateriality of the

medium that circulated in the prominent discussions of the 1990s and 2000s. Anna Munster

and N. Katherine Hayles have been important in giving digital media scholars the tools needed

to think about the relationship between the human and the digital. Both have written about the

enfolding of the materiality of bodies within digital systems, arguing for a new approach to

consider the folded, complex, non-oppositional relationships between the two. This approach is

similar to what Serres describes as 'hominescence,' as a way to describe the transformation of

humans in concert with the development of technology since around the middle of the last

century. In addition, Matthew Fuller's reappropriation of the term 'media ecology' has been

instrumental in rethinking the human condition as an assemblage of both technological and

natural elements (25-31). In Fuller we have a thoroughgoing consideration of information and

the organic, cultural, technical, and political systems that produce it. Likewise, Don Ihde has

written about the way technology 'textures' human existence and, as such, phenomenology

cannot be practiced without decentering its emphasis from the human to a shared experience

between human and technology (what he calls post-phenomenology). More recently Stacey

O'Neal Irwin has shown how this plays out in microperceptual and macroperceptual ways. In

addition to work that re-thinks the relationship of bodies and digital media, the materialities of

digital media have been investigated in order to study the way they store and transmit cultural

texts. Matthew Kirschenbaum's work was ground-breaking in the English-speaking world,

introducing technically informed forensic studies of digital storage and inscription to the

analysis of cultural texts. Equally ground-breaking in this area is Lisa Gitelman's work, which

has explored the histories of recording and storage, uncovering the ways that the material

processes are implicated in the writing of history, showing how new media acts as the context

for differentiation, both implicated in processes of globalization but also in perceptions of

difference. Wolfgang Ernst, in a German speaking context, has also been instrumental in the way that he has explored digital memory and developed an entirely unique way to talk about 'time-critical media' and the 'micro-temporalities' produced by computer processing.

Extending work on the technical processes of storage and transmission, scholars including John Durham Peters and Nicole Starosielski ("The Elements"), as well as Jussi Parikka (*A Geology*), as will be discussed in the following section, have recently focused their attention on the 'elemental' qualities of media in order to think ecologically about media and to in turn think politically about the material substances that make up media. Lisa Parks has also done a great deal of work to open up new approaches in the field, particularly in the area of infrastructure studies, exploring the material objects and sites for communication, what she calls the 'stuff you can kick.' In *Cultures in Orbit*, Parks shows how necessary it is to think about satellites, including their historical development and geopolitics, when conceptualizing the way media situate citizens as subjects in the world. Parks's work in studying infrastructures has further shown how things like electricity grids, cables, mobile phone towers, and other arrangements of material resources need to be addressed by the humanities.

It should go without saying that the above list is by no means exhaustive and it clearly does not do adequate justice to the richness and diversity of the field. The task of including all references to the work going on in this extraordinarily fertile area of study is simply too great for me in this introduction (and I can only apologize to those that I've left off my very short list). Suffice it to say that the study of the material 'stuff' of digital media has itself grown into a subfield of media studies, and there are a number of useful references that readers can consult if they are looking to get a more definitive overview of the digital materialism 'turn' (see, for instance, Bollmer; Casemajor; Herzogenerath; Reichert and Richterich).

Emergency

As sketched out above, those looking to explore the materiality of media have a great deal of theoretical texts at their disposal. *How then, against this background, can we start to think about the questions of materiality and emergency? How can we start to use what we know about the material conditions of media to start thinking about both contemporary crises and the crisis of contemporaneity, as a historical condition? How do media contribute to this condition?* Parikka has started to show us how to do this, using the methodological base of media archaeology to chart not only media's history as a device for the transmission or storage of information, but as a material object that has a much deeper relation to time. This is exemplified by his descriptions of the way minerals are mined to produce computer hardware and the way electronic waste impacts the planet. If we take this approach, as Parikka states, "one could consider media studies to include objects such as plastics, wood, plywood, copper, aluminium, silver, gold, palladium, lead, mercury, arsenic, cadmium, selenium, hexavalent chromium, and flame retardant" ("Green Media" 75), along with the geopolitics, illegal business, and ecological impact of rare earth mining. In this, as he puts it, "we encounter not only an alternative materiality but also an alternative temporality of media" ("Green Media" 75). Electronic waste and the pollution associated with global flows of information is a manifold concern for media theorists, philosophers, and garbologists alike (see, for instance, Gabrys; Serres, *Malfeasance*; Cubitt, *EcoMedia*). Dealing with these same kinds of concerns, Lisa Parks and Janet Walker have recently established a media disasters stream in the *Media + Environment* journal, to explore how "media in various modalities proliferate, transform, translate, and inevitably sculpt the environment. Through these processes, media give shape and meaning to disasters themselves, and become integral to the ways disasters are imagined,

experienced, and felt" (Parks and Walker). This special issue adds to the work that Parks and Walker have collected in their recently established stream through a focus on the materiality of the emergency and how media is implicated in and entangled with its emergence, its proliferation, and the afterlives of events. Sean Cubitt has also addressed the relationship between materiality and the environmental crisis, exploring the ways that communication, media, colonialism, and capitalism are implicated in the current crisis. He argues that an environment and its inhabitants coevolve. "A species does not discover an environment waiting for it. It cocreates that environment by acting in it, eating, excreting, building, reproducing, dying. Ecology is a science of relations and mediations, in which innumerable interactions must constantly re- create the end points 'environment' and 'inhabitant' (Cubitt, *Finite* 9). Because media are so intertwined with the emergencies of the now—because they cannot be separated from the contemporary moment—this is also the reason, as Cubitt puts it, that they can act as tools in creating new futures and imagining alternatives to the "dark now" (*Finite* 9).

Process and Emergence(y)

I am going to now end this introduction with a few remarks based on my reading of the process philosopher Alfred North Whitehead, with an indication of how his ideas can be thought in relation to some of what has been mentioned above. I am, of course, well aware that it is not received wisdom to introduce new ideas at the conclusion of an essay. But I bring up these ideas now so that they could be kept in the back of your mind while reading the essays in this collection, as a type of invitation to think through some of Whitehead's metaphysical claims using the concrete materialism of objects and artworks discussed in this issue of *MAST*. As Isabelle Stengers puts it, this is an invitation to think *with* Whitehead.

In his major work, *Process and Reality,* Whitehead gives an example of the world as a process, as made up of relationships based on the transmission of data from entity to entity. To do this he invents a number of new terms. One of these neologisms is 'actual entity' or 'actual occasion,' which is meant to designate the smallest level of existence in the universe. However, these entities are paradoxical: an actual entity never exists. It is either always becoming or always perishing. It is not a stable and permanent 'thing.' Another term that Whitehead invents in order to understand the becoming of actual entities is 'prehension,' which designates the grasping of data by the entity; it is the movement of datum from one entity to another that creates a series. The illusion of progress or permanence is achieved as datum moves from one actual occasion to another, which becomes and perishes, then passing its information on to the next occasion. The reason that change is possible is because each actual occasion possesses what Whitehead calls its own 'subjective form.' The actual entities that Whitehead gives us are useful for thinking about catastrophes and emergencies because he precisely describes an unstable and non-determinant world that is simultaneously perishing and simultaneously becoming. Because Whitehead's is a world where permanence is always an illusion, there is a constant threat of extinction but always at the same time a hope of a new becoming. Like Deleuze, Whitehead offers us in his philosophy the strange possibility to form a relationship with the world that is not one of despair, even when this world threatens to crush or kill you (Stengers 316).

For Whitehead, an actual occasion prehends datum; it grasps it and takes it into itself. The actual occasion then becomes in a non-deterministic way, based on the information it prehends and its own set of internal properties. It is in this, the notion that our situation is not completely determined, that Whitehead can offer a world of novelty. The rolling set of

catastrophes that seems to make up the historical present—the climate crisis, the threat of the

mass extinctions of almost countless species, the global pandemic—threaten an end to the

established ways of being-in-the-world and being-with-others. But we might also ask,

following Whitehead, what new becomings will follow this perishing of occasions? What are

the new conditions for repair? What new beginnings and new ways of living ecologically do

we want to initiate with the flux of the world?

A major theme that occupies Whitehead in *Process and Reality* is the seemingly

contradictory notions of the transitoriness of existence and the idea of permanence within the

flux of nature. Perhaps this stems from Whitehead's own personal emergency; perhaps

Whitehead's turn to a philosophy of a non-mechanistic world was in part based on the loss of

his son, Eric, in World War I, a few years before he began to develop his mode of thinking and

abandoned mathematics and logic. "Process entails loss," he writes in *Process and Reality,* and

this is "the ultimate evil in the temporal world" (340). Whitehead finds hope and the notion of

permanence in a bipolar God that *conditions* rather than determining our situation. Even now

though, from a largely secular position, it may be possible instead to think of the conditions

alone, without God (although this is not what Whitehead would have intended). We could

think of these conditions without God as the material set of circumstances for emergencies,

that give emergencies their character and that may, we hope, offer some kind of openness for

something new. In this special issue all of the essays look to these conditions and start to ask

questions about how we, as citizens, scholars, and artists, can start to prehend the conditions

for states of emergencies and begin to develop a vision of how new, more ecological and

hospitable conditions could take their place.

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