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In relationship with a virus — an argument for "new" materialist thinking within systemic thinking and the realisation that it has always been there

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Abstract

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The current COVID-19 situation offers an opportunity for us to reconsider our relationship with the world and with our theories about this relationship. While systemic theory already offers many ways and ideas to consider this, in this article I offer another perspective, "new" materialism and highlight its fit with existing systemic theories.

Keywords:

systems theory, ecosystems thinking, guests, hosts, being human, coronavirus, COVID-19

"This bl**dy virus took my job away"

"I quite like it, it offered me a chance to be more reflective."

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I caught this short snippet of conversation, of course, in a queue, the new place where at least for a while we actually encounter and talk to people outside of our own bubble. Although the experiences that the two statements refer to are very different, one more positive and one more negative, they both have two important things in common. Firstly, the virus is seen as an agent, the subject of the sentence. It does something. It takes away or offers something. It does this to the person talking, the object of the sentence. Thus, the person describes a relationship, or rather (re-)constructs one, with the virus the active part and the self of the speaker, the passive one.

In this article I will reflect on our relationship to the COVID-19 virus. Some developments in philosophy that have become known as *new materialism* and the *post-human* will help to investigate this relationship. Provoked by this reflection I will investigate some implications for and of systemic theory and practice. This article is also an investigation into or critique of the newness of "new" materialism, both with regards to systemic theory and practice and also to thought beyond that field.

Starting from how we speak of our relationship to the virus, in the vignette above, what "the virus" does is hugely important. It takes jobs away. But

also offers chances. It can kill people and wreak havoc within our relationships. A few weeks ago, my mother died, having lived with Alzheimer's disease for the last 20 years. "The virus" and the disease it spreads, COVID-19, were the main consideration in our family's decision not to organise a memorial service in person. We would not want to find out a few weeks later that another potentially older relative or friend had contracted the virus and had developed serious health complications. This decision in turn impacts not only the relationships within our extended family but on service providers, caterers who now have one less customer. But we "know" from the news that there are so many examples of businesses having to adjust. Despite many businesses trying to avoid it, many people are being made redundant, as indeed the very first sentence in this article tells us.

On the other hand, what we do impacts on the virus and its spread. Maintaining a physical distance with each other seems to slow the spread of the virus as do other measures such as wearing masks. There are arguments that suggest human actions can trigger viruses to jump from one species as host to another (Zimmer, 2019). In a more poetic way Becvar and Amaladas (2020) say that

human beings claimed that they did not consciously invite a guest called Covid-19. But [...] they may well have created the conditions that can be experienced as an invitation (p. 33).

Whether we like it or not, we are in relationship with a virus: structurally coupled as Maturana and Varela (1972, 1987) would have said, as we are mutually influencing and (part of) each other's environments. In that way a change in one self-contained and self-(re)-producing or self-maintaining system (or autopoietic system) triggers but does not determine a change in the other. That change is determined by its own structure that allows or disallows how to respond to the change in the environment. It also determines how the structure itself can change. In our case it seems an interesting question to ask: "What in our structure determines our responses to the coronavirus and how might we change these structures?"

For our systemic field, the question might well be: "How do we, as humans and as systemic practitioners, psychotherapists, coaches, organisational consultants, position ourselves towards this other autopoietic system?" and "How can we start to understand and contribute to change in the way we think?" Becvar and Amaladas (2020) have offered a systemic ecological view on how to position ourselves differently towards the virus and also to use this opportunity to revaluate the way we think and live. In this article I hope to add to this another perspective that might fit well with a systemic ecological thinking: "new" materialism.

Social constructionism and its influence on systemic practices

Currently, ideas of social constructionism (for example Berger & Luckman, 1967, Gergen, 1985, 1990, 1992, 1994) are very prevalent in the field of systemic practice. Narrative therapies (for example White, 2007), solution focussed brief therapies (for example de Shazer, 1994), collaborative language approaches (Anderson & Goolishian, 1988) and dialogical approaches (for example Seikkula, Arnkil & Erikson, 2003) see themselves or are being seen (Hoffman, 1993; McNamee & Gergen 1992; Minuchin, 1998) as influenced by social constructionism. Maybe the whole field has become social constructionist (Hedges, 2005) or has even moved away from the idea of "systems" towards social

constructionism (Hoffman, 1993). This would of course raise the question whether these approaches are still systemic, but they are taught in courses that are titled "systemic" and Lorås, Bertrando and Ness assert that:

The systemic approach has been considerably developed throughout the years, incorporating elements from first- and second-order cybernetics, structural, strategic, narrative, solution focused therapy, constructivism, social constructionism, postmodernism, among others.

(2017, p. 144)

In the light of a global death toll it seems hard to argue that the Coronavirus Disease, and the actual virus that causes it, are *just* social constructs. Thinking about countries or their leaders that have tried to "construct" the virus as "harmless" to disastrous consequences, like Brazil or the US, seem to indicate a physical reality of the virus that also has some level of existence outside of or independent from the speech acts (Austin, 1962) that surround it. We cannot think of the virus as just socially constructed. On the other hand, we see a lot of social reality being constructed and created through language(s) and actions or speech acts. In May 2020, Dominic Cummings, now former Chief Adviser to British Prime Minister, Boris Johnson, travelled from London to Durham, breaking the government's lockdown rules. A debate and attempted legal proceedings ensued that questioned versions of what is allowed and what is right (The Guardian, 2020).

The post-human and "new" materialism

In his later writing, John Shotter (2014) incorporates into his version of social constructionism the idea of agential realism from Karen Barad (2007), and with it some ideas from more recent movements in philosophy, in particular, the post-human (Braidotti, 2013) and "new" materialism. The term posthuman seems fitting for ideas that bring with them a decentring of the human (or "man"). "Man" can no longer be seen as the highest or most central entity in the hierarchy of acting entities – this would include the corona virus – that constitute reality. Rosi Braidotti (2013) comes from a Deleuzian perspective that eschews arborescent models, the metaphor of the tree and with it the idea of a hierarchy (Deleuze & Guattari, 1987) preferring the metaphor of rhizome or network of decentred, interconnected entities. At any point, it is a possible to create an entry point into the rhizome. A linear roots-trunk-branches view and causality does not make sense. In many ways, as also Nichterlein (2013) explores, there are strong connection points between this and Bateson's (1972) non-linear thinking. Bateson rejected the concept of power, and instead argued for circular, feedback-organised relationships. A linear cause and effect thinking would equate to an arborescent structure of mind rather than an ecological view of mind which foregrounded unanticipated interconnectivities.

In my practice, I often encounter questions of "power". Clients tell me that they suffer under the power of someone else whether this a manager or parent or other person. I often start my work by enquiring into this "power thing" and where it comes from. Often if the sense of inevitability is in doubt, potentials for agency arise.

Jane (name changed) complained to me that she felt that her boss was preventing her from developing and trying out some innovative ideas within her team. She seemed to accept the power of the boss as a given, after all that is what hierarchies are there for. When we started exploring what 'constituted'

power and what the interactions looked like, something different happened:

"Jane, what is it that your boss does that tells you she is powerful or has power over you?"

"One of the things she does, she interrupts me when I am speaking, particularly when I am taking a moment to collect my thoughts."

"And what do you notice yourself or others doing in response?"

"I shut down, I probably blush. And others in the meeting look away, look to her."

"What do you imagine that is like for her?"

"Oh, I think she loves that. Maybe she needs it."

"Ah interesting. What would happen to her if she could not fulfil her need in this way?"

"Maybe she'd fall apart [laughs]."

"So, just to check, are you saying she is threatened by you? She thinks that you could make her fall apart?"

Following this Jane started to develop ideas how she could invite her boss into her ideas, share them, see a benefit for both of them. At the same time she developed ideas about how she might respectfully challenge when being interrupted.

A false hierarchy

Rosi Braidotti (2013) challenges us to not see the human, Anthropos, as central or in a more arborescent model as the top of a hierarchy with subjugated others. This hierarchy, dominant to Western thought, is the extension of a hierarchy between humans with white, middle-aged, ablebodied and cisgendered males — Vitruvian Men, as depicted by Leonardo DaVinci, Man 2 (Sylvia Wynter & Katherine McKittrick, 2015) are seen as at the pinnacle. We find a Eurocentrism, racism and sexism inside of anthropo-centrism.

The hierarchical step between human and non-human others, like the corona virus, is something that Braidotti is interested in. This hierarchy of othering (Braidotti sees animals for example as earth-others) has made exploitation and ownership of living matter and information possible. One example that Braidotti uses for this is patenting and ownership of (parts of) genetic code – the commodification of life itself. It is interesting that the genetic code of the virus was sequenced very quickly and widely shared in order to create a vaccine, some kind of modified version of the virus, which will no doubt have patents and ownership attached, a potentially very lucrative state of affairs for those who own these rights. Yet we cannot know how effective any vaccine will be. This is one of potentially many points that might prompt us to rethink our relationship with the virus and whether a hierarchical view with humans being higher in the hierarchy than viruses remains tenable. Indicative of this false hierarchy is the question of whether viruses count as life (Microbiology Society, 2016).

While this question might be less important to virology it seems more important with regards to our relationship with viruses. So far, approaches that seem to assume the virus as an agent in its own right, like wearing masks in response to it, have been more successful than approaches that assume us being

able to control and own an inferior entity, something that is not even alive let alone with agency.

We are more and more influenced by nonhuman entities, and we can find many more examples beyond CoViD19. Algorithms recognise faces on social networks and make recommendations to target advertisements based on profiling of a previous user's (human) behaviours. With regards to CoViD19, the particular challenge not to establish a hierarchy between entities, ourselves and the virus, seems pertinent – at once new and already there in exchanges as quoted at the beginning of this article, that seem to locate agency within the virus.

Agential cuts – drawing boundaries between observer and observed

Returning to Karen Barad (2007) and what John Shotter (2014) highlighted as an important further development is the idea of agential cuts, concerning the question of what counts as subject and what counts as object. To explore this question, Barad (2007) expands on Niels Bohr's concept of apparatus.

Differing from Werner Heisenberg's thought, known as the uncertainty principle, that a particle's two properties, speed and direction, cannot be *measured* or known at the same time, Niels Bohr thought that a particle does not *have* speed and direction at the same time. While Heisenberg remains epistemological, Bohr is clearly in ontological terrain, although both are referring to the process of measurement. According to Barad, Niels Bohr saw an entanglement between observation or measurement apparatus and the observed/ measured, not unlike Heinz von Foerster (1975), who advocates seeing the observer as part of the observing system.

Barad writes about Heisenberg and Bohr's theories with regard to the well-known double slit experiment (Barad, 2007). Depending on the experimental set-up, light behaves either like particles or like waves. Unlike in Kant's (1787) split between phenomena and noumena, Bohr defined phenomena as this specific entanglement of measurement apparatus and what is being measured in other words the entanglement of the subject (that measures) and the object (that is being measured). This entanglement is the reality. There are no underlying entities (noumena in Kant's, 1787, words) to our perceptions (phenomena). Bohr's realism looks at correspondence between theories and phenomena. Theories are embodied in the apparatuses that produce the phenomena. Here is a parallel to Deleuze's (1997) assertion that "Abstract ideas are not dead things, they are entities that inspire powerful spatial dynamism" (1997, p. 119).

Taking a neutral position towards different ideas of the seriousness (or even the existence) of the virus clearly does inspire spatial dynamism. Some people are very careful to maintain at least two metres of distance while wearing masks and others do not. Some news reports have suggested that some parties have been organised to infect participants based on the idea that infection generates immunity.

The world and knowledge about it united

In Bohr's "proto-performative account of the production of bodies" (Barad, 2007, p. 129), reality is an "ongoing dynamism of becoming" (2007, p. 142). Phenomena are no longer merely perceptions (as Kant had described them) but real, albeit not fixed or separate, entities. Nor are phenomena merely constructions. At this point ontology and epistemology are united. The world / reality (ontology) becomes in the process of knowing (epistemology). Like some social constructionists (for example

Leppington, 1991), Barad sees the dichotomy between epistemology and ontology subsumed in the challenge of representationalism and the

...correspondence theory of truth, which is rooted in subject-object, culturenature, word-world dualisms. The separation of epistemology from ontology is a reverberation of these dualisms.

(Barad, 2007, p. 132)

Interestingly, according to Barad, Bohr left it open to define the boundary of the apparatus, so she now asks:

...where the apparatus "ends". Is the outside boundary of the apparatus coincident with the visual terminus of the instrumentation? What if an infrared interface (i.e., a wireless connection) exists between the measuring instrument and a computer that collects the data? Does the apparatus include the computer? ...the printer attached to the computer...?

(Barad, 2007, pp. 142-143)

What is part of "the system" of life?

Barad critiques Bohr for seeing himself outside of the apparatus. One can easily imagine Heinz von Foerster having a similar critique. Further, the sequence of questions is reminiscent of Gregory Bateson (1972, p. 465) asking about the boundaries of mind with his example of a blind man moving forward, whether the system includes the man (including his brain, nerves), the stick and the street.

Bateson and Barad might just come from different directions in their challenge of an inside / outside dichotomy. Bateson extends mind beyond the boundaries of the human, so that the blind man, the stick and the street are seen as a system of mind. Barad extends the notion of apparatus to include the person conducting the experiment. If we were to apply this logic to our relationship with the virus, Bateson might argue that we need to include the virus in our ecology of mind and Barad would include us in the specific apparatus that is formed between us and the virus as constitutive.

I have referred to the debate whether viruses count as life forms. One important difference between Barad and Bateson is that Bateson (1972/2002) continues to advocate a separation of the world of living entities or creatura, and non-living entities or pleroma. Concepts from the world of pleroma, like linear causation (for example impact), can usefully be applied to non-living entities such as billiard balls (Bateson, 1972/2002) but are problematic in the world of living things. This contributed to his eschewing of the concept of power.

However, the question of whether a virus counts as a living or non-living entity has implications beyond the problem of transferring principles from one world to another. Barad (2007) asks exactly this question: Where is (if there is) the dividing line between living entities, or entities that are imbued with agency, and non-living entities or entities of which we assume no agency? Gregory Bateson uses the example of a (dead) crab and asks his students to collect arguments for the crab having been a living creature (1979). While this leads to very interesting observations of patterns, another interesting question would have been about this dividing line between living and not-living. When

would we locate the time of death? When the crustacean's heart stopped? When the last nerve impulse – and I note that I am possibly doing the forbidden according to Bateson by applying concepts of pleroma to a creatura, as does a large part of biology – was sent? Or when it stopped interacting with other living entities? When would that be? When bacteria and worms (decomposers in biology) have finished with the carcass? Or when a future fossil fuel using creature uses the oil that is composed of the carbon molecules that were once the crab? This leads to the question of difference not only in time, but in space. Is only the crab as a whole alive, or every single cell? What about the molecules that form the cells, the atoms that form the molecules and the subatomic particles that form the atoms? Increasing the size one could ask is living confined to the crab? Or do we need to include the water around the crab, that moves it and is moved by it. This question is then similar to the question posed here in relation to the Coronavirus. Perhaps the question of whether it is a life form becomes unanswerable, or rather our answer depends on how we draw the boundary. With regards to an infected person it might be very difficult to speak of inter-actions between separate entities.

Another difference is that Bateson thinks of interaction between pre-existing entities while Barad describes entities, (including the subject as well as the object) as becoming or being created in the processes or actions of observation or measurement – or maybe more systemically speaking in the process of relating within a wider system. Rather than calling them interactions – the term would suggest pre-existing entities or relata (entities that relate) – she calls these processes intra-actions. Entities are constituted inside of the process of relating to each other, for example, in observation, measurement or discourse. I cannot help but hear echoes of Maturana and Varela's (1987) assertion that a unit or object is "...brought forth by an act of distinction" (p. 40).

What would happen, I wonder, if we saw ourselves and the virus and the disease as becoming in the process of relating? If we started to account of "us" and "the virus" not as subjects relating to objects, not even as separate entities that inter-relate but as together constituting the particular entanglement or apparatus we might chose to call CoViD19 in which we intra-act? Would we approach CoViD19 as less of some "thing" that we need to dissect from the outside, in an approach that Shotter (2006, 2010) would call "aboutness thinking"? Or would we widen our view to other actors - feelings like fear, non- or multi-personal entities like the media or science - in the wider entanglement in which we can be more in tune with our own contributions or intra-actions in constituting the situation? This, Shotter (2006, 2010) might see as thinking from within, or "withness thinking". It might also resonate with Bateson's (1972) reflections on alcoholism, that point to what he would see as epistemic error of being outside and able to overcome alcoholism, if only one is strong enough, has enough will-power. We might also hear echoes of Braidotti's and Wynter's critique of the hierarchy in which Man particularly Man 2 – sees himself as the pinnacle of the hierarchy able to overcome anyone and anything else. I am tempted to see the CoViD19 situation and struggle for social justice and increased public awareness that "Black Lives Matter" as both questioning this hierarchy. But it does not seem quite so easy to "overcome" this current pandemic situation and I am wondering whether this partly due to this epistemic error, or should I say onto-epistemic error or just sheer arrogance, to not see ourselves as part of the ontogenesis of our CoViD19 world.

Boundaries and how they are drawn

In contrast to more social constructionist ideas, Barad (2007) combines Bohr's ideas with Foucault's

concept of discursive practices. She clarifies that "Discourse is not a synonym for language." (2007, p. 146) as opposed to Anglo-American linguistics and some strands of social constructionism:

To think of discourse as mere spoken or written words forming descriptive statements is to enact the mistake of representationalist thinking. Discourse is not what is said; it is that which constrains and enables what can be said.

(Barad, 2007, p. 430)

and I would add "becoming material reality in the process."

Discourses are therefore boundary drawing practices and in creating the boundaries between subjects and objects, subjects and objects are produced in discourse or apparatuses. I argue now that systemic practices form apparatuses as defined by Barad and that systemic practices can attend to or rather reflexively explore these apparatuses from within — across different therapeutic, coaching and organisational practices. Systemic practices can attend to the structures (Maturana & Varela, 1987) and belief systems that co-determine our intra-actions within the apparatus.

Earlier systemic ideas and practices focussed on circularity or mutual influence of related actors – with a focus on humans acting to mutually influence. We could use several models to justify exploring circular patterns: Bateson's use of the example of the blind man that seems to map so well on Barad's description of apparatuses is one example. Maturana and Varela's structural coupling that was also very influential for the development of systemic theory and practice could also be applied to Barad's apparatuses. Organised into apparatuses the structure of parts of the experimental set-up are allowing for certain outcomes or rather behaviours of other parts, as the double slit experiments show. Whatever gets defined as subject and object is structurally coupled in the same way behaviours of family (or group of "systems") members are structurally determined and coupled with each other. This in turn is similar to the complementarity that Minuchin and colleagues (1967) described. Complementary behaviours set up a structure (that is just as non-static as the structure that Maturana and Varela have in mind). The behaviour of the virus and the behaviour of the disease is structurally coupled in a bigger apparatus that includes us, the virus and everything.

An exploration of boundary drawing practices has happened for a long time, if we think of boundaries more generally than just the boundary between subject and object. Brown (1991) for example differentiates two types of circular questions: those that call forth similarities and those that call forth differences. Applied to the question of agency it would call forth the question of subject/object and creates (or constructs?) subjects and objects in the process.

What systemic practices may have fallen short of, from a "new" materialist point of view, is the *material*-discursive practice (Barad, 2007). What has been billed as the linguistic turn has particularly invited practices informed by post-structuralist linguistic thought. Systemic practice as talking therapy has become reflexively exploring words with other words, exploring and changing meanings and reconstructing social worlds and realities, excluding physical material entities and questions from the process or seeing them as merely constructed in language, therefore secondary to human beings. But matter matters. This is the critique inherent in the other headline often given to "new" materialism: post-humanism.

And we are surrounded by non-human entities that interact or rather intra-act with us. A mother and

her 15-year-old son come to see me for therapy . The mother is worried about her son's "excessive playing on the play station". She worries that "he misses out on education and friendships". He states that he is achieving reasonable grades and is learning a lot on the play station and has friends through playing games over the internet together.

Mother: Yes, what you learn is shouting and yelling and being aggressive. And the

friends that you are having there aren't real."

Son: These friends are real. I talk to them. They respond.

Mother: You don't meet them in the real world. You cannot even see them. For all I

know they might not even be there, only part of the game.

Mark: But the game is real?

Mother and son look puzzled.

Son: It's a game. What do you mean is it real?

Mark: Well, I guess the play station is real. It is there. You can touch it. The game ...

I wonder. You cannot quite touch it in the same way, right? Maybe apart from if it is on a CD or DVD. But when you play it, it becomes a bit of a reality, right?

You say you can learn stuff in it...

Son (enthusiastically): Yeah, absolutely?

Mother (more sceptically): Hmm.

Mark: Well I guess you think it is a real problem?

Mother: Yeah, sure.

Mark: Does that make the game real? Or become real or at least a real problem in

your view, when he plays it?

Mother: : I guess.

Mark: If the game was real, would it have its own ideas of what it wants?

Mother: Well I can tell you that. It wants to be played, constantly.

We proceed to explore what the game would want for the son and the family and what effects it has. We explore when the son has resisted the lure of the game and when the game has not been allowed to impact on the relationship between mother and son.

The little vignette at the beginning and the collective experience and individual experiences with the coronavirus bring something similar into sharp focus: we are in relationship both with the physical virus that is not merely constructed *and* the social reality constructed around it. In discourse we create subjects and objects, and what is afforded and constrained.

We can continue to interrogate and explore different possible discourses – not just with words – different possible boundaries. We can continue to be playful and try to see the world from the perspective of the virus, as narrative therapies might interrogate or deconstruct "problems" (White &

Epston, 1990). We can use circular questions to navigate the complexity of intra-actions that constitute what we might chose to call apparatuses or realities. Picking up Becvar and Amaladas (2020) play on the word "host", making the virus the guest, we could playfully ask" how (or how much) do we, as families, companies, countries and global societies want to cater for our guest? Or do we continue to search for technical solutions that go so well with "bash[ing] the virus over the head" as Uğur Şahin, one of the scientists behind a vaccine candidate said in an interview with the Guardian newspaper (Oltermann, 2020). Interestingly such a metaphor already anthropomorphises the virus. Could we accept part of the invitation that this metaphor extends? Interviewing someone with a similar view we might be curious: "If we see ourselves as hosts, the virus would be a guest. What do you think your guest would do if you bash them over the head? Will they stay, go, come back, want revenge? What about their friends? Would they get involved? What might you have done - maybe not that you have anticipated this – that was understood by the virus as invitation? Or was there even something that forced them to come to visit you? How would Coronavirus describe you as a host? Or neighbour? What difference would it make if you saw Coronavirus not an uninvited guest but as a family member, co-worker, powerful leader, friend or even as part of yourself? What has Coronavirus got to teach you?" According to some scientists, the genes of a virus have been incorporated into our human genome. About 8% of our genome consists of endogenous retro-virus genes (mostly no longer functional; Subramanian et al., 2011)

Beyond what Burnham (1992) called the level of approach, there seems to be a "new" attitude called for. One of humility, of seeing oneself as part of. This is what Bateson calls for when he speaks of the epistemic error of the alcoholic – it would be better to see oneself as part of alcoholism. That is maybe what we would experience if we let go of our sense of being able to overcome, overpower or outsmart and we learn to live with and think "with" (rather than about) the virus as just one example and with(in) the world as an apparatus that we are part of at large. Maybe in the spirit of becoming we see ourselves and our world(s) not as separate nouns, subject and object but as verbs, as "transmaterial worlding" as Simon and Salter (2019) would maybe call it. Would we even play string figures with a new companion species (Haraway, 2016)? The more hopeful aspects of me/world can imagine at some point being grateful to the coronavirus for having taught us that.

With some movement towards humility, I need to explain the "new" in "new" materialism. Wanda Pillow (2019) opened my eyes to what she called a "whiting out" of theorising that went with "new" materialist thinking that neglected to give due credit to decolonial (feminist) theorist and scholars who have theorised before much of what is credited now to "new" materialism. Yet, I sense simultaneously something having always been there and an element of newness and urgency entering our nature/cultural sphere when, as I write this, I listen to the song "Blood of the past" by The Comet Is Coming featuring Kae Tempest's lyrics haunting me:

All the many corpses begin to speak

What ignorance is cannot be argued over anymore

It is too late for pleading white picket dreams

Print you off, the shemps, the world is shrinking

Rooted in a trivial concern, in interconnectedness

In the need to make face and keep up

And drown out the many voices within

Imagine a culture that has, at its root

A more soulful connection to land and to loved ones

But I can hear the lie before you speak

There is nothing but progress to eat

And we are so fat and so hungry...

Kae Tempest, 2019

"New" materialism and the posthuman seems to be such a good fit and brings together different directions of thinking underpinning systemic practices. It might have the potential to offer a different way of overcoming the bitter epistemology / ontology divide that seems to have underpinned most of the philosophical thinking about our relation to our world and how we come to know each other (world and us). This virus might be the point in case.

References

Austin, John Langshaw (1962). How to do things with words. Oxford: University Press.

Anderson, Harlene and Goolishian, Harold A. (1988). Human systems as linguistic systems: preliminary and evolving ideas about the implications for clinical theory, *Family Process*, 27(4), 371-393. https://doi.org/10.1111/j.1545-5300.1988.00371.x

Barad, Karen (2007). *Meeting the universe halfway: quantum physics and the entanglement of matter and meaning.* Durham, NC: Duke University Press.

Bateson, Gregory (1979). Mind and Nature – A Necessary Unity. New York: Dutton

Bateson, Gregory (2002 [1972]). Steps to an ecology of mind. Chicago, IL: Chicago University Press.

Becvar, Ray and Amaladas, Stan (2020). Pandemic Disease and Systems Theory: An Ecological View. *Murmurations: Journal of Transformative Systemic Practice*, 3(1), 29-43. https://doi.org/10.28963/3.1.12

Berger, Peter Ludwig and Luckman, Thomas (1967). The Social Construction of Reality. London: Penguin.

Braidotti, Rosi (2013). The Posthuman. Cambridge: Polity Press.

Brown, Jac (1997). Circular Questioning: An Introductory Guide. *Australian and New Zealand Journal of Family Therapy*, 18(2): 109-114. https://doi.org/10.1002/j.1467-8438.1997.tb00276.x

Burnham, John (1992). Approach-Method-Technique: Making Distinctions and Creating Connections. *Human Systems. Journal of Consultation and Management*, 3(1), 3-26.

Deleuze, Gilles and Guattari, Felix (1987). *A thousand plateaus: capitalism and schizophrenia*, Transl. by B. Massumi (original 1980), Minneapolis, MN: University of Minnesota Press.

Gergen, Kenneth J. (1985). The social constructionist movement in modern psychology. *American Psychologist*, 40(3), 266 - 275. https://doi.org/10.1037/0003-066X.40.3.266

Gergen, Kenneth J. (1990). Toward a Postmodern Psychology. *The Humanistic Psychologist*, 18, 23-34. https://doi.org/10.1080/08873267.1990.9976874

Gergen, Kenneth J. (1992). Social construction in question. *Human Systems. Journal of Consultation and Management*, 3(3-4), 163-182.

Gergen, Kenneth J. (1994). Exploring the postmodern: perils or potentials. *American Psychologist*, 49: 412 - 116. https://doi.org/10.1037//0003-066X.49.5.412

The Guardian (2020). https://www.theguardian.com/politics/2020/jul/30/cummings-saga-damaged-uk-unity-covid-19-study-suggests

Haraway, Donna (2016). *Staying with the trouble: Making kin in the Chthulucene*. Durham, NC: Duke University Press.

Hedges, Fran (2005). An Introduction to Systemic Therapy with Individuals. Basingstoke: Palgrave MacMillan.

Hoffman, Lynn (1993). Exchanging Voices. London: Karnac.

Kant, Immanuel (1787). *Kritik der reinen Vernunft*, 2. Auflage. [online] http://izt.ciens.ucv.ve/ecologia/Archivos/Filosofia-I/Kant%20-%20Kritik%20der%20reinen%20Vernunft.pdf [downloaded 10.06.2017].

Leppington, Rozanne (1991). From Constructivism to Social Constructionism and Doing Critical Therapy. *Human Systems. Journal of Consultation and Management* 2(2), 79-103.

Maturana, Humberto and Varela, Francisco (1972). Autopoiesis and Cognition. London: Reidel.

Maturana, Humberto and Varela, Francisco (1987). The Tree of Knowledge. Boston, MA: Shambhala.

McKittrick, Katherine (Ed.) (2015). *Sylvia Wynter – On Being Human as Praxis*. Durham and London: Duke University Press.

McNamee, Sheila and Gergen, Kenneth J. (Eds. 1992). Therapy as Social Construction. London: Sage.

Microbiology Society (2016). Are viruses alive? https://microbiologysociety.org/publication/past-issues/whatis-life/article/are-viruses-alive-what-is-life.html

Minuchin, Salvador; Montalvo, Braulio; Guerney Bernard G. Jr.; Rosman Bernice L. and Schumer, Florence (1967). *Families of the Slums: An Exploration of Their Structure and Treatment*. New York: Basic Books.

Minuchin, Salvador (1998). Where is the family in narrative family therapy? *Journal for Marital and Family Therapy*, 24(4), 397-404. https://doi.org/10.1111/j.1752-0606.1998.tb01094.x

Nichterlein, Maria (2013). Recasting the Theory of Systemic Family Therapy: Reading Bateson Through Foucault and Deleuze. https://doi.org/10.13140/RG.2.2.31765.37608

Oltermann, Philip (2020), Scientist behind BioNTech/Pfizer vaccine says it can end pandemic. *The Guardian*. https://www.theguardian.com/world/2020/nov/12/scientist-behind-biontech-pfizer-coronavirus-vaccine-says-it-can-end-pandemic.

Pillow, Wanda S. (2019). What matter matters? Reflexivity and One-Slit Theorizing. [unpublished manuscript], Gender Studies, School for Cultural and Social Transformation, University of Utah

Seikkula, Jaakko; Arnkil, Tom Erik and Eriksson, Esa (2003). Postmodern society and social networks: open and

anticipation dialogues in network meetings. *Family Process*, 42(2), 185-203. https://doi.org/10.1111/j.1545-5300.2003.42201.x

Subramanian, Ravi P.; Wildschutte, Julia H.; Russo, Crystal and Coffin, John M. (2011). Identification, characterization, and comparative genomic distribution of the HERV-K (HML-2) group of human endogenous retroviruses. *Retrovirology*, 8(90). https://doi.org/10.1186/1742-4690-8-90

Shotter, John (2006). Understanding processes from within: An Argument for 'Withness' thinking. Organization Studies, 27(4), 585-604. https://doi.org/10.1177/0170840606062105

Shotter, John (2010). Social construction on the edge: 'withness'-thinking and embodiment. Chagrin Falls, OH: Taos Institute.

Shotter, John (2014). Agential realism, social constructionism, and our living relations to our surroundings: Sensing similarities rather than seeing patterns. *Theory & Psychology*, 24(3), 305-325. https://doi.org/10.1177/0959354313514144

Simon, Gail & Salter, Leah (2019). Transmaterial Worlding: Beyond Human Systems. *Murmurations: Journal of Transformative Systemic Practice*, 2(2), 1-17. https://doi.org/10.28963/2.2.2

Tempest, Kae and The Comet Is Coming (2019). The Blood of The Past [Song]. On Trust in The Lifeforce Of The Deep Mystery. Impulse! https://youtu.be/G1J8R3rS2k0

von Foerster, Heinz (1975). The cybernetics of cybernetics. In *Understanding understanding: Essays on cybernetics and cognition*. Republished 2003, New York: Springer.

White, Michael (2007). Maps of narrative practice. New York: Norton.

Zimmer, Katharina (2019). Deforestation is leading to more infectious diseases in humans. *National Geographic*. https://www.nationalgeographic.com/science/2019/11/deforestation-leading-to-more-infectious-diseases-in-humans/

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