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Algorithmic Kinning

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Algorithmic kinning is a term that invites us to think about the role of intelligent machines in kin-making practices and the processes of kinning performed by algorithmic technologies.

In her work Donna Haraway proposes that kin-making[1], and specifically the non-genealogical understanding of it, is a political exercise in building affinities and structures of sustainable getting-along: "living and dying well with each other" (Haraway, 2016). Haraway establishes and explores her bonds with OncoMouse (Haraway, 1996), the cyborg (Haraway, 1991), and the fissure isotope Plutonium-239 (Haraway, 1996), postulating them not along the classical line of social contract theory, but rather by sharing a sense of agency and material intimate interconnections through complex shared histories. Such kinships are inherently technological. This technological aspect is highlighted in the work of Kim TallBear, an Indigenous scholar whose work Haraway references extensively in her own research. TallBear focuses on the technologies of DNA testing in determining membership and belonging to indigenous tribes (2013). She points out that DNA testing technologies are not neutral in their rendering of kinship, but rather play a structuring role in promoting the narrative of tribal belonging as racialized. Such narrative and the use of DNA testing for establishing kinship, according to her, does not account for the impure ways of belonging that are much more than blood and involve adoptive kin-making, belonging to particular land and its history, as well as political autonomy and authority.

[1] "Kinning" is a made-up verb referring to practices of kin-making that has been used both in scholarship that builds on Haraway's own work and non-academic contexts. The latter include, for instance, the concept of "kinning" that describes roleplaying or identifying with a fictional character (see https://www.quora.com/What-is-kinning - accessed on 18.02.2022) I am grateful to Sam Skinner for pointing out these non-academic uses of the term.

Relationships, however, are not made exclusively by humans. Media and cultural theorist Wendy Chun highlights that in the contemporary digital realm, especially (but not exclusively) social media and other social spaces that rely on algorithmic infrastructure, relationships are made and unmade based on “homophily” or likeness (Chun, 2018). In other words, our digital interactions, powered by algorithmic technologies, are structured through patterns of sameness – a kind of “birds of a feather flock together” logic. This is not purely a social concept, even though it originated in sociology (ibid.) – it is an algorithmic principle that structures interactions and makes predictions that are then incorporated into algorithmic decision making. This can be seen clearly not only in “relationship factories” such as Facebook and the filter bubbles of likeness that they generate, but also exemplified in phenomena such as the Cambridge Analytica scandal that revealed how algorithmic structures perform categorizations and filiations that are beyond the control of those who are placed in such structures (Hern, 2018). Thus if traditional, genealogical kinship ideas are postulated on the slogan that blood is thicker than water, then the digital infrastructures that we rely on and the “hypernaturecultures” that these infrastructures create, begs the question: is data thicker than blood?

Data analysis and modelling with digital tools is nothing new: computational biology and genetic sequencing are good examples of relatively established technologies. However, it is not only biological matter that is structured by algorithms – biological models algorithmically structure contemporary technocultures as well. Scholars such as Sarah Robinson and Pat Treusch explore the algorithms that are based on biological models. Robisnon (2016) investigates an algorithm that adopts the principle of quorum sensing in cell-to-cell communication to mimic the rules of interaction between cells in order to model the interaction of data within digital environments and information flows. Treusch (2017) looks into CLONALG algorithm that replicates immunological principles. Deep learning structures in machine learning – neural networks, – too, turn to biology in search for data processing models by aiming to re-produce the model of neuronal interaction in the neocortex of the human brain (Lee et al., 2016). Deep learning systems, which build layers of artificial digital neurons requiring large computing power, are now used in projects such as “deep genomics” to trace genetic patterns of illness and develop new medicine (“Deep learning for genomics,” 2019).

"Pattern recognition" and "categorisation" are key concepts that help understand the basic logic of algorithmic systems: machine learning algorithms discover patterns and group data points into clusters or predict which category a certain element of data will fall into. Patterning is by now so widespread in its use as to have become infrastructural, thus making participation in patterns intrinsic to the use of digital technology, not optional. Machine learning algorithms sieve through immense amounts of data pertaining to humans and non-humans alike. They perform processes of sorting and categorisation, discovering filiations and (re)configuring relations. From genes to sexuality, from biological matter to news, machines not only learn but also produce new knowledge that is operationalized and sedimented into further infrastructures, to be mined again.

In such contemporary techno-nature-cultural predicaments, kinning has to be re-thought to include algorithmic kinning. Haraway's notion of kinning is a passionate call to adjust our ways of worlding and relating. However, if such kinning is about "staying close to strangeness", as she writes (Haraway, 2016), then we are in trouble because our technologies create and embody worldings that are based on familiarity and existing injustices (Benjamin, 2018). Thus the provocation that algorithmic kinning brings is to ask: who and what has the agency in performing the kin-making? Who and what has a say when it comes to belonging, in the context where such belongings are produced and reproduced algorithmically? What are the effects of such kinning and how can kinning retain an element of being in proximity to the strange and the alien? (Klumbyte, 2018) Algorithmic kinning is not by default a foreclosure of agency, but rather a call to "kinnovate" (Clarke & Haraway, 2018) with/in computational infrastructures away from homophilic filiations and towards multispecies justice.

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