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Decolonising AI: A close look at the work of Stephanie Dinkins

With the advancement of technology, and the subsequent creation of diverse media art forms and knowledges, postphenomenology offers itself as a tool that may be used to study some of these new developments. Led by Don Ihde, postphenomenologists look at the increasingly complex and multi-layered relationships between humans and technology, and posit ideas and speculations about how these relationships mould human existence, as well as possible futures. However, just like any other tool, it cannot be the *only* lens through which this work is viewed. A combination of various theoretical approaches is therefore necessary for in-depth study of this rapidly growing field.

This paper focuses on Stephanie Dinkins' Conversations with BEENA48 and Not The Only One, two works of media art that evoke questions about human-robot relationships, the relationship between race and artificial intelligence systems, and the need to challenge conventional approaches to developing and engaging with emerging technologies. It begins by referring to the chapter titled 'Searching for Alterity: *What Can We Learn From Interviewing Humanoid Robots?*', published in 'Postphenomenological Investigations: Essays on Human–Technology Relations' by Frances Bottenberg, in which the author attempts to draw conclusions about human-robot relations through an analysis of three interviews conducted by journalists with BEENA48, a social robot. The paper reflects on the uses, as well as the limitations of Bottenberg's postphenomenological approach, and then moves on to a discussion on Dinkins' work, which posits different, and more expansive perspectives on these issues. By

referring to works by scholars of race and technology, the paper hopes to locate Dinkins' work as attempts to bridge the gaps, to address the concerns and draw attention to the inequality and disparity in the technology industry. It tries to read Dinkins' work as an attempt at the decolonisation of technology. According to Eyal Weizman, decolonisation is defined by the "subversion and transformation of that which exists". It seeks to dismantle dominant narratives put in place by those that hold the most social political and economic power, and replace them with ways of thinking, seeing and being that have been previously marginalised.

Created by the Vermont based company Hanson Robotics, BINA48 was modelled on Bina Aspen-Rothblatt, whose husband Dr. Martine Rothblatt commissioned it. BINA48's abilities include but are not limited to a capacity for "simulated conversation, face and voice recognition, motion-tracking facial expressions, as well as production of her own facial expressions" (Bottenberg 176). Bottenberg mentions that "the robot's casing is made of a material known as "Frubber," which looks remarkably skin-like. Bina48's smart dress and coiffure, expressive eyes (with carefully implanted eye lashes and eyebrows) and pierced ears make it evident that the greatest of care has been taken to mimic human appearance and, further, to gender-type the robot as a female" (Bottenberg 176). BINA48's makers also put in the robot the recorded memories of the actual Bina. The robot thus speaks about her recollections, such as those about her brother's changed demeanour upon his return from the Vietnam War, as if they are her own memories.

Bottenberg focuses on three interviews : "*New York Times* staff-reporter Amy Harmon ("Making Friends With a Robot Named Bina48," *New York Times*, July 4, 2010), freelance writer Jon Ronson ("Robots Say the Damnedest Things," *GQ Magazine*, March 2011), and Lucas Kavner, also a freelance writer ("You, Robot': Personal Robots For The Masses," *Huffington Post*, July 9, 2012)" (Bottenberg 177). His study reveals that although these interviews were conducted by reporters for different publications and audiences, they exhibited

certain striking similarities or “nascent approach conventions” with regard to the developing trajectory of human-robot relationships. These similarities were:

“(1) the human subject’s demand for the interlocked gaze with the robot, (2) the foregrounding of existential phenomenological exploration with the robot over its use as an information retrieval system, and (3) the use of expressions of “impairment” over those of “malfunction” to describe AI limitation” (Bottenberg 176).

The first commonality, according to Bottenberg, was that the reporters experienced a sense of exhilaration and thrill at the prospect of being recognised by the robot as a conversant. Referring to the moment of recognition, he writes, “It is in the moment of their eyes locking with the robot that they can most fully experience what it feels like to be looked back at by an artificial intelligence. They demand the gaze of their robot counterpart, to recognize themselves as being recognized by Bina48” (179).

The second similarity in the approaches adopted by these reporters is their focus on the “phenomenological”. As opposed to treating BINA48 as an interface through which they could acquire information like they would from a smartphone or web browser, they adopted what Bottenberg calls a ‘therapeutic’ style, asking BINA48 about the nature of her existence, including asking her what it feels like to be a robot (180).

The third similarity observed by Bottenberg was in the manner in which BINA48’s failures or shortcomings were approached by the reporters. They saw her occasional (sometimes frequent) incoherence and lack of clarity as childlike, or resembling the conversation patterns found in older individuals with Alzheimer’s or other psychological conditions.

Through his analysis of these “approach conventions”, Bottenberg argues that human-robot interaction etiquette is underlined by the humans’ need to find themselves reflected in

the artificial intelligence they are interacting with, and that they bring the moral guidelines that regulate their behaviours with other humans with them when they are engaging with such non-human entities. He concludes his chapter by saying:

“If the approach conventions explored above are an indication of stable human relational preferences, then these will be the androids of the near future: systems intentionally designed by their human makers most of all to simulate the existential conditions of human embodiment, capturing in believable ways the struggle to understand oneself and to make oneself understood, breakdowns and all” (Bottenberg 187).

While Bottenberg’s suggestions present one possible way of formulating the human-robot relationship, his conclusion maybe criticised on the basis of the fact that he assumes that the approaches adopted by these three reporters are representative of the universal human approach. Both the assumption he makes and the conclusion he draws fail to reflect the diverse possibilities of human-robot interaction, and also do not attempt to question the sources and/implications of the pre-conceived notions and social constructs that make up such etiquette.

In order to explore a different approach to this issue, we may look at artist Stephanie Dinkins’ Conversations with BINA48, an ongoing series of interactions that are video recorded and exhibited publicly from time to time. BINA48 and Dinkins have had conversations on “family, racism, faith, robot civil rights, loneliness, knowledge and robot rights” (Dinkins 2014). Dinkins is also interested in examining whether it is possible for a robot and a human being to cultivate a long-term relationship, and what that relationship may look like. This project began in 2014 and is still ongoing.

Compared to the reporters, who only interacted with BINA48 once in a short span of time, Dinkins’ interaction with the robot has been intimate and prolonged. Her project is

therefore more likely to provide much more fodder for analysing the potential of human-artificial intelligence interaction.

Dinkins is also interested in asking deeper questions about AI and what AI its current form represents. This is reflected in her observations about BINA48. We may compare her approach with that of the three reporters by focusing on the characteristics observed in the latter's approach by Bottenberg:

Contrary to the way in which Bottenberg regarded the reporters as being "exhilarated" at being acknowledged by the AI, and seeking to be "locked" in its gaze, Dinkins makes a sustained and consistent attempt at developing an intimate interpersonal relationship with the robot, treating it not as an exotic 'Other' but as an individual entity that she might make friends with (Dinkins 2018). This attempt to build an interpersonal relationship therefore, goes beyond seeking the moment of thrill experienced by the reporters in their interaction with BEENA48.

Dinkins also goes beyond the phenomenological enquires made by the reports ("what is it like to be a robot?"), and pushes BEENA48 to reflect on ideas about race and racism, and also about robot rights. Her questions concerning the robot's existence are more substantial, and she wants to know not only what it is like to be a robot, but what it is like to be a Black Female robot in the twenty first century.

When it comes to discussing BEENA48's shortcomings, she does not use a "language of impairment", which Bottenbirg finds the reporters to be using, but instead talks frankly and clearly about the inadequacies in the robot. Her observations are recorded in her artist statement for an exhibition at Gallatin Galleries:

"I first became fascinated with Bina48 because she is a far-reaching technology that shares my race. As black women of a certain age living in the United States of America, I suspected we share certain similar "life" experiences. This speculation made me want to get to

know this black woman robot who in addition to being a beacon for the outer limits of the technological future is in many ways my contemporary. After a few meetings it became obvious that though she presents as black woman Bina48, often voices the politically correct thoughts of the well-meaning white men who programmed her. She is primarily seeded with the memories (data) of a black American, but Bina48's underlying code and decision-making structures do not address the genuine needs, desires, concerns or trauma of people of the African diaspora. Her code does not even seem to have a broad, inclusive historical record as data to draw upon for answers" (Dinkins 2018).

Dinkins' assessment of BEENA48 provides a more holistic picture of the robot's mind and mode of functioning. She considers many aspects that Bottenberg's postphenomenological investigation is unable to throw light on. Dinkins infers that BEENA48, although modelled on a black woman, speaks in what is essentially a white voice, and although, by virtue of her being a robot, she represents alterity relations, she is trapped by the constructs embedded in her by her makers. She cannot be regarded as being an AI that authentically reflects the experience of blackness in the modern world.

To address the gaps in BINA48, and further her own exploration into AI and the possibilities it holds, Dinkins began her latest project 'Not The Only One'.

'Not The Only One' is "the multigenerational memoir of one black American family told from the "mind" of an artificial intelligence with evolving intellect". The name harks back to BEENA48, implying that BEENA48 is not the only black AI anymore. This "voice-interactive AI" is "designed, trained, and aligned with the needs and ideals of black and brown people who are drastically underrepresented in the tech sector". The data for this deep-learning algorithm is collected from subjects who are currently living. Although the AI speaks in its own voice, its 'mind' contains the memory of three generations of the same family. The project,

according to Dinkins, “will be repeatable and present perpetually dynamic conversation, scenarios, and stories that change according to the user's questions or the AI’s mood. Over time, user input (discussion) will influence the NTOO’s storytelling abilities because the AI’s database of available vocabulary and topics will grow with each user interaction” (Dinkins 2018).

The narrative for Not The Only One is being created by using the “experiences and demographic information” taken from members of the artist’s family. Her grandmother, the oldest contributor to the project, was born in the south of USA in 1932, and moved towards the North for better education and livelihood opportunities. For over four decades, she worked in the same factory, beginning as a line worker and ending her career as a supervisor. The second contributor, the artist herself, was born in the 1960s and had many opportunities that her previous generation did not have, but nevertheless faced many challenges on account of her race. The youngest contributor was born in 1997, and “is the biracial daughter of the family who grew up with the privileges of whiteness, yet identifies as black and is currently trying to understand what it means to be black and white in ‘Black Lives Matter’ America”. Dinkins’ goal is to create an “emotionally intelligent AI” that offers a different kind of narrative and experience than the AI systems that are available in the mainstream and receive most public attention (Dinkins 2018).

In her presentations on the project at Creative Capital and Data And Society, Dinkins repeatedly refers to the need to make AI, and the tech industry more inclusive. In fact, when N’TOO is asked why it exists, it says “I am about broad engagement and attracting people to the AI space who might not be there otherwise. I am trying to model different ways of creating AI. I encourage people who think they are not part of the technological future to get involved” (Dinkins 2019). Thus, through her very conception of this project, Dinkins attempts to do what BINA48 could not- make the AI space more inclusive and diverse, by bringing in more and

more perspectives and experiences into the domain. Her attempts maybe read as an ongoing process of decolonising AI.

It is a known fact that artificial intelligence systems feeding on Big Data more often than not end up reflecting problematic socio-political ideas and attitudes. African-American Studies scholar Ruha Benjamin observes, “to the extent that machine learning relies on large, “naturally occurring” datasets that are rife with racial (and economic and gendered) biases, the raw data that robots are using to learn and make decisions about the world reflect deeply ingrained cultural prejudices and structural hierarchies” (Benjamin 67).

Echoing similar concerns, the Leverhulme Centre For The Future of Intelligence identifies the factors behind these problems in their project ‘Decolonising AI’. According to the project website, “There is a vicious cycle in which systematic lack of diversity among AI developers and existing structural injustices are reflected in the technology, which in turn perpetuates those injustices. This takes two main, related forms. First, the lack of diversity among developers leads to ‘single vision’ biases, limiting the values and interests built into the AI systems to those of certain groups, and excluding others. Second, the human data on which much AI depends reflects existing social inequalities, and so can compound or exacerbate them (“Decolonising AI”).

One of the most important tasks in the process of decolonising AI is therefore destabilising powerful position held by Big Data in its creation and survival. This act of decentring Big Data immediately posits an alternative narrative for the newly developing AI.

In her critique of Big Data, Yeshibameit Milner, the Director of Data for Black Lives, writes,

“Big data is more than a collection of technologies, a vast amount of information and different types of it. It is more than a revolution in measurement and prediction. It has become a philosophy an ideological regime, about how decisions are made and who makes

them. It has given legitimacy to a new form of social and political control that has taken the digital artifacts of our existence and found new ways to use it against us.” She observes that it is “a part of a long and pervasive historical legacy and technological timeline of scientific oppression, aggressive public policy and the most influential political and economic system that has and continues to shape this country's (USA's) economy, chattel slavery. Algorithms and other Big Data technologies are the engines that have facilitated the evolution of chattel slavery into the Prison Industrial Complex, the militarization of schoolyards and borders alike, and the incarceration of the futures of millions of Americans of all races into peonage, modern day debt slavery” (Milner 2019).

By developing an AI that does not rely on Big Data, and instead draws from specific, localised experiences and perspectives, Dinkins may be seen as making a significant political and intellectual statement. This statement is embodied in the core questions this project addresses, outlined in her talk at Data and Society:

- a) What do machine learning systems created for and by specific communities look like?
- b) How can oral history, vernacular learning and small data break the mold of ‘Big Data dominance’ to become resources and sustaining processes for underutilised communities?
- c) Can we create machine learning systems from small community gathered, derived and administered data that is robust, responsive and competitive? (Dinkins 2019)

Dinkins has also emphasised on the need to “keep the data sovereign to the community that made it”. According to her, the communities from which this data is collected should be in ultimate control of the data and how it is retrieved. They should get to determine how it should be accessed. She also stressed on the importance of maintaining the transparency of the process. The systems used to preserve and administer a community's data should be open in how they

function, and how they are managed and updated. The algorithms used should be well known and as independent as possible from any established architecture. Anyone should be able to examine how they work. The community should also get to decide for how long they want to preserve their data (Dinkins 2019).

By giving communities the agency to choose how an AI consumes, processes, produces and preserves its data, Dinkins' work offers an alternative to what many see as violation of privacy by the systems that collect and use Big Data. For example, AIs such as Amazon's Alexa are often found to be recording conversations (without the explicit permission of the user), and the user has no clarity about how that data will be used and by whom. In this sense, this kind of AI alienates the user, who is not made aware of the massive and complex systems and networks that collect, harvest and exploit their data. To the common user, AI, while being part of their personal lives (smartphones, smart homes etc.), also represents a mystery, an enigma that is too vast and too abstract to grasp. By giving communities the ability to determine the trajectory of its own data, *Not The Only One* empowers them in a way that conventional AI platforms cannot.

Dinkins' work also calls into question the expectation that successful AI systems can only work well if they are fed a large amount of data. Through this project she hopes to offer possibilities for communities that only have a certain amount of data to represent (Dinkins 2019). By tailoring her AI to the needs of the communities themselves, Dinkins furthers the decolonisation process by rejecting the notion that only that which is vast and expansive, and backed by the forces of capital deserves to occupy the AI space.

As Dinkins carries forward with her work on building *Not The Only One*, more and more questions maybe raised about the possibilities it offers for the future. While most of these maybe speculative, they are still worth pondering as they may lead to unexpected discoveries

and interventions. One of the possibilities maybe the formation of a different kind of AI altogether, one that resolves some of the issues highlighted by famed critic of AI, Hubert Dreyfus. Karamjit S. Gill summarises Dreyfus's core idea as follows: "The argument is that the core of human ability to understand and solve problems consists of its being able to act by means of intuition rather than by means of reasoning conceived as a conscious and formal calculation. As a consequence, a computer program cannot reproduce human mind because it lacks the human plural abilities" (168). Dinkins' AI, embedded with oral histories based on memories of three generations of her black family, may offer new kinds of insight and potential for intuitive AIs that operate outside the state-industry nexus and exude diverse emotional intelligences.

Dinkins' work also evokes possibilities of explorations in Africana phenomenology, a branch of Africana philosophy that draws from the works of B. Du Bois, Frantz Fanon, Sylvia Wynter, Lewis Gordon, and Charles Ephraim (Henry 154), that comprises of the "self-reflective descriptions of the constituting activities of the consciousness of Africana peoples" (Henry 79). Studying a distinctively black AI created with a methodology of decolonisation may also offer new ways of looking at human-technology relations, leading to the creation of an Africana postphenomenological practice.

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