Northumbria Research Link

Where is the Human in HDI?

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This position paper views HDI from a human-centred perspective informed by the work of Martin Buber and Eric Fromm. Buber's ideas of philosophical dialogue (Zank, 2020)[i] concern how humans experience the world and themselves while Fromm's principles of character orientation (Cherry, 2020)[ii], concern how individuals relate to the world. We seek to discuss the associated relational dynamic at play between humans and data, setting out five questions as a provocation.

Additional Keywords and Phrases: HDI, Human-Centred, Relational, experiential

INTRODUCTION

HDI is concerned with the interaction between the supposedly personal (human) and the neutral (data). The impact this interaction, or flows of data, have on how we live and connect in both a physical and digital landscape is well established through the use of social media, algorithms etc. (Mortimer et al, 2018)[iii]. As these connections grow and become increasingly complex, shrouded in data smog, HDI attempts to 'place the human at the centre of these data flows' (ibid). This (re)positioning aims to give control of 'my data' back to the individual.

1. What does it mean to interact with data on personal, human level?

HDI defines data as object – specifically a boundary object – to use or experience. In this sense, data become what Buber describes as 'It', experienced initially as neutral, logical data sets. We argue that the growing density of data means this experience is becoming ever more abstract, ambiguous and increasingly reliant on expanding technological understanding of how data is produced, sourced and managed. There is a lack of transparency built into these processes, which only adds to the difficulties an individual encounters when attempting to generate meaning from data.

In short, data becomes more impersonal when viewed as an unstructured/ intangible/ unintelligible set of expressions and in order to make sense of data, they are digested as patterns with algorithms inviting inference and reductive or biased stereotyping – the opposite of what HDI strives to achieve.

2. What does small data look like and how do we, as designers and users engage with it?

A key element is how data is made tangible and (re)presented as information. Currently, this often takes the form of data hoarding, both for present and future use, with the hope that when repackaged and presented back to the individual, data is transformed to information. The individual, by now a user, 'buys' into the story 'sold' to them. Here the crucial transformations (data to information, individual to user, rational to emotive) involve an interaction as transaction. Whether financial or not, there is an inherent power dynamic at play, one that may be read as; we know what's best for you. The user runs the risk of becoming subservient to their own data when

it is fed back as information in the form of an idea or product that shapes behaviour (Alaimo, C. & Kallinikos J. (2017). [iv]

3. How can we work relationally within a transactional system…Can the interaction ever be relational rather than transactional?

HDI acknowledges some of these issues and attempts to address them with the concept of a Databox. However, a key issue remains – how do we design a more equal platform of exchange within a system that was not designed for it? This is always going to be problematic if the exchange is a transaction and not a relational flow of data/information. This issue is a central concern for artist Jennifer Lynn Morone, who explores ideas of control, ownership through the commodification of her own personal data[v].

The difficulties faced in finding a balance between human, data and how they interact can be seen through the prism of Fromm's ideas around relationships and the dangers around these becoming commodified. Concepts such as, hoarding, exploitation and marketing which Fromm identifies as orientations leading to unhappiness all appear commonplace in the current format of human, data interactions. A more current version can be seen in The Social Dilemma, and the voice of Jaron Lainer '…the very meaning of communication, the very meaning of culture, is manipulation. We've put deceit and sneakiness at the absolute centre of everything we do'

4. Do we as individuals need all this data, do we as users want all this information?

The case for ever growing data collection is often given as one of presumption that more is better. Data is knowledge, this knowledge is power and when fed back can be used proactively to the benefit of the user. There is little doubt that in certain circumstances this is not only desired but achievable.

For example, Health apps/gadgets that allow for greater quantification of self, may provide a feeling of 'I'm in control of my health'. There is the possibility that a user's behaviour leads to a sense of satisfaction and achievement.

While this might provide people with a sense of satisfaction and achievement, it might also promote obsessive and disordered behaviours (Fairburn, Rothwell, 2015)[vi]. Intentional user manipulation through dark patterns – designed primarily to drive engagement rather than provide value to users – may also contribute to a dysfunctional relationship between people and their own reflected information (Grey et al 2018)[vii]. Can HDI help to not only improve legibility at defined touchpoints, but weave transparency throughout our relationship with data?

5. Can we design and embed the concept of wellbeing into information and interactions? Is this asking too much?

CONCLUSION

We have set out to highlight a dilemma that HDI appears uncannily named to address – namely the relational quality and interaction of a human and their data. Lupton (2015)[viii] writes of 'digital data assemblages', the combined digital and physical self, currently it would seem that these assemblages are heavily biased by data at the expense of the human, individual. If this is the case, how do we aim to claim back the human element and place it at the centre of any interaction?

[i] Zank, M (2020) *Martin Buber*. Stanford Encyclopedia of Philosophy. https://plato.stanford.edu/entries/buber/

[ii] Cherry, K (2020) Fromm's Character Orientations https://www.verywellmind.com/fromms-five-character-orientations

[iii] Mortimer, R et al, *Human-Data Interaction* https://www.interaction-design.org/literature/book/the-encyclopedia-of-human-computer-interaction-2nd-ed/human-data-interaction

[iv] Alaimo, C. & Kallinikos J. (2017), Computing the Everyday: Social Media as Data Platforms, *The Information Society* 33(4), pp. 175-191

[v] http://jenniferlynmorone.com

[vi] Fairburn, C & Rothwell, E (2015) Apps and Eating Disorders: A systematic Clinical Appraisal. International Journal of Eating Disorders. 48:7

[vii] Grey et al (2018) The Dark (Patterns) Side of UX Design https://doi.org/10.1145/3173574.3174108

[viii] Lupton, D (2015) Digital Bodies http://ssrn.com/abstract=2606467