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## Tackling Structural Injustices: On the Entanglement of Visibility and Justice in Emerging Technologies

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In today's world, Artificial Intelligence plays a central role in many decision-making processes. However, its use can lead to structural and epistemic injustices—especially in the context of health. In 2019, for example, an algorithm used millions of times in American hospitals favored White patients over Black patients. The algorithm was used to predict the likelihood that patients would need additional medical care. Skin color itself was not considered as a variable. What was taken into account was rather the development of costs in the health sector. This correlated negatively with the level of health care costs in the underlying data sets. For a variety of reasons, Black patients had, on average, lower health care costs than White patients with the same medical conditions (Vartan 2019). In another case, it was observed that newborns with a positive screening result for rare diseases were diagnosed and treated later if they were patients of color (Zavala et al. 2021). What becomes evident in both cases with respect to different technologies is that there is a link between the use of new technologies and experiences of injustice for (different) marginalized groups that has not been sufficiently considered so far (Wachter 2022).

Experiences of marginalization and invisibility based on specific characteristics such as skin color, gender, sexuality, ethnicity, socio-economic background, and others pose major challenges to questions of justice in dealing with new technologies such as novel genetic tests or algorithmic decisions as in the examples. Depending on the characteristic and the value attached to it, people have different experiences. Experience is not just an abstract category here. It

also refers to specific claims to be visible in public space and how difficult it can sometimes be to assert rights to good treatment (Braun and Krutzinna 2022). In this short paper, we argue how central it is to focus on negotiations of social recognition from an ethics of life forms perspective in order to combat the experiences of injustices caused by new forms of technology.

### BOUNDED JUSTICE AS A WAY FORWARD?

In their papers, Halley (2023) and Ferryman (2023) raise very crucial points to better unravel the entanglement of visibility—of rare disease patients and racial formation—and justice. In particular, Kadija Ferryman (2023) makes an important contribution to understanding this relationship between visibility and justice by linking her reflections with the concept of bounded justice. Bounded justice (Creary 2021) is a concept that attempts to do two things: first, to understand the experience of marginalization as relevant to thinking about justice. And second, to understand and conceptualize justice in such a way that justice is not only theoretically ascribable but also practically redeemable. Ferryman takes up the first point in relation to the question of what race is and what descriptive and normative significance race can have for questions of justice. Her hypothesis is that, from a bounded justice perspective, racial formations can be described as a dialectical process between invisibility and hyper-visibility. With regard to the two examples mentioned, visibility would mean two things: first, that it becomes visible based on which characteristics of a body (such as the skin color) or

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characteristics of a person injustice (can) arise; second, rendering visible which characteristics of a body are (and can be) associated with injustice and result in a person making greater efforts to have their rights respected and their claims heard.

The second point in particular, as Ferryman convincingly shows, can also lead to hyper-visibility in such a way that places additional burdens on people with certain bodily characteristics. It can also happen that a particular body feature becomes so prominent that there are unintended side effects, such as the reduction of a person to that body feature. The concept of bounded justice then has, so to speak, a kind of seismographic function: it can help to uncover where the experience of invisibility leads to experiences of injustice—and where making certain features too visible can turn into the experience of new injustices.

### COMPLEMENTING BOUNDED JUSTICE WITH A STRUCTURAL PERSPECTIVE

What remains unclear, however, is what a way out of this dialectical overlap between invisibility and hyper-visibility might look like. Following Iris Marion Young's approach to justice, this article suggests two crucial aspects to the debate: first, a focus on the social structures in which injustices are experienced, perpetuated, but also fought against. Young conceptualizes social structures as multidimensional and spatial, referring to social positioning that is relational, interdependent, shaped by interactions, and socio-historically situated, including social institutions and socio-economic resources. This understanding of structures reveals the intersectionality of social positionings of both groups and individuals, which is critical in shaping people's opportunities and perspectives (Young 2002). Young's work is based on the idea that the intersectional relationality of social positioning, which is described by structures, is ongoing and can change, as well as the diverse and multidimensional experiences of injustice that accompany it. In this light, Young understands structural injustice as the relative limitation of individuals' freedom and opportunities based on their social positioning (Young 2002, 98). This view recognizes that some individuals have more opportunities to exercise their capabilities and thus determine dominance relations (Young 2002, 52). In relation to the concept of bounded justice, this structural perspective would add insight into the intersectionality of social positioning and make the associated experiences of injustice visible in their complexity.

Closely related to this structural perspective is, secondly, the question of whether new forms of collective action are required to avoid placing the burden of making visible—new or old—injustices (solely) on individual persons. Young's focus on structural injustice implies that the burden on individuals or groups can only be understood in terms of their interdependencies and differences in their social positioning. Because social structures are relational, the focus is not on individuals or social groups, but on their interactions and interrelationships and their interdependence with other social positions. From this follows a social responsibility to collectively speak out and make injustices visible, as the structural perspective transcends the individual level and brings it to the social level.

This structural perspective requires consideration of social differences and interdependencies of social positioning. According to Young, social differences and interdependencies should be seen as resources (Young 2009), as making structural differences visible provides new resources for inclusive tools and practices, such as patient groups' representation, patient involvement at multiple levels of health governance, and participatory discourse spaces at local and super-local levels. Thus, the structural perspective allows not only to break down fixed group identities by revealing the intersectionality of social positioning but also to value the associated social knowledge and experiences while addressing multidimensional demands for justice (Bleher and Braun 2022).

In summary, Young's approach emphasizes the significance of understanding social structures, intersectionality, and multidimensional experiences of injustice in shaping people's opportunities and perspectives. This structural perspective, in contrast to the concept of bounded justice, provides a more nuanced and comprehensive framework for analyzing and addressing injustice by revealing the interdependencies between different experiences of injustice, some of which may be more visible than others or may otherwise remain invisible.

### THE NEED FOR SOLIDARITY BASED FRAMEWORKS

Looking at the structures then also enables a further step to not only identify but also tackle injustice: People who are harmed by being associated with a particular physical characteristic often have no access to legal remedies, either because they cannot prove who and what caused the harm, or because no law

has been broken (Prainsack et al. 2022). Here, a structural perspective on justice requires collective action, and solidarity could play a central role in dealing with experiences of discrimination and marginalization by enabling the visualization of the claims of the excluded, marginalized, or disadvantaged people (Braun and Hummel 2022). Making such persons visible (again) and collectively building inclusive structures of communication and representation is where the realization of justice depends on solidarity practices of collective action.

However, forms of joint action also bear two central risks. First, not every form of solidarity with an experience of injustice leads to the establishment of more justice. Second, sharing with someone can, at the same time, mean that the act of granting solidarity is understood as an illegitimate intervention. There are several ways to mitigate these risks. As a first step, it is important to complement the previous focus on individual entities in law and governance with groups. Many experiences of marginalization and invisibility do become conscious to individual entities only when they can be shared and addressed collectively. Another way forward are participative forms of representation and deliberation in the health sector, such as the oversight of patient councils with a high level of diversity. The inclusion of different people and groups is important, on the one hand, to embed different experiences. But it is also important to prevent hyper-visibility, where efforts to make marginalization visible lead to experiences of social disrespect and exclusion. A third action concerns the question of which characteristics should and may be discriminated against and of which one is willfully unaware. These are only three initial steps, which certainly need further discussion and adaptation. They could make it possible to think much more strongly about bounded justice and structures that promote experiences of injustice.

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## REFERENCES

- Bleher, H., and M. Braun. 2022. Diffused responsibility: Attributions of responsibility in the use of AI-driven clinical decision support systems. *AI and Ethics* 2 (4):747–61. doi:10.1007/s43681-022-00135-x.
- Braun, M., and P. Hummel. 2022. Data justice and data solidarity. *Patterns* 3 (3):100427. doi:10.1016/j.patter.2021.100427.
- Braun, M., and J. Krutzinna. 2022. Digital twins and the ethics of health decision-making concerning children. *Patterns* 3 (4):100469. doi:10.1016/j.patter.2022.100469.
- Creary, M. S. 2021. Bounded justice and the limits of health equity. *The Journal of Law, Medicine & Ethics* 49 (2): 241–56. doi:10.1017/jme.2021.34.
- Ferryman, K. 2023. Bounded justice, inclusion, and the hyper/invisibility of race in precision medicine. *The American Journal of Bioethics* 23 (7):27–33. doi:10.1080/15265161.2023.2207515.
- Halley, M. C., C. M. E. Halverson, H. K. Tabor, and A. J. Goldenberg. 2023. Rare disease, advocacy and justice: Intersecting disparities in research and clinical care. *The American Journal of Bioethics* 23 (7):17–26. doi:10.1080/15265161.2023.2207500.
- Prainsack, B., S. EL-Sayed, N. Forgó, Ł. Szoszkievicz, and P. Baumer. 2022. Data solidarity: a blueprint for governing health futures. *The Lancet. Digital Health* 4 (11): e773–e774. doi:10.1016/S2589-7500(22)00189-3.
- Vartan, S. 2019. *Racial bias found in a major health care risk algorithm*. New York: Scientific American.
- Wachter, S. 2022. *The theory of artificial immutability: Protecting algorithmic groups under anti-discrimination law*. arXiv preprint arXiv:2205.01166.
- Young, I. M. 2002. *Inclusion and democracy*. Oxford: Oxford University Press.
- Young, I. M. 2009. Structural injustice and the politics of difference. In *Contemporary debates in political philosophy*, eds. T. Christiano and J. Christman, 362–83. Chichester: Blackwell.
- Zavala, V. A., P. M. Bracci, J. M. Carethers, L. Carvajal-Carmona, N. B. Coggins, M. R. Cruz-Correa, M. Davis, A. J. de Smith, J. Dutil, J. C. Figueiredo, et al. 2021. Cancer health disparities in racial/ethnic minorities in the United States. *British Journal of Cancer* 124 (2):315–32. doi:10.1038/s41416-020-01038-6.