Structural microaggressions for explaining outcome gaps

Mikio Akagi

Trilateral Research Ltd., Waterford, Ireland

Email: mikio.akagi@trilateralresearch.com; ORCID: 0000-0003-0996-487X

This is a preprint. Please cite the final version to be published in *Philosophy of Science*.

Abstract

Microaggressions are hypothesized to play a causal role in undesirable population effects such as racial health gaps, but the mechanisms through which this occurs are not yet well understood. I call inquiry about these mechanisms the "explanatory project." I suggest that the explanatory project has been hindered by microaggression concepts tailored to be applicable under conditions of lived uncertainty, rather than to facilitate understanding of structural causes. I defend a pluralist, structural account of microaggressions from arguments by Regina Rini that, while appropriate for ethical projects, do not apply to the explanatory project.

1. Introduction

Microaggressions are relatively minor slights and offenses that can appear individually innocuous, but that in aggregate may explain significant gaps in health and other domains. The microaggression concept has been the object of vigorous attention in public discussions, DEI (diversity, equity, and inclusion) work, and in research in psychology, public health, philosophy, and other fields. The term "microaggression" now serves a multiplicity of partly-overlapping functions. It denotes a phenomenological category of ordinary experiences (e.g. Sue 2010a; Pérez Huber and Solorzano 2015), a variety of clinical misbehavior (e.g. Sue et al. 2007; Freeman and Stewart 2018), a cause of health disparities (e.g. Torres, Driscoll, and Burrow 2010; Gee and Ford 2011), an object of psychological research (e.g. Lau and Williams 2010; Wong et al. 2014; Williams 2020), and a category deserving of special moral attention (e.g. Friedlaender 2018; McTernan 2018; Rini 2021). Other researchers have examined how to refine the extension of "microaggression" (e.g. Rini 2020; Thompson 2020), but in this paper I am concerned with the assumptions that facilitate inquiry about microaggressions.

Projects of inquiry with different aims are often served by different assumptions. In particular, there has been excellent work on the ethics of microaggressions, including Regina Rini's (2021) account, that is successful in part because it sidesteps less productive kinds of social controversy. Rini's account and others like it are crafted with assumptions

Mikio Akagi

2

that accommodate the epistemic limitations of individuals, so that the accounts can be applied more straightforwardly in individual deliberation and daily life. However, in empirical research about populations, the same assumptions are less motivated and serve to artificially foreclose empirical possibilities. I argue that some research projects—particularly those that concern causal effects in populations—are better served by a different account of microaggressions.

In Section 2, I will say more about research concerning microaggressions in public health and population contexts. In Section 3, I will defend a "structural" account of microaggression from criticism by Rini. My arguments do not imply that Rini is mistaken about the ethics of microaggressions, only that the scope of her arguments is limited to some projects and not others. In Section 4 I will sketch a framework for thinking of microaggressions in structural terms, illustrated with an example of extant research that aligns with my recommended approach. Finally, I will address some caveats about how my discussion reflects on other microaggression research (Sect. 5) before concluding (Sect. 6).

2. The explanatory project

The term "microaggression" originally denoted acts of subtle hostility or disdain for Black Americans (Pierce 1970), but is now understood to refer more broadly to a variety of acts and states of affairs that demean or alienate any oppressed social group or its members (Sue 2010b). The most famous gloss is that

...microaggressions are brief and commonplace daily verbal, behavioral, and environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative ...slights and insults to the target person or group. (Sue et al. 2007, 273)

The modern microaggression concept applies broadly to many forms of discrimination (including racism, sexism, ableism, classism, queer- and transphobia, colorism, fat-shaming, etc. as well as, of course, intersectional discrimination; Crenshaw 1989; Nadal et al. 2015; Olkin et al. 2019). Microaggressions are generally understood to be asymmetric in that they necessarily target oppressed social groups or their members, not privileged social groups. The label is only invoked for those slights and transgressions that are "congruent" (Liao and Huebner 2020, 100) with systems of structural oppression. (Rini suggests that microaggressions are "micro" not in the sense that they are small, but in the sense that they are parts of larger patterns; 2020.)

This alignment of microaggressions with oppressive systems features prominently in common motivations for psychological research on microaggressions. In particular, it is common for research articles to cite various population-level studies on the negative health effects of discrimination. Negative somatic and psychological health outcomes are correlated with perceived discrimination (Mays, Cochran, and Barnes 2007; Carter 2007; Okazaki 2009; Torres, Driscoll, and Burrow 2010; Gee and Ford 2011; Hurd et al. 2014; Hollingsworth et al. 2017) and not fully explained by other factors such as socioeconomic status or self-esteem (Gee, Spencer, Chen, Yip, et al. 2007; Gee, Spencer, Chen, and Takeuchi 2007). Racial health gaps in the U.S. are the most studied in this context. Microaggressions are commonly thought to play a role in creating and perpetuating these health gaps. However, the mechanisms by which microaggressions contribute to disparate health outcomes are not yet well understood, and different possible mechanisms suggest different mitigating interventions. For example, if microaggressions act on health by way of blood pressure then there are well-studied pharmaceutical and behavioral interventions available, whereas if microaggressions act on health by some other mechanism then these interventions will likely be ineffective.

Frederick W. Gooding, Jr. and I (Akagi and Gooding 2021) use the term explanatory microaggressions to refer to the causal factors that explain recalcitrant outcome gaps, which are gaps between oppressed and privileged groups in desirable outcomes (e.g. somatic and mental health, professional attainment, well-being) that are not explained by relative access to material resources or goods. By contrast, hermeneutical microaggressions are the familiar category of denigrating and exclusionary experiences that are frequently called "microaggressions." While the primary role of the former, explanatory category is to explain social outcomes, the latter category helps us make sense of the lived experiences of people who are members of oppressed social groups (cf. Fricker 2007). If the microaggression concept is empirically valuable, we should expect some conceptual cleavages like the distinction between explanatory and hermeneutical microaggressions. This sort of complexity is not evidence of incoherence, as some critics (e.g. Lilienfeld 2017) have suggested; it a typical feature of scientific concepts (Akagi 2018; Haueis forthcoming; Novick and Haueis 2023).

My focus in this paper is on what I call the "explanatory project": the empirical project of studying microaggressions in the explanatory sense above, discerning the mechanisms that cause recalcitrant outcome gaps, and discovering which kinds of behaviors and situations contribute to them (since they might not be the same behaviors and situations that we call microaggressions in the hermeneutical sense). The explanatory project might be distinguished from other microaggression research projects, such as the hermeneutical projects of better understanding the nature and variety of hermeneutical microaggressions or of constructing anti-oppressive phenomenologies (e.g. Solorzano 1998; Pérez Huber and Solorzano 2015; Freeman and Stewart 2018), or the ethical project of correctly assigning responsibility and blame for microaggressions (e.g. Friedlaender 2018; McTernan 2018; Rini 2021), or the

4 Mikio Akagi

management project of fostering near-term institutional reform given the limitations of our current understanding and social structures.

3. Explanatory microaggressions as structural

Microaggression researchers and scholars engage in these research projects using a variety of disciplinary methods. They have offered various conflicting accounts of what microaggressions are and how to properly ascribe them. Emma McClure and Regina Rini (McClure and Rini 2020; Rini 2021) identify three styles of accounts. First, motivational or psychological accounts define microaggressions based on the (perhaps unconscious) psychological states of a microaggression performer (e.g. Pierce 1970; Sue et al. 2007; Dotson 2011; Tschaepe 2016; Lilienfeld 2017). Second, experiential accounts define microaggressions based on the phenomenological states of a microaggression target (Rini 2020, 2021; Fatima 2017; Sue 2017; see also Crocker and Major 1989). Third, structural accounts define microaggressions based on their functional or causal role in an oppressive social system (e.g. Pérez Huber and Solorzano 2015; Friedlaender 2018; McTernan 2018; Freeman and Stewart 2018; Williams 2020). Hybrid accounts might combine elements from these three basic styles.

While projects and account styles appear in many combinations in the existing literature, structural accounts are naturally suited to the explanatory project. After all, the goal of the explanatory project is to understand the causal mechanisms of social outcome gaps, and structural accounts identify microaggressions by their causal roles in social processes. However, Rini offers two arguments against structural accounts of microaggressions. First, she suggests that structural accounts obscure what it is that makes blame difficult to assign for microaggressions (2021, 81, 92–4). While this consideration is germane to Rini's ethical project, correctly assigning blame is not a central concern of the explanatory project and I will not comment on this argument here.

Rini's other argument appeals to standpoint epistemology and, in particular, the folly of holding a revisionist view on which members of oppressed social groups (potential microaggression targets) might be commonly mistaken about microaggressions. If structural accounts ascribe microaggressions on the basis of their causal role, rather than on the experiences of microaggression targets, it is inevitable that defenders of structural accounts will disagree with microaggression targets about at least some cases (and perhaps about many or most). This consequence is undesirable. Rini writes:

Does anyone have the standing to tell people who welcome a social practice that they are unwittingly accepting their own subjugation or are complicit in their own oppression? ...we should defer as much as possible to people's own experiences. I certainly don't think that I, as a white person, am in any

position to tell a Black woman who loves people asking to touch her hair that she is misperceiving her social relations. (Rini 2021, 80; see also Rini 2020, 108-113)

On structural accounts, microaggressions "cannot be confidently applied in the world without god-like knowledge" that is, at best, inaccessible to most of us most of the time (2020, 109). Inquirers—some of whom will occupy privileged social positions—would be put in the unsavory position of dictating to putative microaggression targets whether some act or state of affairs is a genuine microaggression. Besides, "nothing alienates a potential ally more quickly than insisting you understand her life better than she does" (Rini 2021, 80). For these reasons, Rini favors an experiential account that allows inquirers to avoid disagreeing with potential microaggression targets.

Rini's argument here is well-suited to her ethical project, but it turns on considerations that need not hold the same weight for the explanatory project. It is indeed awkward and rhetorically ineffective to disagree with people about their own experiences, and this fact should constrain accounts that must be applied in interpersonal conversations or daily life. For an ethical project like Rini's, it is a problem if we can never or rarely say with confidence, of some specific situation, that a microaggression occurred. Such an inability would frustrate attempts to correctly assign blame to individual agents. However, the explanatory project does not require us to ascribe microaggressions in everyday contexts. It is not inappropriate for medical scientists to investigate genes or internal anatomical structures just because they cannot be readily identified in typical interpersonal interactions. Likewise, it is not inappropriate for an account of explanatory microaggressions to countenance criteria of ascription that are difficult to apply in daily life, or that are politically inexpedient. In both cases, we inquire into covert causes in the hope that our discoveries might yield knowledge that eases suffering and promotes human flourishing. If our goal is to intervene in the causes of outcome gaps, it is sufficient to discover interventions that work at a population level. For example, we might discourage some category of behavior without having to know exactly which acts contribute to outcome gaps, or we might encourage behaviors (such as affinity group activities) that moderate the harmful effects of microaggressions. By analogy, we are justified in regulating automobile travel with speed limits and safety features without knowing in advance precisely which driver actions would have otherwise caused collisions.

The revisionist potential of structuralism about microaggressions is a drawback for the ethical project because it conflicts with some versions of standpoint theory, but this conflict need not arise in the explanatory project. Standpoint epistemologists hold that members of oppressed social groups typically understand some topics better than other people, particularly their own experiences and the ways they are affected by oppressive

systems. Standpoint theorists do not claim that members of oppressed social groups have any sort of automatic or total knowledge (Wylie 2003; Freeman and Stewart 2020), and certainly not unchallengeable knowledge of the detailed causal mechanisms of unconscious, distributed physiological and psychological processes whose effects, while significant, are discernible only through quantitative empirical studies. Revisionism in this context is no vice, even for standpoint theorists.

Moreover, the same factors that are flaws for the ethical project may be virtues for the explanatory project. For example, a structural account that countenances revisionism has the potential to contribute to our understanding of phenomena such as false consciousness (see e.g. Bartky 1990; Khader 2012; cf. Rini 2021, 80). And whereas Rini's account would have been toothless without a clear criterion for identifying (hermeneutical) microaggressions, I cannot offer such a criterion for explanatory microaggressions, apart from the vague requirement that they explain recalcitrant outcome gaps, because a more precise account of the causal role of explanatory microaggressions must be discovered empirically.

In summary, accounts such as Rini's are crafted to accommodate, rather than to overcome, our present epistemic limitations. In particular, many extant accounts (especially in the context of ethical or hermeneutical projects) take as given various social controversies or gaps in our understanding of microaggressions and their causal contribution to outcome gaps. Such accounts are useful, but limited by epistemic constraints that apply to individuals, not to research programs. To apply the same assumptions in the explanatory project would artificially foreclose empirical possibilities about what kinds of behaviors or situations contribute to outcome gaps, and whether these contributors are dissociable from the experiences of their targets. Whereas it is proper for an account that is intended for everyday application to be constrained by the epistemic limits of individuals, an account that is meant to facilitate inquiry into heretofore hidden causes should not accede to those limits but seek to overcome them.

4. A framework for structural microaggression research

So how might a structural account help us to conceptualize microaggressions for the explanatory project, and discover clearer criteria for identifying them? We currently have a limited understanding of the causal mechanisms of recalcitrant outcome gaps, so organizing our knowledge of explanatory microaggressions in terms of their causal role helps us to confront the limits of our current understanding. It may also serve to remind us that the mechanisms underlying outcome gaps may be quite heterogeneous. Ideally, research in the explanatory project can be located relative to four dimensions: (a) causes (specific situations/behaviors, i.e. explanatory microaggressions), (b) effects (negative outcomes), (c) populations (social groups), and (d) mechanistic hypotheses.

Regarding (a) causes, the most familiar typology of microaggressions is Derald Wing Sue and colleagues' (2007) microassaults, microinsults, and microinvalidations. Lauren Freeman and Heather Stewart (2018) suggest an alternative, clinical typology based on psychological effects: epistemic, emotional, and self-identity microaggressions. The behaviors, situations, and themes covered in these typologies is quite diverse, so research should be specific regarding precisely which behaviors and situations are being investigated. In the long run, such specificity in the literature would allow us to more precisely discern the extension of explanatory microaggressions.

Following Freeman and Stewart's lead, we might strive to categorize explanatory microaggressions by their (b) effects, and specifically on the outcomes that they influence: microaggressions that affect somatic health, mental health, professional attainment, etc. These categories can be further subdivided into more specific effects, e.g. microaggressions contributing to anxiety (Gee, Spencer, Chen, Yip, et al. 2007), suicidality (Hollingsworth et al. 2017), heart disease (Gee, Spencer, Chen, and Takeuchi 2007), etc. Cross-cutting these categories, it is likely that effects vary between (c) populations, i.e. social groups (including intersectional sub-groups) and societies.

As for the (d) mechanisms through which microaggressions contribute to outcome gaps, there are currently many hypotheses. Cameron Evans and Ron Mallon (2020) distinguish "accumulation" and "stochastic" mechanisms. Physiologically, past research has explored the possibility that microaggressions contribute to health outcomes via stress or cortisol (Carter 2007; S.P. Harrell 2000), or via hypertension (J.P. Harrell, Hall, and Taliaferro 2003), or via epigenetics (Kuzawa and Sweet 2009; Goosby and Heidbrink 2013; Aroke et al. 2019). Psychological hypotheses about the causal role of microaggressions include motivational factors such as implicit bias (Pierce 1970; Sue et al. 2007), experiential factors such as attributional ambiguity (Rini 2021; Crocker and Major 1989) and attributions to prejudice (Branscombe, Schmitt, and Harvey 1999), and structural factors such as generational trauma (Goosby and Heidbrink 2013) and plausible deniability of discrimination (McTernan 2018; Friedlaender 2018). Of course, these hypotheses are not mutually exclusive. Some combination of these explanations may turn out to be correct, either between (social group, outcome gap) pairs or within them.

Studies on explanatory microaggressions contribute to our knowledge by addressing some region within this four-dimensional space. For example, a study by Lucas Torres, Mark Driscoll, and Anthony Burrow (2010) examined (b) mental health outcomes, and specifically depressive symptoms, among (c) Black American graduate students, focusing on (d) the stress hypothesis. First, a qualitative experiment examined common themes in participant responses, identifying (a) three themes of interest: underestimations of ability, assumptions of criminality/second-class citizen (both corresponding to microinsult themes identified in Sue et al. 2007), and cultural/racial

isolation. Then the researchers performed quantitative experiments to assess the incidence of microaggressions with these themes for their study participants as well as participant stress levels, depressive symptoms, and coping strategies. Torres, Driscoll, and Burrow found a moderated-mediational model on which microaggressions contribute to depressive symptoms, mediated by stress and moderated by "active coping" strategies. Studies like this one contribute clearly to the explanatory project by situating themselves in the four-dimensional space of causes, effects, populations, and mechanisms.

5. Are explanatory microaggressions really microaggressions?

Before concluding, I will discuss some worries that one might have about the view defended here and its relation to other work on microaggressions.

I defended the revisionist potential of structuralism for the explanatory project (Sect. 3), but one might worry that this potential could obliterate the extensional overlap between explanatory and hermeneutical microaggressions. That is, if explanatory microaggressions are just whatever it is that causes outcome gaps, then they could turn out to be very different sorts of things than familiar examples of microaggressions. Perhaps, for example, we may discover that insinuations that *queerness is unnatural* do not contribute to health gaps, and therefore that such slights are not really (explanatory) microaggressions. If that is even possible, then might it not be infelicitous to say that the explanatory project is really about microaggressions at all?

I am willing to bite the bullet here: explanatory microaggressions might not resemble hermeneutical microaggressions, and little hangs on whether we use the word "microaggression." But I temper my ambivalence with the following considerations. First, it is quite plausible that explanatory and hermeneutical microaggressions do have significant extensional overlap. After all, it is quite common for researchers to motivate discussions of (hermeneutical) microaggressions by appealing to outcome gaps, so it is a common belief among microaggression researchers that (hermeneutical) microaggressions will turn out to fulfill the causal role of explanatory microaggressions. Second, there is an existing body of research about the health effects of microaggressions, sometimes in contrast to other forms of prejudice or discrimination. So my choice of terminology is intended to follow the lead of empirical researchers. Finally, the various microaggression research projects (explanatory, hermeneutical, and ethical) are interrelated. Explanatory research about microaggressions is grounded hermeneutical methods (e.g. the qualitative element in Torres, Driscoll, and Burrow 2010), and would benefit from further grounding in e.g. community science (Thompson 2020). Ethical evaluation of microaggressions depends in part on the ways that they contribute to harms such as outcome gaps (as well as other harms). So while I think it is

worthwhile to distinguish between these various kinds of project, there is value in allowing the word "microaggression" to develop distinct but related senses.

One might also worry that my structural proposal could be self-eliminating. That is, we may discover that explanatory microaggressions are so mechanistically heterogeneous that they are not worth grouping together under a common label. This is a possibility that depends in part on empirical facts and in part on the linguistic decisions of future researchers, neither of which can be predicted with great confidence. In the meantime, I would contend that the explanatory project is well-served by structuralist assumptions for the reasons provided above. And I would hasten to add that eliminativism about explanatory microaggressions does not imply eliminativism about hermeneutical microaggressions. Even if a structural account of explanatory microaggressions ultimately fails due to the heterogeneity of causal roles, there will continue to be value in considering microaggressions as a hermeneutical resource or as a category for moral evaluation.

6. Conclusion

I have argued that different investigative projects regarding microaggressions can require different assumptions about the nature of microaggressions. In particular, whereas a structural account of microaggressions might be inappropriate for an ethical inquiry like Rini's, the considerations she raises do not apply to the explanatory project of understanding the mechanisms that cause structural outcome gaps such as the racial health gap in the U.S. Likewise, my defense of structuralism for the explanatory project has no straightforward bearing on Rini's project. I also sketched how thinking of (explanatory) microaggressions in terms of their causal role can help us to categorize microaggressions and remain mindful of the possibility that microaggressions contribute to outcome gaps in diverse ways.

As our understanding of microaggressions and structural oppression matures, we should be prepared to embrace complexity and contextualism. Microaggressions may manifest differently not only relative to social groups, societies, and contexts, but relative to epistemic aims and research projects. Different projects may demand different styles of account if they are subject to different constraints on methods and application. Inquiry is stifled by an insistence that accounts, definitions, and assumptions be consistent across research projects.

Acknowledgments. I am grateful for feedback and discussion from many people, especially Morgan Thompson, Shen-yi Liao, Kareem Khalifa, Daniel James, Frederick W. Gooding, Jr., and participants at the 2022 Meeting of the Philosophy of Science Association.

References

- Akagi, Mikio. 2018. "Rethinking the Problem of Cognition." *Synthese* 195: 3547–3570. https://doi.org/10.1007/s11229-017-1383-2.
- Akagi, Mikio, and Frederick W. Gooding, Jr. 2021. "Microaggressions and Objectivity: Experimental Measures and Lived Experience." *Philosophy of Science* 88: 1090–1100. https://doi.org/10.1086/715219.
- Aroke, Edwin N., Paule V. Joseph, Abhrarup Roy, Demario S. Overstreet, Trygve Tollefsbol, David E. Vance, and Burel R. Goodin. 2019. "Could Epigenetics Help Explain Racial Disparities in Chronic Pain?" *Journal of Pain Research* 12: 701–710. https://doi.org/10.2147/JPR.S191848.
- Bartky, Sandra Lee. 1990. *Femininity and Domination: Studies in the Phenomenology of Oppression*. London: Routledge.
- Branscombe, Nyla R., Michael T. Schmitt, and Richard D. Harvey. 1999. "Perceiving Pervasive Discrimination among African Americans: Implications for Group Identification and Well-Being." *Journal of Personality and Social Psychology* 77: 135–149. https://doi.org/10.1037/0022-3514.77.1.135.
- Carter, Robert T. 2007. "Racism and Psychological and Emotional Injury: Recognizing and Assessing Race-Based Traumatic Stress." *The Counseling Psychologist* 35: 13–105. https://doi.org/10.1177/0011000006292033.
- Crenshaw, Kimberlé. 1989. "Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics." *University of Chicago Legal Forum* 1989: 139–167.
- Crocker, Jennifer, and Brenda Major. 1989. "Social Stigma and Self-Esteem: The Self-Protective Properties of Stigma." *Psychological Review* 96: 608–630. https://doi.org/10.1037/0033-295X.96.4.608.
- Dotson, Kristie. 2011. "Tracking Epistemic Violence, Tracking Practices of Silencing." *Hypatia* 26: 236–257. https://doi.org/10.1111/j.1527-2001.2011.01177.x.
- Evans, Cameron, and Ron Mallon. 2020. "Microaggressions, Mechanisms, and Harm." In *Microaggressions and Philosophy*, edited by Lauren Freeman and Jeanine Weekes Schroer, 67–78. New York: Routledge.
- Fatima, Saba. 2017. "On the Edge of Knowing: Microaggression and Epistemic Uncertainty as a Woman of Color." In *Surviving Sexism in Academia: Feminist Strategies for Leadership*, edited by Kirsti Cole and Holly Hassel, 147–154. New York: Routledge.
- Freeman, Lauren, and Heather Stewart. 2018. "Microaggressions in Clinical Medicine." *Kennedy Institute of Ethics Journal* 28: 411–449. https://doi.org/10.1353/ken.2018.0024.
- ——. 2020. "Sticks and Stones Can Break Your Bones and Words Can Really Hurt You: A Standpoint Epistemological Reply to Critics of the Microaggression Research Program." In *Microaggressions and Philosophy*, edited by Lauren Freeman and Jeanine Weekes Schroer, 36–66. New York: Routledge.
- Fricker, Miranda. 2007. Epistemic Injustice: Power and the Ethics of Knowing. Oxford: Oxford University Press.
- Friedlaender, Christina. 2018. "On Microaggressions: Cumulative Harm and Individual Responsibility." *Hypatia* 33: 5–21. https://doi.org/10.1111/hypa.12390.
- Gee, Gilbert C., and Chandra L. Ford. 2011. "Structural Racism and Health Inequities: Old Issues, New Directions." *Du Bois Review* 8: 115–132. https://doi.org/10.1017/S1742058X11000130.
- Gee, Gilbert C., Michael Spencer, Juan Chen, and David T. Takeuchi. 2007. "A Nationwide Study of Discrimination and Chronic Health Conditions among Asian Americans." *American Journal of Public Health* 97: 1275–1282. https://doi.org/10.2105/AJPH.2006.091827.
- Gee, Gilbert C., Michael Spencer, Juan Chen, Tiffany Yip, and David T. Takeuchi. 2007. "The Association between Self-Reported Racial Discrimination and 12-Month Dsm-Iv Mental Disorders among Asian Americans Nationwide." *Social Science and Medicine* 64: 1984–1996. https://doi.org/10.1016/j.socscimed.2007.02.013.
- Goosby, Bridget J., and Chelsea Heidbrink. 2013. "Transgenerational Consequences of Racial Discrimination for African American Health." *Social Compass* 7: 630–643. https://doi.org/10.1111/soc4.12054.
- Harrell, Jules P., Sadiki Hall, and James Taliaferro. 2003. "Physiological Responses to Racism and Discrimination: An Assessment of the Evidence." *American Journal of Public Health* 93: 243–248. https://doi.org/10.2105/AJPH.93.2.243.
- Harrell, Shelly P. 2000. "A Multidimensional Conceptualization of Racism-Related Stress: Implications for the Well-Being of People of Color." *American Journal of Orthopsychiatry* 70: 42–57. https://doi.org/10.1037/hoo87722.
- Haueis, Philipp. forthcoming. "A Generalized Patchwork Approach to Scientific Concepts." *British Journal for the Philosophy of Science*. https://doi.org/10.1086/716179.

- Hollingsworth, David W., Ashely B. Cole, Victoria M. O'Keefe, Raymond P. Tucker, Chandra R. Story, and LaRicka R. Wingate. 2017. "Experiencing Racial Microaggressions Influences Suicide Ideation through Perceived Burdensomeness in African Americans." *Journal of Counseling Psychology* 64: 104–111. https://doi.org/10.1037/cou0000177.
- Hurd, Noelle M., Fatima A. Varner, Cleopatra H. Caldwell, and Marc A. Zimmerman. 2014. "Does Perceived Racial Discrimination Predict Changes in Psychological Distress and Substance Use over Time? An Examination among Black Emerging Adults." *Developmental Psychology* 50: 1910–1918. https://doi.org/10.1037/a0036438.
- Khader, Serene J. 2012. "Must Theorising About Adaptive Preferences Deny Women's Agency?" *Journal of Applied Philosophy* 29: 302–317. https://doi.org/10.1111/j.1468-5930.2012.00575.x.
- Kuzawa, Christopher W., and Elizabeth Sweet. 2009. "Epigenetics and the Embodiment of Race: Developmental Origins of Us Racial Disparities in Cardiovascular Health." *American Journal of Human Biology* 21: 2–15. https://doi.org/10.1002/ajhb.20822.
- Lau, Michael Y., and Chantea D. Williams. 2010. "Microaggression Research: Methodological Review and Recommendations." In *Microaggressions and Marginality: Manifestation, Dynamics, and Impact*, edited by Derald Wing Sue, 313–336. Hoboken, New Jersey: Wiley.
- Liao, Shen-yi, and Bryce Huebner. 2020. "Oppressive Things." *Philosophy and Phenomenological Research*. https://doi.org/10.1111/phpr.12701.
- Lilienfeld, Scott O. 2017. "Microaggressions: Strong Claims, Inadequate Evidece." *Perspectives on Psychological Science* 12: 128–169. https://doi.org/10.1177/174569161665.
- Mays, Vickie M., Susan D. Cochran, and Namdi W. Barnes. 2007. "Race, Race-Based Discrimination, and Health Outcomes among African Americans." *Annual Review of Psychology* 58: 201–225. https://doi.org/10.1146/annurev.psych.57.102904.190212.
- McClure, Emma, and Regina Rini. 2020. "Microaggression: Conceptual and Scientific Issues." *Philosophy Compass* 15: e12659. https://doi.org/10.1111/phc3.12659.
- McTernan, Emily. 2018. "Microaggressions, Equality, and Social Practices." *Journal of Political Philosophy* 26: 261–281. https://doi.org/10.1111/jopp.12150.
- Nadal, Kevin L., Kristin C. Davidoff, Lindsey S. Davis, Yinglee Wong, David Marshall, and Victoria McKenzie. 2015. "A Qualitative Approach to Intersectional Microaggressions: Understanding Influences of Race, Ethnicity, Gender, Sexuality, and Religion." *Qualitative Psychology* 2: 147–163. https://doi.org/10.1037/qup0000026.
- Novick, Rose, and Philipp Haueis. 2023. "Patchworks and Operations." *European Journal for Philosophy of Science* 13:15. https://doi.org/10.1007/s13194-023-00515-y.
- Okazaki, Sumie. 2009. "Impact of Racism on Ethnic Minority Mental Health." *Perspectives on Psychological Science* 4: 103–107. https://doi.org/10.1111/j.1745-6924.2009.01099.x.
- Olkin, Rhoda, H'Sien Hayward, Melody Schaff Abbene, and Goldie VanHeel. 2019. "The Experiences of Microaggressions against Women with Visible and Invisible Disabilities." *Journal of Social Issues* 75: 757–785. https://doi.org/10.1111/josi.12342.
- Pérez Huber, Lindsay, and Daniel G. Solorzano. 2015. "Racial Microaggressions as a Tool for Critical Race Research." *Race Ethnicity and Education* 18: 297–320. https://doi.org/10.1080/13613324.2014.994173.
- Pierce, Chester. 1970. "Offensive Mechanisms." In *The Black Seventies*, edited by Floyd B. Barbour, 265–282. Boston: Porter Sargeant.
- Rini, Regina. 2020. "Taking the Measure of Microaggression: How to Put Boundaries on a Nebulous Concept." In *Microaggressions and Philosophy*, edited by Lauren Freeman and Jeanine Weekes Schroer, 101–120. New York: Routledge.
- ———. 2021. The Ethics of Microaggression. New York: Routledge.
- Solorzano, Daniel G. 1998. "Critical Race Theory, Race and Gender Microaggressions, and the Experience of Chicana and Chicano Scholars." *International Journal of Qualitative Studies in Education* 11: 121–136. https://doi.org/10.1080/095183998236926.
- Sue, Derald Wing. 2010a. *Microaggressions in Everyday Life: Race, Gender, and Sexual Orientation*. Hoboken, New Jersey: Wiley.
- ——. 2010b. "Microaggressions, Marginality, and Oppression: An Introduction." In *Microaggressions* and Marginality: Manifestation, Dynamics, and Impact, edited by Derald Wing Sue, 3–22. Hoboken, New Jersey: Wiley.
- ——. 2017. "Microaggressions and "Evidence": Empirical or Experiential Reality?" *Perspectives on Psychological Science* 12: 170–172. https://doi.org/10.1177/1745691616664437.

- Sue, Derald Wing, Christina M. Capodilupo, Gina C. Torino, Jennifer M. Bucceri, Aisha M.B. Holder, Kevin L. Nadal, and Marta Esquilin. 2007. "Racial Microaggressions in Everyday Life: Implications for Clinical Practice." *American Psychologist* 62: 271–286. https://doi.org/10.1037/0003-066X.62.4.271.
- Thompson, Morgan. 2020. "Psychological Research on Racial Microaggressions: Community Science and Concept Explication." In *Microaggressions and Philosophy*, edited by Lauren Freeman and Jeanine Weekes Schroer, 79–100. New York: Routledge.
- Torres, Lucas, Mark W. Driscoll, and Anthony L. Burrow. 2010. "Racial Microaggressions and Psychological Functioning among Highly Achieving African-Americans: A Mixed-Methods Approach." *Journal of Social and Clinical Psychology* 29: 1074–1099. https://doi.org/10.1521/jscp.2010.29.10.1074.
- Tschaepe, Mark. 2016. "Addressing Microaggressions and Epistemic Injustice: Flourishing from the Work of Audre Lorde." *Essays in the Philosophy of Humanism* 24: 87–101. https://doi.org/10.1558/eph.31404.
- Williams, Monnica T. 2020. "Microaggressions: Clarification, Evidence, and Impact." *Perspectives on Psychological Science* 15: 3–26. https://doi.org/10.1177/1745691619827.
- Wong, Gloria, Annie O. Derthick, E.J.R. David, Anne Saw, and Sumie Okazaki. 2014. "The *What*, the *Why*, and the *How*: A Review of Racial Microaggressions Research in Psychology." *Race and social problems* 6: 181–200. https://doi.org/10.1007/s12552-013-9107-9.
- Wylie, Alison. 2003. "Why Standpoint Matters." In *Science and Other Cultures: Issues in Philosophies of Science and Technology*, edited by Robert Figueroa and Sandra Harding, 26–48. New York: Routledge.