Published in final edited form as:

AJOB Neurosci. 2020 ; 11(3): 201–203. doi:10.1080/21507740.2020.1778134.

A “salad bowl” approach to neuroethics collaboration

Katherine E. MacDuffie, PhD

Department of Speech and Hearing Sciences, University of Washington

Treuman Katz Center for Pediatric Bioethics, Seattle Children's Hospital

The target articles in this issue argue that neuroethicists will be best positioned to influence the direction and scope of neuroscience research from the inside—through partnerships with neuroscientists—rather than critiquing from the outside (Chiong 2020; Farahany and Ramos 2020; Goering and Klein, 2020.; Salles and Farisco 2020; Eberwine and Kahn 2020).

Different language is used across the articles to describe the ideal nature of such partnerships, however. Should neuroethics scholarship be embedded in neuroscience, or integrated within it? Should neuroethicists be available for consultation, following the model of clinical or research ethics consult services? Here I advocate for conceptualizing the partnership more simply: as a collaboration.

An (admittedly imperfect) analogy can be made to food metaphors that have been used to describe the United States. The traditional “melting pot” metaphor—in which people from many different national and cultural backgrounds are placed together into a pot and stirred until the “flavors” blend together—has been roundly criticized as unrealistic and problematic as it implies a) that in order to become “American”, an individual must surrender their original cultural identity and b) that American culture is a single homogenous mass (Ramsey, Vold, and Williams 1989). As a replacement, the metaphor of a “salad bowl” is thought to more realistically convey the extent to which individuals retain their cultural identities but are intermixed in such a way that a single “forkful” can capture a diverse array of ingredients. Applying the same metaphor to the relationship between neuroethics and neuroscience, it is clear that a neuroethicist put into a melting pot would quickly lose her distinct perspective and become indistinguishable from her surroundings. As one of many ingredients in a salad bowl, however, she can coexist alongside colleagues in electrophysiology, cell biology, etc., enriching the final product without losing her disciplinary identity.

I find the notion of a “salad bowl”-style collaboration speaks more closely to my experience collaborating with neuroscience colleagues than notions of being embedded, integrated, or in consultation. I am still early in my neuroethics career and humbly acknowledge that the experiences I’ve had of collaborations across disciplines may not be universal. With that caveat in mind, I offer three points in support of simple collaboration between neuroethicists and neuroscientists, which are based on my experience and bolstered by arguments made in the target articles in this issue.

1. Many neuroscientists already recognize their work is not “value neutral”

In their article, Salles and Farisco argue that, in order to work with neuroethicists, neuroscientists will need to challenge their assumption that science is value neutral. There certainly may be neuroscientists who feel this way—that their work follows the scientific method but otherwise operates outside of societal forces and consequences. However, the majority of the neuroscientists I have spoken with are aware of and thoughtfully reflect upon the social and ethical implications of their work. These scientists do not need to be convinced to attend to ethical questions; rather, they recognize their importance and simply do not have the time, bandwidth and/or skillset to explore them on their own. It is with precisely these scientists—those who are thoughtful, reflective, and busy—with whom neuroethicists are likely to have the easiest time collaborating. Furthermore, collaboration may be exactly the level of engagement that these busy scientists are interested in. They may not be ready to commit to providing space for an embedded ethicist in their laboratory, or take the time to mentor a neuroethics trainee, but may be willing to consider a more straightforward collaboration—in which data, resources, and ideas are exchanged, resulting in a tangible end product like a joint publication or a grant application. If collaborations proceed in this way, will there be a self-selection bias amongst the neuroscientists who sign on? Of course. My attempts to establish new collaborations with neuroscientists have certainly not been 100% successful, and those who do answer my emails are those who already have a baseline interest in the questions I’d like to explore. In a perfect world, every neuroscientist would be intrinsically motivated to collaborate with a neuroethicist; given that is not yet the case, I think we will be best positioned to maintain our disciplinary integrity by collaborating with those who are interested in working with us, rather than forcing the hand of those who are not.

2. Neuroethicists have disciplinary expertise in the human experience

In his article, Chiong provides a brief review of the history of the integration of bioethics into medicine and clinical research. This backdrop is interesting in its own right, and vital for the evolving field of neuroethics to understand, but (as Chiong acknowledges) there are some critical differences between the integration of bioethics and what an integrated neuroethics might look like. Chiong asks: “Is there an analogue to ‘the bedside’ for neuroethicists that would inform their identities and perception as colleagues alongside experimental neuroscientists?” I think this question is best answered by stepping back to consider what “the bedside” truly represents in this comparison to bioethics. For example, a clinical bioethics consultant may come to the literal bedside to speak with a patient or family about a specific medical decision. But the service she provides goes beyond that encounter—she must engage with the patient/family to learn their preferences and values, speak with providers across medical disciplines to get their clinical judgements, mediate disagreements where present, and help the team arrive at a course of action that is ethically appropriate and (hopefully) morally acceptable to all involved. In other words, the work of an ethics consultant is to capture the *human experience* of a medical decision and its alternatives for the patient, family, and care team (DuVal et al. 2001).

This idea resonates with what Farahany and Ramos note in their article as a central tenant of neuroethics: to integrate the human experience into neuroscience. This tenant is reflected in the goals of both conceptual and empirical neuroethics projects that seek to understand the implications of advances in neuroscience for the human experience. With this in mind, the challenge (as Chiong elaborates) is to convince skeptics that the human experience plays an important role in neuroscience, in the same way that clinical bioethicists had to demonstrate that philosophers and theologians could play a role at the bedside. It may take time for the dividends of neuroethics collaboration—e.g., increased community support and trust for neuroscience research, smoother transitions of novel neurotechnologies to clinical application—to be fully realized in the minds of our neuroscience colleagues (Mathews et al. 2016). In the meantime, collaborations that place the disciplinary expertise of neuroethicists on equal standing with the disciplinary expertise of neuroscientists will help get us there.

3. Multiple disciplines within a single neuroethicist

As mentioned by the target articles (Chiong 2020; Farahany and Ramos 2020; Goering and Klein 2020; Salles and Farisco 2020), the field of neuroethics is inherently interdisciplinary. One cannot receive an undergraduate or postgraduate degree in neuroethics; therefore, each of us comes to neuroethics with prior training in at least one other discipline. Like an eager candidate in a job interview, we can frame this idiosyncrasy as both the fields' greatest weakness and its greatest strength. It is a weakness because there is no single training path to become a neuroethicist, and many potential trainees may default to more well-trodden careers (e.g., law or medicine) due to the current absence of long-term institutional support for neuroethics training (as argued for by Goering and Klein, 2020). However, it is also a strength because, as a field, we are by definition multidisciplinary. No one is "just" a neuroethicist—we are also doctors, lawyers, philosophers, anthropologists, computer scientists, and psychologists. As a consequence, we are exceedingly good at multidisciplinary collaboration because we do it all the time, even with our closest colleagues. This type of collaboration requires a degree of open-mindedness, a patient willingness to explain without jargon, to re-evaluate taken-for-granted constructs or definitions, and to acknowledge that there may be more than one right way to approach the problem (and we need not all agree). These skills we learn in our daily interactions with each other are precisely those needed to navigate collaborations with neuroscience colleagues. What we can bring to these professional relationships is a fine-tuned ability to collaborate across disciplines, plus a unique skillset as individuals who straddle more than one disciplinary boundary ourselves.

Conclusion

The BRAIN 2.0 report lays out a vision for the next phase of the BRAIN initiative, setting priorities for both basic neuroscience and neuroethics. As Chiong rightly points out, the BRAIN initiative captures less than 10% of the NIH's investment in neuroscience portfolio, and thus does not and should not set the scope for the entire neuroethics field. However, with its annual initiative-wide investigator meetings and variety of neuroethics training and research grants, the BRAIN initiative offers an infrastructure that may be particularly well suited for forging new collaborations between neuroscientists and neuroethicists. Ultimately,

whether we call it integrating, embedding, or collaborating, the important point is to follow to words of Salles and Farisco—“bridging disciplinary boundaries, not denying disciplinary specialization or diluting disciplinary identity”(p.13)—as we work together with neuroscientist colleagues to understand how advancing knowledge of the brain can impact the human experience.

References

- Chiong Winston. 2020 “Insiders and Outsiders: Lessons for Neuroethics From the History of Bioethics.” *AJOB Neuroscience*.
- DuVal G, L Sartorius, Clarridge B, Gensler G, and Danis M. 2001 “What Triggers Requests for Ethics Consultations?.” *Journal of Medical Ethics* 27 Suppl 1 (90001). Institute of Medical Ethics: i24–i29. doi:10.1136/jme.27.suppl_1.i24.
- Farahany, Nita A, and Ramos Khara M. 2020 ““Neuroethics: Fostering Collaborations to Enable Neuroscientific Discovery.” *AJOB Neuroscience*.
- Goering Sara, and Klein Eran. 2020 “Fostering Neuroethics Integration with Neuroscience in the BRAIN Initiative: Comments on the NIH Neuroethics Roadmap.” *AJOB Neuroscience*.
- Mathews, Debra JH, Hester D Micah, Kahn Jeffrey, McGuire Amy, McKinney Ross, Meador Keith, Philpott-Jones Sean, Youngner Stuart, and Wilfond Benjamin S. 2016 “A Conceptual Model for the Translation of Bioethics Research and Scholarship..” *Hastings Center Report* 46 (5). John Wiley & Sons, Ltd: 34–39. doi:10.1002/hast.615.
- Ramsey PG, Vold EB, and Williams LR. 1989 *Multicultural Education: a Source Book*. New York: Garland Publishing Co.
- Salles Arleen, and Farisco Michele. 2020 “Of Ethical Frameworks and Neuroethics in Big Neuroscience Projects: a View From the HBP.” *AJOB Neuroscience*.