

Expanding the Audience for the Discourse on Diversity by Recognizing the Framing Power of Implicit Messages

Dr. Kathryn A. Neeley, University of Virginia

Kathryn Neeley is Associate Professor of Science, Technology, and Society in the Engineering & Society Department of the School of Engineering and Applied Science. She is a past chair of the Liberal Education/Engineering & Society Division of ASEE and is

Expanding the Audience for the Discourse on Diversity by Recognizing the Framing Power of Implicit Messages

Kathryn A. Neeley

University of Virginia

I. Introduction

Since the founding of the Diversity, Equity, and Inclusion Commission in 2011, interest and activity in diversity have grown in ASEE, culminating with the establishment of the Year of Impact on Racial Equity (2021-2022) and the formation of the Equity, Culture, and Social Justice Division in 2020. These initiatives were preceded by several ASEE programmatic efforts including the Year of Action on Diversity (2014-2015), the Best Diversity Paper Award (2015), the Deans Diversity Pledge (2017), the Diversity Recognition Program (2019), and the addition of several divisions devoted to improving the situation of underrepresented groups in engineering. These initiatives developed in parallel with efforts to increase diversity, equity, and inclusion at individual engineering schools and the emergence of what is sometimes referred to as Diversity, Inc., that is, individuals and firms that provide diversity training for corporations, government, and other institutions. These efforts notwithstanding, underrepresentation persists (Pawley, 2019; Slaton, 2022; Holly and Quigley, 2022).

Given the strong arguments in favor of diversity and the costs of perpetuating inequity, the lack of meaningful change is striking and suggests that we, as advocates for diversity, are not reaching audiences beyond those already committed to promoting diversity. This paper explores how our ways of talking about diversity, equity, inclusion, and social justice (DEISJ) when we address the diversity discourse community (people already committed to diversity) may have the unintended consequence of deterring people outside that community from interacting with us. As Robert Livingston observes in *The Conversation: How Seeking and Speaking the Truth About Racism Can Radically Transform Individuals and Organizations* (2021), “social change requires social exchange” (p. xvii). Rhetorical strategies that discourage exchange can limit our capacity to *effect* change. The aim here is not to prove that the deterrent effect exists, but rather, to demonstrate the ways that choices of language and rhetorical strategies *could* produce a deterrent effect. Specifically, I use rhetorical theory and the concept of analogical imagination to illuminate the nature and power of implied messages and suggest conversation as a promising rhetorical mode for engaging a broader range of participants in the discourse on diversity.

The discourse on diversity is organized around values that are cherished in the Liberal Education/Engineering & Society Division of ASEE (LEES) and in the broader community of people engaged in humanistic education for engineers. I want to emphasize that the problems identified in the rest of this paper are *not* criticisms of the values and goals underlying the pursuit of diversity in engineering, although they could be interpreted that way. The alternative view presented in this paper grew out of a discomfort similar to the one that motivated Amy Slaton's critique of the ASEE Diversity Recognition Program (2022). Paraphrased for my purposes, the question is "why is it that the discourse focused on increasing diversity in engineering education so poorly fulfills my sense of needed change"?

Encounters with people who are not yet part of the diversity community revealed two insights about why more change has not occurred. First, people outside of the diversity community probably have not taken the personal and intellectual journeys that brought advocates of diversity to our current state of awareness regarding DEISJ. Put simply, we typically have knowledge and experiences that are not shared by other engineering educators. What is intuitive to us may be completely outside of their awareness. Second, the characteristic themes and rhetorical strategies internal to the discourse on diversity may carry unintended or unnoticed negative connotations that can be alienating to people who do not yet identify as members of the diversity community. The concept of analogical imagination helps us understand the multiple levels on which both implicit and explicit analogies operate.

II. Unintended Consequences of Framing and the Role of Analogical Imagination

In any domain, when common ways of thinking and talking about a problem are not leading to significant progress toward its resolution, it seems reasonable to consider that we need new ways of thinking and talking, that is, new ways of framing the subject. As Claudia Schwartz-Plasch explains it in "The Power of Analogies for Imagining and Governing Technologies" (2018), "The term 'framing' is generally employed to refer to how a social situation is understood and experiences are turned into meaningful narratives" (p. 144). Framing can be implicit (as in implied comparison or metaphor) or explicit (as in the case of analogies). Although there are many subtleties involved with analogical reasoning and imagination, the basic concept is that words can evoke imaginative contexts that have both affective and cognitive dimensions. For example, when we say that we are seeking "allies" in effecting change, we are invoking the imaginative context of war in which there are enemies and the dominant mode of interaction is

combat. The choice of that word implies an adversarial relationship and an end state in which there are winners and losers, or, as Meyerson and Scully put it in “Tempered Radicalism and the Politics of Ambivalence and Change” (1995), our only options are separation or surrender. The language of “responsible research and innovation” (RRI), on the other hand, invokes a context in which “societal actors and innovators become mutually responsive to each other with a view on the (ethical) acceptability, sustainability, and societal desirability of the innovation process and its marketable products” (Von Schomberg quoted by Schwartz-Plaschg, p. 149). In other words, the language of RRI assumes a very different kind of relationship between actors than does the language of regulation. An awareness of the power of analogies can heighten our sensibilities regarding the linguistic choices we habitually make.

Where analogical imagination refers to the context evoked by a particular choice of words, analogical reasoning is a form of critical thinking in which we make an implicit comparison explicit and explore how the imaginative context invoked by the comparison may influence audience response. Implied comparisons are powerful modes of representation and communication but notoriously imprecise, in part because what is evoked depends a great deal on the knowledge and prior experience of the audience. Analogical reasoning puts us in a position to be more deliberate in our choice of analogies and more creative with respect to the rhetorical strategies we use. As the next section explains, our choice of rhetorical strategy should reflect the kind of relationship we wish to establish with the intended audience.

III. A New Metaphor for the Discourse on Diversity: From Oration to Conversation

Both classical rhetoric and modern social psychology suggest that conversation is a rhetorical mode that can be used to broaden the diversity discourse community. Rhetoric, defined as understanding and using the available means of persuasion, has from its origins been primarily concerned with public communication on a large scale, usually a single speaker addressing a large audience, and collectively referred to as oratory. In the late twentieth century, political theorists (more specifically, advocates of deliberative democracy) recognized communication on a smaller scale with multiple participants engaging on equal terms as a potentially useful form of political speech. For example, in “Political Oratory and Conversation” (1999), Gary Remer identifies this other kind of rhetoric as conversation (*sermo*). Drawing on Cicero’s philosophy of rhetoric, Remer defines conversation as purposeful dialogue (in contrast to informal conversation) and focuses on the affinity between conversation and philosophical issues (p. 46).

In Remer's way of thinking, dialogue is distinguished from oratory not so much by its scale, but rather by its aim and form. Conversation is not concerned with calls for immediate, specific action, but is instead philosophical in the sense of investigating issues such as "good and evil, things to be preferred and things to be shunned, fair repute and infamy, the useful and the unuseful" (p. 45). Although conversation is not directed toward immediate, specific action, it proceeds with "an eye to how [ideas] will ultimately be put into practice" (p. 45). It also has distinctive standards of decorum, which provide guidance on the most promising means for achieving a goal. In the case of conversation, decorum entails behaviors such as taking a collaborative rather than an adversarial stance, maintaining emotional equilibrium, letting all participants have their turn, and avoiding behaviors that diminish the likelihood of reasoned argument, such as moving hastily toward a conclusion or allowing destructive emotions ("passions") to overwhelm constructive emotions such as devotion to ideals or the urge for fellowship. Although they may take place in contexts other than personal friendships, Cicero notes that "Conversations flourish best in friendship" (p. 48).

Conversations stand in sharp contrast to epideictic rhetoric, that is, the rhetoric of praise and blame. Describing epideictic rhetoric in the context of human rights discourse, Kampf and Katriel (2016) identify two primary goals: promoting "values of equality and human respect on the one hand and [disparaging] those social bodies and actors who violate them on the other." It is important to note that the promoting and disparaging functions often occur in tandem. Kampf and Katriel describe epideictic rhetoric "as a cultural resource for the ceremonial articulation of communal values and the discursive production of communities. . . .in assigning nobility and baseness to public actors and their actions, epideictic rhetoric sets up models for conduct and thereby reinforces shared cultural values and traditions" (p. 1). One variant, the epideictic of blame, seeks either "to trigger a sense of recognition and remorse on a transgressor's part or to mobilize public support "for negative evaluation of the transgressor's conduct" (p. 2). In any case, it is designed to put pressure on the transgressor and asserts the speaker's moral authority with respect to the audience.

Social psychology recognizes the power of conversation in changing attitudes and behavior. In the context of efforts to solve "the perennial problem of racism—particularly anti-Black racism in the United States" (2022, p. xi), Livingston draws on Bryan Stevenson's notion of proximity: "People need to get proximate to each other for change to occur" (p. xi), Livingston argues that "Conversation is one of the most powerful ways to build knowledge, awareness, and empathy" (p. xiii). This claim is amply supported by research into human behavior showing that "being

given the opportunity to have a conversation, in addition to being exposed to new information, can make all the difference in changing people’s behaviors” (p. xiii). He continues, “If we want to make profound and sustainable racial progress in organizations and society, then we have to reach people on a deeper intellectual, emotional, and moral level. . . A candid sharing of perspectives on race—grounded in facts. . .leads to greater awareness and action” (p. xviii).

Throughout *The Conversation*, Livingston offers research findings and imaginative analogies that are relevant to the discourse on diversity in engineering. In a similar vein, Jonathan Haidt in *The Righteous Mind: Why Good People Divided by Politics and Religion* (2013) presents a social intuitionist model of persuasion that explicates the underlying processes by which social interaction “sometimes leads people to change their minds” (p. 55). Together with rhetorical theory, social psychology provides us with available resources for persuasion that could be used to greater advantage than they have been so far in our context. Understanding the role of social interaction in the formulation of moral judgments makes it easier to see that, rather than having different values than we do, other people may not share our views because they haven’t been involved in the conversations in which we have been engaged. In other words, the most important differences are in personal experience and knowledge rather than values. As the examples in the next section demonstrate, the implied messages in the discourse on diversity can undermine the chances of establishing the relationships that are prerequisites for social persuasion.

IV. Some Examples Illustrating How Implied Messages Are Embedded in the Discourse of Diversity

This section of the paper presents examples of language choices and rhetorical strategies from the discourse on diversity that generate implied messages that could deter audiences outside of the diversity community from productively engaging with us. The critique I offer here *is not* directed toward the substantive arguments authors are making, but rather toward the implicit messages that can result from the imaginative contexts words and phrases invoke. In highlighting these messages, the intent is not to avoid making majority groups uncomfortable or to shift the burden of change to minority groups. Rather, it is to avoid unnecessarily alienating audiences who share a commitment to equity but do not see themselves as insiders with respect to the DEISJ community.

Challenging Oppressive Systems and Calling Each Other into Critical Awareness

Framing the discourse of diversity using the concepts of oppression and critical awareness represents a relatively recent shift from the initial strategy of emphasizing the benefits of

diversity for engineering as a whole. The language of oppression suggests an imaginative context of harsh governance or treatment, and perhaps also deliberate infliction of distress or creation of anxiety. Although the explicit reference is to systems rather than individuals, it could also be taken as at least implicitly casting majority actors in engineering practice and education in the role of oppressors. Oppression is synonymous with tyranny, persecution, and despotism, all of which carry negative connotations of intentionally exercising power to the detriment of others. Intention plays an important role in moral judgment, but as the literature on biases in attribution shows, “we are often too quick to attribute the behavior of other people to something personal about them, rather than to something about their situation” (Jhangiani and Tarry, p. 2). In other words, we can mistakenly infer intention where none existed. Recognizing this form of error does not negate harm done through the behavior, but it does alert us to the possibility that we may be blaming one person or a small group for phenomena that are the result of systemic factors. Although “calling each other” suggests mutual accountability, “into critical awareness” implies that some people are already aware and that those doing the calling are in a superior position. Of course, not all audiences outside of the diversity discourse community would be sensitive to these implications. For those who are, however, the effect is incompatible with the model of conversation between equals.

Privilege and Power

The language of privilege and power is also common in the discourse on diversity, and is often associated with a core-periphery model in which the concerns of marginalized groups are positioned so that people with certain kinds of privilege can keep them out of view. To argue that social justice should be central may change what is at the center, but it still reflects a core-periphery model that is inherently hierarchical. Privilege carries negative connotations because it is often used in contexts where rights or immunities granted only to particular persons and groups are unearned and result from social position rather than efforts on the part of the individual who possesses them. While it is true that privilege is usually invisible to people who possess it, engineering practitioners and faculty generally identify as hard-working people who have taken on challenges. And although those of us involved in humanistic education for engineers tend to see ourselves as a less powerful minority in relation to engineers, they may also see themselves as a less powerful minority with respect to other aspects of institutional positioning. Similarly, engineering as a profession may serve structures of corporate and militaristic power, but individual engineers may see themselves as well paid for valuable expertise and products they provide.

Epidictic rhetoric is perhaps most clearly seen in speech that is framed in moralistic terms and addressed to those who are already committed to equity in engineering. In “None of Our Hands Are Clean: A Letter to Engineers Committed to Racial Equity,” Holloman and Lee (2021) explicitly direct their remarks to those who are already committed to racial equity in engineering, their argument fits clearly into the epideictic category. The phrase “None of Our Hands Are Clean” is often used to establish that no participant in a system or activity can distance themselves from blame and guilt and to emphasize the role of collective responsibility independent of individual intentions or values. Some audiences, however, will have experienced the phrase in the religious context of Christianity and take it as a moral indictment rather than as an assumption of responsibility. If we are making an indictment, it is still an indictment even if we include ourselves in the indicted group. In other words, we may still appear to be assuming the right to indict with respect to people who have not yet engaged deeply with diversity.

V. Alternative Framings with Broader Appeal

Recognizing the deterrent effect of the thematic framing discussed above leaves us with the task of identifying imaginative contexts that are conducive to conversation and supportive of developing what Alice Pawley has called “moral infrastructure,” that is, the recognition that “*education is a moral and political practice* [emphasis in original]” (2019, p. 3). In Pawley’s view, the ability to engage in “moral discussion rather than the techno-rational one that engineers and engineering educators seem most equipped to have” (p. 1) is an essential component of moral infrastructure. While morality is largely intuitive (Haidt, 2013), the ability to engage in productive moral discussion must be learned and engaged in deliberately. With respect to diversity, it also requires the ability to grasp indirect and systemic as opposed to direct and individual causality—and to think about ethics as a matter of collective choices.

Inheriting a House in Disrepair

In *Caste: The Origins of Our Discontents* (2020), Isabel Wilkerson offers an alternative framing for conversations about race that gets us beyond blame and indictment while still inculcating a sense of individual and collective responsibility: America as an old house that we have inherited. The flaws in its original foundations were not our doing and may not be obvious to the casual observer. “Not one of us was here when this house was built. Our immediate ancestors may have had nothing to do with it, but here we are, the current occupants of a property with stress cracks and bowed walls and fissures built into the foundation. We are the heirs of whatever is right or wrong with it. . . .And any further deterioration is, in fact, on our hands” (p. 16). In engineering education, an understanding of systemic causation is essential for seeing below the surface of

things to discern underlying causes. Knowledge of the history of chattel slavery and its legacy effects connects historically remote events to current conditions by a long chain of causation. The historical record on slavery is as ample as it is disturbing, and knowledge of it can play a powerful role in illuminating both systematic causation and the ways that patterns of action in the past have inequitable results that are very much with us in the present. The metaphor of the inherited house has the potential to convince majority audiences that they can take on the moral obligation of knowing this history without taking on causal responsibility for the choices made by our ancestors.

Why the Fish Don't See the Water

This framing is much more common than the one discussed above but is particularly useful for addressing a major issue that Pawley calls attention to: “engineering has profoundly moral consequences, but the stories we engineers tell about ourselves about what we do mostly disregard this role” (p. 2). For those of us who are aware of the historical, organizational, and cultural contexts of engineering, the moral and ethical dimensions of engineering are obvious. For engineering faculty and students, these dimensions are either vaguely invoked or omitted altogether. As Pawley puts it, “despite its embeddedness in a society fundamentally organized by gender and race and colonialism and so on, our profession acts as though engineering has escaped this truth’s consequences, and can exist in a neutral and unbiased state, simply because it focuses on math, science, and technology” (p. 4). Thus, even if nothing is explicitly said to engineering students about the value neutrality of engineering, the design of the curriculum renders the humanistic dimensions of engineering invisible by decontextualizing instruction in science, engineering, and mathematics.

Although it is difficult to identify the origins of the metaphor (as in the concept of “a fish out of water”), David Foster Wallace is a frequently cited source of the story in which two young fish are swimming along together. They encounter an older fish who asks them how the water is. Their response: “What the hell is water?” As Vicki Sedlack (Alameda Education Foundation, n.d.) points out, “While there are many interpretations of this metaphor, I look at it as a description of how we tend to see and interpret things through our individual lens, meaning that without conscious effort we may not see the most obvious and important realities around us. Like the fish who don’t know they are in the water.” In the context of STEM education, the water can be understood as the human needs that gave rise to the development of these fields and the organizational and cultural contexts in which technical capability is implemented are visible. These needs and contexts are the locations in which STEM expertise originates and has effects. It is totally understandable that people who know little to nothing about those needs and contexts—

or about the processes by which they were rendered invisible in the curriculum—would have trouble appreciating DEISJ issues in engineering. That reality does not relieve them of the obligation to actively investigate the social and ethical origins and implications of technical capability.

VI. Conclusion and Implications

The two framings discussed above are just a few of those available that are compatible with conversation as a rhetorical strategy for advancing diversity. They provide a means of calling people into awareness but have much less potential for a deterrent effect than the rhetoric of praise and blame or the tropes of privilege, power, oppression, and colonization. I follow Livingston's lead as he insists that we cannot avoid the hard truths about how we arrived where we are today with respect to race generally and diversity more generally. Those hard truths are potentially powerful resources in motivating and engaging audiences who do not yet see themselves as members of the diversity community. As Livingston acknowledges at the outset, "To get people truly motivated, engaged, and devoted to a course of action, they must develop a greater understanding, appreciation, and responsibility for the work that is being undertaken and the reasons behind it" (p. xii). This paper has attempted to put forward ways we can better prepare ourselves as change agents, especially developing the attitudes and abilities that will allow us to communicate effectively and form relationships with people whose experiences of diversity, equity, inclusion, and social justice are very different from our own. The less commonly discussed rhetorical mode of conversation offers an alternative to oratory and a promising model for channeling our sense of urgency regarding change in a more promising direction of practical effectiveness. Rather than shifting the responsibility for *exchange* to any single group, it implies the engagement of multiple parties and perspectives and is based on a notion of shared responsibility. It is not about conciliation but rather reflects the important but sometimes elusive reality that individuals and systems mutually shape each other.

References

Bergman, P. (1969). *A Chronological History of the Negro in America*. New York, NY: Harper and Row.

- Cech, E. (2014). Culture of disengagement in engineering education? *Science, Technology, and Human Values*, 39(1), 42-72.
- Downey, G. (2008). The engineering cultures syllabus as formation narrative: Critical participation in engineering education through problem definition. *University of St. Thomas Law Journal*, 5(2), 428-456.
- Foster Wallace, D. (2009). *This is water: Some thoughts, delivered on a significant occasion about living a compassionate life*. Kenyon College. (1st ed.). New York: Little, Brown.
- Haidt, J. (2012). *The Righteous Mind: Why Good People Are Divided by Politics and Religion*. New York: Random House.
- Holley, J., Jr. & Quigley, L. (2022). Reckoning with the harm of anti-blackness in engineering education: A reparatory research approach. *Journal of Women and Minorities in Science and Engineering*, 28(2): 95-110.
- Holloman, T. & Lee, W.C. (2021). None of our hands are clean: A letter to engineers committed to racial equity. Retrieved from <https://diversity.asee.org/deicommitee/2021/06/08/none-of-our-hands-are-clean-a-letter-to-engineers-committed-to-racial-equity/>.
- Jhangiani, R., & Tarry, H. (2023). Biases in attribution. In *Principles of Social Psychology*, 1st ed. BCampus Open Education. Creative Commons.
- Kampf, Z., & Katriel, T. (2016). Political condemnation: Public speech actions and the moralization of discourse In: D. Carbaugh, Ed., *The Handbook of Communication in Cross-Cultural Perspective*. New York: Routledge.
- Livingston R. (2021). *The Conversation: How Seeking and Speaking the Truth about Racism Can Radically Transform Individuals and Organizations*. New York: Penguin Random House.
- Lonngren, J. (2021). Exploring the discursive construction of ethics in an introductory engineering course. *Journal of Engineering Education*, 110, 44-69.
- Mathison, M.A., ed. (2019). *Sojourning in Disciplinary Cultures: A Case Study of Teaching Writing in Engineering*. Logan, UT: Utah State University Press.
- Meyerson, D.E. (2001). *Tempered Radicals: How People Use Difference to Inspire Change at Work*. Boston, MA: Harvard Business School Press.
- Meyerson, D., & Scully, M. (1995) Tempered radicalism and the politics of ambivalence and change. *Organization Science*, 6(5), 585-600.
- Neeley, K.A. (2023). The person behind the Mann Report: Charles Riborg Mann as an influential but elusive figure in engineering education. *Proceedings of the 2023 ASEE Annual Conference & Exposition, Baltimore, Maryland*. <https://peer.asee.org/44475>
- Pawley, A. (2019, Fall). Opinion: “Asking questions, we walk”: How should engineering education address equity, the climate crisis, and its own moral infrastructure?” *Advancements in Engineering Education*, 1-11.
- Remer, G. (1999). Political oratory and conversation: Cicero versus deliberative democracy. *Political Theory*, 27(1), 39-64.

2024 ASEE Annual Conference

Riley, D., Slaton, A. & Pawley, A. (2014). Social justice and inclusion: Women and minorities in engineering. In *Cambridge Handbook of Engineering Education Research*, A. Jahiri and B. Olds (eds.), 335-356.

Schuck, P.H. (2017). *One National Undecided: Clear Thinking about Five Hard Issues That Divide Us*. Princeton, NJ: Princeton University Press.

Schwarz-Plaschg, C. (2018). The power of analogies for imagining and governing emerging technologies. *Nanoethics*, 12, 139-153.

Sedlack, V. (n.d.). Fish don't know they're in the water. Alameda Education Foundation.
<https://AlamedaEducation.org>.

Slaton, A. (2022, July 7). Fast-track to virtue: DEI "award" programs in engineering. [blog post]

Tognazzini, N., & Coates, D. (Summer 2021 Edition). Blame, In *The Stanford Encyclopedia of Philosophy* (Summer 2021 Edition), Edward N. Zalta (ed.), URL = <<https://plato.stanford.edu/archives/sum2021/entries/blame/>>.

Wilkerson, I. (2020). *Caste: The Origin of Our Discontents*. New York: Random House.

Winner, L. (1980). Do artifacts have politics? *Daedalus*, 121–136.