



RESEARCH ARTICLE

Podcasting past the paywall: How diverse media allows more equitable participation in linguistic science

Megan Figueroa, Ph.D.*

University of Arizona, Department of Psychology

*Corresponding author. Email: megan@arizona.edu

Abstract

The paywall blocks broad participation in scientific discourse, and it is both financial and psychological. The financial paywall makes access to peer-reviewed research prohibitively expensive for many researchers. The psychological paywall refers to the gatekeeping nature of academic language. Elites hoard the products of scientific research and gatekeep membership in the specialist communities via arcane vocabulary and discourse structures, together with imposition of a tone that demands dispassionate engagement with topics that are urgent and painful to the participants of their research. To exclude the perspectives of those outside the ivory tower is to dismiss unique experiences and epistemologies, essentially blocking diversity of thought in linguistic science. A range of tools is needed to undermine this power structure. Here I highlight one, which is diverse media, in general, and podcasting, specifically. Podcasting brings diverse views into the conversation and allows racially offensive ideas to be understood as such so they can then be challenged. I present the case study of the putative so-called “30-million-word gap”—the claim that, by the time they are four years old, historically marginalized children are exposed to thirty million fewer words than middle- and upper-class white children. I use this notion, which is preposterous on its face, to illustrate the emancipatory potential of the podcast medium.

Public awareness always lags behind scientific discovery. The problem is not a lack of curiosity on the public’s part but a lack of *access* to the work that moves science forward. An increasing number of researchers are promoting OPEN ACCESS in scholarship—the free availability of publications that opens scientific work to anyone who wants access to it. Article 27 of the United Nations’ Universal Declaration of Human Rights states, “Everyone has the right freely to participate in the cultural life of the community [...] to share in scientific advancement and its benefits.” Open access is in opposition to the situation that largely exists in the academy today: the subjects of research studies do not have easy access to the research they contribute to and/or that affects their communities. This is a result of financial and psychological paywalls. A financial PAYWALL is probably familiar to the reader. By financial paywall, I refer to the fact that most peer-reviewed journal articles are prohibitively expensive—access to an individual article can

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cost around \$40, while yearly subscriptions to journals can range between \$2,000 and \$35,000.

Importantly, even if someone without institutional access to journals and the articles within makes it past the financial barrier, there remains another paywall. I want to introduce the idea of a **PSYCHOLOGICAL PAYWALL**, a term I co-constructed with Dr. Fernanda Ferreira. Academic language—including tone and use of jargon—is inaccessible to many would-be consumers of science. This is not an indictment of the public's intelligence but rather an acknowledgment that academic language is often esoteric, and, if you ask the uninitiated, needlessly so. Not only that, but those who control the scientific narrative are disproportionately white, English-speaking individuals of Western European descent/heritage (Clancy & Davis, 2019). That is, most published science is written and edited by white people. The dominant history and practice of science is limited in scope and erases Indigenous and nonwhite ways of knowing (e.g., Kimmerer, 2013). In this piece, I argue that diverse media, like podcasting, challenge both financial and psychological paywalls by allowing for a freer flow of information and consequent participation by more people in science.

Podcasting versus The Paywall

Podcasting is an important and relatively new tool linguists can use to bypass standard methods of circulating linguistic science. **PODCAST**, a portmanteau of *iPod* and *broadcast*, is a freely available, audiodigital medium that most people are familiar with, in one way or another. In the spirit of this piece, I asked my Twitter following how they define “podcast”: “learning while listening,” “like a radio broadcast, except you can listen to it whenever and without a radio,” “infotainment,” and “an audio media, on demand and subscribable, recurring, and on a specific topic or theme or story.” The advent of podcasting has transformed information dissemination in numerous ways. The most obvious is that it allows researchers to partake in something akin to open access. The research report itself may still be published behind a literal paywall, but a scientist(s) discussing their work on a podcast is speaking directly to people—both laypeople and those who do similar work. This allows for transparency in research design and data interpretation. Consuming podcasts is also financially accessible and convenient. Podcast episodes and subscribing to the RSS feeds of podcasts are free. There are podcasts, including my own independent podcast *The Vocal Fries* with my co-host Dr. Carrie Gillon (who conceived of the podcast in 2017), that provide some special features behind a literal paywall, that is, through Patreon—a web-based service allowing makers to interact with their audience. (*The Vocal Fries* provide stickers and bonus episodes that run between ten to twenty minutes to our Patreon supporters.) However, all major content is free. Starting a podcast is also free (or relatively cheap) and disseminates information more widely than journal publishing. Consuming podcasts is also convenient. Many podcast listeners say they do so while commuting to work or doing household chores.

Access to scientific discovery through an audio medium like podcasting is not accessible to all people, no matter how convenient it is for some. Transcript availability is hit or miss. While *The Vocal Fries* use Patreon money to pay for transcriptions of our episodes, popular podcasts like *My Favorite Murder* and *You're Wrong About* do not provide transcripts. This is a major barrier for deaf and hard of hearing people, those with auditory processing disorders, or others who simply prefer reading to listening. As Dr. Jon Henner said on Twitter (2021):

The issue with transcripts is that I don't find them to be equivalent access. First they're active consumption rather than passive consumption of information. Second the interactional dynamics are flattened and it becomes just another article to read rather than entertainment.

While podcasting reaches more people than paywalled journal articles do, there is still a limit to the barriers it breaks down.

Finally, I want to point to the tone and register of podcasting. The medium allows people to be outraged, an emotion that is largely unavailable to scientists when writing for peer-reviewed journals. More people recognize this style and can engage with it on a deeper level, allowing for more and diverse engagement and community conversations. It is limiting to portray science as infallible, and scientists as objective. Podcasting allows for more honest and authentic engagement with the material. This opens the door to different perspectives for scientists to consider and implement in research and within their labs and classrooms. Currently, there is no equity across epistemologies, generally, and within the field of linguistics, specifically. The ethnoracial makeup of the field of linguistics allows white people to define what is normative and valued. In 2018, the Linguistic Society of America reported, "The population of ethnic minorities with advanced degrees in linguistics is so low in the U.S. that few federal agencies report data for these groups." Many racialized scholars have been told that their work engaging race is "not linguistics." (I consciously use the suffix "-ized" in "racialized" rather than using the term "racial" to acknowledge the active and ongoing oppression faced by those who identify with ethnoracial groups other than white.) Charity Hudley, Mallinson, and Bucholtz (2020) found that many racialized linguists are not in linguistics departments at all, preferring to work in departments that support their research that centers race and racial justice. This erasure of racialized scholars and students excludes their unique experiences, insights, and epistemologies, essentially blocking diversity of perspective in linguistics.

Relatedly, listening to a podcast episode about a topic in linguistics may spark interest in language science by a listener who then decides to pursue linguistics as a field of study. This leads to a more diverse linguistics and academy, which helps promote *psychological safety* for racialized and minoritized students. The American Psychological Association's Equity, Diversity, and Inclusion (EDI) Office released a report (2021) stating that success in EDI is achieved by "eliminating structural barriers and scientific practices that have prevented the full participation of [marginalized] groups." One of the persistent structural barriers to full participation of historically marginalized groups is LINGUISTIC RACISM—the denial of fundamental human rights based on language use in institutional and noninstitutional settings that reproduces, regulates, and legitimizes unequal division of power and resources (material and immaterial) that favors linguistic behaviors associated with white people (Alim et al., 2016; Flores & Rosa, 2015). Linguistic racism has profound material and immaterial consequences. Black and Indigenous people and other racialized people have been forced to perform SOCIOLINGUISTIC LABOR and adjust their language, or CODE SWITCH, in institutional and noninstitutional settings to "sound white," including in higher education (e.g., Scott, 2020). The cognitive load of shifting from their authentic selves can tax cognitive resources, hindering performance in a way that reinforces harmful stereotypes.

Even when racialized language users engage in linguistic practices that are situated as "normative" based on standardized language ideologies—socially constructed, abstract ideals based on the linguistic behaviors of those in power—their language may still

be perceived as “deficient” (Flores & Rosa, 2015). Thus, language and race cannot be analyzed as two separate social processes, and we must explore how linguistic science contributes to racialization processes. Ultimately, acknowledging and addressing the impact of linguistic racism instead of burying it under calls for “colorblindness” chips away at one of the structural barriers impeding the full participation of racialized students in linguistics, higher education, and beyond.

Case Study: The So-Called “30-Million-Word Gap”

The challenges to the so-called “30-million-word gap” are a case study in bypassing financial and psychological paywalls. For many scholars, politicians, activists, pediatricians, and parents, Hart and Risley’s (henceforth HR) 1995 book *Meaningful differences in the everyday experience of young American children* is a foundational text that seemingly exposes the relationship between early home language exposure and use and later academic achievement. Few other academic works have been afforded such mass appeal, even in the age of podcasting. HR were interested in the linguistic environments of children across socioeconomic backgrounds: Were there interactional differences between caregiver(s) and child(ren) that may account for later academic success or failure? This work has led to the coining of the so-called WORD GAP (later LANGUAGE OR TALK GAP). HR’s claim based on their observational data was that more affluent parents direct a higher quantity (i.e., more words) and higher “quality” of “language” to their children than their less affluent peers, resulting in children from marginalized socioeconomic backgrounds experiencing a GAP of thirty million words by the time they are four years old. Importantly, all children from the “welfare” families were Black.

This is not new. For decades, the language use of historically and systemically marginalized children, families, and communities has been described in terms of DEFICIT thinking. Standardized language ideologies have positioned language use by racialized communities as inherently deficient. Put another way, RACIOLINGUISTIC ideologies conflate the language use of racialized bodies with linguistic deficiency (Flores & Rosa, 2015). Most scholars do not explicitly state that the language use of marginalized communities is a deficit; instead, the charges are couched in coded terms like “quality” linguistic input. Importantly, the fallacy of the “quality” linguistic input discourse is that it ignores two axioms in the field of linguistics: (a) Children will learn the language variety of their environment whether it is spoken or signed, and they do so without direct teaching; and (b) All language varieties are systematic, rule-governed, generative, creative, and equal (Labov, 1970). What happens when this “quality” rhetoric propagates, however, is that it serves to essentialize the linguistic behaviors of the white middle- and upper-class, while pathologizing others. Importantly, given the demographics of higher education where racialized scholars and students are grossly underrepresented, raciolinguistic ideologies often go unchallenged.

How did HR’s work make it past the literal and psychological paywalls? Normally, the dissemination of research is a two-step process of research being translated into grant-funded interventions based on that work. From there, popular media picks up on the marketing of the intervention and disseminates it to the public. The “word gap” has been covered in venues such as *The New Yorker* and *NPR*, and in television shows like Netflix’s *Orange Is the New Black*. Importantly, the message is filtered through those engaged, literally and financially, with interventions. For example, The Thirty Million Words (TMW) initiative at the University of Chicago states that their interventions are, “Developed in partnership with parents and other stakeholders.”

TMW's founder and co-director Dr. Dana Suskind has written a book called, *Thirty Million Words*. She has appeared on diverse media to promote the "word gap," and, in 2021, was on the popular podcast *Freakonomics* (in 2020, the podcast had more than a hundred million downloads). Nonprofits like *Too Small to Fail* (part of The Clinton Foundation) and *Providence Talks* (funded by Bloomberg Initiatives) were conceived assuming the veracity of the "word gap." Even The White House promoted gap rhetoric when it hosted an all-day event titled *Bridging the Word Gap* in 2014. In 2007 and 2019, then-candidate Joe Biden brought up the "word gap" while on the campaign trail. The message continues to proliferate today.

Importantly, HR's "30 million" figure is an *extrapolation* from averages in their observational data, something that happened once a month for one hour, a very miniscule window into the lives of families that is likely affected by the OBSERVER'S PARADOX, the problem described by Labov: "the aim of linguistic research in the community must be to find out how people talk when they are not being systematically observed; yet we can only obtain this data by systematic observation" (1972, p. 209). Since the researchers were not Black and all the "welfare" families were, it is likely the observational data were even less reflective of the families' authentic linguistic behaviors.

Why then do we so easily accept the generalizations that emerged? Typically, language development, and within that, linguistic input, is studied from the perspective of white, Western European families through a white lens (Clancy & Davis, 2019). Put another way, generalizations about language development are taken for granted as "normal" because members of the white middle- and upper-classes are disproportionately represented in academia. The consequence of this pervasive sampling bias normalizes white linguistic behaviors as "good" and others as deficient. Our understanding of linguistic input is taken from a narrow subset of human diversity. Thus, any behavior to the contrary becomes othered and pathologized. If there were more diversity in the academy, these types of limiting assumptions about human behavior would be treated as suspect from the start.

Podcasting and Diverse Media

In 2018, sociocultural and linguistic anthropologist Dr. Jonathan Rosa tweeted:

I'm incredibly grateful for this important work which debunks the widely circulated myth that low-income kids (mostly of color) suffer from a 30 million word gap, but I'm also sad that we have to spend so much time disproving bigoted ideas when we could be up to so much more.

Rosa is referring to a preprint of work from Sperry and colleagues (2019) questioning the methodology of HR's work. A group of researchers who are proponents of the "word gap" responded to the work:

"If people accept [Sperry et al.]'s argument that children from low-income households are exposed to sufficient talk to learn language and to do well in school.... efforts to increase children's language exposure and enhance its *quality* [emphasis added] may be treated as suspect" (Golinkoff et al., 2019, p. 6).

I argue that it is a good thing that research be treated as suspect and subject to scrutiny. Unfortunately, "word gap" discourse is everywhere. Bilingual parents worry their child(ren)

won't meet vocabulary counts in either language. Literacy initiatives promote the benefits of book reading with children to increase "diversity" of words instead of promoting reading for the sake of being with children and instead of acknowledging the array of literacy-related activities of racialized homes. There should be community conversations around data that has far-reaching material consequences. For example, Adair and colleagues (2017) found that primary school teachers cited the "word gap" as reason not to give Latinx/e students agentive, self-paced work in the classroom. The dearth of epistemologies in linguistics is actively reproducing inaccurate and deficit-based representations of racialized children and families.

Diverse media, like podcasting, have changed the faces of the conversation. When then-candidate Biden cited the "word gap" on the campaign trail, educator Dr. Kelly Wickham Hurst tweeted (2019), "Listen. If y'all don't quit using that debunked study about the 30-million-word gap and letting Biden get away with this madness I'm gonna lose my whole mind. THIS IS BAD SCIENCE. Knock it off." In 2019, *The Vocal Fries* released an episode called, "Don't Mind the Gap." We interviewed Dr. Nelson Flores, Professor of Educational Linguistics, about the ways in which the "word gap" discourse is based in and perpetuates deficit perspectives of racialized families' language use. This episode allowed us to have a conversation about the "word gap" that was largely missing—one with critical and emotional voices. Not only did the episode spread through downloads, but it is also widely shared on social media and is currently used in classrooms as a teaching tool.

Podcasting allows for another way to participate in linguistic science. Dr. Clara Bauler tweeted (2021), "I really love that in most podcasts that I listen to, hosts and participants are not trying to police their language or sound 'standard.' It seems to be a genre that allows for increasing linguistic diversity," she continued. "That is the main reason I create podcasts with my students." Podcasts are disseminating information *in* classrooms and disseminating information *from* classrooms. Linguists would benefit from these dispatches because of the diversity of perspectives and diversity of dialects. When the academy and science are representative of people, there will be more equity among epistemologies and among language varieties. There will be people explicitly stating that "Standardized" American English is a dialect, which will help to stop othering dialects spoken by minoritized communities (Oetting, 2020).

Conclusion

I began this piece by highlighting the concept of the "paywall," which is a barrier to broad participation in science. A key point is that the paywall is both financial and psychological; elites hoard the products of scientific research and gatekeep membership in the specialist communities via arcane vocabulary and discourse structures, together with imposition of a tone that mandates cool, dispassionate consideration of topics that are urgent and painful to the subjects of their research.

A range of tools is needed to undermine this power structure. Here I have highlighted one, which is diverse media, in general, and podcasting, specifically. Podcasting brings diverse perspectives into the conversation and allows difficult and racially offensive ideas to be understood as such so they can then be challenged. The case study of the putative "30-million-word gap," a notion that is preposterous on its face, illustrates the emancipatory potential of the podcast medium. Thus far what has been accomplished is highlighting the influence of the idea and its racist roots. Ultimately, acknowledging and addressing the impact of linguistic racism—instead of

burying it under calls for “colorblindness”—chips away at one of the structural barriers impeding the full participation of racialized students in linguistics, higher education, and beyond. And with the participation of these students, we will see ideas borne of linguistic racism challenged and ultimately replaced by scholarship that respects the full diversity of human language.

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