ARRAY2021 – *Diversity, pluralism – equity?*

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Editorial

By Christopher Haworth, Miriam Akkermann, PerMagnus Lindborg

The term 'computer music' imparts inclusivity and pluralism. Differently to a style- or genre- based definition, the partitioning of our field by medium suggests (in Bob Ostertag's words) "an openness to all the musics which computers make possible" (Ostertag 1998). The ideology of pluralism goes beyond names and permeates the self-understanding of the field as a whole. It is conventional for text books and overview statements on computer music to celebrate the limitlessness of digital audio, where the only restriction on what can be produced is your imagination (see e.g. Mathews, 1964; Boulanger 2000; Manaris and Brown, 2014: 290). Some of the theoretical literature on computer music and its progenitors goes even further, seeing the form as participating in the democratization of sound itself through the abolition of sonic or cultural hierarchies (see Dhomont, 1996).

Yet most of us will have had experiences that rub against these ideals. Indeed, as Bob Ostertag's famous article pointed out, computer music as an academic field is in fact considerably narrower than its name implies, and marked by assumptions about what types of music really count as computer music (ie, musics descended from the western art music tradition), and who really counts as a computer music composer (i.e. white, male, university educated musicians from middle and higher class backgrounds).

Looking back on that article twenty years later we might be able to say that progress has been made in certain dimensions. Recent ICMCs have featured 'club nights' hosting musics derived from house and techno, and live coding comprises an ever-greater share of the research presented at the conference. But has greater diversity of style brought with it a greater diversity of composers and musicians? Are we able to say that our field (e.g. ICMA and its sister organizations, as well as in the wider music academia) truly represents and fosters the music and the cultures that computers make possible?

This issue of Array is the result of the action points agreed by the ICMA

board in our Black Lives Matter statement of 18 January 2021. In that statement we acknowledged that computer music has historically 'perpetuated a white racial frame (Feagin 2013) that has undoubtedly led to the exclusion of musicians who are Black, Indigenous, and people of color (BIPOC)' (ICMA BLM Statement 2021). In centering Black computer music, we acknowledge the specific problems within computer music and the ICMA that are raised by Black computer music. While techno, house, funk, and jazz-derived styles represent an increasingly large share of the musics that are performed at ICMC, there is little to no acknowledgement of their roots in African American forms of expression. Most conspicuously, the ICMA has few if any Black members. The fact of Black computer music's simultaneous presence and absence at ICMA therefore reflects the problems that the BLM movement seeks to address.

The challenge of reckoning with Black computer music in an ICMA context will be a long-term and gradual one. With this issue, we make a start on that process, while also extending our focus to other issues of representation and access that ICMA as an international organization has a duty to address. This issue thus features statements, provocation and analysis pertaining to the diversification and decolonization of computer music and experimental sound; the gender gap in computer music conferences; the lack of inclusivity in computer music in rural Mexico; and accessibility matters in relation to composers with physical impairments. Together, they raise awareness of existing biases and obstacles within our community, while offering ideas for how computer music as a whole can improve. There is a long way to go, but we hope this issue is a small step in the right direction towards making ICMA an organization that supports all the music, and music makers, that computers make possible.

The editors wish to thank all of the authors, as well as Lauren Hayes, Michael Gurevich and Eric Lyon for their input on the issue as a whole.

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Four Provocations on Diversity in Computer Music

By Ritwik Banerji

The problem of diversity in any scholarly or professional field is too complex to address in a piece as short as this one. In what follows, I offer four provocations on this topic. While these are partial, selective, and perhaps "personal," they are nonetheless intended as a way for scholars across this field to decompose the broad issue of diversity into its constitutive elements for subsequent reassembly in pursuit of the goal of greater diversification.

Provocation 1: The Missing Quantitative Answer

The question of whether computer music possesses or lacks diversity is at the very least a quantitative one. As would be the case anywhere else, the final answer to this question must be numerical and should consider multiple parameters in relation to one another. These include not only the race, gender, linguistic background, or geographic location of various participants of computer music as an artistic, academic field, but the relationship between these parameters and the kinds of topics and repertoires included in major gatherings, publications, and other documents of this field's activities.

A quantitative answer is necessary despite the likelihood that it would corroborate the hypothesis that this field, like so many others, is socially homogenous and often dominated by white, middle to upper-class, cisgendered men from the wealthiest nations of the world. It is imperative to check that casual impression against the data.[1] More importantly, the quantitative answer is vital to forestalling a facile, defensive tokenism. Were any of us tasked with summoning a group of nonwhite, non-male music technology practitioners for a panel, festival, or special journal issue, most would easily think of a list of names. In turn, that quickly produced list of names can easily be used as an alibi against any claim that the field lacks diversity: *how did we think of the names so fast if there are so few of them to begin with?* It matters little that a handful of non-white, nonmale colleagues in the field exist. The real question is whether this is enough to earn the designation of 'diversity.'

As necessary as it may be, several factors complicate any simple reliance on quantitative data. Centrally, institutions benefit from not collecting this data because doing so saves them from accepting how far their current outcomes might be from the ideal. This is likely the reason that such data are not currently available and a significant barrier to its honest collection in the future. More importantly, these data alone do not resolve the question of whether the goal is to achieve demographic representation commensurate with demographic proportions elsewhere or to correct the imbalance and inequities of this elsewhere. The first point is rather complicated in an explicitly international organization like ICMA as it is unclear which set of nations ICMA's demographic profile should reflect. The second is complicated by the lack of historical data for ICMA specifically. These complications aside, I am sure the data will be useful for understanding issues of diversity in this field.

Provocation 2: Ethnomusicology's Aversion to Technology

Without necessarily exonerating computer music researchers for their role in the lack of diversity in this field, I would like to consider how this problem is exacerbated by the field of ethnomusicology's ongoing aversion to computation research methods.[2] While ethnomusicology's efforts to diversify are by no means fully successful, the field has been, for better or worse, the domain where music scholarship and cultural diversity most strongly intersect. At the same time, its engagement with computation has historically been quite limited and largely focuses on taking computation as an object of cultural study rather than a methodological tool.[3]

This I know directly from my scholarly professionalization in this field, where my research has focused on the development of virtual performers of free improvisation and asking improvisers to compare these systems to fellow human players. While a contingent of my ethnomusicologist colleagues have seen the value of this work as a means of examining music as a social practice, many others have found that my foregrounding of computation in my work is antithetical to their basic conceptions of this field. For exam-

ple, when I spoke with a senior ethnomusicologist at an elite institution about pursuing this project in the graduate program where she taught, she suggested instead that I apply to her university's school of engineering and applied science and take a few ethnomusicology courses along the way. I am grateful for her honesty, for it saved me from many disagreements that would have made graduate school feel longer than it already was supposed to be. In any event, for her and numerous other ethnomusicologists, computer music as it is currently practiced has no place in the field of ethnomusicology other than as an object of sociocultural analysis.

The consequence of this ideological opposition to computational methods among ethnomusicologists is that the typical purveyors of diversity in music scholarship are themselves disinterested in the diversification of computer music. Conversely, I have often found that computer music researchers are far more interested in musics of beyond the Euro-American world than ethnomusicologists might be in computation, whether as object or tool. For example, my colleagues at CNMAT, particularly the late David Wessel, were often interested in the kinds of musical practices ethnomusicologists typically focused on. Yet due to the typical ethnomusicologist's antipathy towards music computation, there was often very little opportunity for computer music researchers to develop their interests in these musical practices in dialog with those who make it their business to build expertise in these topics. To be fair, there is also a long history of composers taking an interest in such musics solely as a source of creative ideas and doing so without necessarily being explicit with their audiences about the true identity of their inspirations. Thus, ethnomusicological skepticism of such interests is not entirely unfounded. Nevertheless, if just one piece of the diversification of computer music lies in the diversification of its repertoire, a key constituency that would be able to aid this cause is largely disinterested or perhaps even tacitly disgusted by such ideas.

Provocation 3: The Omission of Identity and Experience

Throughout his various commentaries on *Voyager*, George Lewis has

consistently emphasized the relationship between this work and his participation in various social worlds of African-American experimental music, particularly the Chicago-based Association for the Advancement for Creative Musicians (see Lewis 2000, for example). By contrast, while numerous other designers have also built virtual performers of free improvisation since Lewis' pioneering work in this area (for a review of such systems, see Banerji 2018), they are far less explicit about what sorts of personal experiences, whether as performers or listeners, inform the design of their systems. In other words, where Lewis is unambiguous about the relationship between his sociocultural identity (particularly his race), personal experience, and the practice of free improvisation, others omit such narratives and present free improvisation as if the nature of this practice were a self-evident fact requiring no further elaboration. And while Lewis illustrates how arts-technology projects are unavoidably a product of the "community of thought and culture" (Lewis 2000, 33) of their creators, the rest of this cohort of researchers largely disregards this point and presents their work as if it were an impartial, objective depiction of free improvisation as a musical practice.

By and large, omission of explicit discussion of the relationship between culture, social identity, personal experience, and one's own research is an implicit norm of technical writing in computer music. This is largely due to the field's adoption of modes of scholarly communication and documentation from science and engineering more generally (see Latour 1987). While computer music significantly overlaps with these fields in terms of methods and subject matter, music is a fundamentally different entity in that it constitutes an integral element of the behemoth commonly glossed as "culture." The fact that these matters are an acceptable omission in scholarly writing speaks volumes to the state of diversity in the field, or to put it more succinctly, the normative whiteness of this area of research. Were we all to write about the role of culture, social identity, and personal experience in our work, this would likely bear out the fact that the vast majority of researchers in this field are white men as well as the fact that the primary music-cultural sphere that anchors

work in this field (i.e., new music, the Euro-American avant-garde, etc.) is also dominated by white men.

Provocation 4: The Racialization of Computing

Most of my ethnographic work has focused on inviting improvisers to play with systems I have designed to function as performers of free improvisation and compare these to human performers. Given the prominence of George Lewis' work in this domain as both an arts-technologist and an improvising trombonist, many improvisers I have worked with during my ethnographic field research have drawn comparisons between my systems and his. At a private session in the casual setting of my apartment in Chicago in December of 2009, one white trumpeter who I shall refer to as "Joel," made such a comparison (for a longer account of this interaction, see Banerji 2021).

Overall, Joel found that my system *Maxine* (Banerji 2010) compared favorably to Lewis' *Voyager*. For the most part, his praise seemed sincere, though he was, of course, induced towards politeness and praise given the intimacy of the occasion. However, given the racial differential between myself and Lewis, Joel's evaluation reduplicates a set of old, tired, racist stereotypes about the relationship between aptitude in technical fields and race. Whether he meant to fall into this stereotype or not, it remains that on that day, he found the (South) Asian's system to be better than the one made by the Black man. Thus he concurred with a dominant prejudice that Asians are somehow possess greater aptitude in technical fields than other nonwhite peoples.

When we talk of diversity in a highly technical field like computer music, it is essential that we remain alive to the way such stereotypes animate the social life of science and engineering as daily activities for thousands of students, researchers, and other practitioners around the world. Such stereotypes create a risk of a rather uneven and inequitable racial diversification of this field in which "minority" populations who are already prominently represented in technical fields are included at the expense of other populations who are consistently marginalized.

Notes

[1| Georgina Born and Kyle Devine have recently noted that music technology undergraduate programs are often populated largely by white lower class men (Born and Devine 2015). However, the question remains as to whether this alters the overall class profile of those who become lifelong members of this academic community.

[2] I concur with those who argue that the colonialist and racist ideologies at the core of the field of ethnomusicology give us many good reasons to dispense with the term "ethnomusicology" (Fox 2020) and perhaps the field as whole as currently practiced (Amico 2020). Nevertheless, it is quite necessary to use the term here in order to clarify what field in particular I am referring to.

[3] One crucial exception is Bernard Bel and James Kippen's collaborations in the study of North Indian classical tabla improvisation (see Kippen and Bel 1989, among several other publications by these two from the same period). Even so, the ethnomusicologist, Kippen, was uninvolved with the programming in any meaningful way.

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About Decolonizing Sound

By Sharmi Basu, edited as comment from an interview with M. Akkermann

I went to Mills College and worked with Fred Frith, Pauline Oliveros, Chris Brown, and Maggie Payne. I worked with all of them, and I learned so much from that process and was grateful to be there. I also felt very alienated; In the music department, I was often the only person talking about racism, colonialism, and white supremacy while we were having protests about police brutality in Oakland, where Mills is located, not even 10 minutes away. I continue to benefit from my connection to Mills, but I really dropped out from that academic music scene. Since leaving Mills, I have been so fortunate to be connected to a very diverse queer and trans freak experimental music community that is engaged with both arts and politics. While there are plenty of Queer and Trans people of color using computers to make music, this community doesn't necessarily embody computer music, which is ok! The white supremacist nature of computer music in the west often means that it can be very boring. There is a dryness to technique without soul, or story, or struggle. There are missing pieces when composers and musicians put too much emphasis on sound for only sound's sake.

As a South Asian person, I have felt it strange to be in between this academic "new music" world and this punk DIY realm. I find myself fitting into this model minority idea of myself, at least initially. Quickly and dramatically, I break that mold, intentionally or unintentionally – I don't know if it is colorism – I don't know what it is. But as soon as I say something like 'racism', they – the people in power – want this person, me, away from them. And then, when there is an opportunity for said institution to build its reputation through addressing issues, they will call me back in. It's confusing to see where I stand, where people will appreciate my presence and where people will push away my presence, within academia and institutions.

I live in the US and my family is from India, so as Indians, we have our own colonial history. In India, and in most of the world, they have less of a connection to what the American colonization process was. The colonization of what is now known as the U.S. was a devastating mass

genocide, which is far different from what colonization process was like in India. When I talk about decolonization with sound, within experimental music, I try to focus on our relationships with sound and trauma. I try to think of our practices as forms of resistance that have ancestral roots in resilience. So much of experimental music, computer music and electronic music is mediated by the Academy and by western institutions. Arbitrary white men decide what is good and what is bad, what belongs in one funnel versus what belongs in another funnel, what deserves funding and what doesn't, until that object feels accessible and commodifiable to the white man. So many things could be considered computer music that are actually popularized or discovered by Black communities or by indigenous communities all over the world. I think about minimalism, like LaMonte Young, Steve Reich and Terry Riley or whomever. All these dudes went to India once, came back with these practices and then implemented those practices into their own – and are suddenly the king of this music, because this music that's been existing for thousands and thousands of years has been "discovered" all of a sudden. There is this constant colonial approach to the ways that computer music or electronic music codify music.

This decolonizing approach is really to first of all recontextualize and re-historicize what is good music and what artists deserve support and funding. For myself, I feel that so much of my music has a strong influence from ancestral sources – you don't even have to go as far as to say ancestral. But I grew up going to Pujas with my parents, which are like little festivals that go on at a community college or something, with some guys singing for like six hours at a time. I grew up falling asleep in these auditoriums to all sorts of Hindustani music, over and over again, so for me it is part of my blood. In so many ways, this is a part of how I grew up. It is automatically incorporated into my music whether or not I'm explicit about it. I make ambient music and I have this really formative history with me. I also came from punk, and I feel grateful for that, because I think for me the idea of 'no rules' mixed with communal care comes from that. It doesn't come from John Cage or prescriptions of what a randomized

music or chaotic music system is. I don't have to like these horrible people. In my opinion, John Cage is a racist, and we shouldn't be talking about him ever, as he is explicitly Anti-black. We also have plenty of people around now, of whom we can say are the forefront of Black thought in experimental music. George Lewis is an amazing computer musician who has really shifted a lot of what these experimental music communities looked like, throughout his time in Chicago and in New York. Or Raven Chacon, a noise musician who is part of Post-Commodity, who does really whatever he wants, all sorts of multimedia sound art and performance art. He is based out of New Mexico, he is an indigenous artist who very much makes work about colonialism and struggle, but is also a total noise guy. There are so many Black and Brown artists out there; even the history of techno is rooted in Black resistance. There is so much history in Black, Indigenous, Asian, Swana and South American cultures that we ignore because the people who have commodified and capitalized it were white, as are the people who have authority to decide to do so.
I think the function of music is to address aspects where the soul and spirituality meet. This can get taken out of computer music and electronic music when so much emphasis is put upon the technical process. The decolonial process is actually having tools and asking, how can we further access the healing that we need. It can be expressing our emotions or maybe at least feeling connected emotionally to what we are doing. Why is music even important to us? Because it serves these multiple functions that do have decolonial purposes. I grew up listening to indie rock – when I was in middle school and 11-12 years old –, this provided me some emotional solace. Later, this was how I found my community, my friends, and the people I politically organized with: through experimental music. These functions are actually deeply important. Punk functions in both here and Europe when people open up their homes for folks who are on the road. I think so many forms of mutual aid developed within underground musical communities.
Within the Academy and institutions, the musical community functions differently. The Academy continually holds on to computer music as a means to decide who gets what

resources. That's what keeps it white. All these folks of color doing techno, thinking about what sampling is and where plunderphonics come from just don't exist for them. Any of these artists could get support from the Academy, but the academy does not exist to provide resources for them.
For me, it is really hard to talk about anything that has to do with decolonization or decolonial practices without talking about material struggle. Having to actually think about what is anti-colonial, what is anti-colonial struggle, what does it look like to confront the state, what does it look like to confront the police, what does it look like to confront the systems that keep people unhoused, that keep resources out of people's hands, that keep people unfed. Those things are really important to think about together. My wish is for all institutions to disappear, and for all of the resources within institutions to be freely accessible to whomever wants them. I wish for the world that people have enough food and shelter and security – internal and external security – to be able to be creative in whatever ways they see fit and experience joy and presence within that.

I really wish for respect and kindness for all of us who are having to navigate such annoying paths just trying to make some bleeps and bloops.

Exploring Cultural Diversity in Experimental Sound

By Amit Dinesh Patel

Introduction

The genres of computer music, noise, sound art, electroacoustic music, soundscape and improvisation – termed for the remainder of this article as 'experimental sound' are overwhelmingly dominated by affluent, White male practitioners. The Black Lives Matter movement has thrown into sharp relief many examples of the injustices that Black people face as a result of institutional Whiteness, and this should catalyze serious investigation and honest critical reflection in our own field. Recent work in diversifying experimental sound practices has focussed on gender and increasing the representation of women (Born & Devine 2015, Lane 2016, and Goh & Thompson 2021). While this work is absolutely vital, there is a need to address other forms of exclusion, such as racial exclusion. This paper serves as an overview of an 18 Month UK Arts and Humanities Research Council funded research project "Exploring Cultural Diversity in Experimental Sound" (ECDES)[1], beginning in September 2021 (Patel et al 2021). Our research will build an understanding of the experiences of experimental sound composers from Black and South Asian backgrounds, building awareness of the existing cultural diversity in electroacoustic music and sound arts, while also promoting strategies to realize change to support and nurture practitioners from across Britain's diverse cultures.

Representation, Practice and Engagement

Black and South Asian artists are some of the least represented within the field of experimental sound. Their experiences, therefore, provide a valuable counterpoint to the normalized white majority.[2] Working and engaging directly with key participants who are Black and South Asian artists will offer up critical reflections on the compositions that they are being commissioned to create; as well as drawing out and unpacking their diverse experiences within the wider field of experimental sound, where their work is mainly situated. As Tim Ingold argues, there is a distinction to be made between 'knowing about and knowing through' (Ingold 2013).

Thus, the engagement of practice research and participant observation provides an opportunity to move beyond ethnographic documentation into anthropological knowing, building understanding in dialogue with practitioners themselves.

The South Asian heritage of ECDES's Principal Investigator (PI), and their position as an experimental sound practitioner, is therefore essential in affording cultural specificity for the research question, enabling the PI to engage as an informed observer participant (Kaminski 2004), drawing out responses and reflections with an engaged group of other Black and South Asian composers and musicians, to learn from them via an education of attention (Gibson 1979, 254). As argued by Born, socialities are engendered by practice and experience, as well as by the social and institutional conditions that create the environments for specific types of musical practice (Born 2011). This research focuses on the former via an embodied and material approach, engaging artists who practice across a range of different contexts, both within and outside the academy. The unification of practice and experience with reflection echoes the approaches of Steven Feld's "acoustemology", a sonic way of knowing and being in the world, which engages the relationality of knowledge production (Feld and Basso 1996). It is anticipated that complex interrelated strands of identity and practice operate within the key participants of this current research and that Feld's work will therefore be vital in guiding our elaboration, the multivalent and dynamic interplay in the musical and cultural identities of diverse experimental sound practitioners.

A number of recent anthropological research projects have investigated the social and institutional conditions of experimental sound in the UK. For example, Georgina Born's *MusDig: Music Digitisation Mediation project* (Born 2010), combines anthropology, sociology, media, and material culture studies in dialogue with ethnographic fieldwork, to address digital music across a spectrum of creative practices.[3] Born's personal investigations into the aesthetics and ideologies within the culture of university-based digital art music in the UK is significant to the current research. The institutional culture is a key access path-

way into experimental sound, and the structure and gatekeepers of the system have a massive impact on the potentials for diversity across the entire ecosystem. These projects critique established social and political frameworks of the experimental sound genre, providing essential context against which the outputs of the current research can be situated, analyzed, and evaluated.

Why Change?

New initiatives challenging the lack of diversity in musical practices have emerged over the summer of 2020 (Decolonising the Musical University conference, Edinburgh University; the Equality, Diversity and Inclusion in Music Studies network established by Music HE and the Royal Musical Association) but to date, there has been no response within the area of experimental sound in higher education. New book Sound Arts Now (Lane and Carlyle, 2021) has a diverse cohort of voices from artists and academic alike, but while raising underrepresented voices is a positive step, there is a deeper need to fundamentally question the invisible bias' at play within our field, and structural issues need to be questioned and interrogated.

The historical canon of experimental sound is a stark representation of privileged normalization, with the overwhelming preponderance of White males a reflection of the exclusive contexts within which this practice evolved through the 20th century. Ethnic minorities are automatically marginalized by contexts and institutions which are overwhelmingly white, indeed the whole sector is normalized around its (invisible) Whiteness (Dyer 2002). As Lipsitz put it: "Whiteness is systematically embedded in all institutional facets of our society" (Sue, 2016, 23). Such normalization are clearly evidenced in the conference and special Journal issue on "Alternative Histories of Electroacoustic Music" (Organised Sound 2017) which made no reference to ethnic diversity or alternative perspectives of diverse cultures, but featured an overwhelming number of references to the White canon, including over one-hundred-and-twenty references to Pierre Schaeffer, one of the main veritable figures of electroacoustic music.[4]

We have to start moving away from the historical canons, and realign

the focus to include those who have been traditionally the "other"- to give voice to diverse musicians and practitioners and fundamentally question what is accepted and what is qualified as experimental sound practice. An additionally insidious challenge, highlighted by Born and Devine, is that the genre is

> "a cultural–educational domain that is generally understood as ethnically unmarked or 'non-raced' – as representing the musical-universal, the 'commonality of humanity' in music – [but which] is actually experienced as ethnically White and as linked to an invisible politics of Whiteness" (Born and Devine 2015, 139).

An argument strongly expressed by Nate Holder in his poem "If I Were A Racist" includes stanza "If I were a racist, I'd have posters of me on the walls and in the books. No black or brown faces, Just my own", and equally powerful "If I were a racist, I'd know that, Even though the notes may be black, The spaces would remain white", thus highlighting the invisible bias in music education (Holder 2020).

We need to challenge barriers and borders, classifications and categorizations, groups and genres. White people cannot do this on their own, but they can offer a seat, and reach out to diverse communities. Computer music has the ability to transform and diversify, but to do so it must seek to reach broader audiences, connecting with new voices and new people, to foster a culture of opportunity. Not by eradicating the experimental music's past, but by forming exciting inclusive situations, whereby historical figures can sit alongside ethnically diverse sound artists. The call of this paper addresses the need for diversifying the field of computer music, but the irony is that this call is directed towards a generally closed and isolated group of our own academic computer music community. To realize true diversification, it is imperative that we utilize the manifold opportunities around us to connect via online networks, communities, and social media – to join ourselves to the incredible far reaching and diverse communities that are engaging with creative practice in sound via digital means.

Conclusion

Experimental sound occupies a position at the forefront internationally, an avant-garde elite of artistic

practice. In such a context, it becomes even more important to ensure that this practice is truly reflective of the cultural diversity within society as a whole. To blindly limit the scope of these avant-garde and elite practices, risks reinforcing them as another tool for the manifestation of neo-colonial White supremacy. Uncritically considered research in the field of experimental sound risks actively reinforcing neo-colonial perspectives through the plundering of sound materials from distant cultures, abstracting them from source culture for purified presentation in Western Art settings, applied as tokenisms and cultural fetishisms.

As such, engagement with this topic has the potential to benefit not just marginalized practitioners but the wider experimental sound community. Without focussed attention to catalyze action, the wider genre and its practices are unlikely to engage meaningfully with its Whiteness nor benefit from the results. If we can diversify this art form, acknowledge the innovative potential in diversity, and engage constructively with identifying the Whiteness of the genre through recognizing and valuing the aesthetics and creativity of Black and South Asian composers, then we can begin to position this avant-garde art form as, not simply breaking boundaries, but leading the push to diversify elite artistic practices in a way that can set an example for wider musical and artistic communities.

Notes

[1] This research project is hosted by the Sound/Image Research Group at the University of Greenwich, London. The co-investigators are Dr Andrew Knight-Hill and Prof Tracey Reynolds. Special thanks to Dr Andrew Knight-Hill for his support and key instigator for helping me to formalize this personal idea into a co-authored research grant to make a difference and transform change.

[2] As Paula Rothenberg notes in her introduction to her edited volume on White Privilege, even racism has its inequalities, "Hispanics and Asians, occupy the complex space of not being White but maintain some racial privilege by virtue of not being black" (2002: 3, P. S. Rothenberg (Ed.), White Privilege. New York: Worth).

[3] This research is due to be published in a forthcoming volume called Music and Digital Media: A Planetary Anthropology.

[4] The word 'diversity' occurs three times in the edition: two occurrences refer to different perspectives (which are

not so relatively different) and one to gender. While, in contrast, this edition focussing specifically on "alternative" histories, references Pierre 'Schaeffer', the absolute canonical figure of electroacoustic music, 128 times.

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La Casa Azul: A Narrative in Five Parts

A composition by Daniela Chaparro

The question of diversity is itself a tokenizing act. It seems silly to rely on Black and brown people to re-introduce musical histories, technological accomplishments and cultural knowledge that the industry itself has systematically erased. This piece notes that dominant systems of power rely on clean, neat categories that force folks of color to xylo themselves ("us" and "them"), act as representatives of their communities, and (re)tell stories of strife and struggle for a white audience. This leaves very little room for pluralism and diversity of experience and thought.

In *La Casa Azul* I explore my identities with regard to gender, heritage, race, and family in a way that relishes in the "choque," the dissonance between my culture, gender, and geographical location. A clashing of worlds cracks open our awareness of the interrelation of different systems of oppression. It is precisely this new conscious space that is fertile for creation and reflection of myself, my craft as a sound artist, my personal stake in Chilean culture, and my search for liberation from binaries. Through computer sound, I can more accurately represent this experience through a mosaic of text, voice, music, digital synthesis, and found sound.

Composition: http://mediathek.slub-dresden.de/ton90002547.html

Text: Rodríguez Juana María. "Divas, Atrevidas, y Entendidas." *Queer Latinidad: Identity Practices, Discursive Spaces*, New York University Press, 2003, p. 23.

I. Mestiza Mess

Who are we? Where do we come from? Where do we go? Anzaldua's Mestiza Consciousness breaks down the fictions of duality. Anzaldua does not impose a unity of interpretation, although she suggests a cosmic unity that joins all things, just as Clark's Maraza Consciousness depends largely on our capacities to read the sign as a cyclical, spiral relationship. Both authors attempt to transcend duality by not only embracing contradictions and ambivalence,
but also using them to challenge and transform systems of categorization.

Anzaldua describes the Mestiza Consciousness as a creature of darkness and a creature of light, but also a creature that questions the definition of light and dark, and gives them new meanings. A constant process of translation and transformation, of movement through and against sites of knowledge, the Mestiza Consciousness she describes is born of hybridity and cross-pollination. She writes, "the work of Mestiza Consciousness is to break down the subject-object duality that keeps her a prisoner, and to show her in the flesh." Anzaldua invites us to not only sustain contradictions, but to turn ambivalence into something else.

II. La Casa Azul

La casa azul. El sol amarillo. El cielo negro con ollitos. (The blue house. The yellow sun. The black sky, with little holes.) I remember being in Tunquén, or maybe it was Algarrobo, I don't remember. But we had just gotten home from the market, and it was really late. The house was still bright turquoise under the fluorescent lights. But that was the first time i saw the sky so big and so fucking grand and massive. I stood there craning my neck for at least thirty minutes. I was in awe, I had never felt so connected, so centered, and small. Delightfully small.

Esta canción es de ahora. Esta canción es de ahora. Esta canción cuenta lo que existe dentro del alma. Te amo mucho y me encanta tu sonrisa. Siento que tu ternura, o sea lo que tu reflejas siento que, no se porque es muy parecido lo que yo reflejo como de ternura. No se! Linda, te amo y saludos a la familia.

(This song is for today. This song is for today. This song speaks to what exists within our souls. I love you so much and I adore your smile. I feel like your tenderness, or, what you reflect is similar to what I reflect in my tenderness. I don't know! Beautiful, I love you and send regards to the family.)

III. Dissonancia

Disonancia, dissonance. Esta canción cuenta que a veces no se da cuenta de ahora. Ahora. (This song speaks about how one may at times not notice the present moment.) I didn't know what my cousins were going through at the time. Many of them were depressed, dealing with divorce and loss. We didn't quite have the language to express that to each other. Even now, after years of practice, still. We still get hung up on vocabulary. It's really hard to connect.

Saludos para allá, te amo mucho.
(Sending greetings, I love you so much.)

There's a lot of reading between the lines, reading body language, and understanding intention. Letting that speak more than the words themselves. I get really fucking frustrated because of that. I feel like I'm constantly reaching, constantly filling in the gap that I know is always present, will always be present. If I had a wish I would wish

that we could understand each other.

Saludos para allá, te amo mucho.
(Sending greetings, I love you so much.)

I don't know if speaking Spanish together would help us understand each other fully, if we can ever do that with another person, if in every interaction we are always hearing what we want to hear, hearing what we think they're trying to say...never fully getting it. I just want to have a normal grandparent-grandchild relationship, cousin relationship, aunt and uncle relationship. I want to be able to describe my feelings accurately, and express my humor! I lack that so much when I speak in Spanish. I can never be funny. I can never be as funny as I want to be, as I know I can be, and it sucks! Disonancia, dissonance. Can be shrill, can be awkward, can be worth it.

Quien preguntó?
Yo.
Dani, que te acaba de preguntar.
Claro, porque después no voy a estar yo, ¿quién les va a contar?
Si, po. Tú no mas, po.
Claro. Ya po. Por donde empiezo...No pero, uh, cuando quieren otro dia si quieren.
No sé.
Okay.
(Who asked?
Me.
Dani, they just asked you.
Right, because when I'm no longer here, who else is going to tell you?
Right. Only you can.
Right. Okay. Where do I start... No but, uh, maybe another day if you want.
I don't know.
Okay.)

IV. Parra y Jara

Parra y Jara. Broken fingers can still play. I'll never understand the depth of pain and trauma of Pinochet's time. Of how it bled through all the interactions my parents had in university: being teargassed, watching their friends be hurt, knowing people that have disappeared, watching strong politicians be assassinated one by one, watching political icons, musicians disappear only to reappear with broken fingers and charred bodies. Their music still plays out, though. Broken fingers can still play.

We went to Museo de la Memoria last time we went to Chile. I remember my mom not being able to move past the first floor, and there were three. I was so intrigued, and my dad was telling us all the things that he remembered, all

the political campaigns that were happening at the time, “Nó,” and finding connection to the materials that we were seeing. There were wired beds that showed what a typical tortue scenario would look like in the stadium. And my mom cried. At a certain point my mom couldn't take in any more. She sort of glazed over and left. I’ll never understand the effect that had on them. I’ll never understand the ways that people process that.

Atacameños
And then,
Aimaras
What feels the most ironic to me is
Diaguitas
fleeing to a country that was
Changos
so deeply
Picunches
involved in
Yaganes
the reason why
Mapuches
those harms happened in the first place.
Pehuenches
Fleeing to a place with sheen,
Huilliches
with a promise
Tehuelches
that delivers
Cuncos
so selectively
Chonos
to a chosen few,
Alacalufes
the pale few,
Onas
that we were on the right side of,
o Selknams
and we directly benefited from.

¡El pueblo unido jamás será vencido! ¡El pueblo unido jamás será vencido!
(The village, united, will never be defeated! The village, united, will never be defeated!)

V. Who Are We

Who are we? Where do we come from? Where do we go? We are people, humans. We come from our mothers. When asked who we are, we tend to answer in a narrative structure.

!!!!! We follow a form !!!!!

...to overcome the anxieties of self-narration and the burdens of self-representation. To authenticate and perform our identities, artists of color are condemned to write only autobiographical works, only struggles. We don't remember for ourselves as we remember in order to tell. Who I am is not where I or my parents come from. I, we, go from there. All our struggles are our baseline. We want to represent other stories for ourselves. By telling our stories, we cultivate creative energy and move on, to tell different and affirming stories.

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Can we align our research and shared values to improve accessibility?

By Nathan Wolek and Andy Slater

Introduction

Accessibility is a term from disability studies that describes the process of removing barriers to full participation (Fritsch 2016). In 2018, Emma Frid published a systematic survey of accessible digital music instrument research that had been presented at NIME, SMC, and ICMC conferences. (See also Frid's article in the present issue of ICMA Array [Frid 2021]). The overall number of publications in each year was small, but she also noted, "Little research in the community appears to have focused on developing musical interfaces specifically for persons who are blind." (Frid 2018) After reviewing the title and abstracts from all proceedings available for these organizations, she reported that "only one paper mentioned persons with visual impairment as target user group". Let that sink in: one paper in over 40 years of conference proceedings.

If we are serious about improving this organization's overall record on inclusion, we must not overlook accessibility in that discussion. And while we acknowledge visual impairment is only one part of the larger discussion on accessibility, it is the one that the current authors (one sighted and one blind) can speak about from direct experience. One paper in over 40 years of conference proceedings is a symptom of broader issues we must face. The vast majority of the tools we use in computer music rely heavily on visual feedback. Such interfaces present barriers to blind and visually impaired creators. The biggest problem is that we expect creators to rely on their vision to do sound work.

The "Young Sound Seekers" project

The two authors of this paper met because of Young Sound Seekers (Atlantic Center for the Arts 2020), a program designed to provide experiences with the natural soundscape and field recording for blind and partially-sighted youth. The project was developed with financial support and logistical cooperation from the United States' National Park Service, which addresses issues of soundscape quality through their

Natural Sounds and Night Skies Division (National Park Service, n.d.). Students from age 13 to 25 visit the Canaveral National Seashore once a month for lessons and activities designed to enhance their appreciation of the natural environment and its soundscape. The park contains 24 miles (38.5 kilometers) of undeveloped shoreline and a large tidal estuary, all with far fewer people than most Florida beaches. Whether we are learning to listen without distractions, documenting sounds with small field recorders, or using hydrophones to hear beneath the waves, the Canaveral National Seashore provides us with an excellent outdoor classroom. There are plenty of animals using acoustic communication, like the osprey circling in the sky, cicadas in the various trees, and dolphins in the lagoon. It provides an exciting location to enjoy and explore the natural soundscape.

Our lessons have drawn on so much of the rich vocabulary that we commonly use as sound artists and computer musicians to describe sounds with better precision. We use the word "soundscape" to designate a "sonic environment", a word first introduced by R Murray Schafer (1977). We use the words "biophony", "geophony", and "anthropophony" to distinguish between major categories of the soundscape, words that were developed in the writings of Bernie Krause (2012). We teach the students about different ways of listening, borrowing ideas and vocabulary from Pierre Schaeffer (2004) and Michel Chion (1994). It has been a joy to experience the excitement some of them display as they connect with a word that perfectly conveys the thing they have always noticed, but never knew how to describe.

Recognizing the barriers

But while our vocabulary has been empowering, our software and hardware tools present many challenges. While designing lessons for blind and partially sighted students, it has been critically important to always have accessibility front and center. That means extensive testing and planning before presentations with our students, as well as consulting with blind sound artists about the accessibility of specific recorders and software. Teaching visually impaired students about

field recording and audio editing has brought the impact of current interface design trends into sharp focus. The small touch screen on a recording device can open a deep set of options for sighted users, but it presents a large barrier for blind sound recordists. By contrast, physical knobs and buttons on a mixing console or hardware synthesizer create an interface that is tactile and can be memorized by visually impaired sound artists. Additional barriers result from the virtual counterparts to these knobs and buttons found on many graphical user interfaces [GUIs]. Complex GUIs prevent independent work by blind creators if they are not connected to keystrokes, screen readers, or voice commands.

There is an uneven track record on accessible tools for sound. For years, digital audio workstations [DAWs] like Pro Tools and Reaper have been accessible for blind creators. A community of dedicated users has created screen reader compatible macros that make it quite simple to record, mix, and compose using these programs (Halatyn 2014; Teh 2021). More recently, digital field recording has become accessible through the creation of smartphone recording apps that connect with companion microphones. The best of these apps (Shure Inc. 2021) integrate screen readers and voice commands so that blind creators no longer have to engage with the minuscule displays and menus that have frustrated them for years. In contrast, the opportunities to use more specialized plug-ins and software for sound design and spatial audio are unfortunately still limited. When an application is designed to be engaged with visually (e.g., 360-panners, point-and-click patching, drag-and-drop actions, and other common GUI features), the assistive technology used by blind creators is never compatible. These accessibility boundaries make it hard for a blind creator to work autonomously and on their own terms. As we look ahead to more immersive forms of content like XR (virtual reality, augmented reality, and mixed reality), the tools for creation seem to be getting more visual, not less, and this is why there are only a few blind artists creating work for XR. There is certainly interest in creating more immersive audio content, but the lack of accessible tools presents barriers to entry.

Defining our responsibilities

ICMA is an organization that supports and encourages the development of hardware and software tools through its annual call for papers presented at an international conference. We share knowledge on the latest developments through the process of peer review and public presentation, and even archive those papers as a record of the innovation happening in computer music. That record has the power to influence future work for both academic and commercial developers going forward. Therefore, we have a collective responsibility to improve our record of developing tools that are accessible and inclusive. If we want things to improve, it will require us to align our research and shared values.

What actions can we take? Should accessibility factor into the peer review process? The current authors would answer yes. While we acknowledge the work that goes into publishing a paper is already significant, without each ICMA member taking on part of the work, we cannot hope to see our present situation improve. Our modest proposal is that authors seeking to publish about software or hardware projects through ICMC should be required to address the issue of accessibility explicitly in their paper. At minimum, authors who are truly unable or not sure how to address accessibility could include a simple call for collaboration with blind creators and researchers aimed at improving the project. This could be augmented with some honest self-reflection in either the Discussion or Future Work sections of the paper. Ideally, authors would document the ways that they thought about accessibility throughout the development process and made adjustments to improve the overall design of the final product. Exemplary development of inclusive tools would include consultation during beta testing with blind creators who are compensated for their time and feedback. Reading about the development of a project like the Haptic Wave (Tanaka and Parkinson 2016), which was specifically designed for blind audio producers, can provide more general lessons about how to address accessibility throughout the development process. And when we fail at accessibility, authors need to document that as well so that others

can learn from their missteps. These small additions to the work we already do can promote impactful conversations to about best practices.

We firmly believe creators should not have to rely on their vision to do sound work. The ocular-centrist tendencies embedded in the pedagogy of computer music and its related industries are by far the greatest cause of excluding blind creators from its own ecosystem. If the technology continues to grow without a set of accessibility best practices, blind creators will be left uninvited to explore and experiment alongside sighted creators. Their natural expertise and unique perspective of sound is excluded from shaping the future of computer music. Inclusion of blind creators begins with the software and hardware tools we design, so let's get started designing better tools.

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Tackling the Lack of Inclusivity in Computer Music in Rural Areas in Mexico: A Case Study of Michoacán

By Mario Duarte and Emma Wilde

Background

To begin to address the problems concerning inclusion and access to computer music in rural areas in Mexico it is firstly necessary to consider how young people in the country may initially develop an interest in music and how they may gain access to the study of the subject. An interest in music principally arises because children have contact with music in their home or school environment. In the home environment children may hear their parents playing music or they could be introduced to music through friends, they may also receive access to music education by way of their parents paying for private tuition. Not all children in Mexico will be exposed to music in the home and so their main access to music comes from the school environment. In Mexico, music education is included in the curriculum, and all children who attend both primary and secondary school have access to it in some form. However, it is worthy of note that music is not taught as a specific individual subject in primary. Instead, the curriculum contains an interdisciplinary artistic subject called Interdisciplinary Artistic Collective, which involves music, dance, visual arts and theatre. In secondary school, students choose to specialize in either music, dance, visual arts or theatre during their three years of study (Secretaría de Educación Pública, 2021).

Figure 1. Michoacán geographical location.

Although the primary and secondary curricula contain music, it is rare for children to access or be exposed to music technology. Music technology courses are only offered by higher education institutions located in urban areas so access to these courses is limited to young people who already reside in major

cities and those that are financially able to relocate. Free state funded undergraduate music technology courses are only offered in Mexico City and Morelia (the capital city of the state of Michoacán), whilst the rest are found in private higher education institutions, which are also located in cities. The majority of undergraduate music technology courses focus on audio engineering rather than an artistic or compositional approach to making music with computers (Universidad Nacional Autónoma de México, 2015). The ENES, Morelia, UNAM (National School of Superior Studies) located in the state capital of Michoacán is the only institution which offers a free state funded undergraduate degree in Music and Artistic Technology which focuses on composition aided by computers (Figure 1). All this means that many young people in Mexico, mainly those who live in rural areas, are excluded from opportunities to engage with computer music. Exposure to computer music can provide many benefits. It provides the students with new outlets for artistic expression and the skills promoted by the engagement in computer music can be transferred to other subjects in the school curricula.

Why is computer music not inclusive in a state like Michoacán?

In this discussion, we will focus on the state of Michoacán to highlight how inclusivity issues in computer music can arise in rural areas in Mexico. Michoacán is overwhelmingly a rural state as 97% of its localities are described as being rural (Consejo Estatal de Población, 2021). This makes it a pertinent example to discuss when considering issues of inclusivity in rural areas. The Mexican National Institute of Statistics and Geography defines a rural area as one which contains a population of less than 2500 people (Gonzalez Arellano et al., 2013). In Michoacán, 39% of the population is of school age (3 to 24 years old). 61% of 15- to 24-year-olds only complete primary and secondary education and do not continue education after the age of 15 i.e., they do not attend high school or further education according to the most recent national census (Instituto Nacional de Estadística y Geografía, 2020). This represents a serious problem in terms of social disadvantage, because the majority of young people

do not have access to university where they could enroll in computer music courses.

On the other hand, most of the population of Michoacán has access to primary and secondary school education, as 85% of 3- to 14-year-olds attend school (Instituto Nacional de Estadística y Geografía, 2020). This represents an opportunity for engaging children and teenagers in music-making with technology in the primary and secondary school setting. However, the complex social demographics of Michoacán make this challenging. We will highlight three social issues: firstly, the population of Michoacán is disproportionately deprived (Consejo Nacional de Población, 2020), with only 47% of the population having access to computers or the internet. Secondly, there is a considerable level of violence provoked by the activity of the drug cartels in the region, and problems with security which discourage institutions and practitioners from traveling to rural areas to implement artistic initiatives. Thirdly, all of the above creates an environment of educational disadvantage with respect to music and technology in Michoacán and means there is a lack of opportunities for young people to develop an interest in computer music.

It is important to mention that some institutions in the state have been working to tackle these problems. For instance, the CMMAS (The Mexican Centre for Music and Sound Art) created the initiative Acercamientos Sonoros (https://cmmas.org/as/) which is a program that offers workshops in sound art and music made with technology in primary and secondary schools in the state's capital city of Morelia. Also, the ministry of culture of Michoacán offers courses, scholarships and funding to young creators in the region (https://cultura.michoacan.gob.mx/). However, these cultural opportunities are mostly offered in the capital city of the state, while the rural areas representing 97% of the state (Consejo Estatal de Población, 2021) are left behind. The reasons for this are many: it is physically difficult to access these rural communities due to a lack of infrastructure; there are few technological resources in the schools; and the drug cartels have control of various rural regions in the state provoking security issues.

Figure 2. Rural community of Tumbisca, Michoacán, México.

How to tackle these issues and broaden young people«s access to computer music in Michoacán

Some initiatives of social inclusivity have started to emerge in recent years to promote access to music education programmes in rural areas in Michoacán. In 2016, the Erongarícuaro Conservatorio Purépecha (Purepechan Conservatoire) was established. The aim of this institution is to rescue regional music traditions of the Purépecha's culture[1] in different sites in the region. Another important initiative is the work of Biblioteca Comunitaria Ambulante de Comachuén (Mobile Community Library of Comachuén) in Nahuatzen which during recent years has offered a variety of artistic and musical activities, workshops and courses to children and teenagers. An important part of their activities is related to traditional music composition and conferences to display and promote the region's artists.
In the specific field of music education and technology, the authors have been working in Tumbisca, a small rural community in the central region of Michoacán (Figure 2). This project has been running since 2018 and focusses on improving and broadening access to electroacoustic music education and explores

Figure 3. Interactive music system.

how sound-based composition through the use of technology could help or contribute to music technology education.

Comunidades Sonoras (Sound Communities): Working with Electroacoustic Music in Rural Areas

When we first began the project, Comunidades Sonoras (Sound Communities), we had to face the problem of the lack of access to computers and internet due to deprivation. Although Tumbisca has a primary, secondary and a small high school, the facilities are in a very poor condition. None of the educational institutions have computers or access to internet; in fact, the high school is a small building made of wood. Therefore, using technology to teach music was a difficult idea to implement.

We noticed that although the population of Tumbisca do not have access to computers, many of the students have smart phone devices that are used to access the internet.[2] We therefore proposed a sound pedagogy based on the use of mobile phones. A musical interactive system was created for this purpose (Figure 3). This system comprises a graphic user interface loaded in smart phone devices to control musical parameters (Duarte-Garcia et al., 2020).

The students completed a course based on modes of listening, improvisation with musical toy instruments and smart phone devices to create electroacoustic music miniatures (Duarte and Sigal 2019). In a second stage of our work with this community we focused on the listening processes of the environment, soundscapes and music com-

position with found objects (Figure 4). We found that younger students were more willing to participate in the creation of sound-based compositions (Duarte-Garcia and Sigal-Sefchovich 2019).

The project described above was funded by the ENES Morelia, UNAM through an interdisciplinary participation of several departments and undergraduate students. The aim of the project was to engage our students in real life situations to help to improve local problems. In this sense, universities have an important role in the society and there is a need for university educators to begin to go out of the classroom to serve the local community.
More recently we have identified other music & technology needs of the community in Comachuén. Traditional musicians in the area want to record their compositions and performances. Although these days (in some areas) it is easy to buy sound production equipment and to create a home studio, the lack of access to knowledge about how to use the equipment is still a problem. We have recently set up a collaboration with the Mobile Community Library of Comachuén to create a Mobile Studio that will serve this sector of the population and students from the undergraduate program in Music and Artistic Technology of the ENES Morelia will deliver courses in sound editing, music recording, production and sound-based composition in the community of Comachuén. We believe that integrating undergraduate students in these kinds of programs could help to mitigate the lack of access to music technology in rural communities and provide a continuous source of facilitators.

Conclusions – Proposals of Ways of Tackling Issues in Inclusivity in Computer Music in Rural Areas in Mexico

There are various ways in which inclusivity issues in computer music can begin to be tackled in rural areas in Mexico. The fact that many people in rural areas do not have access to computers and the internet may seem like an insurmountable problem, but many do own mobile phones with internet access. Therefore, it is necessary to consider how smaller-scale technology can be used in music technology education initiatives. Using applications

Figure 4. Concert with found objects and electroacoustic forces. Concert and a playlist of works: https://comunidadessonoras.org/talleres [accessed October 2021]

on mobile phones is a way forward to address the lack of technological resources in these areas. It is also important to consider improving access to knowledge and music education programs. We have realized that there is a need for universities to implement and fund educational initiatives within local communities, and that involving undergraduate students in community outreach projects can be a way of mitigating the lack of access to music technology education in Mexico's rural communities.

Finally, it is important to consider how to ensure that people in these areas can develop the skills they need to become independent practitioners so that they do not have to continue to rely on visiting educators from urban areas. Music education programs should focus on ensuring that young people develop skills so that they can continue to progress by themselves and share knowledge with others in their community. This is something we are addressing with the Mobile Studio project with the Mobile Community Library of Comachuén. We aim to

ensure that the participants of the course of sound-editing, music recording and production feel confident enough both to be able to record their music independently after the course«s completion, and to share their knowledge with others in the region by means of imparting their own workshops in their own communities. In the future, these proposals could be implemented in other states of Mexico that contain a high percentage of rural areas, and also in other countries with similar socioeconomic profiles.

Notes

[1] Purépecha refers to an indigenous language and ethnic group which is one of the most numerically important groups among the twelve million indigenous people of Mexico. The so-called Purépecha region covers an area of 6,000 square kilometers in the state of Michoacán. (Amézcua Luna et al., 2015). The last census showed that 90.4% of the households in Michoacán have access to mobile phones (Instituto Nacional de Estadística y Geografía, 2020).

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The Gender Gap and the Computer Music Narrative - On the Under-Representation of Women at Computer Music Conferences

By Emma Frid

In a paper presented at ICMC 1995 Mary Simoni hypothesized that "the reason there are so few women in computer music is because the complex process of socialization has simply filtered them out", comparing this chain of events to subtractive synthesis, suggesting that

> "those few females that pass through the series of filters, escape only to find that their signal strength has been attenuated by 3dBs".

More than twenty years later, the problem of under-representation is still highly relevant, as voiced by Frida Abtan (2016, 53): "At conferences and workshops, there are always a few of us eyeing each other and asking ourselves: why are women still so under-represented in electronic music?" In 2017 I published a paper at ICMC that highlighted this gender gap through sonic representations of female author names in the International Conference on New Interfaces of Musical Expression (NIME), Sound and Music Computing (SMC), and ICMC conference proceedings.[1] Findings suggested values consistently below 20%. In 2021, I updated this dataset and sonified the results for the IRCAM Manifeste event Féminisme – Musique – Technologie (Sound examples available at https://youtu.be/rEgMKINIU5E, accessed October 2021), which featured researchers and artists who address the themes of cyber-feminism by crossing social issues of inclusion and intersectionality with technological and cultural contexts.[2]
The gender gap has not drastically changed since 2016, however, there are some indications suggesting that numbers are trending in a positive direction.

Temporal analysis of predicted genders[3] of unique author names in the ICMC proceedings from 1975 to 2021 suggests a tendency towards higher percentages of female author names in more recent years, with numbers ranging from 2.8% (in 1981) to 16.2% (in 2017) and an overall of 10.4% female names (Figure 1).[4] Of course, prediction methods based on first names have clear limitations since such classifications do not necessarily correspond to ac-

tual gender identities.[5] Moreover, these binary methods do no account for all gender identities. The representation of women estimated by predicted genders of author names can be compared with ICMA membership rates based on self-reported genders. These figures also suggest higher percentages in recent years, with female members ranging from 14.1% in 2009 to 23.8% in 2019 (membership rate data was analyzed for 2006–2021).

Data from other conferences confirm that under-representation of women is also an issue in related disciplines, even if some figures suggest that there are trends towards more balanced demographics. A recent study on NIME demographics suggested an overall percentage of 17.5% female authors and that an "ideal" gender balance could be reached around 2025 (Fasciani and Jackson, 2021).[7] The SMC conference is experiencing increasing female involvement, with 20% female authors in 2019 (Mauro et al., 2020, 5). For the proceedings of the International Conference on Auditory Display (ICAD), 20% of the authors between 1994 and 2016 were reportedly female, with annual percentages remaining relatively unchanged over time, despite an increasing number of publications co-authored by women

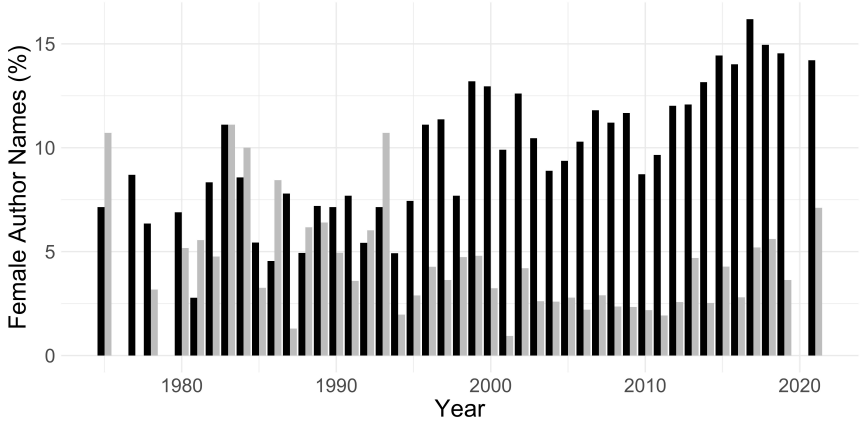

Figure 1: Percentage of female (black) versus unknown (gray) author names in the ICMC conference proceedings. Empty years are displayed when data is missing or when no conference was held.[6]

(Andreopoulou and Gouodarzi, 2017, 3-46).[8] The International Society for Music Information Retrieval Conference (ISMIR) proceedings had 14.7% female authors from 2001 to 2015, with lead female author rates not improving over time, although there have been more papers with female co-authors in recent years (Hu et al., 2016, 765-767).[8] Overall, representation of non-male authors at audio engineering conferences are low, and there is also a notable lack of gender diversity among invited speakers (Young et al., 2018, 328).[9]

The above-mentioned numbers raise questions about how we can ensure that the breadth of the transnational electronic music community's work is represented at conferences.[10] Possible actions to foster inclusion and diversity include ensuring a fair representation among keynote speakers, performers, reviewers, and steering committees; offering scholarships; providing support systems and appropriate facilities at conference venues (for example, offering affordable on-site childcare and all-gender bathrooms); and formulating diversity and inclusion statements[11] with action plans. Interventions should take into consideration that members of additional underrepresented groups may experience effects that interact with, and increase, gender bias (see e.g., Armstrong and Jovanovic, 2015). As emphasized by Goh and Thompson (2021, 2), conceptualizing gender as singular, oppositional, and universal may obscure its co-constitution with sexuality, race, class and disability (see also Goh, 2014 and Thompson, 2020). Other important aspects to consider in the conference context are citation practices (it is well known that women in academia are under-cited in work across disciplines, see e.g., Larivière et al., 2013), the use of inclusive language, and what biases and exclusionary discourses that we may (although possibly unintentionally) conform to. Finally, we should all reflect on how we can contribute to the creation of safe spaces to work in and how we can cultivate an environment where everyone dares to speak up if someone is treated in an unfair manner. For a summary of additional suggestions for conferences, see for example Llorens et al. (2021, 2054).

Under-representation may discourage people to approach a career in the computer music field since it

may not seem likely that such an endeavor would be worthwhile based on prevailing gender bias: on one end those identifying as women should ideally over-perform to stand out in the subtractive filtering process described in the work by Simoni, on the other hand, some may claim that women's work will not be evaluated with the same scrutiny since women are subject to a quotation system that will ensure success, regardless of skills and competences (the act aimed at promoting a change is in this way used as yet another argument to discredit the work of those identifying as women). Social constructs cementing gender norms can hinder the growth and creativity of the community, regardless of gender identity. Balancing numbers is not enough if the interventions aimed at supporting marginalized groups fail to acknowledge the actual importance of their work.[12] We should encourage a self-reflective practice and support attempts to give voice to different experiences and perspectives in our field. The gender gap will not be solved by itself; the modest tendencies towards an increase in representation of women reported here highlight the need for additional initiatives aimed at widening participation, to ensure that all members of the community are represented in the published works that shape the computer music narrative.

Notes

[1] The data consisted of predicted genders based on the authors' first names, see Frid (2017).

[2] The 2nd seminar on cyber-feminism organized by Frédéric Bevilacqua, Sarah Fdili Alaoui, Stéphanie Pécourt, Sara Anedda, Suzanne Berthy, and Sylvie Benoit, with Caroline Bassett, Cécile Chevalier, Sharon Webb, Anna Xambó Sedó, Karolina Jawad, Hyacinthe Ravet, Claire Williams, Sarah Wery and Charo Calvo. See https://www.ircam.fr/agenda/feminisme-musique-technologie/detail/ [accessed October 2021] for more details.

[3] Gender labels were obtained using the genderize.io API, see https://genderize.io/ [accessed October 2021]. In situations where the software framework outputted a probability below 0.8, manual search for pronouns was carried out.

[4] Fitting a regression model with Autoregressive Integrated Moving Average (ARIMA) errors we obtain a positive increase of .17 $\pm$ .1% per year ($p < .001$). A test for the slope of the fitted line after taking account of the serial correlation suggested that we can reject the hypothesis that the mean increase is equal

to zero (95% CI [0.15, 0.19]).
[5] It should be noted that there are many gender identities that fall outside of such a binary categorization, and that the best approach for quantification would involve contacting all authors to ask how they describe their own gender identity (in a free-text format).
[6] The 2020 conference was canceled due to COVID-19, and selected proceedings were published in the 2021 edition.
[7] Gender labels were obtained using a binary classification method. A previous study based on manual labeling indicated that the overall percentage from 2001 to 2017 was 14% (Anna Xambó Sedó 2018, 2).
[8] Figures based on manual labeling.
[9] This work used a novel method designed to avoid the assumptions associated with determining gender from first name to allow for non-binary gender identification based on pronouns collected through emails and manual labeling.
[10] I want to acknowledge that those who publish at computer music conferences only constitute a subset of the community of computer music practitioners. For other work focused on under-representation going beyond academic publishing, see e.g. the female: pressure FACTS survey: https://femalepressure.wordpress.com/facts2020-pressrelease/ [accessed October 2021] and work by Brereton et al. (2020).
[11] However, as pointed out by Hayes and Marquez-Borbon (2021, 34): "openness to diversity does not automatically result in it". Diversity and inclusion statements should always be combined with actions to promote change.
[12] As articulated by Born and Devine (2016, 14): "Although [widening participation or balancing demographic profiles] are crucially important goals, by addressing only participation rates and skewed demographics we confront the surface manifestations of wider, more diffuse and resilient long-term processes."

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A Conversation on Racism and Computer Music

By The Honourable Elizabeth A. Baker, Jessie Cox, Joy Guidry, Yvette Janine Jackson in conversation with Eric Lyon edited by Christopher Haworth

Preface

In its call for contributions to the Fall 2021 issue of Array Journal, the editors asked why the ICMA has so few members who identify as Black, given the considerable debt that the field of computer music owes to musical and technological innovations of Black artists. This article provides a set of responses to the question posed. Virginia Tech invited four Black artists whose work might be considered computer music (this piece puts pressure on borders implied by the term "computer music") to participate in a conversation. Perspectives not often heard within ICMA discourse are shared herein. It is hoped that this conversation will lead to self-reflection on the part of the ICMA membership, and to further conversations, ultimately motivating the ICMA to adopt policies that will make the organization a more inclusive association than it is currently.
This is an edited down version of the original interview, thematized under 'institutions', 'technology', 'genre', 'skills', 'rhythm', 'art music', and 'ICMC'.
Thanks go to Eric Lyon for organizing and conducting the interview.

Institutions

Guidry: Maybe we should make Black coding camps for music. I've started learning how to do this. I've always had a lot of respect for you all but it's so hard. Ableton is so hard. Everyone wants to charge so much money to teach me how to do it, and they talk in these huge words that I have no idea what they're saying. It's just been coined in this way that makes it almost impossible for people to even know that most, if not all of this music, comes from Blackness. I think so many things have to be torn down. But starting with the aesthetic being torn down and giving correct representation and credit. Then the other things will really start to fall into place.

Jackson: In the past couple of years, I've been asked a similar question by different groups, "How can we attract more people of color to our organization?" My response may be cynical but, “Why should people want to join your organization?” It's one thing to put up the invitation, "You're welcome to join", because I think a lot of people don't feel welcomed by many organizations. But don't expect for people, who may have been historically excluded, to be excited to then join just because the doors have suddenly opened. Why do you want them to join? Is it to help with your optics so that you can control the narrative? We've all seen this since last spring [after the killing of George Floyd] - the proliferation of organizations putting out various statements about how they care about everyone and want to include everyone, but then shy away from doing the work to enact the change described on their websites.

Baker: To stay with Yvette's comment, I feel like this is being done really well by King Britt with Blacktronika, where it's not just a class, it's a whole movement of going into schools and saying to kids, "Hey, you can go to college for this." Because a lot of Black kids don't know that you could go to college for computer music. I think the representation within the Blacktronika movement has a huge amount to do with it. Because if you can't see yourself there, then you're not even going to register it on your radar.

Guidry: You can put out these statements and invite people, but is the space ready for us? You can even give us a $100,000 fellowship. But we’ll need a million dollars from the trauma we’re going to have after doing that fellowship. When I was at Peabody, they had Computer Music. But I didn't know what that was. I remember seeing it on the application and I was so confused, and that's all I thought computer music was until I had my Black awakening. But I would listen to this music and see laptop orchestras and think, "There has to be more to it than this." But representation is so important. If you don't see yourself, how can you see yourself there? Put that on the flag.

All these organizations are built on the structure of academia. Within academia, the power structure needs to be Black, Brown, and Indigenous. A white person does not know about diversity because they don't have to be a

part of it, and that includes white queer, and trans people. Everyone has white supremacy in them in that community and race. They don't need to just hire Black artists because oftentimes, if they invite us onto panels, they only talk about us fighting the whites instead of all of the training and the art we produce. At the conferences, at least the bassoon ones, there are reviewers and journalists. Have Black reviewers, have Black journalists, have Indigenous reviewers, because white journalists don't know what we're trying to say with our art. It really struck me, especially with Black Mirror, there was the Black Museum episode. It covered slavery and abuse in slavery, just all the violence, and a lot of white reviewers were like, "I didn't get it" and it's like, sure you didn't get it. That's why we need Black reviewers and journalists everywhere.

We want it to be different, but this is just how it is. It can change, but it's not going to change until we just dismantle academia. I believe Black people, Indigenous, Latinx, Asian American, Asian and Pacific Islander, all these people, we can make our own massive community. We still will not have the funding because, again, capitalism rules all of this. Until we get more people as deans, as provosts and presidents of universities and heads of departments, it's just not going to change. But that's also going to take 50 years to happen. I think so much of the change for the present and just more respect of Black artists is continuing the support from other Black to Black artists, and then from there, building relationships to other non-Black POC and Indigenous people, and getting rid of the problems between our intersections, and then we all support each other. Because at the end of the day, we are going to have to make our own structure, because white people are never going to look at us outside of just, "That's a nice beat. Okay, go on the street." We just have to keep showing support because that is what I've seen the most in this last year of white people freaking out and having to figure out how to do food stamps, how to do unemployment. Black, Indigenous, and Latinx people definitely struggled this last year, but we didn't have to relearn any systems. I feel like that's why some of us really were just okay. We're not on the same playing field, but things are a little different right now. But the amount of support I've seen my friends show me and just our community showing other communities support throughout this last year, it's amazing, especially in the art world, and that just absolutely needs to continue. People have to also know what is

their place in this support. Some people are grant writers. Some people are great public speakers. Some people are good at curation. Some people are good at being stagehands. When we're creating our own structures of support and organizations, we also have to know these things. But at the end of the day, we have to go to therapy to learn that we are valuable. We created this music and we are the root. Until that is instilled and somehow someone makes a pill to get rid of impostor syndrome, I will buy 50 of them, 50 million pills. It's such a long road. It's a very possible road, but it's going to be interesting.

Technology

Baker: Why does academia hate Pro Tools and why are they complaining that it crashes all the time? Because people are telling them, you can't run it on a computer that doesn't have these very minimum requirements. But the price of Pro Tools for the student is not very expensive. It's $10 a month. People could figure out how to subsidize that for students so they'd have access to more of these different tools. I really think it's a matter of letting people have access to things but also collective support as with Joey's student who needed a bassoon to go to college, so there was a GoFundMe and it provided way more than was needed pretty quickly. Treating systems whereby there's a share of resources, both economic and actual tools and software, so that people can have their hands on the best things that they can have. I find a lot of people that get into computer music with Ableton or something like that. Ableton is pretty inexpensive compared to some of the other options, but it might not be the right choice for their first thing given how their brain works and how they like to interact with music.
Part of my thing on tours is, I'll go to elementary schools, middle schools around the country, and let children touch my gear, which seems really scandalous. But you know, a theremin's very safe. They're not going to knock it over, and they make sounds by not touching it. For those kids, it changes their life because it's like, "Oh, we don't just have to play cello, we can do a whole bunch of other stuff."

Guidry: Lisa Harris also does the theremin in Houston, she has so many of them. I think she hosts a camp or workshop every so often. The first time I played a theremin, I was like, "What is this?" I couldn't imagine being eight and having that experience. You'd think, "I have superpowers" because you're not touching the instrument. It just needs a bit more access.

Genre

Cox: Maybe we should unpack this genre question. On the one hand it says there's this non-genre possibility, but on the other hand, when we speak about people of color, specifically Black people, they are put in genres that are markers purposefully created, in the beginning with the classical vs. jazz dichotomy, and then going forward, to draw a sonic color line. This is a problem related to questions of representation, but also the problem of the foundational myth of computer music along with electronic music, and the absence—the purposeful erasure of people of color from that history. Which is why it's a colored myth or a non-colored myth. For example, we had this wonderful symposium at Columbia, and one of the artists that I absolutely love is Michiko Toyama. But we didn't know about her until Brigid Cohen began doing this phenomenal work of uncovering Toyama. The same was happening with Halim El-Dabh. Of course, this brings in the African, and El-Dabh purposely educates on the African roots of electronic music. Even within the stance of computer music being outside of genre (an uncritical view related to "colorblindness"), we're still bringing Black life in through a container. It's not investigating the problematic of computer music itself first.

Baker: I hate the term "jazz" because it was put there so that we can say, "this is Black people, and they can't be in this concert hall because that's jazz and this is a classical space." I always hate labels. Also recently this "Sisters with Transistors" documentary came out. I was very excited about it. I sat down to watch it. There was absolutely no representation of anyone who was not a white woman. Then they had a panel discussion and Moor Mother was on the panel and they let Moor Mother speak once, and then negated everything that Moor Mother said. To me it was the exact example of why I don't like to

associate myself as a computer musician. Because the people that are held up to high acclaim don't look like me and don't care about my voice.

Black computer music is anything made by a Black person. Same answer I have for me, Black music. We honestly have this thing, I'm laughing because I've heard it from both white people and Black people, "Elizabeth, your music's not Black." I'm like, I'm a Black person making music, so by virtue of those two definitions, it is Black music. I think one hierarchy is at the root of racism and really all oppression in the world, so we should not be trying to label anything for any reason. We should just be allowing people to do what makes them feel fulfilled as an artist, as a human. If they happen to be Black, it's Black computer music. I feel like when you try to put rules on things and create rules of what things are, you're going to leave out a lot of people who have some really unique and beautiful expressions and it's just not worth it.

Skills

Baker: With that, there's this disconnect for me because I was in production school and not academia. In production school, it's a whole different culture. If somebody needs help, you help. Skill share is a thing, it's just how you learn. Now that I'm out of production school, I work with the same people professionally. I see a lot of people doing recording and engineering work in schools who are not what I would consider to be an engineer. They know enough to carry academic applications, but they're not engineers for whom this is their craft, this is what they do every day. A lot of the Black engineers are on that other side - this is what they do every day. They're mixing, they're mastering, that is their specialty. There's a huge disconnect because there's a lot of white folks in positions of recording technology in universities who should not have those jobs, but don't want to de-access those jobs to the Black people that should have those jobs, and this creates this culture where they don't want to tell you any information because they don't want you to possibly get ahead of them. That whole mentality is just ripe for destruction and not helping people and not advancing the industry as whole.

Guidry: I will bet the price of my bassoon that so many people who do computer music that have asked me to help them with samples have no idea where to place the one mic on the bassoon at all. There's this level of God complex when you try to correct someone. It's terrible and that also it needs to be a part of these conferences, especially for white people, on how to communicate with other people and how to collaborate, because you don't know everything. You can learn so much from every single person that you decide to make music with. But also all of these institutions are saying, we're pro Black, we're pro Indigenous sovereignty and we fight for immigration reform, but they're not anti-capitalism. As soon as you start to break that down, skill share will be the way of the future because we're all broke now. Corona wiped us out and we still have to learn. We need to start teaching each other, especially Black people. That's why we make all of our own groups. It is just unfortunate that after we make our groups, these other organizations don't really want to involve us, and then we lose access to large amounts of funding. At the end of the day, to me, it's just so rooted in capitalism, and a lot of racism is also rooted in capitalism, and capitalism is rooted in racism. It just goes into this endless cycle. It is an impossible question of, which one do we tackle first?

Jackson: [F]or the people who are holding on to the power, a lot of them do not want to let go of that. It's easy to put on a rhetorical mask of saying, we welcome everybody, we want to see diversity, equity, inclusion, and belonging. But it's a different thing to actually step back to make space for others at the table.

Rhythm

Cox: One needs to remember the way that beats or rhythm is used to mark a primitiveness of African or Indigenous people. One of my favorite composers, Stockhausen, said something in an interview, and that shows what some of the founders of this computer music, the wide computer music mythology or whatever this is we're thinking of, said. He said something like, "I really appreciate all these producers, but they're too much hung up with post-African

rhythms." There is this underlying idea that this is not high art. This is why it's so important to think about the history of computer music because there are these racist ideas that are baked into it. Another important point is something that Joey mentioned very early on: aesthetics. This includes the way that certain aesthetics are trying to be seen as the ideal for sonic production or music-making. We all know the work concept and how it has been used as a way to endorse the colonial project. Relatedly, in computer music, I've rarely heard a discussion about the fact that how sounds sometimes are isolated is attempting to recreate a way of listening that ignores the eyes and ignores a lot of factors to make a certain claim about sound. That also is part of the colonial or coloniality.

Baker: I also want to point out that Afrofuturism doesn't necessarily have to have a beat. I have issues with these conferences that say "we're going to do a concert and it's all Black music." That is literally separate but equal, and I have such a huge problem with these concerts. We're going to make Blackness or Indigenous identity the theme of the concert. I understand that it's done with the best of intentions but it's problematic from the beginning. Nobody wants to be tokenized. We want to be seen for what we do and put on the same playing field as everyone else. When you're moving forward and you're trying to diversify your programming, you don't have to go to someone and say, "I'm looking to do a concert of music by under-represented composers." You can literally just say, "I like your music, I would like to program it." I think that these are very important intentions that need to be had at the beginning of trying to make change, versus trying to put the diverse people in a box and we'll just look at them like they're in the zoo. That feels really wrong and horrible to me.

Guidry: I just think everyone who does not like hip hop, or everything hip hop has influenced is anti-Black. There's people who look at hip hop and they say it's aggressive, it's too harsh, it's too loud, and those are the labels they put on it. I don't understand why they're so afraid of grooves. When people hear electronic music with beats (I also agree Afrofuturism does not have to have beats) they don't see this as art, they see it as entertainment because a lot of times Black artists are not considered artists, we're considered entertainers.

It's just so rooted in worldly anti-Blackness but especially in this country. But it is such a shame because it's the aesthetic of contemporary art and electronic music and composition. Contemporary to me means music or art of our time and that includes R&B, it includes dancehall, it includes all of these things. White people just don't want to admit that it is very hard to write a really amazing verse and then put that on top of a beat.

Cox: As Halim El-Dabh points out, much African-music has been a form of electronic music for hundreds of years because they do all this synthesis of sounds in those musics and with those instruments. There's this problem that I'm glad came up here again—this boxing of Black artists into the Black space that is other (whether it be via genre markers or otherwise). Similarly, Black critical theorists have pointed to the fact that often what Black thinkers or artists do seems to be put into a box so that it is apparently only relevant to Black people but it's actually not the fact. Instead, what really is the fact is that this work is relevant to our times, and to what is happening in the world. This is one of the ways in which racism is bad for white people, in the sense that some will disregard the reality that is at play at the moment.

Art music

Jackson: In and around 2016, I attended seven electroacoustic/computer music and experimental music concerts in, I think, five different countries. Most of the music sounded the same. If it's peer-reviewed, that's a problem with curation. Secondly, the problem is why does everything sound the same? I suspect it's because you have a generation of students just mimicking their teachers instead of learning to express their own voice or that the expression of individuality is suppressed at some point in this system. Again, this pattern was observed over multiple events in different countries (in North America and Europe), and everything just sounded the same.

Backer: Everyone uses the same sound libraries. That's part of the reason why everything sounds the same. Because people are not going out and making their own samples. They're just using the same sound libraries and so every-

thing, of course, is going to sound the same.

Jackson: When Joey was talking especially about rhythm and stealing rhythm, I was thinking about computer music and technology being used to steal these rhythms. Not just from sampled recording, but also with drum machines that make it easier for people to borrow and profit from rhythms from the African diaspora. I was reminded of Evan Williams' article "The African American Male Voice in the Electroacoustic Works of Steve Reich and Jacob ter Veldhuis," where he addresses Steve Reich's "It's Gonna Rain" and sampling of the Black voice.

Baker: Reading about how Steve Reich feels about those particular individuals that he sampled is also the grossest thing ever. He feels no financial obligation to them. He feels like this was something he himself discovered. Steve Reich's only really done one thing his entire major front-facing career, and that is, take from African American, and African culture and just recycle it with a white name, and that's the thing. It's so frustrating.

Guidry: Also, I hated "It's Gonna Rain" being played in music history and contemporary class because people make fun of it. White and non-Black POC make fun of it cause he's using it to make fun of Black voices. If anyone else in the class doesn't care, don't play this anymore. But with these composers, they get so much clout for such mediocrity. I just can't tell you how many times I've seen "Music for 18 Musicians" programmed. For what? What is the point at this point? It's very long, it's very uninteresting. The concert was supposed to be before Corona and that school prides itself on diversity. David Mannes opened with the phrase, "This school is for Black people." But the concert actually let go of all these statements and everything was Philip Glass and Steve Reich. It's just like they get programmed all the time for, I'm not going to say bad music, but not the most interesting thing on the face of this planet. It's just all stolen, like Bartok. Just so much is stolen from Blackness and it's at the point where until there are Black people, Indigenous, and Latinx in positions of power in every institution on earth, these people are still going to get programmed.

Baker: Native instruments are doing a not-so-good thing when they put pre-programmed rhythms into their products, and so many people fall back on these stock things. With software and drum machines, specifically, newer made electronic devices, these appropriated sounds and rhythms are already programmed into your device, and so it's very tempting and super-easy to use them, even though you might not have any relationship with them. I think that a call has to be made from an organization like the ICMA to go to software manufacturers, and drum machine manufacturers and say, "We need to stop this because it's not ethical." It's nice to hear them, but I don't feel that belongs in a sound library and it goes back to where Yvette was asking the question of, why does it all sound the same? This doesn't speak to the diversity of membership, but is more an ethical call to action to say that sound libraries need to be diversified and they also need to be revised in such a way that they're not appropriating from any culture.

ICMC

Cox: Why would one want to go to the conference? If the reason for that is to get tenure, then why would Black people who will not get tenure—even Cornell West doesn't get tenure—why would they want to come to the conference? I don't know. This is, I think, a real problem. There needs to be a reason for wanting to be at a conference, if one has to invest one's own resources. There's also danger in this idea that there are these simple solutions and then we can have a diverse world. But really what one has to do is decolonize, or deal with racism, deal with whiteness and Blackness and what all of that means—the problem of the color line. W. E. B. Du Bois already articulated it over 100 years ago and we still have not really dealt with it in all the spaces, especially these kinds of spaces. This is why I didn't say anything because I don't really have an answer. It's a continuing task and we cannot really give simple answers that will solve the problem. It is not possible to solve racism with a simple "12 step plan" or something like that. At the same time one has to keep working with and on this problem.

Jackson: You can invite people and that could mean reaching out to organiza-

tions that are working with Black youth like the Willie Mae Rock Camp where its director LaFrae Sci has been introducing young women to analog synthesis, or the For the Daughters of Harlem: Working in Sound project. So you could work with organizations to let them know that you exist and let them know that people are welcomed and communicating the types of activities, but don't be upset if people aren't rushing to change their ways of doing and being.

Guidry: I think I would shut the ICMA down for a couple of years. You have to bring it down and just completely rebuild because I think I said it earlier, you can't take this structure and try to make it fit Black, that's when it was never made for Blackness, and Asian, Latin, it just wasn't made for any of us. So you'd have to start all the way from the bottom and make whole new structures of how people are represented. I do think applications should be blind. That will show that there was no tokenism happening. Just finding new structures, finding new ways to do funding, finding new ways to do education. What does outreach look like? Making sure that the people doing outreach match the demographic of the place where you're doing the outreach, and speak the language. Make sure they can get to know the community because they will be a part of that community. Just things like that, but shutting down for at least one year and just restructure everything, and maybe even change the name.

Baker: I'm for shutting it down too. I'm also for not having a conference of white papers because I find a lot of times when you are writing about these things in this academic way, it's like a lens, it's like putting a camera in front of your face. You're removed from the subject and you're removed from the practice, and I often would say to myself, as a person who is a practitioner, what can we do to create more opportunities to actually do stuff? So I'm in favor of shutting it down probably for more years than Joey, and getting people to go out and interact with other people outside of their circle, outside of their bubble and really understand what is computer music in this world today, and not just sit in an ivory tower and pontificate on what computer music is today.

Cox: What is the point of an organization that puts on conferences or journals? It's to create a space for people to meet. These people can be members or not, because it's an open public conference, a public journal where everyone can submit. So that's the first point. I don't think shutting it down would help because what if no one changes who is working for it or none of the values change in that time? Some of my values would be to make it truly a democratic place in the sense that it has to be decolonizing for it to be a really democratic place. It has to practice a type of education for its members to know what kind of systems they are in. To make informed members or citizens who are actually fit to decide on things, who can articulate questions of racism, etc. That requires knowledge, so that needs to be part of the goal. I personally, everything I do, part of my value is to decolonize. If I were president, that would be part of the core values of what this specific computer music organization does. To me, this is maybe a very personal answer, but I couldn't get out of that, it's impossible.

Lyon: As a longstanding member of the ICMA, I and some other members who have been in this organization for decades have asked ourselves if the ICMA is still relevant to today's music technological practices, which have changed so profoundly since the 1970s. A decolonization process may be necessary for the ICMA to maintain its relevance in the future. Part of that would be to better understand how the ICMA functions within larger social patterns of structural racism. What else would a decolonization process require?

Cox: There are a couple of particular points. One point is the people who run it, the administrative people, the editorial committee or whatever the ICMA organization calls that, diversify all of that, the very structure of the organization. The next part to me is the by-laws and all of that stuff so basically the values and meanings behind the organization. Another part is, how is peer review practiced and by whom? If peer reviews are not practiced by a diverse set of people, then you'll basically just reproduce all the problems. So there are these multiple levels of accountability to me, and this is why I started with the organization, even the very core values, because even that, it is a form of

accountability when you do something against the organization. You come in as a new vice president or president, you have to make sure that you continue what the organization needs. This means if we want to change what the organization needs/wants then we have to change its core values. If that doesn't happen through practice, as in the historical practice, then it has to happen through a set of new laws—change the laws.

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The complete interview transcription is available under 10.25370/array.v2021.1

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