

This is a repository copy of Neuroqueer(ing) noise: beyond 'mere inclusion' in a neurodiverse early childhood classroom.

White Rose Research Online URL for this paper: https://eprints.whiterose.ac.uk/216685/

Version: Published Version

Article:

Shannon, D.B. orcid.org/0000-0001-7642-0667 (2020) Neuroqueer(ing) noise: beyond 'mere inclusion' in a neurodiverse early childhood classroom. Canadian Journal of Disability Studies, 9 (5). pp. 489-514. ISSN 1929-9192

https://doi.org/10.15353/cjds.v9i5.706

Reuse

This article is distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND) licence. This licence only allows you to download this work and share it with others as long as you credit the authors, but you can't change the article in any way or use it commercially. More information and the full terms of the licence here: https://creativecommons.org/licenses/

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



Disability Studies Published by the Canadian Disability Studies Association · Association Canadienne des Études sur l'Incapacité

Canadian Journal of Disability Studies

Published by the Canadian Disability Studies Association

Association Canadienne des Études sur le handicap

Hosted by The University of Waterloo

www.cjds.uwaterloo

Neuroqueer(ing) Noise: Beyond 'Mere Inclusion' in a Neurodiverse Early Childhood Classroom

David Ben Shannon Education and Social Research Institute Manchester Metropolitan University david.b.shannon@stu.mmu.ac.uk

Abstract

Inclusion, as it is understood in a British education context, usually refers to the integration of children with dis/abilities into a mainstream school. However, rather than transform the school, inclusion often seeks to rehabilitate—to tune-up—the 'divergent' child's noisy tendencies, making them more easily included. Music and the arts more broadly have long been instrumentalized as one way of achieving this transformation, relying on the assumption that there is something already inherently opposed to music—out-of-tune, or noisy—about that child. In this article, I think and compose with Neuroqueer(ing) Noise, a music research-creation project conducted in an early childhood classroom. I draw from affect and neuroqueer theories to consider how the instrumentalization of music as a way to include autistic children relies on the assumption that 'they' are already inherently unmusical. I consider how a deliberate attention to noise might help in unsettling 'mere inclusion': in effect, changing the mode we think-with in education, and opening us—researchers and educators—to momentarily say "No!" to 'mere inclusion'. This article is of relevance to teachers working in early childhood classrooms, as well as to educational researchers interested in affect theories, crip-queer and neuroqueer theories, and neurodiversity, as well as sound- or arts-based research methods.

Keywords

Affect, Arts-Based Methods, Autism, Crip Theory, Early Childhood, Neuroqueer, Research-Creation, Sound

Introduction

Whenever you compose or play music in a school, somebody(mind)¹ is always noisily out-of-tune. Not in the common-sense meaning—which for me implies off-key recorders, 600 different versions of *What a Wonderful World*, and a mild 3 pm migraine—but in terms of *tendencies*. Somebody(mind)'s tendencies are always noisily out-of-tune: running out of phase with the melody: ruining your careful attempt at harmony.

Inclusion, as it is understood in a British education context, usually refers to the integration of children with dis/abilities into a mainstream school. However, rather than transform the school, inclusion often seeks to rehabilitate—to tune-up—the 'divergent' child's noisy tendencies, making them easier to include. Music, as well as the arts more broadly, have long been instrumentalized as one way of achieving this transformation, relying on the assumption that there is something already inherently opposed to music—out-of-tune, or noisy—about that child.

In this article, I think and compose with a music research-creation project conducted in an early childhood classroom. I draw from affect and neuroqueer theories to consider how the instrumentalization of music as a way to include autistic children relies on the assumption that 'they' are already inherently unmusical. I consider how a deliberate attention to noise might help in unsettling 'mere inclusion': in effect, changing the mode with which we think in education, opening us to momentarily say "No!" to 'mere inclusion'.

¹ I follow others (e.g. Price, 2015; Schalk, 2018) in adopting the language of 'body(mind)'. In so doing, I respond to the silent neuronormativity of some disability studies scholarship. I also hope to indicate the violence with which neurodivergence is often played out on racialized and gendered bodies. I depart from Price and Schalk in parenthesizing 'mind' to make clear that I'm not indicating the separation of body *from* mind, but rather explicitly invoking the minding aspects of embodiment.

Walking through Leeds on a Windy Day: Research-creation with young children.

Walking through Leeds on a Windy Day is a 33-minute electroacoustic composition. It was created as part of Neuroqueer(ing) Noise, which is a research-creation project in an innercity primary school in northern England. I understand research-creation as the making of art as a way of doing and theorizing research (Truman & Springgay, 2015). The content or findings of research-creation are interrelated with its form (Loveless, interviewed in Truman et al., 2019; Truman & Shannon, 2018). In this way, research-creation does not seek to represent data extracted from an environment (Shannon & Truman, 2020); rather, the process of composition—in this case, the process of composing Walking through Leeds on a Windy Day—is the research findings.

This research-creation project was a collaboration between a single class of thirty children, their classroom teacher, their support adults, and me. I am a doctoral student, an electroacoustic composer, and a special education teacher. The in-school project explored the relationship between music composition and the instability of 'neurotypicality', specifically at the intersection of racializing, Anglo-centric, and abling/disabling processes. Research-creation is distinct from approaches to artistic practice that understand art as something that is 'brought in' from outside, whether as pre-formed techniques, canon or curricula (Springgay, 2020).

Instead, research-creation "resides in the speculative middle" (Springgay, 2020, p. 150): I did not approach the classroom with a list of compositional techniques, canonical works, or curriculum statements in mind. However, this does not mean that I was unprepared. Nor did I eschew technique, canon, or the curriculum. Rather, research-creation is oriented primarily by its feminist, anti-racist and anti-ableist intention to method (Springgay & Truman, 2018; Springgay

in Truman et al., 2019). In this way, the project described in this paper was shaped by *propositions*, with technique, canon and curricula curated to better attune to different intensities and flows.

The wider research-creation project was conducted as a series of weekly, hour-long music composition episodes between May 2018 and July 2019. We composed *Walking through Leeds on a Windy Day* as part of this project: between October 2018 and February 2019, when the children were in Year 2. The class topic for this period was 'human and physical features of the local community'.² Part of the unit was planned to include a walk around the school's local area. We—adults, children, me—decided to incorporate a pair of 'phonographic walks' (see Shannon, 2019) into the weekly composition episodes. Our opening proposition was 'local sounds'. You can hear *Walking through Leeds on a Windy Day* via the SoundCloud link below. A written description is included for D/deaf readers:

https://soundcloud.com/davidbenshannon/walking-through-leeds-on-a-windy-day/s-9fgdH

Consent

I sought consent from each child's grown-up for them to participate. I also facilitated ongoing consent from the children by running each episode twice: Children in the research class could refuse to take part in the music research-creation without missing out on the musical activities simply by walking through the adjoining door into the school's second Year 2 class, who would later participate in a near-identical—but 'research-free'—music episode. This also kept provision equitable across the cohort.

² This is a compulsory component of the Year 2 Geography curriculum.

Inclusion, the Neuroqueer & Instrumentalism

The research-creation project was conducted in an inner-city primary school in northern England. The school community is diverse: racially, linguistically and neurologically. 90% of the school's cohort identify as Black, Eastern European, South Asian, East Asian, or Romani or Traveller. 70% identify as speakers of one of seventeen home languages other than English, including Akan, Arabic, Chinese (Shandong and Lower-Yangzi Mandarins), Bengali, Czech, English, Finnish, Romanian, Polish, Spanish, Turkish and Urdu. A significant proportion also claims Pupil Premium (an indication of low-income), and the school's catchment area falls within the 5% most economically disadvantaged boroughs in the country. Like most (if not all) education settings in Britain, the class is neurodiverse: some children are identified as 'neurotypical', while others have been identified as autistic, or otherwise *neuroqueer*.

Throughout this piece, I adopt the neuroqueer as an orientation to neurodiversity and inclusion. I understand the neuroqueer as an emerging perspective that seeks to unsettle fixed understandings of 'neurotypical', while revelling—fabulously, flamboyantly—in unabashed expressions of neurodivergence (Egner, 2019; Yergeau, 2018).³

In a British education context, 'inclusion' usually refers to the physical integration of neuroqueer children into a mainstream school. David Mitchell (2014) contends that inclusion "requires the reification of homonormative values," wherein integration is "based on the ability to approximate values of normalcy" (p. 1). Inclusion, then, might be understood as less about changing what we understand by education, and more about rehabilitating the child to more closely approximate 'normalcy'. In this way, inclusion might be thought of as a "rehabilitation

³ Crip theorists such as Kafer (2013) and McRuer (2006) have long contended that disability should be understood in this way: as simultaneously a Queer political and cultural gesture, and a queering disruption of 'normal'. However, 'crip' is sometimes a "point of contention in neurodivergent spaces" due to its bodily emphasis (Yergeau, 2018, p. 85).

that makes disability disappear" (McRuer, 2006, p. 129). However, this rehabilitation can only be an 'approximation': a disappearance rather than a dematerialization. Rehabilitation, then, is a process of closeting the divergent child, making them just-includable-enough by masking their most divergent tendencies. In this way, divergent body(mind)s become what Heather Sykes (2016) might call 'absent presences' (p. 60), whereby inclusion as a visual and physical integration masks the ways in which the included individual continues to be excluded.

I take up the neuroqueer because of my own queer 'identification-with' neurodivergence. I am an abled, cis-gendered, gay white man. I do not identify *as* disabled. However, in building on the lineage of scholarship authored by abled people in solidarity with disabled people—e.g. 'crip affiliation' (Kafer, 2013), 'coming-out crip' (McRuer, 2006), and 'crip-identified' (Schalk, 2013)—I identify *with* neurodivergence. For Sami Schalk (2013), to identify-with is to have "acknowledged and prioritized political and personal connections to a group with which one does not identify as a member" (para. 20). There has already been extensive exploration of the interrelation between neuro- and gender-queerness, including at their intersection (e.g. Adams & Lang, 2020; Egner, 2019), of the shared medical response in behavioural therapies (e.g. Yergeau, 2018), and of their co-constitutive 'discovery' (e.g. Gibson & Douglas, 2018; McGuire, 2016). As a neurotypical gay man, I recognize something of the shared noising of tendencies between gender and neurological queerness. While contemporary homonormativity—the enabling of white gay men to 'pass' in a way that is not yet afforded autistic people—has marked a point of divergence, the areas of overlap here remain a productive space for thinking.

All too often, the arts are taken-up as one means of facilitating inclusion. Rubén Gaztambide-Fernández (2013) might call this an 'instrumentalist approach', by which the value of the arts is in their perceived capacity to transform "educational outcomes and individual

experiences, or even... the consciousness of individuals" (p. 212). The 'Mozart effect' is one (in)famous example of an instrumentalist approach to music. The Mozart effect is the supposed enhancement to educational attainment or child development afforded by accompanying everyday activities with certain pieces of (usually Western classical) music. The effect was initially posited by Rauscher et al. (1993) and its impact was limited to university-aged participants completing spatial awareness tasks while listening to the *allegro con spirito* of Mozart's sonata for two pianos in D major (KV 448). The effect has since been expanded to include a franchise of related effects, such as the 'Vivaldi effect' (Giannouli et al., 2018), the 'Philip Glass effect' (Rauscher et al., 1995), the deliciously named 'Blur effect' (Schellenberg & Hallam, 2006), and a 'raindrop sound-effects effect' (Proverbio et al., 2018). Aside from the obvious colonial, white supremacist ideology underpinning some of these effects, each is an example of an instrumentalist approach, by which mainstream education values the arts only because they're serving the inclusion agenda: i.e. helping to rehabilitate children to better approximate 'values of normalcy'.

A Mozart-effect-style instrumentalist approach to music has been used to reduce the frequency of autistic practices, such as stimming or asociality. Sometimes this is done through completing musical activities in combination with other therapies (e.g. J. Kim et al., 2008; Sharda et al., 2018; Vaiouli et al., 2015). Sometimes it is done through accompanying everyday activities with music (e.g. Whipple, 2004). In this way, an instrumentalist approach to music is similar to other behavioural approaches to neurodivergence: they seek to rehabilitate the divergent individual by closeting them, ensuring that they better approximate 'values of normalcy'. Moreover, in seeking to reduce the frequency of autistic practices by bringing music

⁴ Pietschnig et al. (2010) offer a detailed and critical overview of some of this work.

into the autistic body(mind), this instrumentalist approach relies on the assumption that autistic practices are already inherently *un*musical.

Another scholarship has sought to establish some autistic people as highly creative savant-like proteges.⁵ For instance, Jon Fessenden (2019) has written on the ways that autistic people might demonstrate a particular skill in 'pitch perception'. I am not suggesting here that this is impossible or without value. However, I might suggest that it demonstrates a similar underlying logic as described of the Mozart effect and other instrumentalist approaches to the arts. Kristina Chew (2008) contends that the savant narrative is an example of 'empathetic poetics', by which extreme skill in some area considered uniquely human—i.e. normative notions of 'music'—is used to present the autistic body(mind) as a distillation of what we consider most-valuable about the human. This kind of hyper-normativity encourages neurotypicals to empathize with neurodivergence. It might also be thought of as akin to what Jasbir Puar (2017) calls 'piecing'. For Puar, piecing is a process by which divergent body(mind)s place front-and-centre their most passable tendencies so as to better approximate values of normalcy. In other words, the savant narrative seeks to salvage the least-autistic/most-includable 'pieces' of the autistic body(mind) in order to better mask the most-autistic/least-includable pieces.

Both approaches to music described here are instrumentalist approaches. They continue to understand art as something that happens outside and is then 'brought in'—whether from outside the classroom or outside the autistic body(mind). Moreover, the value of the arts is caught up in inclusory therapeutic outcomes: music is 'brought in' to the autistic body(mind) to reduce the presentation of behaviours that fail to pass (i.e. disguising the 'most autistic' pieces),

⁵ See Straus (2014) for an overview.

or else maximizing those most normative tendencies that already pass (i.e. salvaging the 'least autistic' pieces). In so doing, it has to assume that there is something opposed to music—noisily out-of-tune—inherent to autistic practices.

Above, I introduced the neuroqueer as a perspective that seeks simultaneously to revel in unabashed expressions of neurodivergence, even while it unsettles the fixity of 'neurotypical'. For the remainder of the article, I explore two episodes from the composition of Walking through Leeds on a windy day that exemplify these dual functions, or what José Esteban Muñoz (1999) might call counter-identification and dis-identification. First, I think and compose with a vocal improvisation that became heard as noisily out-of-tune in the classroom. I consider this improvisation an example of *Neuroqueer* counter-identification: it momentarily unsettles fixed notions of neurodivergence and neurotypicality by calling for us to take autistic practices seriously. Second, I examine an episode in which we composed with statements in the children's home languages, which for most children was a language other than English. I consider this an example of neuroqueer disidentification in that we momentarily unsettled fixed notions of neurodivergence and neurotypicality, as well as *neuroqueering* the adjacent intersections of race and ethnicity. In short, I explore how we—researchers and educators—might change how we think and listen in education, opening us to momentarily say "No!" to 'mere inclusion' (Muñoz, 2009).

Neuroqueer noise

In preparation for our phonographic walk, I introduced the children to the music production technique 'sampling'. To sample is to repurpose snippets of audio (i.e. samples) as

part of a larger composition. We listened to examples of sample-based music⁶ and watched a video featuring D/deaf artist Christine Sun Kim's phonographic explorations of sound (Nowness, 2011) to explore how samples might be used compositionally. We played an adapted version of the 'echo game': rather than a pair of collaborators calling-and-responding with different percussion instruments (e.g. trying to play a large bassy drum in a way that sounds like a triangle), we used acoustic instruments to echo samples that we cued from an iPad (e.g. bird song, burp, clock ticking). In this way, we complicated the perception of what passes as 'music' and what is denigrated as 'noise'. 'Sampling' became a proposition: technique, canon and curricula curated to attune to a queer-feminist, anti-racist and anti-ableist intention to method.

Feminist sound studies scholars have described at length the ways in which perception of a sound might pivot between 'music' and 'noise' along racializing (e.g. Barrett, 1999; Bradley, 2014; Eidsheim, 2019; Stoever, 2016), gendering (e.g. Thompson, 2016, 2017) and abling/disabling lines (e.g. Kafer, 2013; Truman & Shannon, 2018). Here, I suggest that this sonic pivot assumes a *lesser capacity to affect than to be affected* of the noising body(mind). Theories of affect attend to how the passage of intensities between body(mind)s shapes their capacities to: (1) affect other body(minds) and (2) become further affected. Scholars interested in the ways that theories of affect might be used to understand and unsettle patterns of oppression—such as racism, ableism and queerphobia—have contended that the flow of these intensities is conditioned: body(mind)s become 'saturated' (Ahmed, 2004) with perceptions of their capacities that ultimately go on to partially determine what that body(mind) can do. For Mel Chen (2012), these hierarchical perceptions are underpinned by the degree of animacy—of "agency, awareness, mobility, and liveness" (p. 2)—assumed of that body(mind): a stone has less animacy

⁶ Pink Floyd's *Money* (1973); Steve Reich's *Different Trains* (1988); Ben Phaze's *After Hours* (2013); and my own works, 60,000,000,000 (2007) and *Old Green's Life Night* (2008).

than a bumblebee, somebody with an intellectual dis/ability has less animacy than a wheelchair user, and so on. At the apex of this animacy hierarchy sits the normatively abled white man. It's important to note that neither Chen nor myself is saying that this animacy hierarchy is somehow 'true', but rather that the perception of a body(mind)'s animacy—its affective saturation—has a material impact on that body(mind).⁷

On a cold windy afternoon, we walked for thirty minutes around the school's local vicinity. I carried a microphone hooked up to my cell phone to record sounds we might encounter, although I also (correctly) suspected that the wind would disturb the microphone too much for any recordings to be useful as samples. Later, wind-whipped and back in the classroom, we listened to the recording, and listed the sounds we had heard: a bus, footfalls, snatches of conversation, birdsong, and "Mr. Shannon talking non-stop." Given that the samples we'd recorded were useless, we explored how else we might work with sounds we'd encountered. Over the next few weeks, we worked with the recording to create graphic compositions. Children worked in small groups to compose a score using a single line, with different colours to indicate different timbres and troughs and peaks to indicate different intensities. We rehearsed for one week and then recorded the composition in as-near-as-possible-to studio conditions as we could manage in the classroom.

An example of the material impact of affective saturation can be heard beginning at 6:12 in the recording. Rei improvises a sudden, six-note vocalization over her performance of the composition. Rei can be heard to move between the microphones as her improvisation develops, becoming closer to them as she does. Rei is a neuroqueer girl: she is largely 'non-speaking'

⁷ Theorists of Black affect (e.g. Ngai, 2007; Palmer, 2017) have written extensively on the ways in which the racializing perception of affects assumes a lack of intentionality of the racialized body(mind): of animation without animacy. Recent examples among millions of this perception might include Eric Garner and George Floyd's unheeded pleas of "I Can't Breathe" while they were being murdered by Daniel Pantaleo and Derek Chauvin.

(although not 'non-vocal') and has a full-time Learning Support Assistant (LSA). On hearing her improvisation, Rei's LSA hurriedly reaches across the carpet to take Rei's hand. When it becomes clear that Rei's short improvisation has finished, the LSA relaxes back to the edge of the carpet, leaving Rei to carry on performing the composition. A second vocalization was improvised by Kwodwo, a 'neurotypical' boy. Kwodwo's improvisation begins at 16:04 and lasts for 55 seconds. Although considerably longer than Rei's—and employing a range of sounds including rhythmic hums and giggles—Kwodwo's improvisation is not interrupted.

The etymology of 'noise' lies in 'nausea', and so is associated with disgust (Novak, 2015). For Ahmed (2004), disgust is performative: logics of disgust drive the expulsion of the object, whereby the subject finds it disgusting *in the act of expelling*. In other words, Rei's LSA did not find Rei's improvisation inherently disgusting—and most definitely does not find Rei disgusting—but rather could *only* have performed disgust when faced with Rei's improvisation because of how the 'listening ear' (Stoever, 2016) must operate within the confines of inclusion: the six-note improvisation is not includable, and so must be excluded. As such, my intent in thinking through this episode is not to critique an individual colleague for choosing to expel Rei, but rather to unsettle the logics that perform *all* educators in mainstream education: I am as subject to and as culpable of these logics as the LSA in this episode was.

Melanie Yergeau (2018) writes: "involuntarity dominates much of the discourse on autism" across "thought, mode, action, and being" (p. 7). For Yergeau, autistic practices such as self-stimulatory behaviours (sometimes called stimming), special interests, and asociality are understood as involuntary: "as impulses that unfold rather than intend" (p. 35). In this way, Yergeau contends that the popular perception of the autistic is one that emphasizes the *auto*- (as in automatic) as much as the *autos* (as in self): the autistic is an *auto*-maton. Autistic practices

are 'involuntary', and so autistic people lack agency: "rhetoric never arrives" (p. 83). Volition becomes what Snyder and Mitchell (2010) might call a 'minimum capacity' for inclusion. This pivots the perception of the listening ear: rather than perceive Rei's vocalization as music, the perception that it was involuntary—inanimate—means it holds a lesser capacity to affect, and so can only be perceived as noise. However, without this vocalization, Rei passes at the level of the performed; Rei could be visibly included as an absent-presence.

Noise is not the end

In research-creation, the 'finished' composition and research are always fuel for further composing and researching. I was drawn to Rei's improvisation. It is tuned perfectly within the 12 semi-tone harmony system. Moreover, the improvisation is consistent with an octatonic diminished scale. If Rei's starting note is the root-note of the scale, then she is composing with the half-whole diminished scale starting on B, which may imply an accompanying B^{13b9} chord. This chord can now be heard throughout the composition as a pad, changing the mode (the harmonic foundation) of the composition. I also compose with her original six-note melody, echoing it on the piano, and adding countermelodies. In this way, 'noise' is quite literally centred in the work.

A rich line of thinking across sound studies has already looked to the ways in which 'noise' has been (or else could be) re-appropriated: rather than remain denigrated as 'not music', these scholars have considered how noise disrupts the inclusory logics along which music and noise pivot. For instance, Tricia Rose (1994) discusses the music production technique that she terms 'into the red': a production technique common in rap and hip-hop music, whereby the gain of a track is pushed beyond the point at which the sound begins to distort. This technique is epitomized by the Roland TR-808 bass drum, which Tricia Rose describes as a "fat sonic boom"

(p. 75). The popularity of this 'fat sonic boom' forced other audio engineers to deliberately work 'in the red': at the point at which 'music' distorts into 'noise' and thereby complicating the fixity of both. Alexander Weheliye (2005), meanwhile, theorizes the interrelation of Black musical practices—often described as 'noisy'—with the development of modern phonographic technology, and so of the necessity of 'noisy' Blackness to the existence of modernity. Others have started to do similar work in regards to dis/ability, such as cripping stammering (Pierre, 2015) and sonic assistive technologies (Sterne, 2019) to explore how they might unsettle normative notions of time and voice, respectively. However, much of the uptake of autistic practices in sound studies has remained oddly silent (e.g. Bakan, 2014) or else falls into the 'empathic poetics' described above.

Queer-inhuman theorist Eunjung Kim (2015) argues that, instead of compensatorily affording disabled people capitalist-era humanist traits—the absence of which justifies exclusion—we should instead make those traits "irrelevant in recognizing the ontology of a being" (p. 305). In this way, Kim contends that rather than 'include' by effacing difference or assuming some underlying sameness (which really is just another way to efface difference), we should change the whole notion of perception. As indicated by my own composing-with, there is nothing unmusical about Rei's vocalization. Rei's LSA sought to exclude her because the perception of the 'listening ear' marked it as autistic: involuntary and inanimate rather than voluntary and animate. Changing the musical mode with which we listen to the vocalization—as I have done in *Walking through Leeds on a Windy Day*—brings the listening experience 'in-tune' with Rei's improvisation, rather than seeking to tune her up through inclusion. Changing the mode of perception with which we encounter neuroqueer noise removes the justification for exclusion.

Neuroqueer(ing) Noise

Inclusion in the UK "requires the reification of homonormative values," wherein integration is "based on the ability to approximate values of normalcy" (Mitchell, 2014, p. 1). In the UK, these values usually refer to normative notions of ability/disability. We completed our initiating walk in October 2018, a little over two years after the Brexit vote, and smack in the middle of a period of mounting British nationalism that manifests as increased Islamophobic, racist and queerphobic violence. In this diverse space, an understanding of an ability/disability binary is complicated by the ways in which other patterns of oppression intersect: as Puar (2017) writes, instead of asking "are you disabled?" we should ask, moment-by-moment, "how abled are you? and how disabled are you?" (p. 56). In other words, body(mind)s are saturated by affects that ultimately condition what that body(mind) can do.

My own 'talking non-stop'—my white, cis-male, neurotypical talking non-stop—was indicative of the Anglo-centrism of many educational settings. This is despite the significant linguistic diversity of the research school's community. Two months after the walk, we discussed how my 'talking non-stop' related to what we heard on the walk. Ioan commented: "in school, we talking English." In this way, then, just as the included neuroqueer child can become an absent-presence in a neuronormative space—their physical integration naturalized while leaving intact minoritizing structures—a polylingual child can become an absent-presence in an Anglo-centric space.

We formulated a new proposition: to compose with samples of "other languages that we know." The next week, we recorded samples from our other languages. Some of the children asked for post-it notes so they could compose the sentences in advance. I'd forgotten how to give out pieces of paper to six-year-olds without causing a bloodbath and had to be rescued by the

class teacher. We somehow go through 240 post-its. Ama decided to record the sentence: "Me llamo Ama. Tengo siete años." Marie said: "我叫 Marie. 我吃汉堡包." Rei said: "小狗." Joseph switched between English and Akan. Five months later, while listening back to the composition, Abdurahman will reveal through peals of laughter that his home language sentence was the Arabic for "I'm going to smack your bottom." Zhang Wei, possessed of exceptional English and conversational Chinese, became distressed when he couldn't write his home language statements in \mathbb{Z} ? (Chinese characters); he tried several times to think of a sentence, but then became tearful. He explained that "Rei and Marie go to Chinese school, but I don't go to Chinese school." I offered him the option to record some words after class, or the following week, but he declined. Other children recorded their sentences in the corridor, away from the class. Virginia, whose home language is English, said, "Why?" Similarly, Lucy said, "Hello!" Janai (whose home language is also English) uttered several phonemes, some of which I thought resembled Czech, and concluded his sentence with 'oo la la'. Ozge, the class teacher, expressed that she was moved by the activity. She explained that there wasn't space to work with home languages often and commented later that she hadn't realized that, for instance, Rei and Marie could write and speak in Chinese.

In the previous section, I thought about Rei's improvisation as neuroqueer noise, suggesting how we might better value neuroqueer practices as examples of counter-identification (Muñoz, 1999). However, at its queerest—its most 'utopic' (Muñoz, 2009)—the neuroqueer resists the formation of its own or indeed any boundaries. By this, I mean that neuroqueering (as a verb) doesn't just change the mode with which we qualify *disability*: it also changes the mode with which we qualify *ability*. In suggesting home languages as a compositional tool, I hoped we would render their exclusion audible. However, in this episode, English as what Snyder and

Mitchell (2010) might call a 'minimum capacity' for inclusion also seemed, momentarily, to be unsettled.

I hope it's obvious that I am not suggesting that speaking multiple languages is a 'dis/ability', nor that racialized people are 'neurodivergent' (in the way schools might typically understand it). I'm suggesting that neuroqueering tendency in this way doesn't just have implications for how we orient towards neurodiversity, but also for how we orient towards linguistic, racial and gender diversity. As described above, children whose only home language is English, or who have less experience in another language, found the task a little bewildering. Indeed, I was thoroughly bewildered by Abduhrahman's "I'm going to smack your bottom": especially as I had already shared the composition at a handful of academic conferences! In this way, neurotypical speakers of English as a home language were momentarily debilitated, just as Rei's neuroqueer 'non-speaking' was momentarily affectively capacitated by her ability to write and say 小狗 ('small dog', or puppy). In this way, the performativity of the listening ear was momentarily shifted into a different mode. Rather than 'include', which necessitates the rehabilitation of the divergent child, education itself as the thing in which we want to include children was momentarily modulated so that body(mind)s came to pass differently. As Brian Massumi (2015) writes: "The oddest of affective tendencies are OK—as long as they pay" (p. 20). In this encounter, in simple terms, I hope that we momentarily modified the conditions of 'what pays'.

Conclusion: Dis/ability Justice in Education

I am putting the finishing touches to this article in September 2020, whilst writing up my doctoral thesis and having just started a part-time role as a special education teacher.

Consequently, these conclusions seem even more relevant to me now than when I first drafted this piece.

Inclusion, as it operates in British schools, is the physical integration of disabled children into mainstream settings, while leaving unchallenged the pedagogical understandings that dis/able them in the first place. Under these logics, autistic practices are involuntary and so inanimate: never music, always noise.

Yergeau (2018) argues that, despite the perception that autistic practices are involuntary, ultimately, *nobody* chooses their neurology: volition can only take credit for so much. Yet, the inconceivability of autistic agency is caught up in systems of releasing the 'real human'—capable of volition and so, 'obviously', the non-expression of autistic practices—who is trapped inside the autistic, even where doing so seems to (violently) violate their will, because what seems to be at stake is the very capacity *to* will.

Muñoz (2009) conceptualizes queer refusal of inclusion as simultaneously "failure and virtuosity" (p. 169). Rei's improvisation was virtuosically musical (half-whole diminished over B^{13,9}!) and yet flamboyant in its failure to pass as neurotypical: in this way, it was a refusal to be included. This has implications for how we—educators and researchers—understand what is valued in educational spaces, including the very refusal of those understandings. How might we direct support staff to transform education settings rather than to rehabilitate children to be better included? What if we render 'inclusion' irrelevant to measures of 'value', both in terms of how we approach the arts and to how we approach the autistic? What might happen if we remain open to every rock, stim, and scat? Yergeau (2018) has described *neuroqueer rhetorics* as "anti-rhetorics [...] cunning enough to claim and embody the arhetorical" (p. 40). Applied across the school curriculum, a neuroqueer understanding of rhetoric—that renders (in)volition and all

other (neuro)normative humanistic notions of 'minimum capacity' as irrelevant to a practice's value—might reframe these 'involuntary' moments of refusal as that which both "embraces and fucks with rhetoric" (Yergeau, 2018, p. 40).

Throughout this article, I have described my project as 'momentarily unsettling' the fixity of neurodivergence and neurotypicality, of capacity, and of adjacent domains. The modulations—embracings and fuckings-with—that I've proposed operate for only a few seconds at a time, and frequently rely on my own capacitation: as a white, cis-gendered, abled male; as a visiting 'expert'; and as an experienced teacher and musician. Moreover, I'm not sure that a more massive disruption is inherently valuable. Muñoz (1999) contends that rejecting assimilation is not possible for "all minoritarian subjects all of the time" (loc. 3307). In this way, at times, becoming more easily includable is essential: particularly for those living at the intersection of dis/ability, racialization, and cis-gendering. Yet, the logics of 'momentary unsettling' that I've suggested here are replicable. Not to suggest that we ever let go of dis/ability, or that inclusion is never valuable, but rather to indicate some ways that we can—sometimes, momentarily—say "No!" to 'mere inclusion' (Muñoz, 2009), neuroqueering autistic 'noise' as:

- 1. Musical;
- 2. rhetorical;
- 3. jazzy (half-whole diminished over B^{13b9}!);
- 4. flamboyant;
- **5.** and fabulous.

Acknowledgements

I would like to thank Dr. Abigail Hackett for her generosity in commenting on many different drafts of this article, as well as the anonymous reviewers for their comments.

References

- Adams, N., & Lang, B. (2020). *Trans and autistic: Stories from life at the intersection*. Jessica Kingsley Publishers.
- Ahmed, S. (2004). The cultural politics of emotion. Edinburgh University Press.
- Bakan, M. B. (2014). The musicality of stimming: Promoting neurodiversity in the ethnomusicology of autism. *MUSICultures*, *41*(2), 133–161. https://journals.lib.unb.ca/index.php/MC/article/view/22914
- Barrett, L. (1999). Blackness and value: Seeing double. Cambridge University Press.
- Bradley, R. (2014). Fear of a Black (in the) suburb. *Sounding Out!*https://soundstudiesblog.com/2014/02/17/fear-of-a-black-in-the-suburb/
- Chen, M. Y. (2012). *Animacies: Biopolitics, racial mattering, and queer affect*. Duke University Press.
- Chew, K. (2008). Fractioned idiom: Metonymy and the language of autism. In M. Osteen (Ed.), *Autism and representation* (pp. 133–144). Taylor & Francis.
- Egner, J. E. (2019). "The disability rights community was never mine": Neuroqueer disidentification. *Gender & Society*, *33*(1), 123–147.

 https://doi.org/10.1177/0891243218803284
- Eidsheim, N. S. (2019). *The race of sound: Listening, timbre, and vocality in African American music*. Duke University Press.
- Fessenden, J. W. (2019). Autistic music, musicking, and musicality: From psychoanalytic origins to spectral hearing, and beyond. *Journal of Literary & Cultural Disability Studies*, *13*(1), 1–19. https://doi.org/10.3828/jlcds.2019.1

- Gaztambide-Fernández, R. (2013). Why the arts don't do anything: Toward a new vision for cultural production in education. *Harvard Educational Review*, 83(1), 211–237. https://doi.org/10.17763/haer.83.1.a78q39699078ju20
- Giannouli, V., Kolev, V., & Yordanova, J. (2018). Is there a specific Vivaldi effect on verbal memory functions? Evidence from listening to music in younger and older adults.

 *Psychology of Music, 47(3), 325–341. https://doi.org/10.1177/0305735618757901
- Gibson, M. F., & Douglas, P. (2018). Disturbing behaviours: Ole Ivar Lovaas and the queer history of Autism science. *Catalyst: Feminism, Theory, Technoscience*, 4(2), 1–28. https://doi.org/10.28968/cftt.v4i2.29579
- Kafer, A. (2013). Feminist, queer, crip. Indiana University Press.
- Kim, E. (2015). Unbecoming human: An ethics of objects. *GLQ: A Journal of Lesbian and Gay Studies*, 21(2–3), 295–320. https://doi.org/10.1215/10642684-2843359
- Kim, J., Wigram, T., & Gold, C. (2008). The effects of improvisational music therapy on joint attention behaviors in autistic children: A randomized controlled study. *Journal of Autism and Developmental Disorders*, 38, 1758–1766. https://doi.org/10.1007/s10803-008-0566-6
- Massumi, B. (2015). Politics of Affect. Polity Press.
- McGuire, A. (2016). War on autism: On the cultural logic of normative violence. University of Michigan Press.
- McRuer, R. (2006). *Crip theory: Cultural signs of queerness and disability*. New York University Press.
- Mitchell, D. T. (2014). Gay pasts and disability future(s) tense. *Journal of Literary & Cultural Disability Studies*, 8(1), 1–16. https://doi.org/10.3828/jlcds.2014.1

- Muñoz, J. E. (1999). *Disidentifications: Queers of color and the performance of politics*.

 University of Minnesota Press.
- Muñoz, J. E. (2009). *Cruising utopia: The then and there of queer futurity*. New York University Press.
- Ngai, S. (2007). *Ugly feelings*. Harvard University Press.
- Novak, D. (2015). Noise. In D. Novak & M. Sakakeeny (Eds.), *Keywords in Sound* (pp. 125–138). Duke University Press.
- Nowness. (2011). *Todd Selby x Christine Sun Kim*. [Video]. Youtube. https://www.youtube.com/watch?v=mqJA0SZm9zI
- Palmer, T. S. (2017). "What feels more than feeling?": Theorizing the unthinkability of Black Affect. *Journal of the Critical Ethnic Studies Association*, *3*(2), 31–56.

 http://www.jstor.org/stable/10.5749/jcritethnstud.3.2.0031
- Phaze, B. (2013). After Hours [Music composition]. On After Hours [Album].
- Pierre, J. S. (2015). Distending straight-masculine time: A phenomenology of the disabled speaking body. *Hypatia*, *30*(1), 49–65. https://doi.org/10.1111/hypa.12128
- Pietschnig, J., Voracek, M., & Formann, A. K. (2010). Mozart effect-Shmozart effect: A metaanalysis. *Intelligence*, 38(3), 314-323. https://doi.org/10.1016/j.intell.2010.03.001
- Pink Floyd. (1973). Money [Song]. On The Dark Side of the Moon [Album]. Harvest.
- Price, M. (2015). The bodymind problem and the possibilities of pain. *Hypatia*, 30(1), 268–284.
- Proverbio, A. M., Benedetto, F. De, Ferrari, M. V., & Ferrarini, G. (2018). When listening to rain sounds boosts arithmetic ability. *PLoS ONE*, *13*(2).
 - https://doi.org/10.1371/journal.pone.0192296
- Puar, J. K. (2017). The right to main: Debility | capacity | disability. Duke University Press.

- Rauscher, F. H., Shaw, G. L., & Ky, C. N. (1993). Music and spatial task performance. *Nature*, *365*, 611. https://doi.org/10.1038/365611a0
- Rauscher, F. H., Shaw, G. L., & Ky, C. N. (1995). Listening to Mozart enhances spatial-temporal reasoning: towards a neurophysiological basis. *Neuroscience Letters*, *185*(1), 44–47. https://www.sciencedirect.com/science/article/abs/pii/0304394094112214
- Reich, S. (1988). Different Trains [Music composition]. On *Different Trains/Electric Counterpoint* [Album]. Rhino Entertainment.
- Rose, T. (1994). *Black noise: Rap music and Black culture in contemporary America*. Wesleyan University Press.
- Schalk, S. (2013). Coming to claim crip: Disidentification with/in disability studies. *Disability Studies Quarterly*, 33(2). http://dsq-sds.org/article/view/3705/3240
- Schalk, S. (2018). Bodyminds reimagined: (Dis)ability, race, and gender in Black women's speculative fiction. Duke University Press.
- Schellenberg, E.G. & Hallam, S. (2006). Music listening and cognitive abilities in 10- and 11- year-olds: The Blur effect. *Annals of the New York Academy of Sciences*, 1060, 202–209.
- Shannon, D. B. (2007). 60,000,000,000 [Music composition]. On *60x60 CD* (2006-2007) [Album]. Vox Novus.
- Shannon, D. B. (2008, September 6). Old Green's Life Night [Concert]. At *Evolution Mix Saturday Night at Galapagos*. Brooklyn, New York City, NY: Galapagos.
- Shannon, D. B. (2019). 'What could be feminist about sound studies?': (in)Audibility in young children's soundwalking. *Journal of Public Pedagogies*, *4*, 97–107.

 https://doi.org/10.15209/jpp.1178

- Shannon, D. B., & Truman, S. E. (2020). Problematizing sound methods through music research-creation: Oblique Curiosities. *International Journal of Qualitative Methods*, 19. https://doi.org/10.1177/1609406920903224
- Sharda, M., Tuerk, C., Chowdhury, R., Jamey, K., Foster, N., Custo-Blanch, M., Tan, M., Nadig, A., & Hyde, K. (2018). Music improves social communication and auditory–motor connectivity in children with autism. *Translational Psychiatry* 8, 231-244. https://doi.org/10.1038/s41398-018-0287-3
- Snyder, S. L., & Mitchell, D. T. (2010). Introduction: Ablenationalism and the geo-politics of disability. *Journal of Literary & Cultural Disability Studies*, 4(2), 113–125. https://doi.org/10.3828/jlcds.2010.10
- Springgay, S. (2020). The fecundity of poo: Working with children as pedagogies of refusal. In B. Dernikos, N. Lesko, S. D. McCall, & A. Niccolini (Eds) *Mapping the affective turn in education: Theory, research, and pedagogies*, (pp. 148–163). Routledge.
- Springgay, S., & Truman, S. E. (2018). On the need for methods beyond proceduralism:

 Speculative middles, (in)tensions, and response-ability in research. *Qualitative Inquiry*,

 24(3), 203–214. https://doi.org/10.1177/1077800417704464
- Sterne, J. (2019). Ballad of the dork-o-phone: Towards a crip vocal technoscience. *Journal of Interdisciplinary Voice Studies*, 4(2), 179–190. https://doi.org/10.1386/jivs_00004_1
- Stoever, J. L. (2016). *The sonic color line: Race and the cultural politics of listening*. New York University Press.
- Straus, J. (2014). Idiots savants, retarded savants, talented aments, mono-savants, autistic savants, just plain savants, people with savant syndrome, and autistic people who are

good at things: A view from disability studies. *Disability Studies Quarterly*, *34*(3). https://doi.org/10.18061/dsq.v34i3.3407

- Sykes, H. (2016). Olympic homonationalisms. *Public*, 27(53), 140–148. https://doi.org/10.1386/public.27.53.140_7
- Thompson, M. (2016). Feminised noise and the 'dotted line' of sonic experimentalism.

 *Contemporary Music Review, 35(1), 85–101.

 https://doi.org/10.1080/07494467.2016.1176773
- Thompson, M. (2017). *Beyond unwanted sound: Noise, affect and aesthetic moralism*. Blackwell Publishing Ltd.
- Truman, S. E., Loveless, N., Manning, E., Myers, N., & Springgay, S. (2019). The intimacies of doing research-creation: Sarah E. Truman interviews Natalie Loveless, Erin Manning,
 Natasha Myers, and Stephanie Springgay. In N. Loveless (Ed.), *Knowings and Knots* (pp. 221–250). University of Alberta Press.
- Truman, S. E., & Shannon, D. B. (2018). Queer sonic cultures: An affective walking-composing project. *Capacious: Journal for Emerging Affect Inquiry*, 1(3), 58–77. https://doi.org/10.22387/CAP2018.19
- Truman, S. E., & Springgay, S. (2015). The primacy of movement in research-creation: New materialist approaches to art research and pedagogy. In M. Laverty & T. Lewis (Eds.), *Art's teachings, teaching's art: Philosophical, critical, and educational musings* (pp. 151–162). Springer.
- Vaiouli, P., Grimmet, K., & Ruich, L. J. (2015). "Bill is now singing": Joint engagement and the emergence of social communication of three young children with autism. *Autism: The*

International Journal of Research & Practice, 19(1), 73–83.

https://journals.sagepub.com/doi/10.1177/1362361313511709

- Weheliye, A. G. (2005). *Phonographies: Grooves in sonic Afro-modernity*. Duke University Press.
- Whipple, J. (2004). Music in intervention for Children and Adolescents with Autism: A Meta-Analysis. *Journal of Music Therapy*, 41(2), 90–106.
- Yergeau, M. (2018). Authoring autism / On rhetoric and neurological queerness. Duke University Press.