

Some Strings, Many Affordances:

Autoethnographic reflections of an electric bass guitarist

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As I sit down to write this, there are three instruments within eyesight of my workspace. To my left, a five-string fretted electric bass, single-cut, its mahogany body reflecting the early morning sun. To my right, its muse – a five-string fretless electric bass with a hollow body. A more artisanal aesthetic with the wear of years of musical labour. Standing guard beside my desk, these two instruments serve as a metaphorical reflection of my creativity. One instrument guided by frets: true intonation, a thing of reliability. The other is guided by technique-based intonation: muscle memory and ear guiding the through line of tonality.

Then there is this third instrument: a complete contrast in style, design, tone and sound to the pair of electrics. The double bass, leant elegantly in the corner by my desk, watches over me as if to provide some kind of paternalistic guidance through my work. Its cumbersome arches protrude into the space by my right ear as I type. The fingerprints around its neck reflect the years of practice and dedication, though the thin layer of dust settled upon its outer rib reflects a redirection of playing time toward its electric peers.

It is no accident that I write with these basses beside me. The positioning of this room is not left to chance. Having these within the eyesight of my desk is critical to my writing. They – the basses – are in many ways at the core of this writing. Without them, this writing would not *begin*. This work would not *be* without them. I would not *be* without them. When I hold one of these basses, I can *be*. I am both at rest and in action at once, in a single act of music-making. The objective existence occurs with the creation of sound and time all while the undisturbed, uninterrupted serenity of deafened outside and inside noise creates the canvas for my music. These instruments are at once my outlet, guides, and musical



expressors, without whom I would not be. Drummer and autoethnographer Gareth Dylan-Smith (2013) reflects on a similar experience, paraphrasing Descartes, declaring “if I had only ceased to drum ... I would have had no reason to believe that I existed; I thereby concluded that I was a substance, of which the whole essence or nature consists in drumming” (p.2). I too reflect on how my instrument, the electric bass guitar and its affordances, serve as a live collaborator to my existence as a musician, composer, and performer.

The Musical Voice

While my musical education commenced with trumpet lessons and occasional piano playing, it is on the electric bass that I have found my musical voice. It is hard to identify the moment in which I realised my relationship with the instrument had become so profound. There was no switch flicked, curtain dropped, or license card presented indicating some formal recognition of my newfound voice on the instrument. It is instead a feeling with the instrument that signifies the relationship and alignment of voice – one of comfort, of understanding, and of trust (Oswald 1992). The musical and physical characteristics of the instrument form as an immediate through line of expression from me to the audience, thus allowing for me to speak (Vine 2014). I am drawn to composer and educator Margaret Wilkins’ description of this as: “honing your technique so that your music succeeds in expressing your original intent becomes the fulfilment of your dreams... you will become aware of your own individual mental creative space” (2006: 264). Indeed, perhaps the moment the voice is initiated on the instrument is when there is no delay, pre-thought, or limitation between the conception of the musical idea in the mind of the composer, and the execution and expression of it on the instrument.

I am reminded of composer Edward Cone’s rebuttal to the argument surrounding the labelling of music as a language, in which he asks: “if music is a language, then who is speaking?” (1974: 1). Initially presented as a mode of inquiring into the relationship between performer and composer, I find Cone’s question an interesting one to consider reframing as, “if music is a language, then *how* are we speaking?”. With *what* does the musician express themselves, and how? Is the musician’s voice the only voice in this musical scenario? Specifically, does the instrument itself have a voice? If you had asked me this question as recently as a couple of years ago, I likely would have responded cynically, claiming with certainty that the performer alone sounds the instrument. Now, I can see how this question can be re-understood and considered with more nuance. My right thumb, index, and middle fingers do strike the strings, commencing the vibration, leading to pitch. My left index, fore, ring and pinky fingers do fret the strings, shortening the vibrations, altering this pitch. But any agitation can commence this vibration, not just a finger strike, and indeed any vibration can be understood as sound, and in turn, music. Further to this, the vibrating string is not the only sonic output of the electric instrument.

Among my collection of instruments is a thirty-four-year-old Fender Jazz Bass guitar, complete with original pickups and wiring. Having seen many tours, climates, and hands over its existence, this instrument now carries substantial susceptibility to radio interference with its single coil pickups due to age. These pickups create a dull, resonant buzz (known colloquially as a shielding hum) which continues indefinitely until my hands touch the bass. When this signal is processed through an amplifier and passed through to a speaker cabinet, this buzz is only reinforced. While this defect is

common due to the age of passive basses like mine, this demonstrates my bass 'sounding' without my manipulation or engagement with the instrument. In fact, in this example, my manipulation *halts* the sounding of the instrument.

Perhaps then, instead of asking if the instrument itself has a voice as above, the question should be reversed and rephrased to consider if I, as a performer, improviser, and composer, have a voice without my instrument, pedals, and amplifier. This aligns closely with the question rhetorically posed by Eliot Bates in his 2012 article, in which he asks: "does the performer perform the instrument or the other way around" (p. 387). While Bates describes such a question as "pedantic" (ibid.), it is a worthwhile consideration, as these questions flip the assumption that the instrument is reliant on the performer to be sounded, and instead suggests that it is the performer who has a reliance on their instrument so as to sound, express, and make music.

I propose that this integration of bodies into this musical assembly manufactures a force of creativity, which as Dan Harris describes, "moves through but is never contained by or within" (2021: 17-18) the human, instead becoming the playground for, what Harris and Holman Jones describe as, "the ecological system or assemblage of human, nonhuman, atmospheric, and other collaborators in any creative event" (2022: 524). In the same way an ensemble of performers engage, interact, and dialogue through musical construct and improvisation, so too can a performer and their instrument.

A relationship of affordances

The innate relationship between performer and instrument – which Luc Nijs, Micheline Lesaffre, and Marc Leman describe as being "like an organic component of the body" (2013: 2) –, is one that resonates distinctly with me as a performing musician. Whether it is through anecdotal experience of colleagues and fellow performers or studied concepts (to include the work of Veerle L. Simoens and Mari Tervaniemi 2013, Eleanor V. Stubbley 1995, and Mine Doğantan-Dack 2015), distinct lines of relation have been drawn and documented between the experience of the live performer and their deep-rooted bond with their instrument. Concepts such as flow-state, emotional expression, and audience engagement are described as directly benefiting from this live union in musical performance (Wrigley and Emmerson 2013). Throughout my career, I have experienced this relationship extending beyond the live performance setting and this through-line of expressive connection can be embraced to inform the activity of composition. As suggested by Collier, composers "create music by using their available resources" (2009: 262). These resources, as described by Collier, range from experience, education, stylistic norms and the ensembles one is writing for. I believe that the instrument of composition should be considered as one of these resources; the instrument one composes with is as much a collaborator in the compositional process as the composer themselves. Reflecting on this relationship compels us to examine how an instrument's affordances shape both the compositional and performing processes.

Proposed in the 1960s by James J. Gibson, the term ‘affordances’ was developed as a means of understanding the potential actions or uses that an environment or object offers to an individual (1979). Initially situated within the field of ecological psychology, Gibson’s attempt was “to offer a third way beyond cognitivism and behaviorism for understanding cognition” (Lobo, Heras-Escribano, and Travoesp 2018: 1), and sought to suggest the complementary relationship between the environment and the those within (DeSouza 2024). DeSouza (2024) seeks to further explore Gibson’s concept through a simple example:

A chair affords sitting. Yet even if this is its intended purpose, the chair supports many other actions. I could stand on the chair, use it as a music stand, a drum, or a doorstop, and so forth. The list of possible actions is always open-ended. But the list of impossible actions is open-ended too. I cannot use the chair to slice bread, wash my hair, or play chord progressions. (p.83)

This analogy frames the idea of the perceived affordance of the tool as more critical than the tool itself. Chloë M. Mullet (2022) identifies this as an awareness of one’s surroundings, and “the type of procedural knowledge that practice invokes” (27-28). This can be considered as we did the untouched bass, with its shielding hum resonating without the interaction from a hand or digits. While that is still a bass guitar, without the intentional engagement and agitation of the string, it would be near impossible for the instrument to fulfil the generic bass function as understood in contemporary Western music (the low end accompaniment to harmonic and melodic instruments).

We can consider these perceived affordances as applied to both the listener

and practitioner as “musical sounds afford musical responses whether or not such responses are forthcoming: such is the basis of much music” (Windsor and de Bézenac 2012: 111). From the listener’s perspective, music permits emotional, cognitive, and physical responses, such as dancing, singing along, or triggering memories (Clarke 2005). A listener’s cultural background and personal experiences further influence these affordances, shaping how they perceive and respond to musical elements. Such a response allows for the “navigation of a mode of human interaction that is both specific and aesthetic (musical) and continuous with the wider world of human sociality” (Clarke 2024: 64). Indeed, the resulting relationship extends to the materials of music and their affordances, whereby:

Chords and melodies might support “intra-musical” actions. A diminished-seventh chord affords resolution to the tonic, and it also affords enharmonic reinterpretation. A fugue subject might afford stretto, or a subject-countersubject combination might afford invertible counterpoint at a particular interval. (De Souza 2024: 85)

In addition to this, the benefit of these perceived musical affordances to the practitioner, as composer and performer, can be seen as the possibility for action and musical output that is afforded through the engaged interaction with their instrument; the specific technique of the instrument (plucking, blowing, striking), their physical abilities, skill level, and musical expression (Puig 2005: 233). Thor Magnusson (2009), thinking with Don Ihde (1979), discusses the embodied relationship with the instrument, predicated on the idea that the musical instrument becomes an embodied extension of the individual, wherein they are “able to express themselves through incorporated knowledge that is primarily

non-conceptual and tacit" (ibid.: 168). Will Gibson (2006) connects this embodiment as an act of learning on the instrument, describing the fluent actualisation of sound as a derivative of the embodiment of the physical engagement with the instrument. David Sudnow illustrates his similar experience in the study of his acquisition of jazz piano skills, in which he describes the act of embodied piano playing as a means to finally be able to "sing with my fingers" (1978: 87), a vocal characterising of the interaction between the combination of hand position, musical ideas, and the piano (Gibson 2006). Magnusson recognises this embodied practice as a path from novice to expert on the instrument as a Heideggerian act of transforming tools into "ready-at-hand phenomena" (2009: 170). This allows for the focus in the moment of engagement with the instrument to be "on the act and not the object" (ibid.: 170) or, in my case, a focus on the composition and performance, and not on the instrument as a separate entity.

Kathleen Coessens and Stefan Östersjö (2014) suggest that an instrument's musical possibilities vary with each performer, meaning that its affordances are shaped just as much by the unique qualities of the musician as by the instrument's acoustic and resonant characteristics. Consider the means in which an experienced musician holds and conducts themselves with an instrument when compared to a beginner musician. The instrument is at once the same, but what it affords and how it is perceived is the difference, which as Markus Tullberg (2022) equates, "is not due to subjectivity and a matter of perspective, but a matter of an embodied, physical reality and a process over time of adjusting to an instrument" (p. 8). Beyond this scenario, consider two highly skilled, advanced bassists, each performing with an identical

setup: the same instrument, amplification, room, and audience. The musical output of these two individuals would be different, as the musicians themselves are different. Even with their equitable experience and skill level, it is their distinctive understanding and application of these perceived affordances that creates a unique relationship with the instrument and resulting musical output (Coessens and Östersjö 2014). Experience and affordance are inextricably linked through a habitual interaction of practice and time with the instrument and personal experience (Tullberg 2022); and it is this which leads to the difference of expression in individuals (note: difference in expression does not equate to better or worse).

This embodied partnership between entities is a reciprocal one, where in the engagement with the instrument in turn engages the musician as a creative practitioner. The specific instrument being played can inform the way the performer executes their craft, shaping the movement of body, the technique, and the stylistic considerations of the instrument (Miller 2012). I can perform with my fretless bass guitar and be prompted to play in a different way than how I might with the fretted instrument. I play with a different technique, accentuating different stylistic nuances and ornamentation informed by the fretless fingerboard. The immediate access to vibrato conjures musical phrases performed by Jaco Pastorius, Pino Palladino or Esperanza Spalding. It is not just my own musical experience participating in this dynamic relationship, but in fact the experience of the electric bass guitar as an instrument with pre-existing understood roles, functions, conditions and repertoire. Taken together, such conditions form a musical variation of Gibson's 1979 ecological niche: "*a musical niche*" (Tullberg 2022: 4, emphasis in

original). This concept encompasses “genre-specific elements, such as aesthetic value systems, institutional framings, historical background, function of the music at hand, its role in society, and its acoustic dimension” (ibid.: 4). To borrow from Mooney (2010), “to write for violin, for example, he is buying into a certain set of affordances and therefore the musical results will be infused with ‘violin-ness’” (p. 31). This raises the question – what is ‘violin-ness’, or, in the case of this paper, what is ‘electric bass-ness’?

Exploring the Bass-Ness: Me & my bass guitar

The bass’ role within Western music styles is generally known, understood and presumed, and composers to a large extent have a genre and culturally specific application of the instrument within their musical output. With a typical four-string bass’ chromatic range from E1 to D#4, the electric bass guitar lends itself to low-end accompaniment, “as part of the rhythm section, working in conjunction with drummers to construct the music’s rhythmic feel” (Wright 2024: 151). Even the tangible playing technique that the physical dimension of the electric bass guitar affords is generally an obvious one, guiding the musician engaging with it (Windsor and de Bézenac 2012). The relational relationship as one hand strikes (plucks, picks, slaps) the string, and the other hand shortens (frets or fingers) the string demonstrates this physicality.

It is in the creation of music with the electric bass guitar and loop pedal that I have experienced these affordances of the electric bass guitar as more-than a low-end accompanying instrument; but also as a chordal, melodic, and percussive instrument, too. In an attempt to emulate the sound of more than just the solo voice in the room through the use of the loop

pedal, I have sought to access what Catherine Hoad and Oli Wilson (2022) label a “pursuit of autonomy” (p. 88) and create the sound of a larger ensemble while I compose and perform alone (Palmer 2020). Through extended techniques, or varied approaches to instrument manipulation, watching a loop artist create the textural density, colour, and dynamic of a full ensemble is an engaging performance experience for an audience as “a single guitar becomes more than just a guitar; it becomes a drum set, a bass, and even a synthesizer. A single voice is not just a voice, but is instead a chorus” (Cooke 2002). This evaluation from Cooke, of the instrument becoming “more than” itself, is an example of the perceived musical affordance of the looped performance to both listener and practitioner. In the specific musical moment that a bass guitar is played into a loop pedal, it is still a bass guitar, yes? On the first repeat of the loop, it is still a bass guitar, yes? At what point does the sound become more-than-bass guitar? At what point does the agency of the loop transcend the role initially informed by the instrument? In performance with a loop pedal, a performer leaves the ability to audiate the sonic intention of the performance to the autonomous audience, allowing the audience to become creative audiating composers of the sound presented to them in assigning specific loops to the emulating idiom of the instrument it is attempting to replicate. The construction of sound with the loop pedal is the production of multivalence “harnessing limited resources in the service of maximal” (Chapman 2013: 452).

In playing an instrument, one is harnessing both its limitations and affordances at once. The instrument and performer engage in a nuanced dance informed by culture and experience, ensemble and staging, and these resulting affordances

form the essential underpinnings of the creative output. Perhaps we can all simply 'be' with our instruments so as to truly find these affordances – what it means to play that instrument, and how, and when, and why. For me, this is a space of fruitful exploration and rediscovery of my creativity.

And when this is reduced, reframed, and reconsidered, all that is left is me and my bass guitar.

Dom Kingsford-Ross is an electric bass guitarist, and Associate Lecturer in Music at Queensland University of Technology, Brisbane, Australia. His work bridges performance, composition, and interdisciplinary collaboration, delving into the deep connections between musicians and their instruments as a means of compositional storytelling. A seasoned performer, Dom has performed as both a soloist and sideman electric bassist domestically and abroad. His compositions for solo electric bass guitar and loop pedal, and research into jazz performance practices have been showcased at domestic and international conferences. Dom's work contributes to emerging discourses on instrumental agency, solo practice, and the role of technology in jazz-informed composition.

References

- Bates, E. (2012). The social life of musical instruments. *Ethnomusicology*, 56(3), 363–395. <https://doi.org/10.5406/ethnomusicology.56.3.0363>
- Chapman, D. (2013). The “one-man band” and entrepreneurial selfhood in neoliberal culture. *Popular Music*, 32(3), 451–470. <http://www.jstor.org/stable/24736784>
- Clarke, E. (2005). *Ways of listening: An ecological approach to the perception of musical meaning*. Oxford University Press.
- Clarke, E. (2024) What does musicking afford?. *Ecological Psychology*, 36(2), 56-68. <https://doi.org/10.1080/10407413.2024.2355894>
- Coessens, K., and Östersjö, S. (2014). Habitus and the resistance of culture. In D. Crispin and B. Gilmore (Eds.), *Artistic experimentation in music: An anthology* (pp. 333-347). Leuven University Press. <https://doi.org/10.2307/j.ctt14jxsmx>
- Collier, G. (2009). *The jazz composer: Moving music off the paper*. Northway Publications.
- Cone, E. T. (1974). *The composer's voice*. University of California Press.
- Cooke, T. (2002, May 5). The merit of the loop(er). *mxdwn.com*. <https://music.mxdwn.com/2002/05/05/features/he-merit-of-the-looper/>
- De Souza, J. (2024). What can you do with the ukulele? Instruments and musical affordances. In G. Cestino & G. Albin (Eds.), *Research paths in the ukulele*. Milano University Press. <https://doi.org/10.54103/milanoup.133>
- Doğantan-Dack, M. (2015). The role of the musical instrument in performance as research: The piano as a research tool. In M. Doğantan-Dack (Eds.) *Artistic practice as research in music: Theory, criticism, practice*. (pp.169-202). Routledge.
- Gibson, J.J. (1979). *The ecological approach to visual perception*. Houghton Mifflin.
- Gibson, W. (2006). Material culture and embodied action: Sociological notes on the examination of musical instruments in jazz improvisation. *The Sociological Review*, 54(1), 171-187. <https://doi.org/10.1111/j.1467-954X.2006.00607.x>
- Harris, D. (2021). *Creative agency*. Palgrave Macmillan Cham.
- Harris, D., & Holman Jones, S. (2022). A manifesto for posthuman creativity studies. *Posthuman Creativities: Pluralist ecologies and the question of how*. <https://doi.org/10.1177/10778004211066632>

Hoad, C., & Wilson, O. (2022). Looping alone, together. In C. Hoad, G. Stahl, O. Wilson (Eds.), *Mixing pop and politics: Political dimensions of popular music in the 21st century* (pp. 84-94). Routledge.

Ihde, D. 1979. *Technics and praxis: A philosophy of technology*. Springer.

Lobo, L., Heras-Escribano, M., & Travieso, D. (2018). The history and philosophy of

ecological psychology. *Frontiers in Psychology*, 9, Article 2228.
<https://doi.org/10.3389/fpsyg.2018.02228>

Magnusson, T. (2009). Of epistemic tools: musical instruments as cognitive extensions. *Organised Sound*, 14(2), 168-176.
<https://doi.org/10.1017/S1355771809000272>

Miller, K. (2012). *Playing along: Digital games, Youtube, and virtual performance*. Oxford University Press, Inc.

Mooney, J. (2010). Frameworks and affordances: Understanding the tools of music-

making. *Journal of Music, Technology and Education*, 3(2) pp. 141-154.
https://doi.org/10.1386/jmte.3.2-3.141_1

Mullett, C. M. (2022). *Affordance ecologies: Practitioner case studies in musical composition and arrangement* [Doctoral dissertation, Manchester Metropolitan University]. <https://e-space.mmu.ac.uk/630194/>

Nijs, L., Lesaffre, M., & Leman, M. (2009). The musical instrument as a natural extension of the musician. In M. Castellango & H. Genevois (Eds.), *Proceedings of the 5th Conference of Interdisciplinary Musicology* (pp. 132-133). Paris, France: LAM-Institut Jean Le Rond d'Alembert.

Oswald, P. F. (1992). Psychodynamics of musicians: The relationship of performers to their musical instruments. *Medical Problems of Performing Artists*, Vol. 7, No.4.

Palmer, T. (2020). Music technology and the loop sampler. In J. Finney, C. Philpott, G. Spruce (Eds.), *Creative and critical projects in classroom music: Fifty years of sound and silence* (pp. 189-196). Routledge.

Puig, S. J. (2005). *Digital lutherie: Crafting musical computers for new musics' performance and improvisation* [Doctoral dissertation, Universitat Pompeu Fabra].
<https://mtg.upf.edu/files/publications/PhD2005-sjorda.pdf>

Simoens, V.L., & Tervaniemi, M. (2013). Musician-instrument relationship as a candidate index for professional well-being in musicians. *Psychology of Aesthetics, Creativity, and the Arts*, 7(2), 171-180.
<https://doi.org/10.1037/a0030164>

Smith, G. D. (2013). *I drum, therefore i am: Being and becoming a drummer*. Taylor & Francis Group.

Sudnow, D. (1978). *Ways of the hand: The organisation of improvised conduct*. Routledge.

Stubley, E.V. (1995). The performer, the score, the work: Musical performance and transactional reading. *The Journal of Aesthetic Education*, 29(3), pp.55-69. <https://doi.org/10.2307/3333541>

Tullberg, M. (2022). Affordances of musical instruments: Conceptual consideration. *Frontiers in Psychology*.
<https://doi.org/10.3389/fpsyg.2022.974820>

Vine, W. P. (2014). *Composing the instrument: An alternative approach to musical relationships between composer, instrument, performer and audience* [Doctoral dissertation, University of East Anglia]. UEA Digital Repository.
<https://ueaeprints.uea.ac.uk/id/eprint/50592/>

Wilkins, M.L. (2006). *Creative music composition: The young composer's voice* (1st ed.). Routledge.

Windsor, W.L., & de Bézenac, C. (2012) Music and affordances. *Musicae Scientiae*, 16(1). 102 - 120.
<https://doi.org/10.1177/1029864911435734>

Wright, B. F. (2024). The bass guitar in popular music. In J.P. Herbst & S. Waksman (Eds.), *The Cambridge companion to the electric guitar* (pp. 150-165). Cambridge University Press.

Wrigley, W. J., & Emmerson, S. B. (2013). The experience of the flow state in live music performance. *Psychology of Music*, 41(3), 292-305.
<https://doi.org/10.1177/0305735611425903>