The Labour of Thought: Reflections on interdisciplinarity in practice

Abiodun Egbetokun[1], Una MacGlone[2], Ed McKeon[3], Denis Newman-Griffis[4], Claire Sedgwick[5], Aikaterini Tavoulari[6]

[1]De Montfort University, UK; [2]University of Edinburgh, UK; [3]Birmingham City University, UK; [4]University of Sheffield, UK; [5]Teesside University, UK; [6]King's College London UK
Correspondence: [1]abiodun.egbetokun@dmu.ac.uk, [2]Una.MacGlone@ed.ac.uk, [3]ed.mckeon@thirdear.co.uk, [4]d.r.newman-griffis@sheffield.ac.uk, [5]c.sedgwick@tees.ac.uk, [6]aiktavou@gmail.com

Abstract

In this reflective article we explore interdisciplinarity in practice. We begin from the position that interdisciplinary work provides great potential and acknowledge that it has become increasingly visible in discussions on the role that research can play to answer complex questions. By definition, interdisciplinarity transcends academic silos and enriches knowledge by integrating frameworks, methods and approaches across diverse disciplines. However, as our reflections identify, interdisciplinary can be a complicated, complex endeavour that requires careful thought. For instance, it is a non-trivial endeavour to find a common language, build coherent teams or gain a shared understanding of research problems - all of which is required for truly interdisciplinary work. It is important, therefore, to understand the labour of thought involved in conducting interdisciplinary work and achieving effective interdisciplinary collaboration. This article brings together the reflections of six early career researchers from a diverse range of disciplines. In this article we explore both the theoretical challenges and opportunities of interdisciplinary research, as well as the practical application of this work. The impetus for this work comes from a British Academy Early Career Researcher Network event in September 2024 where we discussed the relevance of interdisciplinary research to ECRs.

Keywords: Interdisciplinary research; research culture; research methods; collaboration

Egbetokun. Exchanges 2024 12(2), pp. 33-50

33

Introduction

Interdisciplinarity is often touted by academic and policy leaders as the future of research in a complex and interconnected world (**Woolf, 2017; Thompson, 2022; Baty, 2023**). Working across narrow disciplinary perspectives and methodologies is seen as a necessary practice for progress on global challenges such as achieving net zero (**Patterson et al., 2023**) and navigating the growth of artificial intelligence (**Lim and Chase, 2023**). When done successfully, interdisciplinary research often has greater impact (**Hu et al., 2024**) and leads to better long-term funding success for researchers (**Sun et al., 2021**). However, making this work successful, and enabling interdisciplinary researchers to thrive in competitive environments, remains largely an individual endeavour with little sense of shared practice or clear recognition for interdisciplinary work.

Interdisciplinary research is high risk, high reward (**Leahey, 2018**). The net zero concept illustrates this aptly. Achieving net zero involves much more than technical or engineering solutions; it also requires insight from public policy, economics, behavioural sciences and beyond. Integrating methods, approaches, definitions and frameworks together across these disciplinary areas is a non-trivial coordination challenge. There is a real risk that things do not work out well. Yet the potential rewards are substantial: integrating diverse perspectives proffers more comprehensive solutions and strategies—spanning emissions reduction, sustainable technology development, social acceptance and facilitative policy measures. With growing numbers of early-career researchers adopting interdisciplinary approaches to tackle major challenges, a clearer understanding of how to support and encourage interdisciplinary working is needed to sustain an effective and inclusive research sector.

Practising interdisciplinarity in research—breaking down the walls of academic silos and bridging between different frameworks of knowledge and ways of working—is a subtle art, and a significant labour. This article engages with the *labour of interdisciplinarity*: the wider work of research, collaboration, communication, funding, and impact required to bring interdisciplinary change into the world. Interdisciplinary work takes *time*, to think, to learn, and to bring to fruition. It takes *resources* to fund research teams that bridge multiple disciplinary epistemologies and skill sets. It takes significant *collaboration*, including developing, managing, and maintaining the relationships with other researchers and non-academic partners that so often characterise interdisciplinary research. And because of these, interdisciplinarity is structurally *vulnerable*: expertise and authorship are often distributed, making credit and reward more difficult to assign; research time is often longer and may be seen as less productive;

Egbetokun. Exchanges 2024 12(2), pp. 33-50

34

conflicts and contradictions in working across disciplinary epistemologies may create interpersonal tension and interact with disciplinary power dynamics; and research value is constantly questioned in research systems built on disciplinary foundations. These characteristics have specific impacts on early-career researchers, who are often in precarious employment or struggling to progress and are held to discipline-based standards on short timeframes (**Andrews et al., 2020**). These challenges are further complicated by competing perceptions of the value of STEM disciplines compared to social sciences and humanities in research and education (**Olmos-Peñuela et al., 2014; British Academy, 2020**).

This article presents practice-based reflections from six interdisciplinary researchers on what makes interdisciplinary work well in practice. Our reflections on this fundamental question provide a starting point for engaging with substantive aspects of shaping future interdisciplinary practice and building shared understanding in response to key challenges such as:

- How do we leverage the tensions, risks, and contestations inherent in interdisciplinary work as valuable assets, enabling us to challenge disciplinary norms and surface new insights and high-impact questions?

- In a moment of negotiating the metricisation of interdisciplinary labour (**Interdisciplinary Research Advisory Panel, 2022**), how do we make interdisciplinary labour more sustainable and support interdisciplinary researchers to succeed?

We build on discussions begun at the British Academy Early Career Researchers' Network 'Collaboration of the Faculties' event on interdisciplinarity in September 2024.[i] This article is intended to serve as a catalyst for further discussion around how we work effectively across disciplines, how we understand interdisciplinarity as a term and how we ensure equitable and transparent working when collaborating.

Interdisciplinary labour often involves both maintaining diverse, or even conflicting, perspectives on the same questions while also bringing together a coherent voice that draws on all contributing views. We make this tensioning process tangible in this article using the process of collective writing, designed to bring together multiple voices and perspectives engaged in the 'continuous struggle for meaning-making' (**Jandrić et al., 2023**). Each author contributed an individual reflection on the shared theme of the experience of interdisciplinary work, which are included and individually credited in the following section. We then engaged in a collective reading of all reflections and collaboratively authored the introduction and concluding reflections of this article with a

[Egbetokun. Exchanges 2024 12(2), pp. 33-50](#)

35

shared voice. This created a 'diffractive writing' process (**Jarke & Bates, 2024**) that materialised in the text of this article the harmonies and tensions between authors and makes tangible the multiplicity of collaboration. Our process, and the disciplinary and interdisciplinary tensions reflected shaping the article as a coherent whole, forms a clear illustration of the need for building shared understanding of the nature of interdisciplinary work and the individual and collective labours required for its production.

Reflections

Engaging interdisciplinarity

We first feature three reflections on different aspects of labour involved in interdisciplinary work: navigating what interdisciplinarity means in practice; the challenge (and opportunity) of multiplicity inherent in interdisciplinary research; and the process of constant translation faced by interdisciplinary research and researchers.

Interdisciplinary research: one paradox and a three-level opportunity-challenge mix: Abiodun Egbetokuen

Interdisciplinary research, that is, working across disciplines, sits at the crossroads of academic ideals and practical challenges. Major research stakeholders, including universities, funders, and policymakers, generally praise interdisciplinarity. They sometimes create incentives for it through special funding programmes such as the British Academy's International Interdisciplinary Research Projects Scheme which aims 'to develop new international interdisciplinary research in the humanities and social sciences.' (**British Academy, 2024**)

Paradoxically, interdisciplinarity is sometimes penalised in academic recruitment, promotion, and appointment decisions. For instance, tenure committees sometimes favour narrow specialisation. This paradox suggests that interdisciplinarity is a multi-level construct, one that must be understood and nurtured at all its levels because progress on one level does not necessarily suggest all-round progress.

The challenges and opportunities of interdisciplinarity are best understood by looking at it on the three core levels at which it typically takes place.

The first level is problem definition. Research activity can be deemed as interdisciplinary if it addresses a problem that transcends disciplinary boundaries, for instance, climate change, gender equality and digital transformation, among others. However, researchers frequently frame issues through the biases of their own disciplines, which can limit the scope of what interdisciplinary collaboration might achieve. Moreover, power imbalances between disciplines often shape how problems are

[Egbetokun. Exchanges 2024 12(2), pp. 33-50](#)

36

framed. Dominant fields may unintentionally (or intentionally) steer the problem definition toward their own priorities. For example, in climate change research, natural sciences often overshadow social sciences in framing 'solutions', even though human behaviour is central.

On its second level, interdisciplinarity is about the methodological approach to solving problems. Research is interdisciplinary if it deploys methods and approaches from different disciplinary areas. Yet, true interdisciplinarity goes beyond simply gathering diverse methods. It requires deliberate integration of the different methods to bring depth and a nuanced approach to problem solving.

On the third level, interdisciplinary collaboration affords a broader range of possible outputs and outcomes than a single discipline. From conventional academic papers to innovative, media-based products that speak to a broader audience. But reaping these benefits is not easy because communication within interdisciplinary teams is sometimes difficult. Different disciplines bring unique languages and assumptions about the expected outputs and outcomes of collaboration, which can make conversations challenging. Power relations further complicate this process. Disciplines with higher institutional prestige or funding leverage may dominate decisions about outputs such that they inadvertently prioritise formats familiar to their field (e.g., journal articles over community workshops).

Ultimately, success in interdisciplinary work requires intentional, strategic planning and communication on these three levels. I know this first-hand because I have degrees across three different disciplines: engineering, management, and economics. In my personal experience as a researcher, I have found that operationalising interdisciplinarity is a non-trivial task, even for the most experienced. As it turns out, most of the difficulties stem from ignoring the nuances or failing to acknowledge that interdisciplinarity is a continuum rather than a discrete phenomenon. As a thought experiment, the reader is invited to decide which of the following is truly interdisciplinary:

- a project that integrates methods from different disciplines but focuses on narrowly defined research problems.

- a research team made up of colleagues from closely related disciplines but that addresses a complex problem requiring insight from multiple disciplines.

Perspectives will vary regarding the examples, and this draws attention to the fact that there is no one-size-fits all approach to interdisciplinary research. Yet, true interdisciplinarity needs to be clear on how it matches the three core levels described above. A tree is a helpful imagery for this

purpose. Shared understanding of research problems would be the roots that support the trunk of interdisciplinary methods which ultimately lead to branches, leaves, fruits and flowers of diverse outputs and outcomes. A healthy tree requires all the different parts.

In(ter)disciplining: Ed McKeon

Interdisciplinarity is a verb disguised as a noun. Necessarily lacking adequate definition, it is better considered in terms of collaborative action and performance – or more precisely, as an art and a practice. As everyone involved in the arts knows, generalisation is problematic (starting with the definition of 'art'). It particularises. Interdisciplinarity is not one thing, then, but there are family resemblances in practice. I briefly note three, each arising from a question of motive force.

One can start with problems acknowledged in their complexity, such that no single discipline can provide answers or solutions. These can be 'wicked problems', but more often these approaches address concrete issues, practically, in specific contexts. For example, the *Music, Noise and Silence* project led by the Science Museum gathered together curators, museum professionals, and musicians with specialists in Sound Studies, Cultural History, and Science and Technology Studies to consider ways of exhibiting music and sound technologies and objects (**Boon et al., 2017**). This can be a catalyst for action with variations on cross-, multi-, trans-, and inter-disciplinary practices (depending on personnel, budgets, decision-making structures, etc.,). We begin with the end.

The efficacy of a discipline's boundaries and its capacity to reproduce itself can erode, its methods and knowledge seeping into other domains. It becomes 'impure', in(ter)disciplined. Music would be one example (embracing everything from 'noise' to 'silence'), philosophy – arguably – another. At the Collaboration of the Faculties event, I presented an example of this with my co-author Eun Sun Godwin, considering the ways in which orchestral conductors have been figured as exemplars for corporate leadership. This approach arises with a gap.

Last, in(ter)disciplining can open with a conversation that discovers common interests with different perspectives (like this collective writing on interdisciplinarity). It starts in media res.

No single approach is 'right', but one may be more suitable than another for a given situation. We need to cultivate capacities to recognise these differences and to apply ourselves accordingly.

[Egbetokun. Exchanges 2024 12(2), pp. 33-50](#)

38

Translating interdisciplinary concepts between disciplines: Claire Sedgwick

Interdisciplinary research is often an act of translation where we need to consider the different ways that concepts, methods, and disciplines can be interpreted. Furthermore, when we research interdisciplinarily we are also often engaging with different research cultures, assumptions, and norms. It is important to consider how we translate our research effectively, but also how we recognise and respect the different epistemologies that exist within and between disciplines. This can be challenging- as Urbanksa et al (**2019**) note there is in-group bias especially around the distinction between so-called 'hard' and 'soft' sciences. However, they also note that interdisciplinary work itself increases the appreciation that researchers have for research outside of their own discipline. It is important then, to understand interdisciplinary research as a space of challenges and opportunities.

Whilst interdisciplinary research can play an important role, both in terms of broadening potential solutions to research problems and in enriching the kinds of research problems that are asked in the first place, it is important to consider how we translate our research effectively and equitably to researchers in other disciplines. We need to consider what is gained and what is lost when we step outside of our disciplines and how we can ensure that value complexity is not lost through over-simplification.

My own experience as a researcher is one of interdisciplinarity, although this movement between disciplines has often been accidental rather than intentional. I began my academic career with Bachelors and Masters degrees in English Literature before moving onto a PhD in Feminist Media Studies. Currently I would say I research in Cultural Sociology. Although by no means premeditated, I think these shifts reflect an eclectic attitude towards research. However, as others have reflected, such shifts need careful reflection and explanation, especially when mapping out a research trajectory that does not follow a straight line. Throughout all of these shifts I've needed to learn new disciplinary languages and norms, beginning with the assumption that my fluency in one discipline does not guarantee the same fluency in another. Furthermore, my current role in research impact and engagement means that I spend much of my time working with researchers from disciplines very different from my own and therefore in a constant state of learning new disciplinary knowledge and norms. These disciplines have different cultures and approaches to research. Interdisciplinary research can open up avenues. but also lead to conflict where researchers are coming at the research question from radically different perspectives. Effectively translating ideas across disciplines involves determining shared understandings whilst at the same

Egbetokun. Exchanges 2024 12(2), pp. 33-50

39

time ensuring that potential conflicts and divergent understandings are not ignored. In this respect, interdisciplinary research can be as much about understanding who you're translating to as it is about the translation itself.

Bridging Theory and Practice: Disability Studies as an Interdisciplinary Imperative: Aikaterini (Katrina) Tavoulari

The intersection of disability studies with other disciplines represents a crucial frontier in academic discourse, demonstrating why interdisciplinary approaches are not merely academically enriching but practically essential. As Davis (**2016**) argues, the field inherently demands multiple perspectives to fully grasp its complexities. Examining disability through multiple lenses (medical, social, cultural, technological, and political) provides a more comprehensive understanding that directly influences real-world outcomes.

Far beyond the binary distinction between impairment and disability that Oliver (**2013**) initially proposed in 1983, contemporary disability theory has evolved into a rich tapestry of intersecting frameworks that challenge fundamental assumptions about human variation, social organisation, and the built environment. While Oliver's social model marked a crucial paradigm shift (**Shakespeare, 2006**), its true significance lies not in the simple impairment-disability dichotomy, but in how it catalysed a profound reconceptualisation of embodiment and social participation.

This theoretical evolution manifests particularly in the dialogue between disability studies and architectural theory. According to Erkiliç (**2011**), Universal Design transcends Mace's original principles, emerging as a radical reimagining of spatial justice that questions the very notion of 'normal' bodies and behaviours. Hamraie (**2017**)'s groundbreaking work reveals how Universal Design, rather than merely accommodating difference, fundamentally challenges the ableist assumptions embedded in modernist architecture and urban planning. Through this lens, accessibility becomes not an afterthought but a critical lens for examining how built environments reproduce or challenge social hierarchies.

The medical humanities have similarly undergone a transformative critique through disability theory. Contemporary patient-centred care models represent not just a procedural shift but a fundamental epistemological challenge to traditional medical authority. By incorporating disability rights perspectives, these frameworks expose how medical knowledge itself is socially constructed and how clinical practices can either perpetuate or disrupt patterns of marginalisation. Recent work of Iezzoni and Agaronnik (**2020**) demonstrates how disability justice frameworks are reshaping the understanding of health equity, moving

[Egbetokun. Exchanges 2024 12(2), pp. 33-50](#)

40

beyond individual accommodation to address systemic barriers and institutional ableism.

These crossroads demonstrate that no single discipline can adequately address the complexities of disability experience. While a medical perspective might focus on individual impairment, what Shakespeare (**2006**) calls the 'medical model', a purely sociological approach might overlook crucial biological realities. As Linton (**2005**) notes, the power of disability studies lies in its ability to integrate multiple perspectives while maintaining a critical stance toward traditional disciplinary boundaries.

The beauty of interdisciplinary work in disability studies lies in its practical applications. When universal design principles merge with urban planning, people create more accessible cities – a point powerfully illustrated in Imrie (2012)'s work on inclusive urban design. When disability theory informs policy making, societies create more inclusive legislation, as seen in the theoretical foundations of the Americans with Disabilities Act (**Scotch, 2002**). Similarly, when medical humanities engage with lived experiences, healthcare delivery improves (**Charon, 2006**).

This theory-practice synthesis is not just academic exercise, but vital for creating meaningful change. Through interdisciplinary dialogue, research societies transform theoretical insights into practical solutions, ensuring that research addresses not just intellectual curiosity but also human needs. Besides, as Kafer (**2013**) argues, the future of disability studies depends on its ability to bridge theoretical frameworks with practical advocacy.

Curating interdisciplinarity work: Una MacGlone

As a researcher investigating music participation, creativity and wellbeing with children who have disabilities, an interdisciplinary approach was required for the following reasons: 1. In Community Music contexts, knowledge and practice in the field often do not fit into one arts discipline neatly. Skilled Community Musicians can operate across musical genres and in more than one arts discipline, for example, by incorporating drama or art with music (**MacGlone, in press**). 2. Overarching aims in community music contexts are not necessarily improvements in musical skills. There may be goals for improving wellbeing; social skills or to develop creativity and agency (**MacDonald et. al., 2012**). When music is the vehicle for developing non-musical goals, an interdisciplinary lens is essential to appreciate processes and outcomes. 3. My research is often with disabled people and people with various health conditions; therefore, participants may have different communication needs and different communication styles. This demands bespoke combinations of methods to capture engagement and communication in and through music.

[Egbetokun. Exchanges 2024 12(2), pp. 33-50](#)

41

My approach is informed by a pragmatic theoretical position, it places value on empirical inquiry, experiential knowledge, and interdisciplinary scholarship – reflecting diverse ways of knowing (**Dewey, 1916/2005**). Through my research I've explored the interdisciplinary interplay between music and psychology, community music, music therapy and improvisation, for example:

Figure 1: Interdisciplinary Interplay – Author's Personal Model
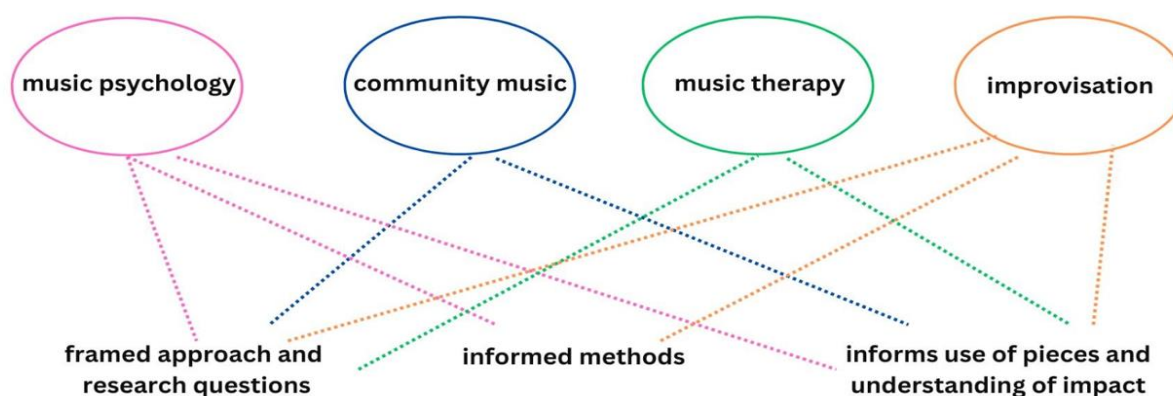
Music Psychology, concerned with human behaviour around in and through music itself contains contrasting paradigms, in qualitative and quantitative approaches. Using mixed methods (an increasingly common approach in examining impact of artistic activities) means that the researcher must reconcile these paradigms and decide for herself how to mix qualitative and quantitative methods – how they are weighted, sequenced and their relationship to each other (**Cresswell & Plano-Clarke, 2018**).

Context is important, for example, working with an inclusive music organisation, required reading Community Music literature. Thinking about wellbeing impacts can usefully be informed by Music Therapy, but there is an issue here; Music Therapy is delivered by a qualified Music Therapist (my practitioners were not therapists but worked towards wellbeing goals). This discipline has expanded however, a sub-discipline of Community Music Therapy is establishing its own literature and practice which can inform group music practices which have health and wellbeing as a main focus (**Stige & Åaro, 2013**).

Improvisation has been written about through the lens of the other three disciplines I mention, but here my creative practice as an improvising musician and educator informed conceptualisations of musical and multimodal communication between practitioners and participants. This brief sketch is a way of describing how, for me, disciplines collided and

informed each other. Understanding this interdisciplinary narrative is crucial for articulating complexities of my research topic.

Space for Interdisciplinarity

Finally, in the spirit of action on interdisciplinarity, we feature a reflection on interdisciplinary research culture and the need for explicitly interdisciplinary spaces in research, particularly for early career researchers.

Interdisciplinarity and early career research culture: Denis Newman-Griffis

Why do we do interdisciplinary work? Amidst measuring, teaching, and applying interdisciplinary skills, we benefit from pausing to reflect on why and how to support interdisciplinarity.

As Foucault (**1966**) and Latour (**1987**) have memorably illustrated, disciplines are dynamically constructed and constantly reshaped in living research practice. The world, people, and selves we study are poorly contained by discrete disciplinary boxes in the day-to-day: studying new cell biology questions may depend on changing social practices in pesticide use; understanding social media impacts on conception of the self may require computational analysis of thousands of posts. Many early career researchers aim primarily to tackle pressing, cross-cutting challenges in the world; these are typically the outcome of complex systems of interacting factors that actively erase disciplinary bounds. Interdisciplinarity thus has significant strengths and appeal for early career researchers eager to make a difference (**Nissani, 1997**).

Nonetheless, disciplines have material meaning and impact in practice: where one gets a job, discusses research, publishes new work, etc., are all deeply rooted in discipline-based structures. Interdisciplinary work is therefore often disincentivised by academic structures built to favour discipline-based performance measurement and reward, separating researchers and research processes into siloed administrative structures and communications channels (**CASE, 2021**).

Supporting the vital labour of interdisciplinarity therefore requires supporting those who engage in it, especially early career researchers bringing new perspectives despite discipline-based headwinds. Interdisciplinary communities, both formally constituted and informally convened, can help provide this support and exemplify a more inclusive research culture. The authors of this article are members of two such growing communities, the British Academy's Early Career Researcher Network (ECRN) and the UK Young Academy, each materially supporting the growth of early career UK leaders who escape disciplinary bounds.

43

[Egbetokun. Exchanges 2024 12(2), pp. 33-50](#)

These communities testify to the wider need for interdisciplinary networks at all levels, from individual institutions to international convenings.

In a moment when many boundaries are being forcefully re-asserted, such spaces are more vital than ever to resist disciplinary balkanisation and connect those who are best equipped to make a difference, regardless of identity or category. Political, academic, and sectoral borders cannot circumscribe learning and action. New transdisciplinary insights and methodologies help to work across not only different disciplines, but different knowers and types of knowledge (**Lawrence et al., 2022**). These wider ways of thinking must actively reshape wider research culture as well as methodology.

Space for interdisciplinarity must be complemented with the knowledge and skills that underpin interdisciplinary work. Spaces such as the ECRN and UK Young Academy address the first step of bringing together interdisciplinary voices around a shared table. We must then collectively address the next step: building shared interdisciplinary practice and craft.

Shaping the labour of interdisciplinarity as something to be measured, valued, and taught is essential to achieving wider research agendas on interdisciplinarity and bringing more interdisciplinary research to real-world impact (**Interdisciplinary Research Advisory Panel, 2022; Cantone, 2024**). This requires investment from research leaders at all levels, and a willingness to set aside the strictures of disciplinary separation. Investment in interdisciplinarity will grow a stronger base of early career researchers and future research leaders and yield outsized returns in research that responds to the complex problems of today's world.

Meta Reflection

Taken collectively, our reflections are themselves an illustration of the diversity of perspectives, emphases, and challenges involved in the labour of interdisciplinarity. Beginning from a shared theme and shared event, our individual contributions reflect on quite distinct elements of interdisciplinary work: its multi-level conceptualisation; its dynamic and self-challenging practice; the complexity of its communication; its constant and overlapping dialogues; its curation amidst disciplinary collisions; and its relationship to wider research culture. These are tightly interwoven in interdisciplinary practice, yet too often addressed in isolation when working to advance agendas of interdisciplinarity.

Our apparently simple exercise of reflecting individually and collectively on interdisciplinarity thus draws us back to the *labour* of thought, in our title, and as a supplement or corrective to the maieutics or midwifery of thought celebrated in the Socratic tradition. Without labour, no midwifery;

Egbetokun. Exchanges 2024 12(2), pp. 33-50

44

without midwifery, the perils of unaided birth. Five themes emerge from these short contributions:

Following Abiodun and Aikaterini, interdisciplinarity is nuanced, and it emerges between theory and practice. To bowdlerise Kant, theory without practice may conceive but does not birth; practice without theory imperils the nascent approaches that societies need to deal with change.

Following Una and Claire, interdisciplinarity is contextual. Natality individualises, to paraphrase Arendt: every interdisciplinary problematic is similarly different, not referenced to a norm.

Following Ed and Denis, in(ter)disciplinarity is not singular but has variants - to push the metaphor, birthing thought may equally arrive through Caesarean, test tube, or parturition.

Following Claire, interdisciplinary research has multiple audiences and requires translation. Native tongues are constructed, not natural, and for thought to speak requires plasticity of language. It requires polyglotism.

Following Denis - and in the spirit of this enterprise - interdisciplinary work requires communities. It is not parthenogenetic, even if its miraculous birthing often takes place away from the centres of power, in more humble environments.

Acknowledgments

Abiodun Egbetokun is currently a Senior Lecturer at De Montfort University, UK and Associate Fellow at the Academy of International Affairs (AIA), Germany. He specialises in policy-relevant interdisciplinary research on innovation, entrepreneurship and economic development. Former Deputy Director at Nigeria's National Centre for Technology Management, he has held fellowships at Oxford and UNU-MERIT. He consults for international organisations like UNIDO and the African Union Commission. He is

a Fellow of the Nigerian Young Academy, Senior Fellow of the Higher Education Academy and Certified Management and Business Educator.

Una MacGlone is a Lecturer in Music at the University of Edinburgh. She has research interests in improvisation, pedagogy and social and wellbeing effects of creative music-making. She is co-editor of an anthology: Expanding the Space for Improvisation Pedagogy (2019), published by Routledge. From 2021-24 she held a British Academy Fellowship which enabled innovative research investigating processes of inclusion in and wellbeing impacts from community music workshops with children and young people with additional support needs. She is a double bassist, performing across genres and has played on over 20 commercially released recordings.

Ed McKeon is a Postdoctoral Research Fellow at Birmingham City University concerned with curatorial theory and musicality, untangling relations between gallery arts and post-experimental musics. As a curatorial producer, he operates at the points where music indisciplines others—theatre, book, installation, or performance—collaborating with artists from Pauline Oliveros to Jennifer Walshe, and Elaine Mitchener to Brian Eno. His book *Heiner Goebbels and Curatorial Composing After Cage* was published by Cambridge University Press in 2022.

Denis Newman-Griffis is Senior Lecturer and AI for Health Lead in the Centre for Machine Intelligence, University of Sheffield. Their award-winning work investigates the principles and practices of responsible AI, with a particular focus on health and disability. Their interdisciplinary research draws on computer science, health informatics, critical data studies, disability studies, and science and technology studies to connect artificial intelligence research with human impact. Denis is a Research Fellow of the Research on Research Institute, a British Academy Innovation Fellow, and a founding Member of the UK Young Academy.

Egbetokun. Exchanges 2024 12(2), pp. 33-50

46
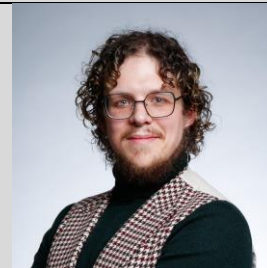
Claire Sedgwick is a researcher in the Cultural and Creative Industries. Her PhD was in Feminist Media Studies and led to the book, *Feminist Media Studies: From the Second Wave to the Digital Age* (2020). Her most recent book *Inequality in Contemporary Stand-Up Comedy in the UK* was published in 2024.

Aikaterini Tavoulari is a Fellow of the Higher Education Academy, Chartered Psychologist with the British Psychological Society, and Chartered Disability Practitioner with the National Association of Disability Practitioners, bringing over 19 years of interdisciplinary clinical psychology experience. Her career includes leadership in specialist disability education in Greece, clinical work at Moorfields Eye Hospital in London, and lecturing in disability studies, vision impairment, psychology, and business at University College London, and Birmingham Business School. She completed her first postdoc at the University of Bath and currently holds a second postdoctoral position at King's College London, collaborating with Oxford and East London universities. Her community-based research has received funding from GW4, British Academy, UNICEF and others. Aikaterini has partnered with organisations such as RNIB, Guide Dogs UK, Retina UK, Goalball UK, and Research England to advance inclusion, enhance accessibility, and challenge ableism in higher education and the field of vision impairment.

References

Andrews, E.J., Harper, S., Cashion, T., Palacios-Abrantes, J., Blythe, J., Daly, J., Eger, S., Hoover, C., Talloni-Alvarez, N., Teh, L., Bennett, N., Epstein, G., Knott, C., Newell, S.L., and Whitney, C.K., 2020. Supporting early career researchers: insights from interdisciplinary marine scientists. ICES Journal of Marine Science, 77(2), 476-485. DOI: 10.1093/icesjms/fsz247 [Accessed: 25 January 2025].

Baty, P., 2023. Interdisciplinary research is key to scientific discovery. So why are universities reluctant to cross disciplines? World Economic Forum, 21 November. Available at: https://www.weforum.org/stories/2023/11/interdisciplinary-science-next-big-breakthrough/ [Accessed: 25 January 2025].

Egbetokun. Exchanges 2024 12(2), pp. 33-50

47

Boon, T., Jamieson, A., Kannenberg, J., Kolkowski, A., and Mansell, A. 2017. 'Organising Sound': how a research network might help structure an exhibition. Science Museum Group Journal. https://dx.doi.org/10.15180/170814 [Accessed: 25 January 2025].

British Academy, 2020. Qualified for the Future: quantifying demand for arts, humanities and social science skills. Available at: https://www.thebritishacademy.ac.uk/publications/skills-qualified-future-quantifying-demand-arts-humanities-social-science/ [Accessed: 25 January 2025].

British Academy, 2024. *Knowledge Frontiers: International Interdisciplinary Research Projects 2025*. https://www.thebritishacademy.ac.uk/funding/knowledge-frontiers-international-interdisciplinary-research/ [Accessed: 25 January 2025].

Cantone, G.G., 2024. How to measure interdisciplinary research? A systemic design for the model of measurement. Scientometrics, 129(8), 4937-4982.

CASE 2021 The role of the UK Government in supporting interdisciplinary research Available at: https://www.sciencecampaign.org.uk/analysis-and-publications/detail/role-of-govt-supporting-interdisciplinary-research/ [Accessed: 3 February 2025].

Chen, H., Chiang, R.H. and Storey, V.C., 2012. Business intelligence and analytics: From big data to big impact. MIS quarterly, 1165-1188.

Creswell, J. W. & Plano Clark, V. L. 2018. Designing and conducting mixed methods research. Los Angeles: SAGE.

Davis, L. J. 2016. The Disability Studies Reader. London: Routledge.

Dewey, J. (1916/2005) Democracy and Education. An Introduction to the Philosophy of Education. New York: Cosimo Inc.

Erkiliç, M. 2011. Conceptual challenges between universal design and disability in relation to the body, impairment, and the environment. METU Journal of the Faculty of Architecture/Mimarlık Fakültesi Dergisi, 28(2).

Foucault, M., 1966/2005. The Order of Things. London: Routledge.

Hamraie, A. (2017). Building Access: Universal Design and the Politics of Disability. Minneapolis: U of Minnesota Press.

Hu, L., Huang, Wb., and Bu, Y., 2024. Interdisciplinary research attracts greater attention from policy documents: evidence from COVID-19. Humanities and Social Sciences Communications, 11, 383. DOI: 10.1057/s41599-024-02915-8 [Accessed: 25 January 2025].

Iezzoni, L. I., & Agaronnik, N. D. 2020. Healthcare disparities for individuals with disability: informing the practice. Disability as Diversity: A Guidebook for Inclusion in Medicine, Nursing, and the Health Professions, 15-31.

Egbetokun. Exchanges 2024 12(2), pp. 33-50

48

Imrie, R. 2012. Universalism, universal design and equitable access to the built environment. Disability and Rehabilitation, 34(10), 873-882.

Interdisciplinary Research Advisory Panel, 2022. Interdisciplinary Research Advisory Panel: final report. REF 2021. Available at: https://2021.ref.ac.uk/media/1901/idap-final-report-designed-final.pdf [Accessed: 25 January 2025].

Kafer, A. 2013. Feminist, Queer, Crip. Bloomington: Indiana University Press.

Latour, B., 1987. Science in Action: How to Follow Scientists and Engineers Through Society. Cambridge: Harvard University Press.

Lawrence, M.G., Williams, S., Nanz, P. and Renn, O., 2022. Characteristics, potentials, and challenges of transdisciplinary research. One Earth, 5(1), 44-61.

Leahey, E., 2018. The Perks and Perils of Interdisciplinary Research. European Review, 26(S2), S55-S57. DOI: 10.1017/S1062798718000261 [Accessed: 25 January 2025].

Lim, E. and Chase, J., 2023. Interdisciplinarity is a core part of AI's heritage and is entwined with its future. Times Higher Education, 8 November. Available at: https://www.timeshighereducation.com/campus/interdisciplinarity-core-part-ais-heritage-and-entwined-its-future [Accessed: 25 January 2025].

Linton, S. 2005. What is disability studies? Pmla, 120(2), 518-522.

MacDonald, Raymond A. R., Kreutz, Gunter and Mitchell, Laura 2012. 'What is music health and wellbeing and why is it important?', in R. MacDonald, G. Kreutz and L. Mitchell (eds), Music, Health, and Wellbeing, Oxford: Oxford University Press, 3–11.

MacGlone, U. M. (in press) Into the Limelight in de Bruin, L., Skinner, A., and Southcott, J., (Eds) Guerrilla Music II: Communities, Resistances and Disabilities. Lexington.

Nissani, M., 1997. Ten cheers for interdisciplinarity: The case for interdisciplinary knowledge and research. The Social Science Journal, 34(2), 201-216.

Oliver, M. (2013). The social model of disability: Thirty years on. Disability & Society, 28(7), 1024-1026.

Olmos-Peñuela, J., Benneworth, P., and Castro-Martínez, E., 2014. Science and Public Policy, 41(3), 384-400. DOI: 10.1093/scipol/sct071 [Accessed: 25 January 2025].

Patterson, J., Bray, R., Davies, G., and Ford, R., 2023. How interdisciplinary collaborative research can enable a better transition towards a Net Zero future. EnergyREV, University of Strathclyde Publishing: Glasgow, UK. ISBN 978-1-914241-31-4. Available at: https://strathprints.strath.ac.uk/84635/ [Accessed: 24 March 2025].

Egbetokun. Exchanges 2024 12(2), pp. 33-50

49

Scotch, R. 2002. From good will to civil rights: transforming federal disability policy. Palaestra, 18(4), 53-54.

Shakespeare, T. (2006). The social model of disability. The disability studies reader, 2(3), 197-204.

Stige, Brynjulf and Aarø, Leif E. 2011, Invitation to Community Music Therapy, Abingdon: Routledge.

Sun, Y., Livan, G., Ma, A., and Latora, V., 2021. Interdisciplinary researchers attain better long-term funding performance. Communications Physics, 263. DOI: 10.1038/s42005-021-00769-z [Accessed: 24 March 2025].

Thompson, L., 2022. The Future Must Be Interdisciplinary. UCL Parnassus Blog, 4 May. Available at: https://blogs.ucl.ac.uk/parnassus/2022/05/04/the-future-is-interdisciplinary/ [Accessed: 25 January 2025].

Urbanska, K., Huet, S. and Guimond, S., 2019. Does increased interdisciplinary contact among hard and social scientists help or hinder interdisciplinary research? PLoS One, 14(9). DOI: 10.1371/journal.pone.0221907 [Accessed 27 January 2025].

Woolf, D., 2017. The future is interdisciplinary. The Hill Times, 3 November. Available at: https://www.hilltimes.com/story/2017/11/03/the-future-is-interdisciplinary/261070/ [Accessed: 27 January 2025].

Endnotes

[i] Visual minutes available at: https://www.linkedin.com/posts/dr-claire-sedgwick-b0b9b839_visual-minutes-activity-7242547424953602048-Awsq [Accessed: 27 January 2025].

Egbetokun. Exchanges 2024 12(2), pp. 33-50

50