Composing, researching, and ways of talking
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Ways of talking have effects. What are the effects of talking about composition as if it were a form of research? What is the purpose of talking like this? What is gained? Should we be suspicious that this way of talking emerges from an imposed bureaucratic necessity? If I am composing music, does thinking of it as research help in any way? Or does it distort our understanding of what composing is? These, rather than matters of definition, are the important questions. As Ian Hacking writes, '[d]on't ask for the meaning, ask what's the point.'[1]

Camden Reeves, in his response to my article 'Composition is not Research', goes to great lengths to decry the search for definitions, although I make no attempt at definition.[2] Most concepts work not in terms of necessary and sufficient conditions, but in terms of exemplars, paradigms, and shared characteristics. My attempt to *characterise* a crucial difference between two types of activity does not entail a search for definitions.

Reeves focusses on 'scientific method'. It's an odd line of attack, as my article does not mention scientific method. It's hard to say why Reeves ascribes to me some kind of scientistic outlook, but the result is that most of his objections are wide of the mark. I drew some examples from science, but my points have nothing to do with methodology. Of course, science does enjoy a certain paradigmatic status, and an entirely disjunctive concept is not really a concept, so we would expect *some* resemblances between scientific and non-scientific research. Many of the disanalogies mentioned in the second half of Reeves's article are surely disanalogies not just with scientific research but with any useful notion of research. I find nothing to disagree with here – indeed, much of it echoes my own points – but leaves me wondering what there is to be salvaged in the idea of 'composition as research'.

Because of its paradigmatic status, scientific method – or rather, an *idea* of scientific method that exists mainly in the minds of humanities academics – is often the first port of call when trying to make something look researchy. This is fundamentally misguided, since scientific discovery is very often haphazard and unsystematic: it is only in the verification of such discoveries that method becomes crucial – yet, as I have argued, it is precisely this stage that is missing in composition. The fact that efforts to make composition look like research often emphasise methodology is the *symptom* of a deeper incompatibility between composition and research. It is precisely because of this incompatibility that its proponents often reach for the most obvious paradigm.

My point, then, is not about method. It is that the idea of composition-as-research implicitly ascribes qualities to composition which it cannot have – just as, as Gilbert Ryle argued, the idea of mind as a kind of *substance* involves ascribing to it properties that cannot possibly apply to what is

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[1] Hacker, I., *The Social Construction of What?* (Cambridge, Mass.: Harvard University Press, 1999) p. 5.

[2] Reeves, C., 'Composition, Research and Pseudo-Science: a response to John Croft', *Tempo*, this issue, p. 00

in fact a collection of dispositions and aptitudes. A category error brings with it not just the wrong questions, but the wrong *sort* of questions. (It is not really about fixity versus 'boundlessness', as Reeves suggests.)[3]

My main points can be understood in terms of two ideas: intentionality and corrigibility. Let us take intentionality first. This is the quality of 'aboutness': paradigmatically, language has intentionality because it is *about* something that is not itself language – ideas, objects, and so on. In our normal way of talking, research has this quality: 'what is your research about?' is a meaningful question and we would normally expect a researcher to be able to give some kind of answer. What kind of answer might a composer give to that question (other than a quizzical look)? One might perhaps describe a compositional problem that one is trying to solve. Or one might simply be trying to think of what comes next (although 'I'm researching what note should come next' would be a strange way of talking). In both cases the thought is directed to musical material and structure. If we want to call this research, then it is a special kind of research that is about itself. Moreover, this does not align with the intentionality commonly attributed to music: rarely would we say that a piece is primarily *about* some compositional problem. Rather, a piece might find solutions to compositional problems, while being *about* something else – outlooks, emotions, inner life, or whatever. Thus, compositional research would not only be reflexive, but would have an intentional object of a different kind to that normally attributed to pieces of music, which are nonetheless in some sense (according to Reeves) 'the research'.

The second point is to do with *corrigibility*. This was the point of my invented compositional 'research questions', whose answer is always (trivially) 'yes'. This problem is not solved by changing the grammar of the question to 'how', with the piece itself as the answer: this manoeuvre merely replaces a trivial 'yes' with a trivial 'like this'. The point remains: what counts as getting it right – not *musically* right (which is a matter for aesthetic judgment) but right in some 'research' sense? This point does not depend, as Reeves implies, on a scientific model of research. It is, rather, a question of evidence and criteria. Whether you are in the laboratory, in the library, or at the archaeological dig, there are criteria at work which allow you – and others in the field – to assess whether your evidence supports your conclusions. This does not mean that the criteria are absolute, or that they can be exhaustively specified in advance, but that anyone working in a given field will know what it means to produce evidence that confirms, falsifies, or corrects an earlier piece of research. A musicologist suggesting that a certain type of rubato was used in mid-nineteenth-century piano music, or a literary theorist advancing a new interpretation of a play, must still provide evidence, and that evidence can be assessed by others in the field according to shared criteria. Research in the humanities might be more about 'narratives', as Reeves suggests, but narratives are still open to correction or refutation.

This does not entail that the idea of 'research' is unproblematic for all other academic disciplines. In particular, philosophy encounters some, but not all, of the problems I have identified for composition as research, and to that extent 'research' is also a problematic term for philosophy

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[3] Reeves, p. 00.

(which, like music, predates the very idea of research). New philosophical ideas do not necessarily displace older ones, even when they are incompatible. On the other hand, the fact that we can say that they are incompatible suggests some kind of corrigibility (we would not describe pieces of music as 'incompatible'), and there are philosophical views which are held at one time and later shown to be unsatisfactory. The fact that a discipline like philosophy sits uneasily with some aspects of the idea of 'research' hardly undermines the argument that composition sits even more uneasily.

We might use the expression 'condition-governed corrigibility' for the property of research whereby its results are open to correction, refutation, falsification, and so on, discursively by means of evidence and criteria. (I take the expression 'condition-governed' from Sibley,[4] who argues that aesthetic terms are not 'condition-governed', meaning that there are no (non-aesthetic) conditions for their application.) If I claim that Nebuchadnezzar II built the Hanging Gardens of Babylon, we know what kind of evidence we would accept (inscriptions, for example) and we know how we would test those pieces of evidence (dating the inscriptions, analysing the language used on them, etc.). Evidence does not have to be empirical – to test the proof of Fermat's theorem, we would go through the mathematical deductions looking for errors, or perhaps attempt our own proof of its negation. Compositional decisions are not like this. This is not to say that there is no such thing as rightness and wrongness in such decision-making, but that we do not have the means of demonstrating the value of these decisions that are available to empirical or deductive claims. Kant's view of aesthetic judgement (which he called 'judgments of taste') as subjective yet normative gets at this point – the normativity (or *universality* as he calls it) means that it is not just a matter of personal preference (or 'agreeableness' in Kant's terms) – but the *subjectivity* of such a judgment means that we cannot adduce empirical evidence or argumentation in order to support our judgment. Indeed this is one of the main things that distinguishes the domain of the aesthetic.

The distinction at work here, loosely put, is between discovery and invention.[5] Before my critics leap on this statement with accusations of essentialism or definition-mania, let me repeat that an attempt to characterise something is not an essentialising move – it is, however, an attempt to get at a fundamental difference between two types of activity: describing and presenting; making and finding out; or, in Aristotelian terms, *poiēsis* and *epistēmē*. It's hardly a new idea, and deserves more than the breezy dismissal it receives, both from Reeves and from Ian Pace in his response.[6] Einstein was not just 'making something'. He was describing the world. A composer, on the other hand, is making an addition to the world that is not primarily descriptive. (And no, not like a smartphone or a blancmange.[7])

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[4] Sibley, F., Aesthetic Concepts. *Philosophical Review* 68/4 (1959), pp 421–450.

[5] Of course, you can discover things in composition – we do it all the time (that a certain motive can be set against another one without contradicting the harmony; that a certain chord is the complement of another, etc.) But things like this are not a plausible basis for composition as research – compositional questions are of the form: why put these motives together? Why these motives at all?

[6] Pace, I., 'Composition and Performance can be, and often have been, Research', *Tempo*, this issue, pp. 00–00.

[7] See Pace, p.00

Pace is right that my article does not engage with the existing literature on 'practice as research'. This is a burgeoning area, and there is no space here to discuss the examples he gives, except to note that such technical and background historical research has no bearing on my original argument. But I shall take this opportunity to make a few observations about the output of the practice-as-research industry. Much of it begins from the institutional imperative of casting artistic practice as research, and then proceeds to a 'how-to' guide. Where a (non-institutional) justification of the idea of practice-as-research is attempted, one can discern two types of argument. First, there is the argument from an extended concept of knowledge, as used for example by Robin Nelson in his introduction to *Practice as Research in the Arts*.[8] The idea here is that if we recognise the legitimacy of 'embodied' knowledge, 'material' thinking, and so on, then we can have practice-as-research. The second type of argument, deployed for example by Helga Nowotny in her foreword to the *Routledge Companion to Research in the Arts*, depends on the idea that scientific research is more like art than we have traditionally supposed.[9] On the one hand we have the argument that art has more to do with knowledge than we had thought; on the other, we have the argument that science is more like art than we thought (so if *it* can be 'research', why not art?).

The latter line of argument often appeals to 'Science and Technology Studies' (STS), which emphasises the role of social forces – power relations, alliances, funding, and so on – in the practice of science. The proponent of STS most often cited is Bruno Latour, who, in much of his work, regards results in science as primarily the result of socio-historical relations and processes. Latour thinks that scientists' agreement on a certain theory is prior to the observation that confirms it: observation is made to fit theory, rather than the other way around. He seems to believe this in a very strong sense – for example, he argues that Ramesses II could not have died of tuberculosis, as tuberculosis was only discovered in 1882. According to Latour, Robert Koch in some sense *created* tuberculosis in 1882, so before then nobody could have died from it.[10]

It is easy to see how this kind of thing lends itself to an extension of the concept 'research' to include creative practice. If researchers are really shaping the world to match a theory that is preferred for other reasons, then research does indeed start to look more like art. Estelle Barrett writes that 'Bruno Latour suggests that science is a process of amassing inscriptions in order to mobilise power.'[11] These inscriptions 'refer to each other, rather than material realities'.[12] In

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[8] Nelson, R. (ed.), *Practice as Research in the Arts: Principles, Protocols, Pedagogies, Resistances*. London: Macmillan (2013).

[9] Nowotny, H. 'Foreword', in Biggs, M. and Karlsson, H., *The Routledge Companion to Research in the Arts*. (Abingdon: Routledge, 2011), pp. xvii–xxvi.

[10] Latour, B., 'On the Partial Existence of Existing *and* Nonexisting Objects', in Daston, L. *Biographies of Scientific Objects*. Chicago: University of Chicago Press (2000), pp. 247–269, here pp. 248–259.

[11] Barrett, E, Towards a Critical Discourse of Practice as Research. In Barrett, E and Barbara Bolt, *Practice as Research: Approaches to Creative Arts Enquiry*. London: I.B. Taurus & Co. (2010), pp. 135–146, here p. 144.

[12] I*bid.*

Barrett's chapter, this becomes a justification for regarding creative processes as a form of research – after all, science is also a creative process.

This is not the place to launch a critique of STS, but I do think practice-as-research is in trouble if it depends on a view of science that confuses ideas and things so profoundly. However, Pace seems to espouse a version of this view in his suggestion that, if Einstein had not come up with relativity, someone else might have come up with an 'entirely different paradigm' instead.[13] Most physicists would find this idea absurd.

The other argument appeals to forms of knowledge that are not discursive or propositional. This is often done with reference to Merleau-Ponty, who employed the idea of 'savoir de familiarité' in his *Phenomenology of Perception* (1945). Alternatively, one might enlist Gilbert Ryle and his insistence that knowledge-how is irreducible to knowledge-that.[14] Versions of this idea form the basis of many of the articles that Pace mentions.[15] The idea of non-propositional and non-discursive knowledge is not new. It is arguably present in the Aristotelian account of the distinction between *epistēmē* and *tekhnē*. So one might well ask why Robin Nelson, in his preface to *Practice as Research in the Arts*, tells us that practice-as-research entails a 'shift in established thinking about what constitutes research and knowledge'.[16] Why does he write of 'intelligent practice' as if artists were previously being unintelligent?[17]

In any case, one might propose a concept of 'embodied research' to go with 'embodied knowledge'. If 'research' is the creation of knowledge, then one could say that, while knowing how to do something that someone already knows how to do (like ride a bicycle) is not research, working out how to do something that nobody else knows how to do is a kind of 'researching-how'. What is researching-how in musical composition? It can't, of course, be *how to write music*. Nor can it be *how to write the particular piece of music* that I'm writing – that would be trivial. But might 'how to write in sonata form' might be knowledge-how that was created by Haydn and his contemporaries? Could 'how to write music using twelve-note technique' be knowledge-how created by Schoenberg? 'Reseaching-how' would then simply be a newfangled expression for the kind of formal or technical innovation in music that has happened throughout the history of western music.

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[13] Pace, p. 00.

[14] Ryle, G. [1946], 'Knowing How and Knowing That', in Ryle, G., *Collected Essays* (Oxford: Routledge, 2009), pp. 222–235.

[15] See, for example, Wallrup, E., 'With Unease as Predicament: On Knowledge and Knowing in Artistic Research on Music'. *Swedish Journal of Music Research / Svensk Tidskrift for Musikforskning*, 95 (2913), pp. 25–39). It is worth noting that Wallrup's compositional examples are of composers writing theoretical works – I discussed the distinction between this and composition as research in my original article.

[16] Nelson, p. 8.

[17] *Ibid.*, p. 5

Schoenberg articulated the principles of twelve-note music, but Haydn could not have written a research narrative about being a pioneer of sonata form. The difference between the *particular* originality of a given piece and a formal innovation is often only apparent in retrospect, and is rarely the work of one person. Nor can it be just an arbitrary innovation – say, writing music based on genetic sequences, or playing the viola on a trapeze – this tends to revert to the type of trivial answer to a research question that I discussed in my original article. It would be a pretty tall order for most compositional work, and covers only one aspect of compositional originality. It certainly wouldn't necessitate a body of literature such as that on 'practice as research'. But if you want to say that composers throughout history who have come up with formal innovations have been doing 'research' without calling it that, then go ahead.[18]

Pace, at one point, agrees that composition is 'not intrinsically research', but that it might entail various activities that are research.[19] If this is his view, we do not disagree; this is exactly what I said in my original article. But at another point he states that 'research' is just a word for what composers have always been doing, except for the additional requirement of supporting text. One interpretation of this might be that composition is research, and the text simply points out how – but this would contradict the earlier statement that composition is not intrinsically research. Another would be that composition is not research until turned into research by the text. This certainly doesn't square with our usual use of the word 'research'. You could, in principle, do scientific, literary, or historical research without writing anything down. Moreover, if documentation can turn non-research into research, this undermines the 'material thinking' justification for practice-as-research: if we take this line seriously, then compositional knowledge-how would not be amenable to translation into knowledge-that. This is a far cry from Pace's insistence on 'explicit articulation to facilitate integration into academic structures'.[20]

Nowhere do I suggest that composers should never be asked to write words about their music; merely that if the burden placed upon those words is to demonstrate that the music itself is a kind of research, the result will often be nonsense, or will at best present a distorted view of what is important about the piece. Pace's suggestion that composition is somehow a less demanding activity for an academic to undertake, and that it needs the words to make up the difference, hardly warrants a response and has no bearing on the question at hand.[21] His idea that

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[18] But why would you want to? There is of course a sense in which following the 'rules' of sonata form or twelve-note music without this embodied knowing-how would be like trying to ride a bicycle having only read a book about it. To anyone who has taught composition this will seem like an apt analogy. But we can't push it too far, for the point of composing isn't really 'getting it right' in *this* sense. (Did Schubert get composing in sonata form right? Did Berg get twelve-note composing right?) So the corrigibility problem arises here too. This would be better discussed in terms of the Adornian dialectic of universal and particular, rather than in the language of 'practice as research'.

[19] Pace, p. 00

[20] Pace, p. 00 The error of imagining that knowledge-how is 'implicit' knowledge that can be made explicit is discussed by Ryle ('Knowing How and Knowing That', p. 227).

[21] Pace, p. 00

accompanying texts of this kind have the function of justifying public subsidy of composition is also questionable. I am not convinced that the level of the individual piece of music is the right place for this justification to happen; more importantly, the idea that anyone with doubts about public subsidy will be won over with a research narrative is far-fetched.

Pace seems to think that without such an accompanying text, composing becomes merely a matter of composers composing 'in the way they always have done'.[22] This points, perhaps, to a tendency to dismiss any idea of a domain of irreducible non-conceptual thought as some kind of romantic fantasy of ineffability. I have no problem with 'opening a window' on the compositional process, but when this is anything but superficial, it is often poetic and rarely in the language of aims and objectives; nor is it a matter of 'making explicit' for the purposes of 'integration', as Pace puts it. Amenability to such language does not, as we have seen, turn something into research; but in any case, much of what makes music meaningful is generally resistant to such 'integration'. The originality of an individual piece often lies in the non-systematic accumulation and interaction of expectation-defying particulars: startling dissonances (or consonances), tonal implications, a voice entering a moment earlier than expected, a moment of fragility, a strangely unbalanced phrase, the subtle warping of a familiar shape, the particular grain of an electronic sound. Pointing this out is not work-avoidance, it's just what music is like.

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[22] Pace, p.00. The fear that, if composition is not 'research', then it must be merely intuitive, perhaps lies behind the idea that something's being 'research' implies a some kind of increased intellectual status.