TEMPO 76 (302) 52–60 © The Author(s), 2022. Published by Cambridge University Press. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.
doi:10.1017/S0040298222000341

WHO ARE WE TEACHING AND WHY ARE WE TEACHING THEM? THOUGHTS ON MUSICAL DIVERSITY IN UNIVERSITY COMPOSITION TEACHING

John Godfrey

Abstract: Musical composition has traditionally been taught with the assumption that students share musical backgrounds and have similar aims. In today's highly diverse musical world, however, composition students are exposed to a multiplicity of musical languages. They develop their personal creative styles from an internal conceptual 'melting pot' and must also develop compositional methodologies for a potentially large array of disparate usages. This article argues that the teaching of composition should recognise both the rich global diversity of musics and the plethora of uses to which compositional techniques might be applied, and that such teaching might most productively be focused on imparting a broad selection of technical concepts from many musics, coupled with an interrogation of the underlying purposes of techniques taught. All musics must be treated as equally worthy of study and students' embodied experiences respected. Curricula need to be designed with such a catholic view in mind, encouraging students to embrace the growing profusion of genres, techniques and resources available and develop a flexible, broadly informed and resourceful outlook.

As an inexperienced academic at University College Cork (UCC), Ireland, I taught various courses that required music theory and notation skills that I took for granted from my own education as a 'classical' musician in the UK. I quickly discovered that the students did not, in general, have the skills I expected. In a staff meeting about our curriculum I complained that the students needed to learn 'the fundamentals'. Mícheál Ó Súilleabháin, a hugely influential figure in Irish traditional music, countered with the riposte that would, over time, give me a different idea of what composition teaching might be: 'Whose fundamentals?'

I had already started on a journey of discovery that embraced multiple musical traditions as a professional musician. In 1989, I co-founded Icebreaker, a new-music ensemble that took as its starting point the pioneering work of Louis Andriessen in the 1970s. The group included musicians from a number of different backgrounds: classically trained, jazz, jazz-rock. We had such fundamentally

different ideas about how to count and feel rhythms that it was often a struggle in the early years to find consensus. I had a similar experience in Crash Ensemble many years later when a superb player of Irish traditional music joined us to play keyboards in Philip Glass' *Music in Similar Motion* (1969). He had a way of phrasing and articulating the rhythm of this piece that was deeply compelling and quite unlike any other interpretation I'd ever heard. We decided to adopt his 'feel', an uphill climb for most of us.

UCC is considered by many to be the 'mothership' of Irish traditional music, and it has historically attracted many of the country's most remarkable young traditional musicians alongside those from several other musical backgrounds. It is also a department that celebrates diversity in every aspect of its musical make-up: operating on the principle that all musics are equal, it has developed a curriculum that is unique in Ireland, routinely embracing many kinds of music, including Irish traditional music, Western art music, jazz, pop, rock, hip hop, Indonesian, Indian, Chinese, Byzantine and African musics, free improv, sound art and a freewheeling kind of sonic arts creativity.

Students at UCC come from diverse musical backgrounds, but students whose background is 'classical' music are a much smaller proportion than they tend to be in other countries. For various reasons – both cultural and to do with secondary school curricula – even those students who self-identify as 'classical' musicians have less exposure to the music and its theory than their mainland European counterparts. This is not to say that Ireland doesn't produce a great many first-rate musicians, including those specialising in Western art music, but the paths by which students develop their practices are somewhat different to those taken by students in countries where Western art music is a more central part of their cultures.

While Ireland is unusual in the West in having a flourishing vernacular music that is both nationally and internationally significant, it is not unusual in that most students are experienced in multiple musical languages. Easy access to music from all over the world has enabled today's students to be familiar with multiple traditions. Teaching composition in the twenty-first century must necessarily recognise their experience and also recognise that all musics have value, that we – whoever we may be – have plenty to learn from each of them. It is also clear from the music produced over the last six decades or so that the differences between genres – even the binary opposition of art music and popular music, so central to many twentieth-century conceptions of music in the West – are increasingly identified as opportunities for (or sites of) new developments rather than reasons to keep them segregated.

Historically, composition training has been about specialism. Many music institutions teach composition as a Western art-music practice, others teach it via jazz or select popular-music idioms; students in these programmes may be exposed to other forms of music, but these are typically considered adjuncts, rather than core concepts. Given the increasingly diverse experiences and musical interests of students, however, is specialism the best path to follow, especially early in a student's training? When I ask in my title who we are teaching, I'm really asking teachers of composition to embrace the idea that each individual student has a wealth of musical experiences, the precise nature of which is very hard to determine despite any shared training that they may have received (for instance, in secondary school).

For teachers of composition this means we should assume not a tabula rasa, but rather a tabula fecunda – a page of possibilities – in

our students. Each student develops their page from multifarious experiences, and there's no telling quite what these will be. Is counterpoint made with pen, paper and furrowed brow or created on the spot in a band rehearsal? Have a student's strongest experiences of harmony come from secondary school studies of Bach or from playing chords on their guitar? Is a student skilled at composing for clarinet or for digital clarinet played back by software? Is their concept of form driven by reels and jigs, by Beethoven sonatas or by Taylor Swift's songs? Is a mode something that one plays every day as part of a living tradition, deeply embodied and profoundly understood, as is the case for an Irish traditional musician, or is it something learned as an abstract technical concept when studying plainchant? Is the student's music preserved on manuscript, as an Ableton Live patch or as an audio recording? A student may well have more than one understanding of a technical idea simultaneously: a traditional musician in Ireland, for example, may know modes as well as their native language, and also know them as an abstract technical concept in other music, without necessarily having connected these understandings.

What are the implications of a student's experiences? If a student knows harmony from a guitar, how does that influence them? Some teaching practices would deny the value of this knowledge and attempt to replace it with conventional harmony training, but to do so undervalues the student's experience and assumes, if only implicitly, that it can (or even should) 'erase' a part of the student's musical personality. In the face of increasing uncertainty about students' prior experiences, it can be tempting to double down on the historical assumptions of composition teaching and hold fast to the idea that Western art-music methods should have primacy. Indeed, the committees that oversee secondary school education in Ireland have recently reintroduced the study of 'counterpoint' (by which they mean select eighteenth-century German methods of counterpoint) into the curriculum of the Leaving Certificate,[1] against the strong advice of a body of secondary and tertiary teachers who were consulted on this idea early in the planning stage. But what has been achieved by doing this other than a further separation of education from lived reality?

If we accept that alternative forms of knowledge exist and should be celebrated, how then do we teach a class in which student A has guitar harmony, student B has Bach harmony and student C, who plays a melody instrument and never studied harmony in school, has no hands-on harmony at all. We must also acknowledge that each student in our class has listened to different musics, so their experiential aural knowledge of harmony differs too. This is not inconsequential, since ears lead minds in so many compositional decisions.

What will these diverse students do with their knowledge? The creation of music happens in every genre, but the processes by which it happens, and the aspects of the music to which creativity is most saliently applied, are different. Indeed, the idea of 'technique' is itself utterly foreign in some genres. In a sequence from Peter Jackson's docuseries on the Beatles, *Get Back*,[2] we see Paul McCartney rapidly

[1] The Leaving Certificate is the final secondary school examination in Ireland, typically taken at age 16 or 17.

[2] *Get Back* (Disney+, 2021). The sequence in question is at https://youtu.be/07q95KiVguc (accessed 10 January 2022).

https://doi.org/10.1017/S0040298222000341 Published online by Cambridge University Press

arrive at the ultimate form of the eponymous song through a sort of musical mumbling that coalesces into the song's familiar musical shape: any technique at play here was unconscious, and it's a creative method that is probably far more familiar than a consciously constructional approach based on technical concepts.

It seems to me that composition teaching needs to address two equally important, inseparable facets: technique and imagination. Composition teaching often focusses on the former, and students gain considerable fluency in executing the techniques they have learned. This is particularly valuable when the purpose of a student's technical knowledge is clear: a composer intending to write mainstream film music, for instance, must be fluent with tonal harmony practices, orchestration, leitmotif and so on. But for every 'this is how it's done' a cornucopia of 'this is how it could be done' is shut out. For every student whose technical fluency has been learnt from the curriculum of the Leaving Certificate, I see many others crippled with self-doubt, unable to reconcile what they've been taught with the music they actually make. So I introduce and explain the abstract concept of 'technique', its merits and its limitations, before teaching technical methods themselves. For many musicians the creative process is enjoyably mysterious and personal, and a dry and impersonal focus on technical methods can seem foreign to the act of creation as they know it.

The second facet, imagination, can be supported both with information about the possibilities that exist in any given situation and with empowerment, the permission to use whichever possibility a student's music demands. Empowerment is important, at least in Ireland, where many students lack confidence and the secondary school system tends to favour learning by rote over self-realisation; students often need explicit permission to 'break the rules'. I recently taught a free improvisation class that included a fine trad fiddler, but she never played her fiddle as a traditional fiddler would: she used drones, extended techniques and abstract sounds with imagination yet had clearly drawn a sharp contradistinction between the language of the class and her 'home' language. I pointed out that there was no reason not to play the fiddle in the way to which she was more used and she started to combine playing styles in a very beautiful and distinctive way. Encouraging students to recognise the value of their embodied knowledge enables them to develop meaningful and personal hybrid languages.

The benefits of a libertarian approach are considerable, but there is an argument that composition teaching that does not focus on particular approaches or styles leads to composers whose skills are not sufficiently specialised for some notional job. This educational approach is seen in performer-training in conservatoires that focuses almost exclusively on the skills required to be a particular kind of musician. While this form of specialisation has its advantages in those few circumstances where specialism is necessary, it is overly limiting as a general educational approach given the proliferation of musical styles and careers for which we must prepare our students. Undoubtedly, the teaching of composition with a latitudinarian approach is complex, but the range of potential outcomes for the students can (and should) increase.

Each student's technique might then be considered not as a list of 'must know' but as a personalised set of skills or ideas with which to accomplish what the student needs to accomplish, whatever that is. While we can give students an array of technical ideas to consider, each student must decide which pieces of knowledge are useful for

them. As teachers we must let go of the idea of setting specific goals for our students to reach; if we are to empower rather than direct, this is essential. Teachers must also enable musical creativity that operates outside their personal experience and that 'misuses' the techniques, concepts and aesthetics they've taught.

Some examples

'Harmony' is a beleaguered study in Ireland, confused by apparently irreconcilable demands, and taught in the Leaving Certificate according to very old-fashioned models that have little to do with the music that the students generally listen to, play, study and compose. This means that students arrive at university with very limiting preconceptions about harmony, and those students who wish to become school teachers expect to be taught how to teach harmony in the way that it's taught in the Leaving Certificate.

The first step in teaching harmony as a living, creative resource is the empowerment of students' experiential knowledge. It is concurrently necessary for teachers to recognise their own limitations: when I first came to Ireland I found the harmonies that are used in Irish traditional music strange, my classical-tonality-moulded ears often finding them functionally separate from – and even dissonant with – the melodies they accompany. This is, however, a well-established harmonic practice, honed by generations of superb musicians: it was my ears, not the musicians, that needed training.

The second step is to view harmony as a fuzzy set in which multiple possibilities are valid. Many curricula separate different types of harmony – classical harmony, chromatic, jazz, contemporary and so on – but while this is useful in many contexts it can also instil the idea that there are rights and wrongs, shutting down imaginative cross-genre possibilities. I have developed teaching methods that demonstrate harmonic practices from diverse traditions, explain why they can be valuable and then challenge the students to explore those practices in their music, in *whatever* genre they choose. This encourages students to try something they have not attempted before and underscores the idea that trying something foreign within a musical language can expand one's compositional resources, with interesting, often surprising, results.

But how does one approach harmony when students begin with radically different ideas about what it is and how it functions, or even of the meaning of apparently shared terms. For example, for me the term 'improvisation' implies instantaneous composition with a high degree of freedom, but to many traditional musicians it applies to the ornamentation of, and slight deviations from, a tune; in my tradition that would be called 'interpretation'. It's a superficial example but a reminder of potential pitfalls. When talking about harmony in a class comprising musicians from different backgrounds, how much is mutually understood? Are we teachers aware how terms are understood by students from traditions other than our own?

One approach is to consider elements of harmonic practice away from their genre's standard practice and find other ways to view them. Voice-leading, for example, is a concept that seems very 'classical' and receives little attention in traditions other than art music, at least as something done consciously rather than instinctively. In music where the guitar is the primary provider of harmony it is largely ignored, because the guitar offers relatively few ways of voicing commonly used chords and true contrapuntal voice-leading is

https://doi.org/10.1017/S0040298222000341 Published online by Cambridge University Press

technically difficult. Yet it is beneficial to learn about voice-leading for musicians of any genre, to hear that chords which move with what's conventionally considered 'good' voice-leading sound different from those that do not. This is not to imply that music should always follow the principles of contrapuntal voice-leading but that what happens to the notes within simultaneities matters. In my classes students watch videos of starling murmurations to see how we can be aware of both the large shapes created by the flock as a whole and the movement of the individual birds, and how the actions of the latter colour the former.

Voice-leading is a way of understanding the relationship between 'horizontal' pitch movement and simultaneities. Different traditions deal with this in different ways, the choice being especially broad if we allow for those in which simultaneities are not necessarily triadic. In Ligeti's *Lux Aeterna* (1966), for example, the opening spread of pitches from a unison F to a variety of chromatic and diatonic clusters operates according to principles very similar to conventional voice-leading. The pasibutbut of the Bunun people of Taiwan exhibits a harmonic practice in which the primary part proceeds by microtonal slides, and a further three parts contribute notes that have fixed-interval relationships to it; with several somewhat independent voices on each part, both the pitch and the timing of the resulting harmonies are 'diffused'.[3] The pitch movements of the individual embellishing instruments of the Javanese gamelan are determined by a central melody, the balungan, and many of the parts consist of embellished versions of this melody, creating a logic of relationships between lines and simultaneities. In Gaelic psalmody, a preacher leads the singing of a psalm; the congregation follows in free time, creating simultaneities from a shared line diffused temporally in a stochastic manner.

The logic of voice-leading in Western art music is best learned through the ear: *this is what simultaneities created by voices moving by easily sung intervals sounds like*; *this is what they sound like when voices move in some other way*. Exploring the concept in other musics demonstrates that there are ways of producing successions of simultaneities that make sense to the ear without them necessarily being triads; in other words, it allows for good harmonic flow while at the same time liberating the student from limiting conceptions of harmonic practice. This is a way of thinking that empowers but doesn't delimit and may easily be combined with existing practices within music of a particular genre.

To assume that any one genre of a subject has primacy makes problematic forms of understanding that are not necessarily problematic. It is, for example, relatively easy to separate the durations that make up a rhythm from the feeling of that rhythm if one is used to writing music down: one can see the individual crotchets and quavers on the page, lift them from their context within a metre and transplant them into another metre, and so on. Messiaen's rhythm-manipulation methods are predicated on this kind of understanding. For musicians who do not read music, however, this can be extremely difficult, because rhythm is much more felt than it is thought. A rhythm in lived musical experience does not comprise a series of abstract

[3] An example of this can be found at https://youtu.be/vPyboGyBUuM (accessed 10 January 2022). For a technical description of pasibutbut, see Jonathan Stock, *Everyday Musical Life among the Indigenous Bunun, Taiwan* (New York: Routledge, 2021).

https://doi.org/10.1017/S0040298222000341 Published online by Cambridge University Press

durations for anyone – even Messiaen – and so 'lifting' them from the context becomes inordinately difficult. This is only a problem if it's assumed that the forms of duration manipulation that are made possible by using notation are desirable. This rarely happens in aural musics, and where it does, as in Meshuggah's 'Clockworks' (2016) or Snarky Puppy's 'What about Me?' (2014), it is sometimes possible to find alternative means of explanation that don't rely on musical notation.[4]

Conversely, music notation sometimes fails to offer insights into forms of rhythmic understanding that are common in aural musics, such as 'feel', something which any good performer of a beat-based music 'knows' and can creatively manipulate to powerful effect. Indeed, the concepts enshrined in notation can be destructive when learning to understand 'feel', because they create a dependent relationship between metre, beats and musical events that can be unhelpful. It's necessary to accept that neither a genre that routinely uses notation nor a wholly aural one offers a complete picture of rhythmic language; too close adherence to one or the other closes down opportunities for learning.

Notation makes some techniques seem harder to work with than others, but that impression can be illusory. Several strands of contemporary art music celebrate the types of complexity that can be produced by irrational rhythms, especially when they are multi-layered and/or married to metrical structures that are both constantly changing and constructed of irregular subdivisions. Consider works such as Schoenberg's *Erwartung* (1909), Boulez's *Le marteau sans maître* (1953–55) or most of Ferneyhough's music. My first professional performing experience of this came through the music performed by Icebreaker in the 1990s, much of which explored a rhythmic language that sounded very different from the examples above but was built on similar concepts.[5] All this music – whether intentionally convoluted or transparent – employs unusual notational techniques that pose considerable difficulties for its players. For those invested in the traditions that grew out of Western art music these complexities can be welcome challenges and even tokens of high artistic value, yet the use of additive rhythm plus tuplets is routinely heard in non-notated musics all over the world, from so-called 'maths metal', to Balinese Gamelan gong kebyar, Kora music of the Mandinka people of West Africa, the playing of Indian tabla players and the work of Western jazz musicians (especially drummers) and free improvisers.

If the teaching of tuplets and their usage is approached with the assumption that they are difficult because they are both hard to notate and to interpret, their significance in many genres is likely to be neglected. Playing and/or thinking complex rhythms in any tradition usually takes a lot of training, but the degree to which those rhythms are 'difficult' depends a great deal on the mindset a tradition creates. A rock guitarist is capable of producing very complex rhythms during a

[4] See, for instance, the Israeli drummer Yogev Gabay's superb YouTube channel, 'Time Consuming', in which he tackles numerous very complex examples of rock, hip hop and jazz. His analyses of Meshuggah's 'Clockworks' (https://youtu.be/YwrSvpjdK-w) and Snarky Puppy's 'Shofukan' (2014) and 'What about Me?' (https://youtu.be/BCkxWt8YH9M) deftly demonstrate metrical and rhythmic structures based on systematically organised agglomerations of various short durations.

[5] Examples include Diderick Wagenaar's *Metrum* (1970) and *Tam Tam* (1978–79), Michael Gordon's *Trance* (1995), Damien LeGassick's *Evol* (1994) and my own *Euthanasia and Garden Implements* (1990). Icebreaker's discography can be accessed at www.icebreaker.org.uk/discography.html (accessed 16 January 2022).

https://doi.org/10.1017/S0040298222000341 Published online by Cambridge University Press

solo without necessarily feeling the complexities of those rhythms as a challenge. By contrast, Meshuggah produces music that deliberately counters the rhythmic standards of its root tradition in a way that is widely regarded as complex and very difficult to play. As a free improviser playing an abstract music that is largely unmetrical, I feel rhythm but don't think of it as being attached to a beat; in Icebreaker and Crash Ensemble, I was very aware of the relationship of rhythm to beat. The two types of playing require what feel to me like fundamentally different approaches, even if we might use the same technical language to describe them both.

Nor should it be assumed that rhythmic complexity always requires music notation. Many rhythmically complex languages, including those with very extensive theoretical edifices, like Indian tala, are communicated largely aurally. Yogev Gabay's YouTube channel, which is dedicated to explaining extremely complex rhythmic structures in rock and jazz, uses almost no musical notation and is exemplary. He does not underplay the difficulties of those rhythms, but neither does he explain them as counter to conventional rhythmic practice: they are simply what they are. Many students today are also familiar with alternative forms of musical notation, like the horizontal 'piano-roll' representations of pitch and time in many digital audio workstations (DAWs), which can offer yet more ways of understanding rhythmic languages.

Microtonality is also often taught as part of radical contemporary art-music theory. As a student, I learned about just intonation and mean tone from encounters with the music of pioneers such as Harry Partch. I was taught how microtones *deviate* from the equal-tempered twelve-division scale, and today many YouTube videos designed for non-classically trained musicians continue to explain them as being in the spaces between the notes of that scale.[6] The quintessential musical idea of microtones is as exceptions, yet our ears know different: they are ubiquitously exposed to microtones. The singing of Radiohead's Thom Yorke, the individual scale tunings of Irish traditional musicians or of a Javanese gamelan, the pitch-bending in Indian classical music and American blues, the subtle and continual adjustment of pitching in a good string quartet – all are heard as pitching that has meaning, not as deviations from a theoretical standard. The notion of micro-tuning as extraordinary arises from its relationship to the theoretical constructs of Western art music, while an approach that begins with the ear recognises that microtones are not unusual at all. We can explore their role within different traditions and understand them, not as exceptions to a rule but as a richly creative resource.

How students apply these ideas in their own music depends very much on what that music is. As a teacher, I can guide the students to numerous practices that inform, expand and refine their personal musical languages. This model can be easily summarised: here is a selection of ideas; explore them to see what you get. At UCC we embed this approach both on the curricular level and within individual courses. In the early 2000s we developed an umbrella structure to contain all of the courses that had anything to do with creating music: students could choose a number of these each year. That structure no longer exists but the concept does: UCC offers a large number of

[6] For an example, see David Bennett's explanation of microtones at https://youtu.be/q1XOnIk2ai8 (accessed 10 January 2022).

https://doi.org/10.1017/S0040298222000341 Published online by Cambridge University Press

composition courses from which students make a selection. They cover many subject areas: thematic and structural techniques in Beethoven, jazz harmony, composing with/around/through Irish traditional music, sound art, the concept of looping, music technologies, rhythm techniques, songwriting, improvisation, harmony and counterpoint, composing for instruments, composing with field recordings, composing experimental music and so on. Students also gain creative experience in other courses: they might learn jazz improvisation as part of a jazz/world ensemble, pop arranging in pop-performance courses or raag-based improvisation techniques while learning sitar. There are often compositional opportunities in courses that are not primarily practice-based, and an open system of electives allows each student to customise an often unique acquisition of knowledge. At UCC we prefer this model to a sequence of composition courses that might imply that composition is a unitary activity taught the same way to every student; this runs counter to the idea of celebrating the diversity of our students and of music itself.

This approach is also implemented on a course level. While some of our composition courses are specific to particular disciplines (for example, jazz harmony), many are intended as ways of exploring technical ideas without attachment to a particular type of music. They're designed for students with different types of experience and are taught through examples from a wide range of musics, with assessments adapted to each student's chosen language. At postgraduate level, our MA Experimental Sound Practice is for sonic creatives of any kind, with or without a musical background, and is intended to embrace the enormous range of artistic ideas, aesthetics and technical methods found in the sonic arts, making them accessible to students with various types of prior experience and encouraging both innovation within each student's artistic practice and the belief that 'borders' between the arts are notional.

A popular quotation disparages the idea of 'dancing about architecture'[7] but fails to recognise that embracing multiple forms of understanding simultaneously is an essential component of creativity. Teaching composition must balance the demand for training that is vocational and/or focuses on common topics with the need for broad-based knowledge and a flexibility in approach. A student with a wide range of technical resources can create diverse types of music and also has a richer source of ideas to feed their imagination. Dancing about architecture – or, indeed, music – embodies knowledge that is as powerfully transformative as conventional theory.

[7] The full quotation, 'Writing about music is like dancing about architecture', implies that both are useless activities. Its source is unclear but may date from at least 1918; see https://quoteinvestigator.com/2010/11/08/writing-about-music/ (accessed 26 January 2022).

https://doi.org/10.1017/S0040298222000341 Published online by Cambridge University Press