

TROPISMS – A PERSONAL HISTORY OF THE GENESIS OF A COMPOSITION, STRING QUARTET NO. 5, DANCERS ON A PLANE

Kevin Volans

Abstract: This article considers the nature of the relationship between composers and musicologists and explores the aesthetic roots and ideas of my 5th String Quartet, *Dancers on a Plane*, which has recently been the subject of a musicological study.

The conversations that go on between composers and, especially, those 'conversations' between composers and their own work are little known to the outside world. Even an extended interview with a well-informed music journalist cannot hope to cover more than a fraction of the discussion, exchange of ideas, technical tips, concepts, speculations and argument that are part and parcel of the evolution of shared values and aesthetics. With my colleagues I have had extended conversations on (to name a few random examples): the limits of anti-conceptualism; the importance of register and register composition; the historical meaning of colour and how timbre affects the meaning of a piece; the difference in approach involved in structuring a piece of 20, 30 or 60 minutes; the use of tempo systems in lieu of key systems; notation as an aspect of composition itself; and overcoming notions of form. There was never any discussion of pitch organisation.

Yet most published analyses or interpretations of pieces that I have read show scant acknowledgement of these topics and seem to have little interest in *why* a piece exists or how it came into being. I call this 'tropism' because a piece of music metaphorically grows as a plant grows. In biology tropism is the turning of all or part of an organism towards an external stimulus, such as light. I think composers and their work do this all the time. Our conversations act on us at times as light acts on certain plants. We begin to lean in a certain direction. The geographical origin and the social and political climate in which a piece comes into being are also critical. Context is everything.

Context: Cologne

An updated version of this article was published in January 2022, all of the corrections were minor typographical changes. I have long considered myself a member of the Cologne School of composition. Cologne is where I studied for nine years at postgraduate level; it is where my ideas were moulded and where I made

lifelong friends. Central to the Cologne School was Karlheinz Stockhausen. His work had one overriding characteristic that determined the trajectory of his career: it looked always to the future. Stockhausen was born in Mödrath, 36 kilometres from Cologne city centre. At the end of the Second World War he was 17, had lost both parents and Cologne had been flattened. The cathedral still stood but almost the entire city centre had been demolished. Germany had lost the war and nationalism had failed, so internationalism and finding a new international 'language' had to be the solution. There was no looking back – the only way was forward.

It is no coincidence then that one of the world's first studios for creating music entirely from electronic means was founded in Cologne at the Westdeutsche Rundfunk (West German Radio - henceforth referred to as the WDR) in the early 1950s. Like opera in the nineteenth century, electronic music gave birth to many other kinds of music and influenced the ways in which composers worked and thought. It has several important differences from traditional instrumental music. Its sounds can give the illusion of being very close by and very distant; it can whisper in your ear or hail you from a great distance. In instrumental music, on the other hand, the distance between music and listener is of course constant. By the late 1950s electronic sounds could also move at varying speeds throughout the performing space, from behind or in front of the listener, at high speed in circles around the edge of the room or diagonally across the space. These sounds may be recorded sounds, newly invented sounds or noises, sounds that would have been discarded or ignored in traditional music (like page turns or the squeaking of a piano stool); electronic music vastly increased the range and scale of available sounds, from the tiniest scratch to an overwhelming roar. This music lies somewhere between instrumental music and film.

All these elements trained composers to listen afresh, to listen consciously to the entire aural world. The invention of polyester-backed recording tape in 1947/48 facilitated tape cutting and editing, enabling sudden changes in densities, locations and types of sounds as well as the overlaying of multiple sound-worlds. Throughout the 1960s the combination of these technological developments expanded composers' musical horizons and a key technical notion of the music of the 1960s was integration, the melding of different kinds of music within a single piece.

With vastly increased, often state-backed budgets, composers like Stockhausen, Boulez, Xenakis and Berio were able to enlarge their projects. When Stockhausen's work was shown for six months as the German exhibit at the 1970 World Expo in Osaka, Japan in a specially designed geodesic dome with a sound transparent floor, live audiences totalling some 3.5 million people made him one of the most successful composers in history. But Stockhausen's brand of integration began to take on an aura of musical imperialism. He integrated all kinds of music from different cultures into his own music, but there was no suggestion of the reverse, and no integration between different cultures themselves. It was more assimilation than integration.

The local is the universal

By the mid-1970s less intrusively manipulative projects also informed the compositional world of Cologne: pieces like Luc Ferrari's *Presque Rien no.* 1 - le *lever du jour au bord de la mer* (1970), the World Soundscape Project of Murray Schafer and Hildegard Westerkamp, and Feedback Studio's *Strassenmusik in Köln* (Street music in Cologne). Walter Zimmermann, a friend living in the neighbourhood at the time, was starting work on his *Lokale Musik* project, conceived in direct opposition to the universalist notions of the Stockhausen generation of composers. Zimmermann headed his project with the slogan 'The Local is the Universal'. Walter also suggested to Moya Henderson (from Australia), Clarence Barlow (born in Calcutta) and me that we return to the places of our birth (he himself was from Franconia), make soundscape recordings and then make a comparative study of the relationship between landscape and local (traditional) music. We could not get funding but the idea had been planted, and at staggered intervals we set off to make projects derived from this initial impulse.

I made four trips to Southern Africa, gathering two collections of traditional and acculturated Zulu music and two collections of Basotho music. (These collections are now housed in the British Library and are available online¹.) I had set out to make soundscapetype recordings but rapidly became more absorbed by the music I heard than by the ambient sounds. I also made soundscape recordings of insects, birds, animals and sounds of human activity. These resulted in three tape pieces which I made in the late 1970s in the electronic music studio of the Cologne Hochschule: KwaZulu Summer Landscape, a 70-minute soundscape piece blended from a number of recordings, Studies in Zulu History, an electronic piece that synthesises the sounds of the KwaZulu landscape in a formalised way, and a shorter piece, Cover Him with Grass, made from sounds of human activity, including singing and poetry, in Lesotho. These pieces provide the precedents for my decision to include natural sound recordings in my 5th String Quartet. Above all, the joy of African music-making became a light to which I turned.

My recording trips resulted in a complex project in several parts. First, I gave illustrated lectures on these trips at the Feedback Studios in Cologne; then I wrote a series of broadcasts for the WDR (and later Belgian Radio) on the music I had recorded. (The WDR had financed my first two trips.) I wrote hour-long programmes on, for example, *Zulu Guitar Music, The Ughubu Bow Songs of Princess Constance Magogo kaDinizulu, Basotho Traditional Music,* and *Downtown and Highlife in Johannesburg,* introducing the various kinds of Southern African music I had encountered. The programmes proved very popular and were heard by several hundred thousand people. Through the enthusiasm of the head of the Volksmusik Department, Dr Jan Reichow, and the help of Christopher Ballantine of the University of KwaZulu-Natal in Durban, we were able to facilitate the first concerts outside South Africa of Ladysmith Black Mambazo, Johnny Clegg and Sipho Mchunu.

This was the background for my attempt to employ some aspects of African performance and compositional techniques in my own work. Let's begin with the most dramatic idea I came across. In 1967, in an attempt to understand and describe the notions that underlie the traditional music of the Venda, the ethnomusicologist John Blacking wrote that:

The repetition of short patterns, with only minor variations within the total structure, gives to Venda music the character of a waterfall: it is forever

¹ https://sounds.bl.uk/World-and-traditional-music/Kevin-Volans-South-Africa

moving, and yet its overall pattern never changes, and from a distance it even appears as solid and immovable as a stone statue.²

This metaphor of a waterfall or a stone statue captured my imagination when I read it in the mid-1970s in Cologne. Some of the masterpieces of North American minimalist music had reached Germany: Steve Reich's *Drumming* (1970–71), for example, proposed a new idea of 'process' in place of 'development', and a suspended kind of time. Reich's piece apparently had its primary inspiration in Ghanaian music; certainly its repeat patterns created from short figures seemed to have an African influence. But Reich's interest in process meant that the work had a trajectory in time, a slow evolution from beginning to end.

What Blacking was describing was a far more radical kind of music, a music in which time was stopped, an idea diametrically opposed to the Western classical music tradition of the last several centuries. In addition, he claimed that the music, to Western ears highly repetitive, was not perceived as such by the Venda at all. This idea was fascinating for a young composer just completing his study with Stockhausen, whose music is based entirely around changes in time, whether durations of sections, rates of change, tempi or rhythmic proportions. What I had studied was predicated on a Euclidean idea in which time was subdivisible into a number of equal units. A musical structure was created by the juxtaposition of different materials of proportioned durations, just as an architect would proportion a building. By manipulating the rate and density at which information flowed, the composer could alter the listener's experience of time, revealing different elements of the composition in a predetermined sequence and manipulating the emotional experience of the listener.

I need to emphasise that I am talking about formal structure and duration – not rhythmic structure within a bar or phrase. In architecture a façade of a building that is divided, say, into two parts of equal dimensions is called symmetrical. If it has, say, six sections with widths in the proportions 1:6:3:2:5:4, it is called asymmetrical. Similarly, I define a piece of music with sections of different durations that do not repeat themselves in an easily recognisable pattern as asymmetrical. Serial music constructed pieces with systems of proportioning that were asymmetrical in this sense, even though in the end the aim was usually to balance out all elements until a kind of equilibrium was achieved. Very often, influenced by working in tape lengths in the electronic studio, composers proportioned these segments in minutes or seconds.

Commissions usually specify the length of the piece they want. The composer is called upon to write music that sustains the interest of the listeners for this length of time, and they divide it into sections which are usually of contrasting or varying material. Until the advent of 'open form' schemes in the early 1960s and the innovations of minimalism in the 50s and 60s, the overall duration of a piece was predetermined in advance. A piece of music could not be extended *ad libitum* by repetitions of sections, for example; all events followed one another in a sequence predetermined by the composer. Participatory African music, however, is composed in cycles of patterns, usually of even numbers of pulses, and of equal lengths which can be repeated ad lib by the performers. I call this kind of formal structure 'additive',

² John Blacking, Venda Children's Songs: A Study in Ethnomusicological Analysis (Chicago: University of Chicago Press, 1995; originally published Johannesburg: Witwatersrand University Press, 1967).

and, according to Blacking, Venda music took an additive approach to time and form in which there was no attempt to structure the listener's emotional experience in time: no process, no development, no evolution, no recapitulation, no proportioning, no 'architecture', no contrasting material, no dialectic. The music lasted as long as the energy to produce it lasted.

What young composer could resist an idea that so radically contradicted everything they had been taught? For centuries European music has offered a kind of transcendence, a 'magic carpet effect'. We sit quietly in rows facing the musicians and they play music that takes us on an imaginary emotional or intellectual journey. The music is intended to lift us from our seats and our normal perception of time. Blacking suggested quite the opposite: an 'audience' that was expected to participate, by dancing or singing or clapping, and a music that could stop the flow of time, embodying the moment.

But the sequence is very short; as Blacking stresses, the music is made up of 'the repetition of short patterns, with only minor variations within the total structure'. This is more important than the metaphor of the waterfall, because the image of a constant flow cannot be achieved by the repetition of very long phrases, nor can it be achieved by non-repetitive means. For this effect to be achieved the patterns must also be constructed of even numbers of pulses. All the African music I have become familiar with (excluding introductory flourishes and the very occasional solo piece) have been constructed with pulses in multiples of four. I have not come across traditional music patterned in groups of say, 7, 9, 11 or 13, although that is not to say they don't exist in traditional African music.

Mbira

I had no access to Venda music at the time. The internet did not exist, and commercially available recordings of Venda music are very rare, even today. But I was familiar with other Southern African music which displayed similar qualities: Zulu guitar music, which I had known since childhood, and Shona mbira dza vadzimu music, which I had come across on Paul Berliner's record *The Soul of Mbira* (1973).³ So I turned towards those musics, making two attempts to write music that embodied this idea of open form, using repetition of short phrases: pieces called *Mbira* and *Matepe*. They were derived from Shona music and were premiered in Cologne in 1980 at the Ostasiatische Museum with Paul Simmonds and me on harpsichords, Robyn Schulkowsky on rattles and Michael Ranta on Thai gongs. My source material for the patterns of 'Nyamaropa', the traditional piece on which I based *Mbira*, was Andrew Tracey's pamphlet *How to Play the Mbira Dza Vadzimu* (1970).⁴

The piece *Mbira* did not wholly embrace this new idea. I added an 'introduction', where each player showed off different variations on the patterns, an idea taken from Zulu guitar music rather than Shona music, and I added a kind of coda, an apotheosis, in which the whole piece was transposed up an octave and recast into 72 beats (or pulses) as opposed to 48. The sound on the harpsichords in this register was ethereal, much thinner and more delicate.

³ The Soul of Mbira: Music and Traditions of the Shona People. 2002, Nonesuch Records, 79704-2. Recorded in Zimbabwe by Paul Berliner and originally released in 1973.

⁴ Andrew Tracey, How to Play the Mbira Dza Vadzimu (Roodepoort: The International Library of African Music, 1970).

The form was simple, beginning–middle–end, and only the central section was what one could call open form, but here, too, I specified the sequence in which the patterns were to be played and also varied the density of the piece: at given moments the players are obliged to drop their left-hand patterns and play the right hand only; on another occasion it is suggested the players are (ad lib) to play the bass an octave lower, an octave below the range of the mbira. I suggested a duration of between 10 and 20 minutes, but we always found ourselves finishing *Mbira* after about ten minutes; we were not able to shake off our old sense of 'timing'. *Matepe* was more successful: performances ranged comfortably between 10 and 20 minutes.

The pieces were written for harpsichords of historic design: a seventeenth-century Italian harpsichord copy with a somewhat explosive bass, and an eighteenth-century Flemish-style instrument, which was altogether smoother and sweeter in sound. This enabled the patterns to 'speak' differently on each instrument. We also re-tuned the instruments to a compromise between Shona tuning and the Western major scale; when tuned, say, to seven equal steps to the octave – closer to Shona tuning – the instruments clashed horribly with the fundamentals. Our compromise tuning differed from that of the equal tempered major scale, as shown in Table 1. The adjustments are given in cents.

To match the harpsichords Robyn Schulkowsky developed some delicate rattles from aluminium 35 mm film canisters, filled with various seeds. Michael Ranta's collection of Asian instruments provided a set of Thai gongs that matched the final tuning of the harpsichords, and so I could write a part for him.

The whole endeavour was a conscious learning process for me. I wanted to create a set of pieces, beginning with Mbira, which gradually moved from a traditional African style of music to an entirely invented kind of 'folklore'. I also wanted to introduce Cologne composers and audiences to a different kind of open form and to the remarkably different kind of rhythm that Shona music employs, in which each player has a different downbeat. By playing the music on harpsichords I was able to introduce register composition and develop patterns which were not playable on the original traditional instruments. For example, adding just one note to the traditional patterns played on the right-hand keyboard of the mbira enabled the inversion of patterns and the creation of new and rhythmically more ambiguous melodic contours. As most composers know, transposing individual notes by an octave or two is one of the most powerful transformative tools in our compositional repertoire - altering the gestalt, the line, of a group of pitches radically transforms their musical meaning. For example, if one transposes the E flat and the D in the opening figures of Beethoven's 5th Symphony (see Example 1a) up an octave, the result is somewhat histrionic and unstable, rather than authoritative and portentous (see Example 1b).

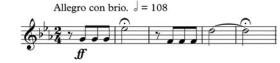
Similarly, register composition has been a vital tool of composers for centuries. Transpose the opening of the Waldstein Sonata up by

Table 1: Kevin Volans, harpsichord tuning, with cent deviations, for *Mbira*.

G	A	В	С	D	Е	F♯	G
0	-29	-40	+14	-15	-40	-40	0

Downloaded from https://www.cambridge.org/core. ISPG/USA, on 18 Feb 2022 at 17:48:52, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/S0040298221000668





an octave and the import of the music is radically (and disastrously) transformed – even though the pitches are identical. Register composition was one of the most seminal elements of integral serial composition from the mid-1950s onwards.

By shifting the tone colour of the music from mbira dza vadzimu music to European harpsichords and Thai gongs, and by changing the tuning system, by shifting register and newly developed patterns, and by performing the music in a concert situation within a school of avant-garde music, I radically and unavoidably altered the meaning of the music. Or so I thought.

Some ten years later, a young musicologist, Martin Scherzinger, argued in an undergraduate dissertation that because the pitches (as written on paper – as opposed to their actual frequencies, which is quite a different thing) followed the same harmonic patterns as traditional Shona music, *Mbira* was essentially a transcription of the original music. All the months of work – discussing possibilities with my colleagues, considering the instrumentation carefully, choosing an appropriate tempo, learning the kind of pattern permutations possible, developing new patterns, deciding on the form-scheme of the piece and the sequence of the patterns, choosing the transpositions, selecting the gongs, working with Robyn on the rattles – all that decision-making was discounted. The musicologist, it appeared, focused only on the dots on the page and extrapolated from there.

What surprised me most was Scherzinger's dismissal of register, both note-to-note and at the large-scale compositional level. In an email to me of April 2009 he insisted that:

Aside from a few notes that have been placed an octave lower than the original and (perhaps) the coda... the entire piece can be performed on the mbira rather easily. In fact, members of the mbira ensemble I founded at the Eastman School of Music in 2001 have performed the piece on both mbira and harpsichord with equal facility.

Yet my piece extended at least an octave above and below the range of the mbira dza vadzimu, and some of the patterns would not have been performable on traditional instruments. For Scherzinger's school of musicology it would seem that register is of no significance. It doesn't matter which F sharp you play, as long as it is F sharp.

Around the same time as Scherzinger's dissertation was written a recording of *Mbira* was released by the WDR. Soon afterwards I received an enraged letter from a musicologist whom I had always admired, demanding, presumably on behalf of the Shona people, a 'considerable sum of money'. If I didn't cough up, there would be consequences: my reputation would be damned throughout the musical world. I was extremely shocked and upset. I had embarked on this project in good faith, and by this time the piece had been

Example 1:

(a) Ludwig van Beethoven, Symphony No. 5, bars 1–5. (b) Ludwig van Beethoven, Symphony No. 5, bars 1–5 (registrally varied). performed fewer than ten times. The royalties amounted to less than €50 in today's money. I consulted with Gideon Roos, head of the performing rights society in South Africa, SAMRO, who pointed out that even if the original material had been copyright to the Shona people, the small amount of royalties would be impossible to distribute. But it was clear that I had entered a grey area: in my enthusiasm for this beautiful music I had, according to some, overstepped the mark.

So I withdrew the piece and assumed that this would be the end of the matter.⁵ I also decided not to make any more direct references to African music in my work. On 11 February 1990 Nelson Mandela was released from prison, an event that marked the end of apartheid. I had emigrated to Ireland in 1986, and it seemed inappropriate for me to attempt to speak on behalf of others. There were plenty of talented young South Africans who could speak for themselves.

By 1990 I had begun working extensively with British contemporary choreographers: Siobhan Davies, Shobana Jeyasingh and later Jonathan Burrows all commissioned work from me. *Correspondences* (1990), with Shobana Jeyasingh, was a 90-minute 'dance opera' for baritone and string quartet written to complement Bharatanatyam dance patterns. Shobana sang a series of talas on to a tape, giving me the rhythms of each section of the work; working with a precomposed rhythmic structure was an entirely new experience for me. *Chevron* (1990), for Siobhan Davies, attempted to employ the many lessons I had learnt from Morton Feldman, the idea of formlessness in particular. Similarly, *Wanting to Tell Stories* (1993), taking its title from a phrase used by Philip Guston, explored post-abstractexpressionist ideas of narrative versus non-narrative form. In between these, the atonal orchestral piece *100 Frames* (1991) explored ideas of 'floating' orchestration.

Then, in early 1993, the filmmaker Deborah May approached me with the suggestion that we apply for a BBC commission for their new 'Sound on Film' series. The idea was to commission half-hour television programmes (precisely 28 minutes, in fact) in which, first, a piece of music was composed and then a film made in response to the music. Our plan was to film and record in Namibia and Johannesburg. I had visited Namibia once and longed to return. Later that year we won the commission with a proposal that the music and the film reflect the extravagance and beauty of the patterning, the movement and the contrasts of the Southern African landscape, its peoples, cultures and animals. It was all very vague but we were confident that we could produce something intriguing. What was clear was that we had to avoid it sounding and appearing like a travelogue or, even worse, a tourist board advertisement. The music had to eliminate any hint or trace of fake African music. I decided on a kind of dance piece with 'gaps' left in the texture to allow the film to take the foreground. The gaps would be silent or filled with a soundscape recording of some kind.

I chose to write for my favourite medium at the time, the string quartet. I wanted to make the rhythmic structure, the dance patterns,

⁵ In 2004, for example, although aware that the piece had been withdrawn, Martin Scherzinger wrote about it again in a chapter in the *Cambridge History of Twentieth-Century Music*: 'In his piece *Mbira*, for example, Volans simply presents ten full minutes of basically unaltered transcriptions of the mbira tune *Nyamaropa* (performed by Gwanzura Gwenzi) for two retuned harpsichords.' Scherzinger, 'Art Music in a Cross-Cultural Context: The Case of Africa', in *Cambridge History of Twentieth-Century Music*, eds Anthony Pople and Nicholas Cook (Cambridge: Cambridge University Press, 2004), pp. 548–613.

take the foreground, so most of the piece was written chordally, beginning with the juxtaposition of three kinds of chords, a split A minor 7th in first inversion, G major (played usually with triple stops in the first violin) and an occasional E flat major (using artificial harmonics). Superimposed on these was a pattern of circular bowing on the viola, producing the overtone series of D. This bowing was the only 'Africanness': the way in which it elicits overtones is typical of much southern African bow music.

I wanted strong rhythms, similar but not the same as those in the Bharatanatyam piece I wrote for Shobana. Rhythmically the piece is very asymmetrical, structured around uneven numbers of beats. For example, the opening is:

Two bars of 4/4 and one of 3/4, dominated by triplets = 11 crotchets

One bar of 4/4 and one of 3/8 = 11 quavers

One bar of 3/4 and one bar of 8/4 = 11 crotchets

One bar of 7/4 and two bars of 5/8 = 12 crotchets

One bar of 4/4 and one bar of 8/8 (divided 3 + 3 + 2) = 8 crotchets Two bars of 4/4 and one bar of 3/4 = 11 crotchets

Then soundscape: two bars of 9/4 (with string quartet) and 15/4 (silent)

And so on throughout the piece until the final section, which consists principally of repeated bars of 7/8, separated by bars of even numbered minims (see Example 2).



Example 2:

Kevin Volans, String Quartet No. 5, Dancers on a Plane. © Copyright 1994 Chester Music Limited; used by permission of Chester Music Limited.

Downloaded from https://www.cambridge.org/core. ISPG/USA, on 18 Feb 2022 at 17:48:52, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/S0040298221000668

Very few consecutive bars have the same rhythm. With hindsight, this is as far removed from the kind of structure described by Blacking as I could get while still retaining a traditional sense of 'dance' rhythms. Harmonically the piece is very static. The harmonies of the opening dominate, taking up half the duration of the piece.

Because of the strict time limits imposed on the piece by the television programme I had to abandon any ideas of open form and additive formal structure. It became a 'subdivisively' composed piece, and I had to revert to everything I had learnt in my studies with Stockhausen: proportioning of durations and monitoring rates of change. 28 minutes is the sum of the numbers from 1 to 7. The sum of numbers from 1 to 6 is 21 (which conveniently coincides with the Fibonacci series: 0, 1, 1, 2, 3, 5, 8, 13, 21). I knew that the 'trajectory' of the piece should aim for this moment, 21 minutes, and then wind down for the final 7 minutes. In Stockhausen, however, this would often be a moment of maximum repose: the 'climax' would be the quietest moment in the piece. I decided that this would be the moment for a kind of recapitulation and to increase the energy of the opening material by transposing it a minor third higher. What I failed to take into account was that the open strings of the opening would inevitably sound stronger than the same material on stopped strings. So my changing up a gear didn't come off. The piece should have begun with the material transposed up a minor third, and at 21 minutes moved down on to the open strings. I have always felt the piece is unfinished and have revised it twice; maybe I will do so again.

The instrumental music was completed in Ireland before we set off to South Africa and Namibia. What was to be placed in the 'gaps' in the music, whether silences or soundscape recordings, would depend on what our recording trip brought up. My assumption was that the recorded natural sounds, at least those of human activity, would be made in Namibia, but once we arrived in Johannesburg I realised that the project budget would not allow me and my sound technician to travel to Namibia with the film crew. So we took the cheaper option of going to the northernmost part of the Kruger National Park (where I knew we could make good recordings of insects and birds) and then to conveniently neighbouring Venda. In the two days in Venda we made a number of sound recordings, none of them of music, of which five made their way into the piece. I chose the ones which fitted best into the score, first according to their pitch and second their rhythmic structure.

Imagine my astonishment, then, when a musicologist, William Fourie, published an article in which he claimed to demonstrate that I had written the piece using concepts of composition derived from Venda music, a music with which I was completely unfamiliar and whose principles were at odds with the methods I had used. According to Fourie, 'in this article, I frame the quartet's use of theoretical concepts of Venda music'.⁶ Later he writes that, 'as suggested by Volans's programme note, the instrumental part does have a strong grounding in Venda traditional music'⁷ and that 'the quartet part reproduces, albeit it relatively abstractly, the Venda music from which Volans tells us it originates' (my italics).⁸

⁶ William Fourie, 'Between the Musical Anti- and Post-Apartheid: Structures of Crisis in Kevin Volans's String Quartet No. 5, *Dancers on a Plane', South African Music Studies*, 39 (2019), p. 132.

⁷ Fourie, 'Between the Musical Anti- and Post-Apartheid', p. 152.

⁸ Fourie, 'Between the Musical Anti- and Post-Apartheid', p. 156.

My programme note makes no such reference:

The avant-garde in the 20th century has increasingly treated the work of art as an object in this world rather than a window into another world. This is as true of music as visual art. At the same time, and somewhat paradoxically, quotation or reference to other works has become a common structural device. The work of Jasper Johns embodies both these elements. His 1950s paintings of the United States flag are both paintings and flags, but not paintings *about* flags. His later work contains reference to Picasso and da Vinci among others and in his painting *Dancers on a Plane* he has inserted figurative references to Tantric art in the midst of abstract patterning. Johns' juxtaposition of abstract and concrete imagery interests me. In this piece I have inserted natural sound recordings into the dance patterns of the string quartet music. This is similar to but not the same as what Johns has done – it's rather like making world that gave rise to the music. My 'inspirational debt', however, in writing the piece is more to Johns' partner, Robert Rauschenberg.

Venda music is made up of additive formal structures, the opposite of the kind of subdivisive processes and concepts of timing and duration of my piece. As exemplified by the Tshikona national dance, Venda rhythms consist of a pattern of 12 pulses, which is repeated continuously throughout the whole piece. There are no pauses and there is no deviation from this. According to Andrew Tracey and Laina Gumboreshumba, this pattern is 'widespread across sub-Saharan Africa from West Africa to South Africa. It is usually described as a "timeline pattern", meaning that it can be used as a constant pattern with which all parts of an ensemble are timed or coordinated."⁹

This is entirely at odds with my string quartet, which has no 12-pulse pattern repeated continuously throughout the piece, but Fourie chooses to ignores the rhythmic and formal structure of both my piece and Venda music. Stranger still, when he discusses pitch he does so in terms of medieval/ancient Greek modes. John Blacking was at pains to explain that his use of the word 'modes' did *not* refer to Western concepts of modes,¹⁰ but Fourie describes a 'Dorian-like Venda mode' and a 'Mixolydian-like Venda mode'.¹¹ The Western modes in question are defined of course in terms of sequences of tones and semitones. In equal temperament, these intervals contain 200 and 100 cents, respectively, and in Pythagorean tuning they are closer to 204 cents and 90 cents. But the tuning of Venda pipes in the Tshikona dance has nothing remotely resembling whole or half steps. For example, Tracey and Gumboreshumba give the four sets of pipe-tunings shown in Table 2.

As Tracey points out, 'none of the scales actually show the typical Western modal patterns of whole-tones and semi-tones', and, in particular, the Sundani pipes 'show a preference for intervals around 171.4, the mean cents figure for an equi-interval heptatonic scale'.¹² To talk of these scales as 'Mixolydian-like' or 'Dorian-like' discredits Fourie's entire argument.

⁹ Andrew Tracey and Laina Gumboreshumba, 'Transcribing the Venda Tshikona Reedpipe Dance', African Music, 9, no. 3, pp. 25–39.

¹⁰ See, for example, John Blacking, 'Problems of Pitch, Pattern and Harmony in the Ocarina Music of the Venda', *African Music*, 2, no. 2 (1959); Blacking observes that 'The tone and pitch of wind instruments may vary considerably because of such factors as changes in temperature or in the position of the player's mouth in relation to the embouchure', add-ing that 'Venda boys were not at all disturbed if the pitch of a single *tshipotoliyo* varied from one performance to another, even when the interval was as large as a whole tone'.

¹¹ Fourie, 'Between the Musical Anti- and Post-Apartheid', p. ?.

¹² Tracey and Gumboreshumba, 'Transcribing the Venda Tshikona Reedpipe Dance', p. 28.

Table 2: Venda pipe-tunings, intervals in cents.

Kalavha pipes	124	221	185	101	163	224	182
Sundani pipes	168	185	136	167	174	193	177
Hamangilasi pipes	159	208	165	145	178	198	147
Phiriphiri pipes	118	217	222	165	150	200	128

Fourie believes he establishes a link between my 5th String Quartet and traditional Venda music by referring to an antiquated system of scales and analysis. He ignores time structures, rhythm, other aspects of my compositional technique and use of technology and the history and the social significance of both Venda music and my music.

The gap between composition and musicology, it appears, could not be greater. Composition as I know it – the structuring of sonic material in a fixed or open time frame, whether by anti-conceptual or conceptual or extra-musical means – is apparently of no significance. Music is approached entirely via selected aspects of its notation.

Conclusion

What is happening in the examples above is the same thing that discredited 'ethnomusicology' in the early twentieth century. By ignoring the historical, geographical and political origins of a piece of music, by removing the music from its time frame and social context, by not discussing with composers how *they* conceive of and describe their work, musicologists of today are behaving like colonial writers of the past. Composers are excluded from the discussion of their work as if they are somehow illiterate and beneath consideration. It was only in doing some research for this article that I discovered most of the musicologists, one may wonder what purpose it serves. As Diderot warned: 'Beware of the man who wants to set things in order. Setting things in order always involves acquiring mastery over others – by tying them hand and foot.'¹³

¹³ Denis Diderot, Supplément au Voyage de Bougainville, 1796, in Diderot's Selected Writings, ed. Lester G. Crocker, trans. Derek Coleman (New York: Macmillan, 1966).