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Body & Society special issue: Rhythm's Return: Embodiment and Cultural Theory

Introduction: Rhythm Returns – Movement and Cultural Theory

Rhythm returns, it makes a habit of it. This is in its nature – repeating itself, reiterating, doubling-back – a *ritournelle*. Rhythm itself turns between ebb and flow, flow and arête, contraction and dilation, growth and decay, condensation and rarefaction, contraction and relaxation, inhalation and exhalation. Rhythm from *rhythmos*, as Emile Benveniste (1971) taught, is both flow and form, that is, both meter and music, quantity and quality. Rhythm makes us remember, repeating by rote, making habits and routines; but it is amnesiac, making us forget – only to return afresh. As Henri Lefebvre reminds us, 'dawn is always new' (1996/2003: 231). Rhythm is double-sided, it doubles up, even double-crosses itself, both the earthly and ethereal, enforcing the work of labor as much as the play of pleasure. Rhythm has equal facility to be a regressive or progressive political weapon, as we discuss below. Rhythm is multiply inflected, both traumatic and cathartic. There is a rhetoric to rhythm, we feel it, it carries an affective charge, conveying meaning as feeling and tone, rather than logic or information.

Our interest in rhythm in this issue is not so much a turn to rhythm, in the way of linguistic turns, or the turn to affect, but instead – perhaps inevitably with rhythm – a *return*. 'Return' suggests repetition of old ideas, but with difference. For many of us, Lefebvre's *rhythmanalysis* has been the entry point to the theorization of rhythm, disclosing how different rhythms come together in everyday life. However, this special issue does not take Lefebvre's seminal work as its starting point, but rather seeks to embrace a wider approach, which revives perhaps less known figures from the past and brings together a panoply of contemporary approaches. At the same time, there is a general attempt to understand the function and meaning of rhythm in the analysis and theorization of embodiment, mediation and culture, and to find conceptual resonances between rhythm and such notions as affect, virtuality, and power. Rhythm is a concept that moves between disciplines, focusing attention on, among other things, how our sensory worlds are mediated and organized, how we come to learn to move our bodies

and become individuals, and how our experiences might escape being captured in systems of representation or efficient production, standardization and control.

In this special issue we then explore what makes rhythm useful as a conceptual methodology in the study and conceptualization of the body and culture – a rhythm method. This takes place through a range of examples, areas of application and historical periods. To set the scene for this, the introduction traces what could be called a genealogy of rhythm, or perhaps better imagined as series of lateral rhizomatic connections, as rhythm itself is a disruptive inflection that never runs smoothly. Historically rhythm is continually returning; constantly falling in and out of fashion.

With rhythm's periodic return, as with any circle, it is difficult to know where to start. One place would be the ancient figure of the Ouroboros, the serpent biting its own tale, a diagram found in numerous Gnostic, Hermetic and Alchemical texts. This serpent symbolises self-reflection and continuity through continual re-creation. Another possible early source of thinking about rhythm is Heraclitus, whose pre-Socratic philosophy considered movement, rather than stasis, as the founding principle of the universe, relevantly also to contemporary debates in philosophy and cultural theory about modes of knowledge that can account for the becoming and emergence of form (see Laplantine, 2005: 105-108). But all there is scope for in this introduction is to mention a few instances of these returns, to hint at a wider and deeper context for the articles we present in this special issue and possibly encourage a more substantial genealogy of rhythm. Even this could be said to go against the rhythmic flow itself, as one of rhythm's qualities is always to renew itself.

[Figure: Ouroboros]

Such syncopations are expressed in the structure of the introduction, that while trying to maintain the through line of the rhythmic argument as it were, also includes various detours and excursions into specific examples of the way rhythm has been taken up. The first half of this introduction focuses on the cultural history of rhythm and embodiment in modernity, whilst the second half goes on to use this history to inform particular deployments of theorizations of rhythm and the body in the range of articles included in this issue that relate to media technology, politics, vibrations and the virtual.

Rhythm in Modernity

Despite its importance to Western (as well as non-Western) thought throughout millennia, one might argue that it wasn't until the end of the nineteenth century that rhythm began to receive systematic theoretical attention across philosophy, science and the arts. Alongside influential metaphysical formulations such as Friedrich Nietzsche's notion of the eternal recurrence, this endeavour to map the world through its rhythmic character was expressed by the English polymath and originator of the theory of evolution, Herbert Spencer. After surveying the natural, organic and biological and human worlds, Spencer concluded in a chapter in his *First Principles*, first published in 1864:

[R]hythm is a necessary characteristic of all motion. Given the co-existence everywhere of antagonist forces – a postulate [...] necessitated by the form of our experience – and rhythm is an inevitable corollary from the persistence of force. (Spencer, 1867: 271)

In Spencer's view rhythm is thus considered as a fundamental property of all natural forces, or rather the relationship between them. In the late nineteenth and early twentieth centuries, theorizations of rhythm (such as Spencer's) emerged as part of the processes of industrialization and the proliferation of new media technologies of speed and media. New to this context, which emphasized mobility and change as well as fragmentation of the sensory realm, was the central – even if quite ambiguous – place that rhythm acquired in conceptualizations of human psychology, social behaviour and physiology.

Paola Crespi's introduction to texts by Rudolph Laban and Rudolf Bode maps this preoccupation with rhythm in modernity, highlighting in particular the place and meaning of rhythm in in the German *Körperkultur* of the 1920s. Bode's and Laban's essays, which are translated for the first time into English in this issue, both discuss rhythm as an embodied force of vitality and emphasise its pedagogic importance – a theme that was also stressed by Emile Jacques-Dalcroze in France, whose eurhythmic (meaning 'good rhythm') exercises were aimed at increasing mental and emotional awareness, making physical performance more accurate and expressive and making musical expression more precise. At the same time, as Crespi points out, Bode's and Laban's texts exemplify the ambivalence in response to the increasing quantification and mechanization of experience that is characteristic of the intellectual climate of the period. Indeed, the texts indicate how rhythm, as Michael Cowan (2012: 18-19) observes, became a fetishized keyword of modernism connoting the possibility of

overcoming the malaise of technological civilization through communal participation, ritual and connection with nature (something that later became the core of Fascist politics in the 1930s). This conceptualization of rhythm can also be considered in the context of that of habit, as a way of understanding – and controlling – affect in turn of the century psychology of Stanley Hall and William McDougall (Blackman 2013).

Bode and Laban's essays challenge the epistemology of rhythm developed in the natural sciences in the late nineteenth century to probe into the relation between the individual and the environment as well as the mind and the body. Perhaps one of the most overarching articulations of rhythm in the experimental scientific sense can be found in the American psychologist Thaddeus Bolton's doctoral thesis *Rhythm*, which was subsequently reprinted in *American Journal of Psychology* in 1894. Bolton catalogued the panoply of rhythms, stating 'rhythm is so universal a phenomenon in nature and in physiological activity and underlies so completely speech, that I desire to call attention to some of its manifestations' (Bolton, 1894: 146). Bolton does this under the headings of rhythm in nature, physiological rhythms, attention and periodicity, rhythmic speech, time-relations and intensity of sounds and qualities of sounds. Finally, Bolton (1894: 163) specifies 'the emotional effects of rhythm on savages and children', bringing to the fore the important issue of the political and ideological discourse of race, nation and biology in which rhythm was also imbricated as well as the definition of rhythm in late-nineteenth and early-twentieth-century psychology and anthropology to circumscribe the Western (white and male) individual's appearance and behavior from its significant others (women, children, colonial subjects as well as crowds) (see Golston, 2008: 32-34). Bolton then goes on to describe a series of experiments on rhythm conducted with the aid of a precision event timer device called the chronograph, which was devised by one of psychology's founding figures, Wilhelm Wundt, in his famous laboratory in Leipzig. Adopting Wundt's psychometric approach, Bolton's conclusion perhaps lacks the insight of his preceding account of the field: 'The conception of a rhythm demands a perfectly regular sequence of impressions within the limits of about 1.0 sec. and 0.1 sec' (Bolton, 1894: 237).

[Figure: Wundt's chronograph]

In Bolton's musings, as Michael Golston explains, 'rhythm rises to the surface of phenomena to reveal skeletal blueprints of time, space, and consciousness' (2008: 13). One could perhaps think of rhythm in general terms as a central epistemic tool in experimental physiological and psychological sciences of the

era. In the work of Hermann von Helmholtz and Wilhelm Wundt, among others, rhythm was employed in the observation and measurement – and, by consequence, modulation and control – of somatic and cognitive capacities. Von Helmholtz and Wundt noted how physiological and mental processes are fundamentally temporal by nature, thus turning rhythm into a particular kind of object knowledge of physiological and psychological sciences: through its power of synthesis of perception and consciousness, rhythm appeared as the key to the secrets of mental and physical life. This is particularly evident in the opening of Christian Ruckmich's article 'The Role of Kinaesthetics in the Perception of Rhythm', published in *American Journal of Psychology* in 1913, where Ruckmich (1913: 305) complains that 'the experimental investigation of the perception of rhythm has grown so extensive and, at the same time, so indefinite in scope.' He continues:

The subject of rhythm has been carried over into many fields both inside and outside the science of psychology: within, it has been related to attention, work, fatigue, temporal estimation, affectation, and melody; without, it is frequently mentioned in connection with music, literature, biology, geology, gymnastics, physiology, and pedagogy. (Ruckmich, 1913: 305-306)

While we cannot include such a range of rhythmic subjects in this issue, this is a useful reminder of the scope the concept has been considered to embrace.

Mediations of Rhythm

Not surprisingly, perhaps, there was also a particular media technological dimension to the scientific conceptualization of rhythm. Very early in the history of theoretical writings on the medium of film, Harvard experimental psychologist Hugo Münsterberg wrote about the vitalizing power of rhythm in the movies, underscoring its capacity 'to excite and to intensify the personal feeling of life and to stir the depths of the human mind' (1916: 220). Münsterberg saw cinema as a 'psychotechnology' endowed with particular kind of power over the viewer's existential reality – and as such also a continuation of the various types of mechanical instruments developed to measure and quantify the human mind. Indeed, moving to Harvard in the 1890s, Münsterberg, a student of Wundt's, had inherited a psychological laboratory from William James, which he turned into a collection of various types of apparatuses the purpose of which was the analysis and dissection of the rhythm and duration of mental processes (see Bruno, 2009). A whole repertoire of different gadgets was employed to trace, measure

and diagram the mind's workings, from the thresholds of conscious perception to the duration of various mental acts. This psychophysical intervention into psychic life was itself an inherently 'cinematic' gesture, as Giuliana Bruno notes: 'On these temporal grounds film and science met: the sectioning and sequencing of time and the search for its movement turned the history of science into the language of cinema as the experimental researches of Eadweard Muybridge and Étienne-Jules Marey, among others, analytically parsed the leap of time that led from lab to film' (Bruno, 2009: 99).

Excursus: Early Film

A cursory look at the context of early theorizations of cinema attests to the importance of rhythm to modernity's media environment. In early film theories – ranging from the writings of René Clair, Abel Gance and Germaine Dulac in France in the 1920s to Soviet Montage theorists (most notably, Sergei Eisenstein) – cinema was considered a fundamentally rhythmic medium. René Clair proclaimed that the 'cinema must be a veritable orchestration of images and rhythm' (1988: 281). For him, rhythm encompassed the organization of both film form (its poetics) on the editing table and the flow of the spectator's experience and consciousness, the intensive ebb and flow of sensations, emotions, imaginations and ideas in the process of film viewing. Indeed, Clair spoke about the suggestive power of rhythm in cinema, referring to its capacity to take hold of even such basic physiological processes as breathing and so capture the viewer under cinema's spell. 'Rhythm', Clair wrote, 'can become jarring and correspond perfectly to a gasping and irregular breathing, establishing once more a firm relation which exists between the intensity of organic rhythm and that of artistic rhythm' (283). Clair's conceptualization echoed the views of Sergei Eisenstein, who envisioned how cinematic montage could be attuned to the spectator's internal biorhythms such as the heartbeat.

Thus, cinematic rhythms – in the sense of selecting, cutting up and recomposing – come across as emblematic of a more general epistemology of the human body and mind in modernity. The reference Bruno makes to Muybridge's and Marey's 'pre-cinematic' practices is telling in this respect. Especially in Marey's hands, chronophotography ('photography of time'), the sequential recording of differential phases of movement on one or several photographic plates, amounted to the visual deconstruction of time-based physiological processes. From the extremely rapid movements of insects to the trotting of horses and the running of human animals, the experimental physiologist Marey came up with an

encyclopaedia of movements previously unseen to the human eye. Living beings were considered by this ‘engineer of life’ in mechanical terms as sorts of machines that performed their duties with predictable regularity.

Another key media technological context for novel formulations of rhythm was provided by the phonoscope from the 1880s, the invention of a French priest and founding figure of phonetics, Abbé Jean-Pierre Rousselot. In the psychometric tradition of Wundt’s chronograph, this was an instrument for the recording and subsequent measurement of the rhythms of speech. But importantly, the phonoscope (alongside the experimental scientific context in which it was put to use) also became a source of artistic inspiration, particularly in modernist poetry. Ezra Pound, among others, was familiar with the device. Indeed, Michael Golston (2008: 65) claims that ‘Pound situates Rousselot as one of the driving forces behind the inventions in verse from that characterize Modernist poetry.’

[Figure: Rousselot’s Phonoscope]

Excursus: Phonoscopic Modernism

It is in the intimate proximity of human body and machine of the phonoscope, that rhythm was entrained in the political project of Modernism, as an opposite to the authoritarian of the Fascist regime of Hitler’s Germany (though this antithesis was less evident to the earlier Italian Futurists). In poetry it was the modernism of the Imagist movement of Anglo-American poets, principally Ezra Pound and William Butler Yates, for whom Golton (2008: 4) tells us: ‘rhythm bore an ideological significance.’ A 1913 *Poetry* magazine article entitled ‘Imagisme’ by F. S. Flint (1913: 199), gave one of the three rules: ‘As regarding rhythm: to compose in sequence of the musical phrase, not in sequence of the metronome’ (the other two rules concerned directness and brevity).

As a leading figure for Imagism, Pound (1934/1951: 198) stated that ‘rhythm is form cut into TIME, as a design is determined SPACE’, associating rhythmic patterning between these dimensions. He believed in what he called ‘absolute rhythm’ as nothing less than the foundation of civilization. As Charles Hartman (1996: 6) puts it: “The metrical system handed down from generation to generation of poets and refined theoretically by generation after generation of prosodists was the very heart of poetry. The prosodic theorists were defending civilization itself. [...] Meter equals verse, equals poetry, equals culture, equals civilization.” This by classical verse form of the iambic pentameter was a coup for the

new modernists order that the Imagist believed was to be expressed in free verse.

This rhythmic emphasis was expressed not only in the lines these poets wrote, but also their themes and titles. Pound's *The Return*, considered as the first properly Modernist poem, published in 1913, opens:

See, they return; ah, see the tentative
Movements, and the slow feet,
The trouble in the pace and the uncertain
Wavering!

These lines suggest that rhythmic order of the march has fallen out of kilter. In 1921, some ten years later W. B. Yeats published his famous *The Second Coming*, inflecting once again the theme of return, in the poem that of the Beast or Anti-Christ. It opens:

Turning and turning in the widening gyre
The falcon cannot hear the falconer;
Things fall apart; the centre cannot hold;
Mere anarchy is loosed upon the world...

The impending collapse that Yeats signals here is the unravelling of the circular repeating rhythmic conical form of the gyre that he holds the temporal organisation to the world. Rhythm is the antidote for 'mere anarchy'; or as Deleuze and Guattari (1988: 313) later similarly state: 'rhythm is the milieu's answer to chaos.'¹ Yeats' lines carry considerable ideological as well as spiritual freight and he supplemented his poetic output with an entire mystical philosophy based on the geometry of the gyre and cyclical theory of history. This takes the instabilities of rhythm off in a different inflection to Pound's anti-Semitism and fascist sympathies.

[Figure: W. B. Yeats' gyre]

Labour and the Politics of Life

One should not forget that it was at the same time as this mechanization and 'rhythmitization' were being conducted in experimental sciences as well as arts

that productivity (in economic terms) became lodged in the body, in the time-based processes of force, labour and fatigue. Rhythmic performance, both human and mechanic, became considered key to the production of wealth and the accumulation of capital. Marey's studies on 'animal machines', for instance, predated attempts at the scientific management of work in the 1910s and 1920s, indeed, the synchronization and so-called rationalization of the actions and gestures of workers and machines into regular unified patterns following the logic of the conveyor belt (see Rabinbach, 1990). Taylorism, which blurred distinctions between the spontaneous and the automatic, the human body and the mechanical engine, is a well-known example from the United States (and later Europe). However, ideas about the economy of time and rhythm in machine-human interaction were also inherent in the ideological atmosphere of the newly founded Soviet Russia (see Zielinski, 2006: 227-253).

There is a case, then, to think about rhythm as a pervasive force and a critical concept when it comes to mapping larger socio-political developments in modernity. From experimental physiology and psychology and the management of labour and to the media technological environment, we can detect a certain bio-politics of rhythm – the notion of bio-politics referring here, quoting Michel Foucault, to the 'controlled insertion of bodies into the machinery of production and the adjustment of the phenomena of population to economic processes' (1998: 141). If rhythm stands for duration, emergence and productive forces, it is precisely rhythm that provides the key to the optimization and control of life's potentials. In this sense, rhythm comes across as indispensable to capitalism's processes of capture and the management of both individual and collective bodies: crisscrossing established boundaries between entities, it marks processes of exchange and translation between human and machine, science and entertainment, and individual and collective, among other things. Walter Benjamin observed this sharply when considering the place and meaning of cinema in the 'training' of individuals to attune themselves to the collective sensory horizon of industrial capitalism: 'That which determines the rhythm of production on a conveyor belt is the basis of the rhythm of reception in the film' (2007, p. 175).

Benjamin's observation suggests an approach to rhythm as a certain kind of force of adaptation and individuation. When it comes to the capture and modulation of the rhythms of heartbeat and emotions taking place in the cinema, for instance, we can speak about a mode of power that operates on the level of sensorimotor adjustments. As anthropologist Jean-Pierre Warnier (2009: 42-45) argues, the activities of being affected, moving, and doing, or what he calls

‘sensori-affective-motor’ comportment, feed into governmental techniques by which bodies become social and individuals grow into persons. Warnier points out that the physiological register of sensations and rhythms is always by nature political physiology – evidently so, one should add, if we (following Jacques Rancière [2010: 139], among others) consider politics in terms of sensations and sensibilities rather than representations, in terms of the shaping and reshaping of corporeal capacities and textures of sense experience that generate the body politic. In this sense, rhythm as the dynamic coupling of movements within and outside individual bodies should also be seen as a process through which subjectivities are managed, that is, a process through which sensibilities and actions can become embedded within collective organization.

Pasi Väliäho’s contribution to this issue approaches rhythm in such political terms in the context of video games, bringing Benjaminian concerns to bear on the present media environment. Combining the sensory matrix of first-person shooters with the epistemic preoccupations of contemporary neurosciences, Väliäho’s text speculates on how video game images fuel contemporary dominant models of individuation as particular kinds of rhythmic adjustments and perceptual categorizations. At the same time, it gestures towards larger constellations of the management and administration of the potentials of life in the contemporary world. If the imagery of first-person shooter video games can be regarded as a form of training and adaptation, at the other end of the spectrum we have the military screens of unmanned aerial vehicles, or drones, which translate perceptual dispositions common from video games into the actual control of life and death. The ‘unblinking eyes’ of drones record footage of human interactions and transactions that ideally allows the pilots, military intelligence analysts as well as computer algorithms to engage in a type of rhythm-analysis of populations in view of establishing patterns of the daily activities and habits of people living in a particular location (Gregory, 2011: 195). Through the accumulation and analysis of ‘big data’ of people’s activities, the objective is to separate the uneventful from the eventful, to anticipate future threats by singling out abnormal, deviant behaviour that might be a sign of insurgent emergency needing to be eliminated by means of precision operations in which drones again play a crucial role as hunter-killers.

Here, then, the statistical analysis of rhythms (of styles, repetitions and differences) becomes a sinister operation in the Western societies’ attempts at world dominance. Furthermore, it suggests how the biopolitics of rhythms has moved from the physiological and **psychic life** of individuals to reach the level of population control. Increasingly, standardization replaces singularity. How can

rhythm resist?

Rhythm and the Politics of Potentiality

Several projects in recent cultural theory that turn to rhythm – or its varying conceptual incarnations – in their re-examinations of embodiment, sound, technology, artistic and cultural practices, and (collective) individuation enable differently premised responses to the above question. These approaches do not disavow perspectives on rhythm as motion and dynamics that lend themselves to observational techniques, regulative organisation, or the controlling power of measurement and model based knowledges. Nevertheless, their respective definitions ally rhythm primarily with an excess or residue. It is conceived of as a force that resists systematised or exhaustive capture. It is likened to an elusive yet productive '*more-than*' (Manning, 2013: 87). This is in so far as the approaches at stake link rhythm to imperceptible movement and the non-conscious dimensions of experience, the intensive and emergent aspects of reality, and the irreducibility of variation or differing difference. As for contemporary theorizations on rhythm's ontology as well as political potential, we can extract three conceptions of rhythm from this type of work that have special relevance vis-à-vis the concerns of the present issue: rhythm as vibration, virtuality and incipience. Whilst partly overlapping in their understandings, they are distinguished by differing emphases.

Excursus: Négritude

One instance of rhythm's subversive force can be found in conceptualizations of *négritude*. In *The Racial Discourse of Life Philosophy*, Donna Jones describes how rhythm was fashioned as an aesthetic form the anti-colonial struggle, in what she understands as the tradition of Bergson's vitalist philosophy. This was pre-national independence, rather than a post-colonial era which have subsequently borne the more familiar conceptual vocabulary of Homi Bhabha's concept of hybridity, Edouard Glissant's of creolisation, or Paul Gilroy's of the black Atlantic. One important exponent of the idea of *Négritude* was Léopold Sédar Senghor, the poet, philosopher and first president of Senegal, who coined the term.ⁱⁱ According to Jones, his appeal to rhythm was in support his hylozoism (the belief that life is integral to matter) position, in opposition to the dominant Cartesian mechanistic reductionism of the idea of dead matter. In his *Prayer to the Masks*, Senghor (1998: 14) writes:

	<p>Let us answer the 'present' at the rebirth of the World As white flour cannot rise without leaven <i>Who else will teach rhythm to the world</i> Deadened by machines and cannons?</p>
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<p>The Masks of the title are those of the ancestors charged with the rhythmic rebirth of the world. Describing importance of rhythm for Senghor, Janice Spleth (1985: 55) writes that it “has a metaphysical basis related to the concept of vital forces. The energy of these forces, which animates all beings, manifests itself in the form of waves whose ebb and flow appears as the weak and strong beats of music or poetry.”</p>	
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<p>The Martiniquean poet and politician Aimé Césaire (1913–2008) was the leading poet of Négritude, inspired and championed by Sartre. For Césaire it was not so much racial difference that was acknowledged and celebrated, but rather the vital life force of African peoples against the de-humanizing of colonial oppression. Césaire’s epic poem <i>Notebook of a Return to the Native Land</i>, published in 1937, became the corner stone of black francophone literature. Again it plays on the theme of return, here perhaps the return of the life itself, against the negatives of its annihilation.</p>	
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<p>Look at the tadpoles of my prodigious ancestry Hatched inside me! Those who have invented neither gunpowder nor compass those who tamed neither steam nor electricity those that explored neither sea nor sky but those who know the humblest corners of the country of the suffering those whose only journeys were uprootings those who went to sleep in their knees those who were domesticated and Christianised those who were inoculated with degeneration tom-toms of empty hands inane tom-toms of resounding wounds burlesque tom-toms of emaciated treachery (Césaire, 1970: 72)</p>	
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The rhythm-keepers of the tom-toms (their name itself a repeating) that Césaire mentions here are also taken up in his other writings. The character King Christophe in his play *The Tragedy of King Christophe*, is possessed by the great drummer Assotor, whose symbol is a 'rhythm-bird; a bird-drummer, a master of rhythm by virtue of his wildly fluttering heartbeat, as in the myth of the Colibri [humming bird]' (Bailey, 1992: 99). For Césaire rhythm is the heart that gives the pulse to our embodied being.

In the first understanding, rhythm's excess or resistive capacities can be summarised to lie in its movements outside the (technologically enhanced) conscious spectrum of (*human*) perceptual faculties. Rhythm courses beyond or below conscious reach. As Elizabeth Grosz (2008: 54) puts it, 'vibration is the common thread or rhythm running through the universe from its chaotic inorganic interminability to its most intimate forces of inscription on living bodies of all kinds and running back again.' Rhythm thus eschews direct capture within visually or aurally bound systems of detection, measuring, dividing up, and patterning. As the quote from Grosz implies, the approach under discussion here revolves conceptually round rhythm's associations with *vibration* (and its preindividual sensation). This path has lately been pursued by a number of undertakings in cultural theory across investigative areas from dance and music cultures to war as with Shelly Trower and others (see e.g. Trower 2008 and 2012).

Proceeding in this conceptual vein, Stamatia Portanova, whose response to Erin Manning's article on movement's firstness is included in this issue, proposes in a previous text that we consider rhythm 'as an attribute characterising the molecular, micro-physical dynamics of matter and its energetic vibrations' (Portanova, 2005). Rhythm conceived in this way comprises vibratory micro-movements or activity that is *inherent to matter*. The ontological divide informing much Western philosophy between dull matter and vibrant life dissolves (cf. Bennett, 2010:vii). To cite Constantin Boundas, who stresses the wholesale acceptance of this premise in modern physics, 'matter, just like vibratory energy, must have undulatory and rhythmic characteristics' (Boundas, 1994: 97). Rhythm occurs within the particles, chemical reactions and neural firings constitutive of human and other living bodies. It encompasses fluctuating frequencies and amplitudes constitutive of the audible features of sound that pervade the air, corporeal tissues, or other material textures whilst their temporalities can be technologically modified.

For Portanova's analysis, which explores historical and contemporary dance practices as rhythmic spreading and transmutation on bio-physical, cultural and technical levels, rhythm does not stand, then, for patterned sequences of extensive motion. Even less does it manifest as regularised 'repetition of elementary units (steps or beats)' or metric compartmentalisation of movement, which influential lineages of Western thought from Plato onwards have associated it with. Rhythm rather consists of the intensive variations, (meta)stabilities, and transmissions of activity that underpin and constantly – imperceptibly – reorganise the seemingly permanent substance and phenomenological qualities of material, physical, and perceptual entities. It propagates through human bodily forms and collectives, aural and visual shapes, inanimate natural and technical formations. Ultimately, rhythm amounts in this scheme to 'a galvanising current flowing in and between all human, animal and technological, animate and inanimate, organic and inorganic bodies.'

Rhythm as vibration is therefore a force of more-than in that it resolves the apparent finality of matter into molecular becomings. It circumvents the division of reality into bounded categories and beings, and escapes perception even if its movements inform what is sensorily perceived as substances, patterns, and qualities. This path of conceiving rhythm as intrinsic to materiality and material-energetic exchanges between entities has strong resonances with the concept of intensity in Gilles Deleuze's philosophy. Following Deleuze:

Everything which happens and everything which appears is correlated with orders of differences: differences of level, temperature, pressure, tension, potential, *difference of intensity* (Deleuze, 1994: 222).

A vibratory understanding of rhythm also aligns with more recent resuscitations of the activeness of matter that often build upon Deleuze among other theoretical inspirations from Lucretius to Darwin. These lines of exploration are nowadays frequently labelled 'new **materialisms**'. A well-known case in point is Jane Bennett's work on political ecologies (Bennett, 2010; see also Coole and Frost, 2010).

Furthermore, rhythm as vibration links us back to the question of affect discussed above. This is if by affect, we mean relations and passages of influence between bodies (human, nonhuman, part-bodies, and otherwise) that originally occur at the level of impinging sensations and intensive variations of state *before* their translation into actually perceived effects, or the individuated experiences of the relationally recomposed entities (e.g. Massumi, 2002; Massumi, 2009; Seigworth

and Gregg, 2010: 1-3, Blackman and Venn, 2010). It is in accordance with this that Julian Henriques (2010: 57) has proposed 'the propagation of vibrations could serve as a better model for understanding the transmission of affect than the flow, circulation or movement of bodies by which it is most often theorized.' Henriques defines vibration as 'the energetic patterning of vibrating through the particles' of different, always singularly situated material media. Vibration hence provides the conceptual basis for a 'rhythmic materialism'. (Ibid. 58-59.) From this perspective, rhythm as vibration offers a means of analysing how especially such formations that lack the (apparent) solidness of objects, like sounds, elicit transmissions or *transductions* of affect across multiple participating 'media.' These span, for example, human corporeal agents, sets of sound system equipment, and broader socio-economic dynamics of a musical scene.

A vibratory rhythmic approach thus enhances the challenge that cultural and social research on affect is presently posing to traditional models of analysis. It effectively beckons beyond the envelope of self-contained individual, the wider presuppositions about the composition of reality out of readily distinguishable terms and scales, and the privileging of linguistic, discursive and representational organisations as the key constitutive forces of our worlds. (On affect and rhythm as ways of remodelling subjectivity and corporeality in contemporary cultural theory, see e.g. Blackman, 2012: 100-123.) In 'Rhythmic Bodies,' his contribution to this special issue, Henriques further elaborates the methodological implications of the notion of rhythm as energetic patterning that connects and heterogeneously affects diverse bodies and mediums. He focuses on the rhythmic body of the bashment gal in the dancehall. It can be said here that the bashment gal makes sense of the world and has her own agency through the rhythmic patterning of affective intensities, rather than any signal processing, or exchange of information, as this is defined as statistical probability in information theory. In the dancehall session noise is celebrated, as with excess and overload of sonic dominance. Noise draws attention to the materiality of the medium, its lack of transparency, its resistances and interference to the intensions of signal, as it were. It is in this materiality that the heart of the dancehall experience beats, as with all affective transmission. At the same time rhythmic bodies have to be considered as ethereal. They are immaterial as much as physical, as Blackman explores through some of the forgotten archives of the science of psychology, in her *Immaterial Bodies* (2012).

To think of rhythmic bodies as both material and ethereal is an example of how the rhythms of the dancehall provide evidence against some of the founding dichotomies of the standard Western scientific model. Henriques suggests that

rhythm could provide a way of dissolving the traditional epistemological and ontological antinomies. For instance, this is the key claim of psychiatrist Nicolas Abraham's concept of rhythmizing consciousness, that is rhythm as both inside and outside, subjective and objective.

The perception of rhythm-object is already, in a sense, possession. But to possess an object means to turn toward it. [...] How is it I come to possess a rhythm-object? By making myself a rhythm object. And so I *have* it because I *am* it. Perceptive appropriation of the rhythm-object as such becomes possession in the double sense of having and of being.
(Abraham, 1995: 75)

Although part of reality's unfolding in excess of the contours of subject/object and conscious content, rhythm as vibration is hence far from exterior to socio-political settings. Its operations therein should be embraced both as productive of unpredicted effects and as adaptable into a technologically modulated means of social governance. This is exactly what Goodman's (2010: xix) idea of 'the politics of frequency' suggests. Yet again, the material and sociocultural ambiguity of rhythm between capture and release, organised motion and ineliminable variation returns. This notwithstanding, its associations with vibration lead us toward the next, albeit linked, conceptualisation that also connects rhythm to a notion of more-than – whether vis-à-vis the bounds of number, perceptibility or hitherto actualised reality. As argued above, these conceptions of rhythm can be seen to endow it with resistive potential in both social and ontological sense.

This second approach ties rhythm to the *virtual*, understood here with the philosophies of Deleuze-Guattari and for example Susanne Langer. In so far as vibration disperses the presumed stability of matter into so many becomings, it can be claimed that the 'vibratory' approach already assigns rhythm as the virtuality of (material) entities – a virtuality immanently (re-)constitutive of their actual properties. This holds in relation to Deleuze-Guattari's and Deleuze-Bergson's conceptions of the virtual (on the use of the latter composite name, see e.g. Boundas, 1994). To quickly recall these notions, they posit the virtual as differentiating tendencies and conditioning forces, or *contractions of intensity*, which elude the spatial and chronological divisibility pertaining to the actual. Yet, the realness of the virtual manifests itself in how it effects actual states and occasions. Indeed, this concept, which Deleuze's work, for instance, gives various complex characterisations, does not concern only the intensity in matter. As the generative force of all actual that no actualisation can exhaust, the

'variations of rhythm' (Boundas, 1994: 96) the virtual consists of can be related to a number of aspects: The rhythmic intensities of virtuality may refer to the ever-differentiating impacts of the past on what comes to pass as our actual present experiences, thought and acts in the world of extension (e.g. Deleuze, 1991: 51-71). They may also refer to relations – or affectivity – as virtual movement. This is inasmuch as a relation engages the relating terms in a joint transition *before* resulting in actual observable changes at the level where the terms can be considered distinguishable, individual entities (see e.g. Manning, 2009). A concomitant way of thinking rhythm and the virtual is provided by the concept of *microperception*. It foregrounds the world and our bodies as ongoing multiplicities of tendency, reactivated capacity, affective re-beginnings (Massumi, 2009: 5). Only few of these will actualise in awareness or action at any one time. Still, their virtual richness underlies, even in its not consciously felt modes, the experiencing of every occasion.

In her contribution to this issue, 'Towards a rhythm analysis of the sonic work of art', Eleni Ikoniadou elaborates some of these notions of the virtual. Coupling philosopher Susanne Langer's work with recent discussions on digitally manipulated microsound, Ikoniadou seeks to mobilise a 'minor' understanding of rhythm. This is in order to explore the alternative – other than conscious and subjectively (e) recognised – modes of perception in the encounters of 'space-time, technology and the body' within recent media and sound art projects. For Ikoniadou, minor theories of rhythm, such as Langer's and Deleuze's, by definition take flight from the historically prevalent premises of measured ordering of time and direct sensory accessibility. The conceptualisations she draws on engage with the inaudible but viscerally affective micro-components of the sonic and, in the case of Langer (who builds on Bergson), with rhythm as virtual 'experiential time' determinable only by 'sensibilities' and 'tensions'.

The notions of rhythm as microevental textures and as living forms of forces out of which seemingly stable objects and our experience's more conscious layers emerge, enable Ikoniadou to probe the virtual as integral to sonic experimentation in recent media art: The microsonic inklings of digitised sound exceed what is actually heard. Our experience of the artwork is 'doubled' by a virtual event comprised of spatio-temporal, technological and bodily forces that instigate, yet outlive the work's knowable aspects. This approach emphasises the significant role of digital technologies in creating the virtual, never quite capturable dimensions of (sound) art event, embodiment and perception instead of reducing digital code merely to its familiar associations with precision and probabilistic powers. By engaging a specific installation, *Through the Looking*

Glasses, Ikoniadou offers a nuanced reflection on the relevance of this non-representational rhythm analytical stance for **body studies** and digital culture theory

The approaches to rhythm in Ikoniadou's article and even more so Milla Tiainen's contribution, which is introduced below, resonate closely with the discussions presented in the special section of this issue around Erin Manning's essay 'Wondering the World Directly, or, How Movement Outruns the Subject'. Manning's piece proposes a philosophical reassessment of the notion of movement through an encounter between Maurice Merleau-Ponty's phenomenology and Alfred North Whitehead's process philosophy. Even if not focusing on rhythm *per se*, the essay, and the responses to it by Jodie McNeilly, Stamatia Portanova and Maxine Sheets-Johnstone, highlight many of the key (albeit sometimes implicit) conceptual concerns that this special issue turns around whilst simultaneously providing a directly philosophical context: the place and meaning of the subject in cultural theory, the critical importance of process rather than structure, and the question of embodiment.

'Wondering the World Directly' also brings us to the third and in the present confines final proposition about rhythm's resistance. Elaborating on the association of rhythm and the virtual mostly through Whitehead's thought, this approach opens yet another facet to rhythm as that which passes and endures, or reconfigures and propels forward, in the background of every completed and pinned down actual instance. This conceptualisation informing Manning's essay, which expands on her earlier work, seeks to understand movement and rhythm in terms of *incipience* or *preacceleration*. Rhythm as preacceleration designates the momentum when virtuality in the sense of plentiful competing potentialities and tendencies verges on becoming actualised, always within specific situational – or ecological – and affective – or relational – circumstances (e.g. Manning, 2009: 5-7, 14, 118). As Manning states, it is the passage of the virtual into the actual and the indeterminacies of the not-yet-actual populating this 'in-between passage' that '*rhythm feeds on*' (ibid. 90, italics added). Querying rhythm as incipience thus concerns theorising the very movement of actualisation whilst keeping the virtual excess or remainder in the picture. It addresses the infinitely varying co-determinations of the virtual and the actual.

A central theme in Manning's writings is, then, movement as intensity and tendency before it becomes a concrete displacement of the body or an accomplished act; before it becomes 'ours'. She strives to analytically grasp the pre- or post-subjective dimension, which she describes as 'the pulsion toward

directionality' of a movement's taking form before we actually move (Manning, 2009: 6), or 'rhythmic shifting, a polyphonic multiplicity in germ ready to be activated, to be articulated [...] in movement, in gesture' (Manning, 2013: 169). Resuming these lines of thought, Manning's contribution to this issue is an attempt to think beyond the subject without resorting to the analysis of structures and systems. Manning's is a plea for ontological immanence, for taking into account, in her words, 'the virtual force of movement as it traverses and insinuates itself into all actual displacements, into all form-takings and ecologies of life-living'.

Portanova's response endorses this call, expanding on the Whiteheadian themes of Manning's essay and seeking to conceptualise the immanence of experience beyond distinctions between subject and object. McNeilly's and Sheets-Johnstone's responses, on the other hand, are more critical in tone. Both point out how there are alternative ways to comprehend the scope of phenomenological enquiry (from Edmund Husserl's original programme to Sheets-Johnstone's interdisciplinary work on embodiment) and the very concept of the subject that Manning seeks to oust from her metaphysical framework. Taken together, these responses contribute to increasingly fine-grained philosophical understanding of current debates on movement, embodiment, and subjectivity.

Lastly, Milla Tiainen's article endeavours to introduce recently elaborated concepts of rhythm to voice studies. This cross-disciplinary field has over the past years experienced a resurgence of activity. Investigations of voice might seem a specialised, marginal strand of sound studies. Yet, Tiainen argues that they connect productively to broader aspirations of the human and social sciences. This is because recent examinations have repeatedly analysed the entanglements of the voice with such burning issues as the body, (collective) individuation, technologies of mediation, and the nature and exercising of politics. Particularly, philosophical and cultural theoretical discussions have noted the specific power of voice in dissolving notions of self-enclosed individuality and agency, discrete singular body, and substance-based ontology. Seeking to theoretically extend these views, Tiainen argues that the voice as sound and material movement champions a reality of processes and relations key aspects of which may be grasped with understandings of rhythm.

Proceeding with Manning's and Brian Massumi's work (who build on Deleuze/Guattari, Simondon and Whitehead), the article elaborates, firstly, the notion of incipience: rhythm as a heterogeneity of intensive potential before and beyond actualisation. This notion requires a rethinking of the oft-posit

ephemerality of voice: its primary existence as *a pure passing*. The same applies to the links of voice to embodiment, agency, and the role of the in-between (relationality). When the voice is reconceived in terms of incipience, its emerging sound and expression become connected to a body/mind that always involves more potential than what will actualise, to a varying 'serial' subjectivity, and to such ecologies of relation and affect, including virtual past–present–future interactions, as part of which the voice, body and vocal subject individuate.

After proposing this shifted view on voice and ontology, the article invokes, secondly, a notion of rhythm as affective attunement (e.g. Massumi, 2009). Whilst resonating with the notions of propagation and transduction, this conceptualisation encourages a refreshed insight into another significant issue: the relationship between voice and politics, or the kinds of politics that the voice may be involved in. Rhythm as attuned but never fully regulated affect across a collective of bodies/minds helps the article to push existing theories of the politics of voice or its relation to politics of the body (and body politics) in new directions. Tiainen suggests a perspective that extends from models of language and the body (psychoanalysis) and representation and performativity (social constructivism) familiar in voice studies towards a vocalic politics of feeling and tendency in the sense of activated – or captivated – responsiveness, capacities and potential. The article puts these notions in initial analytical conversation with the awarded British feature film *The King's Speech* (2010). Despite its mainstream surface and conventional associations of voice, presence, class and individual authority, this film also encourages more 'minor' understandings of rhythm as the primacy of process and relationality.

Overall, as this special issue hopefully shows, rhythm is not one but many. There will never be a single way of speaking about it – not even if we, as this special issue does, limit our scope to the analysis and theorization of cultural phenomena (and the philosophical underpinnings of such theoretical work). Rhythm moves from dance halls, vocal performances and mediated speech acts through to art galleries, console platforms and plugged-in bodies. Whilst aligning with power, it simultaneously points towards moments of excess, potentiality and hence struggle. And whilst manifesting itself as something subjectively felt, rhythm at once exceeds individual bodies and minds, carrying a promise of immanence in experience. One might object to the elusiveness of such a concept, but the thrust and purpose of this issue, however, is to embrace rather than critique rhythm's multifaceted character. We hope that what follows will allow readers to affirm rhythm's capacity to bring out the heterogeneity and complexity of whatever issue is at hand; indeed, to acknowledge and think anew the world's varying and divergence.

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