Preamble: **Thinking Through Sound**

It hits you, but you feel no pain, instead, pleasure.¹ This is the visceral experience of audition, to be immersed in an auditory volume, swimming in a sea of sound, between cliffs of speakers towering almost to the sky, sound stacked up upon sound - tweeters on top of horns, on top of mid, on top of bass, on top of walk-in sub bass bins (Frontispiece). There is no escape, not even thinking about it, just being there alive to, in and as the excess of sound. Trouser legs flap to the base line and internal organs resonate to the finely tuned frequencies, as the vibrations of the music excite every cell in your body. This is what I call sonic dominance.² This explodes with all the multisensory intensity of image, touch, movement and smell - the dance crews formations sashaying across the tarmac in front of the camera lights, the video projection screens and the scent of beer rum, weed, sweat and drum chicken floating on the tropical air. The sound of the reggae dancehall session calls out across the city blocks, or countryside hills to draw you in. It brings you to yourself, to and through your senses and it brings you to and with others sharing these convivial joys - out on the street under the stars in downtown Kingston, Jamaica.

Such a scene is literally the dance of the sonic bodies to which this book attends. Sonic bodies are fine-tuned, as with the phonographic instrument of the sound system “set” of equipment. Sonic bodies are the flesh and blood of sound system crew and “crowd” as the dancehall audience is known. They are single and multiple. They are social as with institution as with the sound system session at the centre of the dancehall scene. Sonic bodies pulsate as the bass line frequency of Reggae’s signature beat. It is the crew’s esprit de corps. Sonic bodies are vocal, as well as musical, with the MC (or DJ) voice booming out across the darkened dance-floor, to elicit the crowd’s response. Sonic bodies also consist of a corpus of knowledge, handed down through five generations of audio connoisseurs from the inventor of the sound system, an ex RAF radar engineer. Sonic bodies are therefore “knowing,” knowledgeable and they “make sense,” as with the selector dextrously “juggling” the turntables to build the “vibes” of each dancehall session. Sonic bodies are performative and highly skilled, as with the crewmembers’ techniques to generate and sustain the dancehall’s economies of pleasure. These “scientists of sound” continually monitor, investigate and innovate the sound of the session to maintain their sound system’s advantage in the most intensely competitive and sometimes violent of street cultures. This makes the dancehall session a unique living laboratory – an auditory Galapagos - outside the usual dominance of vision.

The reggae sound system session at the heart of Jamaican popular culture is a possibly extreme and unfamiliar example of the kind of auditory immersion that is occurring in many other places. Bodies are being increasingly recognised as sonic despite so much attention given to screen, images and digital communications. There is an auditory flood engulfing us from mobile mp3 players, “sodcasting,”³ muzak, bespoke radio stations, personal play lists and ever-decreasing download latencies from and ever-increasing range of music, archives and back-catalogues.⁴ There is however a major distinction to be made between this musical ubiquity and the dancehall sound system. With the sound system bodies are placed inside sound, whereas with earphone listening it’s the
opposite, sound is placed inside bodies. As with much to do with sound there are two sides to this auditory saturation – receptive and expressive. On the one hand, this current immersion in auditory abundance can be experienced as a sonic invasion of our bodies and their personal space. On the other, it can also be heard as a sonic extension of the body, in the way Marshall McLuhan considered the wheel was of our feet. After having been imprisoned in writing for the past two and a half millennia, in little over a hundred years of phonographic recording, sound and music are being liberated from music's transcription and sound's circumstances of embodied production. Recording, distributing and listening to sound has become almost as easy, ubiquitous and mobile as reading and writing. This is the quotidian context in which we are now enjoying – or suffering – this auditory excess.

Sonic bodies may be contrasted with light bodies in the way that audition carries a corporeal weight – exemplified by the liminal extremes of the sonic dominance sound system session - that vision has traditionally been used to escape. Sonic bodies have to be heard, felt and given the attention of listening. It is of little use looking for them. Sonic bodies demand being approached in a certain way, one based on a relationship of mutual recognition and respect, as distinct from the positivist scientific paradigm of prediction and control. Sonic bodies produce, experience and make sense of sound. Sound, even as the playing of a recording is always “live” at the point of hearing. SOUNDING has to be embodied as an event in a particular time and place, as distinct from being “frozen” as a text or image whose embodiment is less immediate. This is the point that Jacques Attali famously makes: “… the world is not for the beholding. It is for hearing. It is not legible, but audible.”

In this book I offer you as the sonic body of the reader an invitation, simply put – to become a listener. Only then can you venture inside the sonic body, or rather some these multiple sonic bodies. Sonic Bodies is a journey into sound. My entire approach and orientation is one of thinking through sound. This is sound qua sound, that is, auditory vibrations. This is distinct and different from what certain sounds are used to compose, that is music. Such thinking through sound is also distinct and different from our habitual thinking through images, or, it is important to note, music. Indeed, it is also has to be distinguished from thinking about anything. Sound can indeed be an object of thought, as was first brought to attention with the Canadian work sonic environments and soundscapes in the 1970’s. Instead, thinking through sound is a way of thinking, a process of knowledge, and a gnosis. Thinking through sounding brings to the fore the value of auditory propagation as a mechanical process as a model of a way of understanding that is not entirely bound up with language, notation and representation.

Sounding is a dynamic patterning propagated through a material medium. Though it cannot be expressed outside its embodiment in such a medium, it is in itself entirely immaterial and insubstantial. Sounding is a transitory event in time, rather than an often more permanent mark on a visual surface. Such events are entirely distinctive, unique and unrepeatable. Sounding has direct sensorial effect and affects, as with smells, tastes and gestures, in addition to how it is purposed as a medium for encoding meaning, as with phonetics. This intrinsic meaning of sounding is often independent of conscious attention, as with the prosody of the actual utterance, that is, tone of voice. Thus the idea of sounding serves to draw attention to a rather different object of enquiry than the conventional ones of text or image. In practice it is not object at all, but a
process or event, not a coded representation but medium, not a thought but a feeling - often independent of conscious reflection.

In these ways, Sonic Bodies mounts an auditory investigation, rather than only an investigation of audition. To do this sounding is considered mechanically - as auditory propagation and specific sensory modality of audition, distinct from, yet integrated with, the other senses. It is also considered practically - as the basis for the techniques and traditions of a particular popular auditory culture of the Jamaican reggae dancehall session. Drawing on such embodied ways of knowing grounds the investigation with the material of numerous examples. Finally, sounding is considered philosophically - as a dynamic model for both questioning the world - as distinct from the way the trope of the visual image is often settle them - and understanding itself – as developed with the idea of sound judgment in the conclusion.

If thinking were only a matter of ideas, that is, an activity of a mind that could be isolated from its body, then the model, metaphor or medium of thinking would not be quite so important. On the other hand, if thinking is more than this, as is argued throughout Sonic Bodies, then important implications follow. Furthermore, if what is called thinking has its origins in the kinds of processes, practices and potentialities that only our embodiment affords, then the metaphor is not to be dismissed as a crutch, but the actual limb of thought. Like any language, sound embodies its own unique sensitivities, nuances and idiomatic forms of expression that inevitably get lost in translation. The auditory vocabulary carries values and associations: we “sound someone out,” for instance, or having “sound judgment” as discussed in the conclusion. Thinking through sound is thus a matter of working through the medium of sound as thought. We work through something to find out more, or “to work it out.” This can mean “taking it in,” or letting it “sink in,” that is, absorbing, assimilating, incorporating, or even ingesting something, so that, we become part of it and it becomes part of us. So the passage of working through indicates the crossing of a threshold. With sound this can be the traditional barrier between thinking and working, or interior and exterior worlds, or mind and body, for instance.

What sound offers is a dynamic model of thinking. This can only be expressed through corporeal practices of thought, rather than the more commonplace discursive line of thought. Indeed, such a tissue of thinking lends itself to diagrammatic expression, as with the numerous triangulations throughout Sonic Bodies. This is, of course, visual, but without being tied to representation. Such thinking though sound concerns such vibrations specifically, as against more the commonplace visual preoccupation with words or representational images. It draws on a repertoire of metaphors, analogies and models that are distinct and different from those of representation, discourse and inscription. Light and visual processes are often used to expression of the immateriality of mental images. By contrast, sounding insists that we do not forget that auditory processes always require expression through a particular material medium, such as air or water. Sonic Bodies proposes auditory propagation itself, that is, the periodic movement of vibrations through a medium, as a model for sociocultural as well as corporeal and material processes. These vibrations have to be considered together with the techniques and the instruments required to make them. As with sounding itself, sonic bodies are only ever expressed in a particular, embodied and specific medium, event and location, that is, a time and a place.
The specific exemplar for *Sonic Bodies* of the reggae sound system session takes place every night of the week, out on the streets of Kingston. But before we get there, there is another way in which the particular and specific character of sonic bodies can be taken into account. Both sonic bodies and sounds themselves, as events situated in time and space, are always distinctive and unique. Indeed, with embodiment we can never forget ourselves. It is our own subjectivity, as with a sound event itself, that needs to be recognised and appreciated - rather than sacrificed on the altar of objective science. So the writing of this book has necessarily been a personal biographical journey, as it is with every researcher, and what draws to their research topic. Often this is entirely unconscious, only evident in retrospect, or with the clarity that another person can supply with comparative ease.

Even to begin an understanding of how the crewmembers stage and run a dancehall session demands setting aside commonplace approaches. On the one side, there is the model of understanding as rational or cognitive process, involving representation and calculation. The improvised, extemporised and spontaneous character of their performance appears to rule out such a cerebral picture of what they do. As the antithesis to this, the crew’s performance could be considered as entirely intuitive, instinctive and even “natural,” as consistent with the racist stereotypes. But the range of frequencies of wavebands, detail of nuance and judgement of timing, demand a far more complex account than such biologically determined approaches can offer. *Sonic Bodies* claims that the crew’s fine-grained, sophisticated and subtle responsiveness and manipulation of the multi-sensory and multi-media apparatus of the dancehall session demands a different understanding of the nature rationality itself – as a challenge to what are conventionally considered the limitations of embodiment. This is one of the major challenges of thinking through sound.

My journey into sound was from music (rather than from the frequently “overlooked” value of sound in filmmaking). Music had often been the subject of the BBC documentaries I made throughout the 1980s, particularly as a vital component of popular culture. When I moved into making fiction films and eventually the feature film *Babymother*, music featured literally centre stage in this reggae musical set in Harlesden, West London. Musical performance gave my on-screen characters, not to mention my often fresh talent of my cast, a certain confidence. So when it came to repurposing my film making experience for academic research, it was natural to utilise the dancehall scene that had been the subject of my documentaries and the setting of the fiction. Here it was the sound system engineers who attracted my interest, as the dancehall scene is primarily one of playing already recorded music, that is phonographic reproduction, rather than an artist’s live performance.

Living in Kingston from 1996 to 2001 gave me the opportunity for easy access to the dancehall sessions downtown. Over this period I ran the film and television department at CARIMAC (Caribbean Institute of Media and Communications) at the University of the West Indies, Mona. Researching and writing my feature film *Babymother*, I established a research relationship with Winston “Weepow” Powell. He is the founder and boss of Stone Love Movement, the island’s leading and longest established sound system. But it took a friend, the filmmaker John Akomfrah, to point out to me that my interest in popular culture, was in fact very much following in my father’s footsteps. Fernando Henriques’ *Family and Colour in Jamaica* on the basis of his research into the popular African-Christian religious cults, such as Pocomania, in rural Jamaica. This was
published in 1953, with me hardly born. My connection with the field that would in the
1970s and 1980s establish itself, as Cultural Studies has also been a personal matter.
Its founding figure, Stuart Hall, claimed to me that on the eve of his departure from
Jamaica to England, as a Rhodes scholar at Oxford, he had what was to turn out to be
a fateful meeting with my father.10 (Their families were friends, both living in Port
Antonio, Portland). My father had returned to Jamaica for his PhD research, also at
Oxford. According to what Stuart told me, this conversation inspired him to recognise
that there could be other professions, besides the middle class favourites of lawyer and
doctor, that he might pursue. Such are the contingencies, necessarily specific and local
(and personal) for which Stuart was later to provide such persuasive theoretical account
is also the lineage I am most comfortable locating myself. Such, also, is the connectivity
of sounding.

So this was the personal history I now like to think guided me on my path to the
dancehall sessions in downtown Kingston. These sessions are enjoyed by audiences
several thousand strong, with dance crews sashaying across the tarmac dance-floor, in
front of camera lights for live large video screen projection and round-the-clock local
cable television broadcast. The compulsive energy and contradictory extremes of the
Jamaican dancehall sessions are best located in the auditory culture of the island’s
society. For over fifty years this street dance scene has been the life-blood for many
West Kingston communities, with the sound system as a mechanism for converting
cultural into commercial capital.11 Dancehall style and fashion cuts and mixes African
rhythms and retro vinyl technologies together with the latest digital music and video
software; Rastafarianism and strict a Christian religiosity; sexually explicit costume and
choreography with internationally censored anti-gay lyrics; local and global markets;
sectarian ghetto political violence and American consumerist values. In an inner city
session a “gun salute” is highest praise for the MC, and the “clashes” between rival
sounds evoke fierce fan loyalties, as with football teams. Not only is Dancehall a bass
culture in terms of the pumping lower frequencies of the reggae bass line, but also a
base culture as a popular street culture, not to mention the bottom-up of its signature
“bumper-grinding” sexually explicit choreography.

Insisting on the importance of materiality and corporeality of media promotes ways of
understanding that are inevitably gendered, raced, classed, aged and so on.12 The
sound system crewmember’s ways of knowing which tend to be male, compared with
the young female ways of knowing of the crowd, for instance. Particular situated and
embodied ways of knowing also contrasts with the conventional ideals of knowledge as
universal, objective and abstract “ideas” in general, where the signifier “floats” above the
signified. This makes sounding materialist in its approach, but this is a rhythmic
materialism, as distinct from what can be called the gross materialism of genetic
reductionism, for example, or deterministic historical materialism. Sound is always a
dynamic event, forever incomplete and continually in a state of change. Thus thinking
through sound offers a way to voice criticisms of the status quo and raise questions, in
the way that images are often used to settle them. In the mechanics of auditory
propagation noise is necessarily a disturbance, it disrupts and can used as a destructive
weapon.13

As with sound making, sonic bodies require an instrument for their propagation, as
vocal chords can be described as the instrument for voicing. The dancehall sound
system “set” is the particular instrument for Jamaican music. As a phonographic
technology at the centre of shared musical event of the dancehall session, it is widely recognised that it has exerted a considerable influence on Jamaican music and many others worldwide. As Michael Veal puts it, “These sound systems have been more central to musical innovation in Jamaica than live performance, and the creative practice developed in the sound systems have in turn influenced the evolution of recording conventions.”

This is such that Reggae and Dancehall music in Jamaica has developed in tandem with the sound systems themselves. In his comparative study of the Kingston and Montreal music scenes, John Constantinides describes the sound system as “the lynchpin of Jamaican music… not only a mediator or diffuser of recorded music, but an influential creative actor in the production of Jamaican musical culture wherever it may be found.”

Working and thinking go together, not in the performance techniques of the crew, as the subjects of the investigation, but also, its methodology. This demands a continual shuttle between, on the one hand, observation and listening to the phenomenon, and on the other, theoretical considerations and elaborations.

Besides medium and instrument, the third element for auditory propagation, on which Sonic Bodies gives sustained attention, is the skilled techniques for playing these instruments. The crew’s performances techniques embody a particular way of knowing, know-how, or techné. Aristotle contrasts techné with both episteme (from ἐπιστήμη, “to know”) or formal, analytical or scientific knowledge, on the one hand, and on the other, phronēsis, or practical wisdom, to which we return in the conclusion. The sound system crewmember’s expertise and skilled techniques for playing the set have certainly contributed to Reggae’s international success, as well as its influence on many other music genres. These techniques have been the foundation for a host of musical genres from Hip Hop, to Techno and Grime. Jamaica is arguably the source of black power. In music, this was initiated with King Tubby’s innovative dub techniques, anticipating sampling and being felt across pop and avant-garde music, as well as Big Youth’s “toasting” pioneering Rap in the 1980’s. In addition, the Jamaican musical influence has been felt internationally in Hip Hop, Jungle, Drum & Bass, Garage and currently Grime and Dubstep. As an instrument for enjoying music, sound systems have also shaped DJ performance technique, the studio practices of versioning and re-mixing as well as the pleasures of listening in Raves, Clubs and Carnivals.

Sonic Bodies contends that the media, instruments and techniques that allow auditory propagation can also account for the spread of sonic bodies. Rhythms are infectious. The musical, cultural and political “vibes” of Reggae, Dub and Dancehall have been carried abroad in the music of such international stars as Bob Marley, and more recently, Turbulence, Movado, Shaggy, Sean Paul and Damian Marley. The sound crew’s skills are also tested on the international stage in sound “clashes” or championships, where Japanese, German, Italian and American, Canadian as well as Jamaican Sounds compete. There are also vibrant local sound system scenes in these countries as well as Mexico, Brazil and Canada. These Sounds, as sound systems are called, are crewed not by Jamaicans, but by natives of those countries. Some of these, especially the Japanese and German sound systems, have the enthusiasm, skills and confidence to compete against Jamaican Sounds on their own island turf, for instance, Sentinel, a German Sound, who won the 2006 World Cup Clash. Sonic bodies are thus both one and many at the same time, as is expressed as much in the Rastafarian conception of singular as plural as “I n’ I” as it is in Bracha Ettinger’s (2006) concept of the matrixial.
Sonic Bodies draws on several years of participating and observing the island’s leading Stone Love Movement in action; and listening to what they say:

When you get the instrument of authority with the mic you must use it constructively…
You have to love the music… sound business I born in it, grow by it, live by it…
You connect musically with the people, like you become this puppeteer…

Winning a competitive dancehall “clash” often depends, inter alia, on the choice of music. So how, does the selector, for instance, know which is the right groove to drop the needle? The answer to this question, it is proposed here, is to be found in the media and periodic movement of sounding itself. Just as the popular culture of Dancehall provides a particular site for investigating auditory culture, so the particularities of sound itself provide materials for understanding how this works. Working sonically in this way takes its cue from the phonographic reproduction of music by the sound system set of equipment itself. As against “live” musical performance, this inspires consideration of the crew’s re-performance skills for re-playing already recorded music. As one engineer put it: “A sound system is re-processing music that’s been processed already.” It is an apparatus for the re-presentation, rather than representation of music. In short, re-performance is the remix of the mix of performance. Re-performances combine the tradition of interpretation (as with a classical musical score) but with a record, together with that of improvisation (as in jazz) but here “rewinding” the track or the MC extemporisng on top of it.

So Sonic Bodies calls for a dive deep into the mechanics and materiality of the auditory medium itself, with its tones, textures and intensities. Thinking and working through and with sounding suggests sinking into sound, theorising down to the depths of the lower frequencies of the bass line, the infra sound of its roots and routes, sinking into the substance of the subject, being immersed in it, as with the sonic dominance of a dancehall session, and thereby deep into the frequencies. The vibes of sounding sink into theorising to produce sonically saturated theory, as it were – as a syncing of the dynamics auditory vibrations of sound theory, with those of a dancehall. With its auditory sensibility and methodology of listening, the propagation model attempts to establish sounding a particular activity for investigation. Sounding is a complex set of relationships is invariably expressed on several different registers at the same time. Most often these registers are considered separately, isolated from each other, as with mechanical and social process, or technological or psychological levels of analysis, for example. The conceptual force of sounding is to refuse such dichotomies, in favour of an intrinsically relational approach. Sonic Bodies raises the question: what can thinking through sounding tell us about social and cultural practices and the processes of communication in particular? If this is a theoretical question, it answers by way of a specific practical example: how, or in what manner does a sound system work? That is what this book explores.

The time and place of sounding
The idea of thinking through sounding is hardly without precedent in practice. This way of knowing is the living heartbeat of many music traditions, especially where these are popular and oral, as with the reggae sound system. Thinking through sounding is what the engineers and other crew actually do, without necessarily “reflecting” or verbalising...
Similarly, there is a small but significant body of scholarship describing Jamaican music and culture, without necessarily utilizing this as evidence for any particular theoretical position. This provides a useful context in which to place the particular findings on the Stone Love Movement sound system. The current literature on Reggae and Dancehall was pioneered by Carolyn Copper’s *Noises in the Blood* and more recently *Sound Clash*. It also includes Norman Stolzoff’s *Wake the Town and Tell the People* and Lloyd Bradley’s *Bass Culture* and Donna Hope’s *Inna di Dancehall* and Sonjah Stanley-Niaah’s *DanceHall: from Slave Ship to Ghetto*. A broader political and cultural context has been provided by Deborah Thomas’ *Modern Blackness* and Obika Gray’s *Demeaned but Empowered*.

The specific detail of the particular Stone Love Movement sound system exemplar also follows in the footsteps laid by Olive Lewin, Cheryl Ryman and Garth White’s pioneering ethno-musicological research on Jamaican folk traditions. In fact, one of the earliest studies of Jamaican popular culture was my father’s, mentioned above. The general approach of *Sonic Bodies* draws on the cultural studies approach to subcultures, initiated with the work of Richard Hoggart, Raymond Williams and Stuart Hall, and developed by Dick Hebdige, Dave Morley, Iain Chambers, Paul Willis, Paul Gilroy, Angela McRobbie, Laurence Grossberg and many others. It is concerned with “culture” and systems of signification that include everything that people do in and with their expressive practice. Style and fashion are invariably critical, as Zora Neale Hurston and Henry Louis Gates have shown in their accounts of rhetorical tropes in the African American vernacular. Jamaican Dancehall is possibly the fastest moving, most creative and occasionally violent of music scenes. *Sonic Bodies* is also to be located in the musical cauldron of the Caribbean region, in relation to work on other Caribbean genres, such as Gordon Rohler’s *Calypso and Society* and Jocelyne Guilbaud’s *s on zouk music, and recently kaiso, as well as Mimi Sheller’s *Consuming the Caribbean*. Also the Reggae of the sound systems can be considered in a broad range of influences, namely from African music, with Kofi Agawu’s work, and African dance and visual culture with that of Bibi Bakare-Yusuf. Reggae’s own influence on Hip Hop is explored for example with Trisha Rose’s *Black Noise*. The theoretical use that *Sonic Bodies* makes of Caribbean cultural material includes embodied ways of knowing and modernism for which David Scott’s *Refashioning Futures* and *Conscripts of Modernity*, Antonio Benitez-Rojo’s *The Repeating Island* and Anthony Bogues’ *Black Heretics, Black Prophets* have provided inspiration. Another way in which *Sonic Bodies* is different from much of the Jamaican and Caribbean literature is the way it uses particular situated local practices to raise more general theoretical issues. In this respect it follows Huon Wardle’s *An Ethnography of Cosmopolitanism in Kingston* on Kingston’s street culture, or Tim Ingold’s anthropological study of skilled craft practices (though these are those of artic Laplanders).

Thinking through music has certainly been most productive, with Kodwo Eshun’s *More Brilliant than the Sun* with his sonic journey into Jazz and Funk, Josh Kun’s *Audiotopia* on the American racial imagination and James Sneed’s prescient essay *Repetition in Black Culture*. In the classical field, Jacques Attali’s *Noise* and more recently Alex Ross’ *The Rest is Noise: listening to the twentieth century* need to be mentioned. But *Sonic Bodies* principle concern is with the sound of music, as distinct from music as such. As Silvia Torres-Saillant points out in *An Intellectual History of the Caribbean*, musical
subjects have their limitations and criticizes what he calls the “favorite spot” Caribbean scholarship has for popular music and assumptions about the progressive political character of music. This attention to sound takes it cue dub music itself that emphasises the material and dynamic base and bass of sound, rather than the superstructure of musical melody and harmony. It draws on Michael Veal’s account of music studio production techniques in *Dub: Soundscapes and Shattered Songs in Jamaican Reggae*, mentioned above, Louise Meintjes’ in *Sound of Africa! Making Zulu Music in a South African Studio* and Louis Chude-Sokei’s essays on the sound system. But rather than studio recording, post-production, or the traditional concert, *Sonic Bodies* concentrates on the crew’s re-performance of pre-recorded music. This auditory emphasis is on techniques located in a popular cultural phenomenon, rather than in the traditions of avant-garde and classical music as is more often the case, as with Douglas Khan’s brilliant *Noise Water Meat*, for instance.

In so far as *Sonic Bodies* is located within the field of cultural studies, it aims to develop an auditory cultural studies in relation to, but distinct from, its more usual visual inclination (along with most other disciplines and approaches). Furthermore, it attempts cultural studies that is itself auditory, as distinct from one that has audition as it object of investigation. This specifically auditory emphasis also makes *Sonic Bodies* distinctive within of the Jamaican and Caribbean literature - in contrast with the literary tradition of “reading” images, lyrics and musical “texts,” as well as the more recent social geography of the location of dancehall venues in Sonjah Stanley-Niaah’s work. Thinking through sound draws attention to mechanical processes of auditory propagation, music, on the other hand, attends to social and cultural ones. Neither sound nor music afford immediate opportunities for representation in the way visual images and graphic signification does – that is with the phonetic harness of language. Outside a Caribbean setting as such, Les Back and Michael Bull have taken up the importance of sound with their groundbreaking edited volume *The Auditory Culture Reader*, Jonathan Mowitt’s *Percussion* and Barbara Browning’s *Infectious Rhythms* on Brazilian samba are also important in this respect. Steve Goodman’s *Sonic Warfare* theorises the full range of frequencies, from infra to ultrasound that make up the auditory spectrum. Daphne Brooks’ *Bodies in Dissent* adds a historical dimension to race and performance. Another important lead is given by Francis Dyson, who in her *Sounding New Media: Immersion and Embodiment in the Arts and Culture*, takes the important step of using sound to understand phenomena that are not only auditory, that is, virtual reality.

Within the field of audition, a sound system is a phonographic instrument par excellence, that is, it plays only already recorded music and sound effect, rather than the beats and pitches from which these recordings have been “built” (to use the Jamaican music producer’s lingo). This has been recognised by Dick Hebdige, Paul Gilroy and others in respect to the sound system. More recently, the particular importance of phonographic technology more generally has been explored in the pioneering work of Jonathan Sterne’s *The Auditory Past*, Alexander Weheliye’s *Phonographies: Grooves in Sonic Afro-Modernity*, Mark Katz’s *Capturing Sound*, perhaps initiated by Evan Eisenberg’s *The Recording Angel: The Experience of Music* from Aristotle to *Zappa* published in 1987. It is its phonographic medium propels *Sonic Bodies* to give special attention to the performance techniques and practices of the sound system crew, as these have been described in Frank Broughton and Bill Brewster’s practical guide *How to DJ Properly*. The selector’s turntable skills to mix or “juggle” tracks are also of considerable theoretical interest. Nicolas Bourriaud builds an
entire post modern aesthetic on what describes as the DJ’s “re-performance” skills, in Postproduction, Culture as Screenplay: How Art Reprograms the World.

The body of sound
Sonic Bodies claims that thinking through sounding is relevant well beyond the particular example of the Jamaican sound systems. It argues there is a distinct and different way of thinking expressed through sounding. This emerges from the intimate nature of the relationship between sound and embodiment, one that is only matched by that between vision and the disembodied mind, as an entirely different sensory modality and another kind of object altogether. Otherwise, of course, the body’s ear is quite different from the mind’s eye. With the current corporeal turn, this auditory connection to embodiment is gaining an increasing purchase. It has certainly been aided and abetted by renewed interest in the senses, often from within an anthropological tradition. Here the work of Paul Stoller, Katheryn Geurts, David Howes, Constance Classen and others have been most important. Crucially, the turn towards the body is also a turn away from the discourse, language and inscription with which so much arts and social sciences have been preoccupied. It is also a turn away from any hierarchy of the senses and the dominance of vision in particular, towards a pattern of cooperation of sensory modalities in which each contributes its unique qualities for our negotiation through the “ambient energy flux.” While readily recognising surfaces, edges and patterns, the eye is most accurate with alignment by the straight line of sight. The ear, by contrast, is at home in the depth and textures of timbre, recognising the complexities of melody, harmony and octave transposition most readily. This not to essentialise the sensory modalities, but rather to recognise their affordances.

The dancehall session provides Sonic Bodies with a test bed for understanding the full-bodiedness of sensory experience. Here, the crew’s performance techniques together with their phronēsis, or practical wisdom, exemplify the kind of complexities, subtleties and sophistication of which the body is capable – far more so than when the dominant dualistic tradition condemned it to being the mind’s extension, or fleshly slave. Philosopher Richard Rorty sums this up most succinctly: “If the body had been easier to understand, nobody would have thought we had a mind.” In this way, the crew’s connoisseurship and expert evaluations express their embodied ways of knowing, or “logic of practice,” to use Pierre Bourdieus’s phrase. Dealing with sound and music, their performance expresses a kind of rationality that is not necessarily tied to formal logic, discourse, or representation, though, of course it can be so purposed. The sound crew’s evaluative techniques are described as the analogia, rather than the logic, of their practice, as they are not restricted to analysis, calculation, inscription or visual representation. This develops the idea of the ratio of rationality, as the kind of expertise both of, and at, the heart of all manner of other performance and re-performance settings, situations and practices. Many contemporary creative practices these techniques often cannibalise existing recordings, as with Hip Hop scratching, Chris Cutler’s “plunderphonics” or mp3 file “mashing,” for example. This remixes the traditional distinctions between production and consumption.

On the basis of a fine-grained account of the performance techniques of a popular culture sound system practices, Sonic Bodies challenges some of the most widely held assumptions about what knowledge itself actually is. One such assumption is that knowledge resides in “the mind” - as if this could be separate from its body. Another is that knowledge is information about things, rather than relationships and
dynamic patterns. A third assumption is that knowledge originates with peer-reviewed research in the academy, rather than subaltern or lumpen street cultures. So some questions to start: What kind of knowledge may a person have without knowing it? When is tacit know-how more important than explicit know-what? How is thinking through sound any different from thinking through images? What is meaning when it has nothing to do with representation? Thinking through sound encourages an auditory epistemology. The central idea is propagation, as with the periodic disturbances of sound waves through a medium. The longitudinal waves of sound, as with the transverse ones of light, need to be continually propagated. Without the periodic movement of vibrations there would simply be silence. The verb sounding, as distinct from the noun sound, emphasises such activity. Sounding always requires kinetic movement, with the corporeal agents of sonic bodies - whistling, clapping or singing; blowing, scrapping, banging or otherwise playing a musical instrument; or pressing “play” on a recording of any of the above. Indeed, the echo and reverberation – the signature sound of reggae dub - are music studio production methods of elongating this auditory life.

The practices and processes of propagation ensure an approach that is dynamic as well structured, addressing energetic fields, rather than separate static objects. It is concerned with rhythm, the patterning of intensities through time, rather than the pattern of symmetries, systems and codes in space. The foundation of this auditory epistemology is the crowd’s visceral immersive experience of sonic dominance in the dancehall session. This is the sensory experience is the pivot around which thinking through sound turns and returns - its leitmotif. Thinking through sounding also calls for a practical methodology of listening, where sound is a subject, vehicle and medium for the thinking process. As sounds displace images, thinking itself becomes more than only a cognitive manipulation of representations and knowledge is not only visual. Listening concerns depths rather than surfaces, disposing it to evaluation, as with “sound judgement,” further than mere monitoring. It is a haptic sense and as touch itself simultaneously both makes a connection between one and another, and recognises their separation. The ear serves as the organ of balance, readily “making sense” of things and recognising resonances and proportions between the frequencies of sound waves, as with an octave, for example. The eye can make very accurate alignments, but has no way of telling the proportional relationships between the frequencies of light.

The sound crew’s phonographic re-performance obliges them in their practice - and we do in our investigation - to pay particular attention to the three dimensions of longitudinal waves. These are: frequency or pitch, amplitude or volume and timbre or sound “colour.” The crew’s skilled techniques “build the vibes” of the crowd in the dancehall session in the way the music producer “builds” the beats, harmonies and melodies of “riddim” track from auditory vibrations. As sonic bodies themselves, the crew are built out of such vibrations. Furthermore, the dynamic patterning of these vibrations offers the opportunity for an understanding of how the crew “make sense” of what they do which may include - without being entirely dependent upon – any conscious calculation or visual representation. The multi-sensory extremes of the sonic dominance of the sound system session make it a living laboratory for investigating the crew’s embodied ways of knowing. **Sonic Bodies** aims to expand the idea of sound, with the concept of sounding, in the way that Christopher Small has done for the concept of music, with his concept of musicking (but using the popular culture of the dancehall session, rather than
Small’s of a classical symphony concert). Sounding encompasses everything, everyone and all the activities that goes into the making of sound. This includes listening, as sounding is always reciprocal and often rhythmic: impression and expression, crescendo and decrescendo as well as the corporeal routine of breathing - as both inspiration and expiration.

**The body of thought**

In theory, thinking through sounding takes on an altogether different complexion than it does in practice. Sounding boasts a radical edge, entirely absent from habitual patterns of thought in terms of light and image. From the trumpets sounding the downfall of the walls of Jericho, the destabilizing influence of audition has long been recognised. This critical attack that sound can be used to mobilise literally strikes at the heart of the predominantly ocularchronic character specific to Western metaphysics has been extensively documented. Seeing is believing, but hearing on only hearsay. But it should be noted that this visual dominance is far from universal. It is not the foundation of many Eastern philosophies, for instance. In fact it can be argued that sounding initiated Western philosophy with the Orphic cults and Pythagoras’ “music of the spheres” as Joselyn Godwin describes in *Harmonies of Heaven and Earth*. Before Plato’s cave wall becomes the screen on which shadows played, it’s rather more distinctive – and mysterious - characteristic was as a resonating echoic chamber. Sound certainly lingered on in the unwritten dialogic tradition of pre-Socratic philosophy, as it did in scientific investigation up to the start of the seventeenth century, with Johannes Kepler's *Harmonices Mundi* and the “sound-house” of Francis Bacon’s *New Atlantis*. Early twentieth century avant-garde art was more concerned to make itself heard than with harmonics. The Italian Futurist were famous for their noise machines, Russian revolutionary art less so for its invention of “artificial sound.”

Far from being a “natural” phenomenon, sound has a rich social and cultural history, much of which remains to be written.

More currently, in the context of the corporeal turn, the resonances of sounding and body can become a weapon against the reflections of lighting and mind. Thinking through sound thus evolves into a philosophy of resonance, which is, in almost every respect, rather different from more commonplace philosophical reflection. But what does a philosophical resonance sound like? It is likely to be concerned with relationality, that is, mixing, mingling and synthesis as well as analysis, similarities as well as differences and continuities as well as dichotomies. Most critically it included embodied practice and subjective sensory experience as well as the manipulation of mental images or cognitive process. In short, this way of philosophizing exploits a vocabulary of auditory mechanisms and a repertoire of models and metaphors from sound and listening, in the way traditional philosophy has relied on visual support. This is certainly not to abandon reason, but rather to consider it as ratio, rather than only representation, as I do in the concluding chapter with the idea of “sound judgment.”

Sounding also has a critical edge against the text, discourse and the formalist and structuralist preoccupations of much recent work in the arts and humanities that the philosophy of light has underpinned. While these, in their time, proved useful against positivism and behaviourism, such reductionism no longer occupies the dominant position it once did. As might be expected, the critical questions sounding raises for text is orality and voicing (to which chapter 7 on the MC vocal performance is devoted). For language, the questions sounding raises concern the importance of phonetic expression of the particular utterance. Sounding turns away from Saussure’s *La Langue*, or
language system, towards precisely what this eschewed, Parole, or speech itself. Sounding draws attention to analogue variation, rather than the diacritical differences of a system of signification; contingencies rather than abstract types or essentialisms; it is concerned with communication as an embodied, situated and particular process in the way feminists epistemologies have pioneered. The reorientation from a discursive to an embodied emphasis, that the working through sounding encourages, might seem to favour a sensory gear change from eye to ear. The mind’s eye for text was invariably privileged over and above the body’s ear for speech. But the thinking through sound does not call for a reconfiguration of the senses as such - other than recognising their multiplicity.

There is currently a growing interest in a metaphysics that refrains from the traditional ocularcentric obsession where vision stands as the paradigm for all perception, as Casey O’Callaghan argues in Sounds: A Philosophical Theory. This is a philosophy of sound, rather than a philosophy that is in any way itself auditory - by adopting the kind of auditory methodology advocated here. From within the tradition of analytical philosophy, O’Callaghan makes no mention of European thinking on sound and audition. This favours enquiry into listening and the voice, as with Jean-Luc Nancy’s Listening, Peter Szendy’s Listen: A History of Our Ears and Mladen Dolar’s A Voice and Nothing More. Prior to this comparatively recent work, such interest came from phenomenologically orientated thinkers, such as Don Ihde with Listening and Voice and David Michael Levin with The Listening Self and Joachim-Ernst Berendt’s The Third Ear: On Listening to the World. Jean-François Augoyard and Henri Torque in Sonic Experience describe the empirical detail of sound as effect: A Guide to Everyday Sounds. As Adriana Cavarero details exquisitely in For More than One Voice: Toward a Philosophy of Vocal Expression, sound has always been an anathema to the dominant traditions Western philosophy. This because sound of the voice makes it impossible to ignore our human embodiment, both in general and in particular, as with the distinctive sound that each individual’s voice expresses. To be sure, a person’s face is key to our relational identity with the Other, as Emmanuel Lévinas has proposed as the foundation of philosophy as ethics. But equally important is their voice, where the value of this distinctiveness is very different. This is due entirely to the mechanical characteristics of auditory propagation, compared to those of light, that is, physics, rather than metaphysics. Our eyes see a face, or the surface of any object, to the extent that it reflects or absorbs an ambient light source. The face itself has no say in the matter - exactly the opposite when the face chooses to speak, that is, take responsibility for its own propagation in the auditory sphere. Similarly, in a darkened world, a person would be forced to identify himself or herself by shining a light on their own face.

It is such practical properties of the propagation of sound that configure thinking through sounding to produce an “auditory imagination,” to use the term T. S. Eliot originally coined for understanding of poetry. The idea of an imagination has merit compared to the more formal alternatives of auditory philosophy, epistemology or metaphysics in so far as it expresses the potentialities embodied knowing that sounding is being used to explore in this volume. From the point of view of light, sound always remains in the dark shadows. From the point of listening, there are questions on which light always remains silent. It is these that Sonic Bodies begins to ask.

The Argument of Sonic Bodies
Starting the journey of Sonic Bodies by thinking through sound, as distinct from thinking about sound as an idea or an object, the next step is to consider talking through sound. This involves an appreciation of the idiomatic vocabulary and nonclementure of those that work with sound in Jamaican popular culture, namely the sound system crew. This leads to a methodology, or a doing through sound, that informs the investigation. Not surprisingly listening to sound is central to this methodology, followed by describing exactly what was heard of the processes and practices of sounding. This leads to a theorising through sound itself, that is, completing the account of the practice and performance techniques of sonic bodies with a theory of a sonic logos.

In the introductory part, Practising and Theorising Sound, the first chapter The Dancehall Scene locates the dancehall session and the reggae sound system within the dancehall scene. This is then situated more widely within the orality, musical traditions and auditory values of the Jamaican sensibility, that is, as a bass culture. The second task of the chapter is to introduce the approach of thinking through sound specifically and literally as a periodic disturbance or longitudinal wave that propagates through a medium. The chapter then makes two claims. One is that the entire Dancehall scene with all its various sonic bodies, is configured in, as and by these vibrations. The other, following from this, is that these vibrations can be usefully considered as falling into three distinct wavebands. The first each of these is identified as the material waveband of sounding propagated through the gaseous medium of the air. These frequencies are produced by the “set” of equipment whose qualities of “tone” and “balance” the audio engineers are skilled at monitoring and manipulating. Second comes the fleshly corporeal waveband of the crew’s performance and the crowd’s participation with the selectors’ choice of music and “riddims” tracks played in the session, the crowd’s dance and their own performance skills on the decks. Finally, there is sociocultural waveband or simply “vibes” by which the session “makes sense” to the crowd in terms of their feeling and understanding of the Dancehall scene. The final part of the chapter locates this idea vibrational waveband model in the context of other theoretical approaches.

The second chapter, Sound Systems describes the transmission of these vibrations of sounding at each of the three wavebands. It proposes that any such periodic movement requires three elements, that is, a medium for the propagation, an instrument for making the disturbance and technique for using the instrument. In this way, the term sound systems in the plural plays both theoretically - as a system or framework of understanding - and practically – as the phenomena of the auditory vibrations themselves and a reggae sound system or institution for sounding. Here the media of sounding include material vibrations of a speaker cone, for instance, as well as the sociocultural medium of the dancehall scene as a whole. The instruments of sounding include those of the flesh and blood crew at corporeal frequencies; the phonographic sound system “set” of equipment, in the material waveband; and the session itself, at the sociocultural waveband. The techniques of sounding in the corporeal waveband include the crew’s kinetic skilled performance skills, such as the selector’s dextrous skills on the turntables, for example, or the crowd’s dance and in the material waveband the amplitude, frequency and timbre of the sound waves themselves.

With the two triads of the wavebands and elements of sounding in place, Part 1 Audio Engineer and Material Waveband turns to the audio engineer as the crewmember
with special responsibility for this particular waveband at electromagnetic and electromechanical frequencies. At the same time, it must always be remembered that no waveband can be considered in isolation from the other two. A crewmember’s specialist responsibility in one waveband can only ever expressed in relation to the other two. Chapter 3 Fine-tuning, gives a step-by-step account of the pre-performance practice of “compensation” by which the engineers adjust the auditory output of the phonographic set of equipment. This is a recursive skilled technique comprising three corporeal procedures: manipulating the value of the electronic components of the set (for example, by substituting one for another); and monitoring the consequence output variation – the auditory amplitudes and frequencies. Finally the engineer has to evaluate auditory qualities of “balance,” “weight” and “attack,” as well as what one described as “my harmony with the sound,” with skills located in the sociocultural waveband.

Next, chapter 4 Learning to Listen, broadens the scope of the enquiry to situate the audio engineer’s acquisition of their skilled techniques in the context of an apprenticeship tradition. Here the youngest current Stone Love engineer, for instance, is the fifth generation of engineering apprentices, starting with the inventor of the sound system set, Hedley Jones, sixty years ago. Such skills learning draws attention to the importance of their evaluative judgements by which the crew “make sense” of what they do as they do it in the session, further to those required for the initial playing, recording and production of the music. The engineers are considered as sonic bodies mediating “betwixt and between” all three wavebands of sounding, rather as merely having a “technical knowledge.” The chapter also draws parallels between what a “prento” (apprentice) engineer has to learn for his engineering and researcher’s methodology of listening (as distinct from viewing or reading). Sound asks questions in the way images often settle them. Listening is always distinct from - but in relation with - both the auditory faculty of hearing and the practices of sound making. The engineer’s learning is contextualised with that of other skills (Levin, Ingold, Sterne) and with the research relationships and methodology of working through sound, as well as Goethe’s “delicate empiricism.”

Part 2 Selector and Corporeal Waveband adopts a similar approach for the second key crewmember of the selector. Chapter 5 Juggling, gives an account of the selector’s skilled dextrous (or “deckstrous”) performance and re-performance role and function in the session. This includes “building the vibes” or intensities of the session, and “steering” the crowd along the procession of the night. The selector’s re-performance techniques, like those of the engineer, involve manipulating, but this of the musical material on record or CD, which is done by cutting, sampling, or selecting one particular music track or part of it; mixing a smooth transition between one selection and the next; and repeating the record played, or part of it, or its echoing tail as a sound f/x (effect) - in response to the crowd’s requests for “pull-ups” and “rewinds.” The selector also engages in monitoring, not meters or screens like the engineers, but “reading” the vibes of the crowd. As with the engineer working with auditory materials, the selector’s skills include evaluating with their expertise, connoisseurship and “know how,” not sounds, but the feedback from the crowd.

Chapter 6 Cut, Mix n’ Rewind locates the selector’s skills in the broader context of those of the recording studio production techniques of Reggae “versioning,” Hip Hop “looping,” and the value of repetition, as a typically modernist trope, but “inna dancehall
stylee." The selector’s re-performance (Bourriaud) techniques are key to phonographics of the apparatus of the sound system (Weheliye). This affords a critique of the dichotomies that visual metaphors are often used to promote, which invariably separate technologies from their use, sound making from listening, production from consumption, transmission from reception and performance from re-performance.

Part 3 MC and Sociocultural Waveband addresses the skilled techniques of the third and final crewmember considered in Sonic Bodies. Chapter 7 Voicing, describes the MC’s (or DJ) performance as “acoustic master” (Chion), adding a distinctive sociocultural waveband to the sounding of the session. It describes how the MC’s techniques contribute to the affective intensities of the whole of the session - by “exciting” the crowd, “guiding” them through the session and championing them in the lyrical battle or “clash” against sound system competitors. The MC’s techniques include “lyricing”: issuing instructions, or “chatting the mic;” with performance tropes such as “riding the riddim,” “conducting choir” (antiphony), a wealth of idiomatic expressions and “tracing” (ritual insulting, Gates); and the distinctive tone of their voice, usually both authoritative and entertaining.

Chapter 8 Rhetoric and the Logic of Practice situates the MC’s voicing in context of the ancient rhetorical triad of logos, pathos and ethos, claiming this to be a more comprehensive and useful than more contemporary theories of communication. From this it is then suggested that the MC and other crewmember’s way of knowing needs to be located within the embodied, particular and situated character of the sensus communis of the session as a whole. This has three components: right time or kairos, right place or topos and right action which are considered in relation to the idea of knowledge, ways of knowing and Bourdieu’s “logic of practice” specifically. Both knowing and communicating described in this manner embody a relationship between measure and value, drawing on Hans Kayser’s account of Pythagorean concept of harmonics where the circle of value is squared in the measure of practice.

To conclude, Triangulating a Sonic Logos claims that thinking through sound encourages the kind of sensibility that might prove useful for understanding the ways of knowing to be found in other situations and settings - with nothing to do with a dancehall session or indeed sound as such. It takes the performance techniques of the three sonic bodies of audio engineer, selector and MC as an exemplary expression of a sonic logos. This is a way of knowing particularly susceptible to, and expressive of, phronēsis, that is, practical wisdom or sound judgment that often involves proportion and analogia. This triangulates with the technē, know-how or practical craft of the crewmember’s skilled performance techniques and the episteme of analytical or scientific knowledge. In fact triangulation - expressed in such abundance within and between sonic bodies - is a key feature of the sonic logos, taking its cue from Peirce’s semiotics. Triangulation encourages an escape from the dualities and antimonies often sanctioned by ocularcentric and language biased philosophies. With a sonic logos, mind and body, viewer and viewed, subject and object, internal and external worlds mingle and merge to render rationality in terms of ratio rather than only representation.
This, of course, makes reference to the Bob Marley lyrics: “The one good thing about music/ When it hits, you feel no pain,” from Trenchtown Rock, from the African Herbsman album, released in 1973 on the Trojan label.

Playing music from mobile devices in public places, such as on a bus, often to announce of other people, as Marshall 2010 discusses.


Attali 1979: 3.


Glenn Adamson makes a similar argument in his Thinking Through Craft (2007).

The embodied character of thinking is a theme Brian Rotman has pursued with the most abstract of thought systems, that is mathematics, as with his Becoming Beside Ourselves: The Alphabet, Ghosts and Distributed Human Being (2008). Other approaches to this issue include of embodiment and meaning include, Lakoff, George and Johnson, Mark (1980) Metaphors We Live By and Horst Ruthrof’s Semantics and the Body: Meaning from Frege to the Postmodern (1997).

Thinking diagrammatically, according to Frederik Stjernflett’s Diagrammatology (2007) involves the the visualisation of relationships, rather than their appearances and therefore should not be considered as representational.

This was a conversation in June 2004 that in fact took place on the beach at Frenchman’s Cove, Portland, near the parish capital of Port Antonio.

In respect of materiality, Frederich Kittler’s work has been important in promoting the study of media technologies, as with for example his Gramophone, Film, Typewriter (1999) and Visual Media (2009), also Zielinski 1999 and 2006. In respect to corporeality on early important wok is Elizabeth Grosz’s Volatile Bodies: Towards Corporeal Feminism (1994) and more recently Ahmed (2002).

As with Goodman (2009)

Veal 2007: 51.

As with Bradley 2000 and Stolzoff 2000.

Constantinides 2002: 1.

For example, Maxine Sheets-Johnstone’s The Corporeal Turn (2009).

Gibson 1986: 263

Rorty 1979: 239.

Bourdieu 1990.

Henriques 2003


For example, Berendt 1983.

Oram 1972.
26 For the former Douglas Kahn's *Noise Water Meat: A history of Sound in the Arts* (1999). Andre Smirnov provides an authoritative account of the Russian musical avant-garde, for example [http://asmir.theremin.ru/genz_e.htm](http://asmir.theremin.ru/genz_e.htm)

27 Lévinas 1999.

28 In *The Use of Poetry and the Use of Criticism* (1933/1964) in his chapter n Matthew Arnold, Eliot describes the 'auditory imagination' as "the feeling for syllable and rhythm, penetrating far below the conscious levels of thought and feeling, invigorating every word; sinking to the most primitive and forgotten, returning to the origin and bringing something back, seeking he beginning and the end" (pp 118-9).