

Geos, Topos, Choros – Approaches to Place for Sonic Practice

ROBIN PARMAR

robin@robinparmar.com

Limerick, Ireland

ABSTRACT: The Ancient Greek philosophers developed three approaches to place. Formulated from geometry, *Geos* distances the observer from her subject, abstracting place into a coordinate grid. This instantiated an ocular bias that has since dominated philosophy, aesthetics, and the study of place. Against this hegemony, two alternative models deserve consideration. *Topos* derives from tales of circumnavigation and peripatetic narratives such as the *Odyssey*. Places are fluid and multivalent, experienced from an individuated subject, narrated in spatial and temporal sequences. *Choros* identifies regions of difference by symbolic correspondence with the heavens. These *klimata* are built from patterns accumulated over time within a social milieu, into myths that act as guiding metaphors. This paper proposes that Topos and Choros have useful explanatory power when applied to sonic practice. Four examples are considered in detail: Hildegard Westerkamp’s “Kits Beach Soundwalk”, Janet Cardiff’s *The Missing Voice*, Robert Curgenvén’s *Climata*, and the author’s installation *In that place, the air was very different*.

KEYWORDS: Claudius Ptolemy, Michael Curry, Hildegard Westerkamp, Janet Cardiff, Robert Curgenvén, the *Odyssey*, human geography, place, sound walk, field recording.

1. Introduction

When we study the world and its effects we are engaging with the discipline of geography. This takes its name directly from *Geos*, which is but one of the three approaches to place known to the Ancient Greeks. The other two, *Topos* and *Choros*, have largely been forgotten. This is a measure of the dominance of empiricism through the history of Western philosophy and language. At the outset, it is important to note that the meanings of these terms have changed over time (Curry 2002, 503)¹. To avoid confusion with contemporary usage, proper noun forms will be used throughout this paper.

Two definitions can be taken as a starting point for the discussion that follows. Michael Curry has associated *Topos* with place, *Choros* with regions, and *Geos* with “the earth as a whole” (Curry 2002, 503). Second, the *Oxford English Dictionary* defines chorography as:

The art or practice of describing, or of delineating on a map or chart, particular regions, or districts; as distinguished from geography, taken as dealing with the earth in general, and (less distinctly) from topography, which deals with particular places, as towns, etc.

This paper will describe each approach in turn, presenting particular sonic works as illustration. The goal is to demonstrate the usefulness of these terms in developing an understanding of place that is grounded in a multisensory (specifically sonic) phenomenology.

2. *Geos* and the empirical

Claudius Ptolemy was a Greek, resident in Alexandria, sometime in the second century. He wrote three influential works, one each on geography, astronomy, and astrology. The first of these, *Geographica*, is the only cartographic work to survive from antiquity. This volume improved on the incomplete maps of Marinus of Tyre and the work of Hipparchus on earth sciences (Berggren and Jones 2002, 3). Though not without its own systemic errors, Ptolemy’s grid-calibrated metrics were unprecedented in accuracy and scope, and maintained their superiority for fifteen centuries (Schütte 1917, 12 and 15).

Amazingly, *Geographica* does not contain maps, but instead presents an algorithm for devising maps. It consists of a gazetteer of place names with their coordinates, plus instructions on how to create map projections (Berggren and Jones 2002, 4). The innovative geometric tool that facilitates this process is a grid of latitude and longitude lines overlaid

¹ For example, referring to a map as “topographic” is *not* in accordance with *Topos* as used herein; but is instead an instantiation of *Geos*.

on the globe. This creates a uniform and homogeneous space that pre-exists location. The system requires an ideal observer positioned superior to the globe, hence abstracted from the realms they measure. This person requires only the sense of sight and a facility with geometry to fill the empty grid with places. Vision is here equated with mathematical reason in particular, and rationality in general.

In this way, *Geographica* instantiated a regime that was reinforced in the Renaissance by two key works. The first was Leon Battista Alberti's *De Pictura* (1435), which established the fundamentals of perspective theory (Parmar 2014a). The second was Isaac Newton's *Principia Mathematica* (1687) which laid out the empirical method. The relationship to geography was not incidental. It was Newton who "produced the illustrations for Varenius' *Geographia generalis* (1650), seen by many as the founding work of modern geography" (Curry 2002, 507). The ocular and the empirical have since worked hand in hand, dominating philosophical thought, language, science, and aesthetics. In our age of satellite imaging and Google Maps, it is difficult to read the world in any other way.

Several practices of sonic ecology are due to this method, most especially sound mapping. In his discussion of notation, R. Murray Schafer suggests that "the best way to appreciate a field situation is to get above it", proposing "aerial sonography" as the most fitting way of mapping sound (Schafer 1994, 131). Hence, his observer position is congruent with Ptolemy's. Tools such as the isobel map and events map are beholden to Geos, just as his hierarchical classification schemes are manifestations of the empirical (133–145). While these are certainly useful techniques, they present little challenge to ocular hegemony².

3. Topos and the wandering subject

The *Tabula Peutingeriana* is the only existing map of the Roman Empire road network. It was created by a monk in Colmar in 1265, but is likely based on a map prepared almost thirteen centuries prior, by Marcus Vipsanius Agrippa for his friend the emperor Augustus. The map has pictorial elements but neither the linear scale nor areas are represented accurately. Unlike Ptolemy's work, it has no regulating grid or scale. Instead, this map functions as an *itinerarium*, a "register of road-distances, meant for wrapping up and transporting in a traveller's bag" (Schütte 1917, 15). It's not a tool for measurement, but is instead designed to get the user from one waypoint to the next.

This map is emblematic of Topos, a model of place first heard in the *peripli*³, stories of circumnavigation taken from the journals of the Carthaginian Himilco, the Persian Scylax of Caryanda, the Greek Pytheas of Massalia, and others. These narratives of sea voyages trace

2. *The Soundscape* is a rich work and many of Schafer's ideas do not conform to Geos; see below.

3. The singular *periplus* is the Latin form of the Greek *periploos*, literally "a sailing-around". The first preserved *peripli*, transcribed by writers such as Pliny the Elder, are from the 6th century BCE. But the oral tradition is likely to be much older.

coastlines, both in time, as one locale follows another in a sequence of days travelled, and in space, as greater distances are put between the traveller and home (Curry 2002, 506). Places are experienced by an individuated subjectivity; it is difficult to trace the same path twice. Not only are new places found with every journey, but the places themselves are inconstant.

A famous literary example of Topos is the *Odyssey*. Composed circa 700 BCE, and attributed to Homer, this epic poem is often described as the voyage of Odysseus from Troy back to his home in Ithaca. In fact, the story only provisionally concerns the journeys of the titular hero, whom we do not even encounter until Book Five. The first journey is instead made by his son Telemachus, and this is as much a metaphor for his maturation (a “journey” into manhood) as it is about traversing territory. Known locations largely do not figure in the *Odyssey*; instead the places described are “sheer fancy”, based on “bits and pieces of solid unassimilated fact” (Lattimore 2007, 15). Places are described largely through the distinctive peoples who inhabit them: the Lotus-Eaters, Phaiakians, Laistrygones, and so on (9). The *Odyssey* is emblematic of Topos in its wandering heroes, divergent narratives, and reliance on the experiential.

A contemporary encounter with Topos occurs when your smart phone is out of satellite range and you become lost in non-Cartesian space, “off the grid”. At such disorienting moments, you might ask a stranger for directions. You will then receive an account of how to get from “here” to “there”, told from the narrator’s point of view. In Ireland, the sequence of directions might go something like this: “Continue down to Fennessy’s, take a left up towards St. Anne’s. Then turn right and walk towards Kelly’s Bar”. These directions are given in terms of pubs and churches, landmarks that reveal much about the specific community in which the narrator is embedded. In a different social milieu, you would be provided different landmarks⁴. Topos, then, is about individual experience constrained by the characteristics of places, that are themselves in the continuous process of formation by the social.

A place owes its character to the experiences it affords to those who spend time there – to the sights, sounds and indeed smells that constitute its specific ambience. And these, in turn, depend on the kinds of activities in which its inhabitants engage. It is from this relational context of people’s engagement with the world, in the business of dwelling, that each place draws its unique significance (Ingold 2000, 192).

Following Heidegger, Ingold develops a definition of landscape as dwelling place, as described more fully elsewhere (Parmar 2014b).

4. In the suburbs, directions might be given in terms of malls and traffic lights. In certain Canadian locales, directions are given in terms of doughnut shops.

From “landmark”, R. Murray Schafer extrapolated “soundmark”, noting the importance of those “unique tones” that mark “every natural soundscape” (Schafer 1994, 26). Navigation by soundmarks occurs when people follow bells to church, demented children’s tunes to an ice cream van, or a distant thundering roar to a waterfall in the forest. Indeed, Topos is especially strong in cultures which have well-developed non-visual sensibilities. Steven Feld has written extensively about the Kaluli people of Papua New Guinea, who navigate the rainforest by sound more than sight, and name places for the sounds they produce. For the Kaluli “sonic sensibility is basic to experiential truth” (Feld 1994, np).

Though the Kaluli might be an extreme example, this relationship to place is not unknown in Western European traditions. For example, it manifests in *walking*, an activity that encourages engagement with one’s own body, facilitating close encounters with environments both natural and constructed. Rebecca Solnit’s *Wanderlust* provides a wonderfully nuanced reading of the various purposes to which walking has been put, and how this activity has been framed through cultural prohibitions, aesthetics, and morality. She credits Wordsworth with founding “the whole lineage of those who walk for its own sake, and for the pleasure of being in the landscape” (Solnit 2014, 82).

Urban walking finds its exemplar in Walter Benjamin’s study of Charles Baudelaire. He is described as a *flâneur*, a person of leisure and means, who wanders the arcades of Paris. This engagement with the city is special in having no specific goal, being conducted without maps or guides. But this should not be taken as an innocent attempt to engage with the urban environment on its own terms. Rather, the *flâneur* explicitly formulates walking as a means of subverting the sensory bombardment of capitalist excess.

(T)he man of leisure can indulge in the perambulations of the flâneur only if as such he is already out of place. He is as much out of place in an atmosphere of complete leisure as in the feverish turmoil of the city (Benjamin 1955, 172–3).

This perambulation was taken up by the Situationists in the form of the *dérive*, defined by Guy Debord as “a mode of experimental behaviour linked to the conditions of urban society: a technique of rapid passage through varied ambiances” (Debord 1958, np). The aim of this “drift” is to derive a new personal experience in an otherwise oppressive urban environment, by means both disruptive and revolutionary.

These excursions are similar to the *peripli*, in that specific destinations and social encounters are not entirely known beforehand, even if the scope of such activities is constrained. Though Odysseus had a specific goal in mind, his route was circuitous in the extreme, directed both by his own intent and that of various interfering deities. Topos is less concerned with directed travel than peripatetic wanderings and the experiential nature of the journey.

4. Topos and the soundwalk

As walking has increased in popularity, so have activities that combine excursions with listening practice. Field recording has been enabled in part by technologies that allow high fidelity location recording, but also by changing aesthetic sensibilities. The *soundwalk* was introduced by the World Soundscape Project (at Simon Fraser University, British Columbia) to increase awareness of the auditory environment. In an article originally published in 1974, Hildegard Westerkamp defined the soundwalk as “any excursion whose main purpose is listening to the environment” (Westerkamp 2001, np). She explicitly relates this to the history of urban walking as a way “to regain contact with nature”, and contrasts this excursion with the “purely visual” experience of driving a car. The soundwalk is multivalent; besides listening, it can include sound-making, imitation, and composition.

Westerkamp is among those sonic artists who have produced sophisticated compositions that engage with Topos. These arose out of her involvement with Vancouver Coop Radio, which provided a forum for dissemination as well as a welcoming community of fellow practitioners. As early as 1978, she was producing the pioneering radio programme *Soundwalking* (McCartney 1999, 226⁵). In “Kits Beach Soundwalk” (1989) the composer provides the narrative, in a comforting voice that describes and reflects in turn. The piece is cinematic in form, a monologue delivered as a series of linked scenes. It begins with lapping surf and sea bird calls, over which Westerkamp creates the equivalent of an establishing shot:

It’s a calm morning. I’m on Kit’s Beach in Vancouver. It’s slightly overcast and very mild for January. It’s absolutely wind-still. The ocean is flat, just a bit rippled in places. Ducks are quietly floating on the water.⁶

The language becomes more particular as Westerkamp describes what we are hearing in the foreground of the soundscape, as contrasted to the background sounds of the city. The composer changes the volume levels and calls our attention to these changes, so that we must confront the piece as an overt manipulation of sonic events.

The city is roaring around these tiny sounds but it is not masking them. I could shock you or fool you by saying that the soundscape is this loud. [Volume increases.] But it is more like this. [Volume decreases.] The view is beautiful; in fact, it is spectacular. So, the sound level seems more like this. [Volume decreases further.] It doesn’t seem that loud.

5. These page numbers follow the PDF file version of the paper, since the document itself has no explicit numbers visible.

6. The text is the author’s own transcription, following the version recorded for the CD *Transformations*.

After a further exposition about city noise, we are transported from the beach to a post-production studio. Here, the narrative makes another break, this time into the world of images and metaphor. Various dreams are recounted in association with the barnacle sounds, their commonality being that they are “healing dreams, energising”. We have departed a long way from the title of the piece by this point. “Kits Beach Soundwalk” begins in Kitsilano as location, but soon relocates itself to a recording studio, and then to the imagination. Westerkamp has described this as speaking

from inside remembered soundscapes, from inside my experience and knowledge of soundscape, from inside the musical, artistic aspects of the soundscape (Westerkamp 1998, 68).

The soundwalk is not necessarily or only a physical perambulation; it is a walk *through* and *with* sound. Westerkamp is the pathfinder, forging a trail with her very subjectivity. Though this is an internalised activity of memory and perception, the metaphor of the journey is still apt, as the composition encounters places literal and otherwise.

5. Topos and remediation

Janet Cardiff has created an extensive body of work, often in collaboration with George Bures Miller. One extended series of pieces is simply labelled “walks”. To date there have been 26 of these, from “Forest Walk” in 1991 to “The City of Forking Paths” in 2014 (Cardiff 2017). These sound pieces combine field recordings made *in situ* with voice-overs and extensive post-production. Cardiff discovered the underlying method by accident, when she inadvertently played back a tape recording while on site. “I heard the sound of my body while walking, my voice describing what was in front of me and also my breathing. I began to walk with my virtual body” (Schaud 2005, 79). She draws extensively on literary and cinematic devices when constructing her walks, which she often describes in terms of virtuality.

One of the most successful of these walks is *The Missing Voice: Case Study B* (1999), commissioned for the Whitechapel Library, London (128). A participant gets a portable music player and headphones from the front desk, presses play, and then follows the narrative where it leads them. This process is familiar from those audio guides that are provided to museum visitors. But rather than a simple tour, this piece creates from the outset a complex fictive world:

I’m standing in the library with you, you can hear the turning of newspaper pages, people talking softly. There’s a man standing beside me, he’s looking in the crime section now (284).

This text is dissociative; the artist is in impossible proximity to the listener. How can she be standing in the library with us if she made this recording years ago? Cardiff invokes time travel by manipulating the listening experience (5). Instead of a simple excursion, we inhabit a mediated narrative, as though participating in one of those crime novels. Soon we will be out on the street, walking the same alleys that Jack the Ripper once traversed. The potential threat is palpable, Cardiff imbuing the story with her own paranoia; her visit to London to create *The Missing Voice* was her first time alone in a big city (283).

Sometimes explicit directions are provided, just enough to keep us on the path. But these immediately morph into the fiction. Once outside the library, we are instructed: “Turn to the right, Gunthorpe Street. A man just went into the side door of the pub” (284). Then we hear the tape recorder being stopped and restarted. For a second time, we hear “A man just went into the side door of the pub”, but this time filtered as though played from a cassette deck. This remediation is characteristic of Cardiff’s walks, in which the listener at all times inhabits “at least two acoustic spaces” (16). In *The Missing Voice*, one “Janet” walks the street with a recorder, giving us directions and telling a story. A second “Janet” is discovered as a recorded voice on a cassette tape, a clue to a possible crime. The overall effect is to involve us in the action as a complicit partner.

This self-reflexive narrative comments on mediation and the position of a woman in the city. But it has more again to say about place, since from the beginning the instructions are impossible. We cannot stand with the artist in the library, since it has since been closed and replaced with an art gallery. This is an inevitable consequence of the ongoing development of urban spaces. Changes to the built environment risk eroding the effectiveness of any work that depends on physical permanence. If we cannot follow the path indicated by artist-narrator-protagonist, we cannot inhabit their world. But Cardiff has deliberately integrated the fragility of place into the piece, which was “originally conceived as a farewell gesture for a site that was in the process of disappearing” (128). Rather than eroding the efficacy of the fiction, the self-conscious references to loss increases the potency of the narrative. This is already apparent in the title, *The Missing Voice*. We will never find what is absent, and so must be content with the pleasures of the search itself. In this quest, the whims of the controlling agency dictate our travails, sweeping us off course as often as not. The composer as Olympian god? Perhaps “Janet” smiles at this conceit as she disappears behind the railway car window (285). In any case, *The Missing Voice* has much in common with the *peripli*, an example of Topos as self-conscious remediation.

6. Choros as symbolic exchange

Besides the *Geographica*, Ptolemy published two other authoritative texts, the *Almagest* on astronomy and the *Apotelesmatika*⁷ on what we might now call astrology, but which more literally translates as “effects” or “influences”. This book provides a system of classification that identifies separate and distinctive regions on the earth. The surface of the globe is divided into *klimata*, horizontal bands governed by different gods and their temperaments. These zones indicate the characters of the peoples who live within them. Those who live in the north are cold and those who live in the south hot, since their character is influenced primarily by the sun. Sunrise and sunset have their effects, as do the planetary bodies. This chorographic model of place is long-standing, extant for eight centuries before being codified by Ptolemy (Tuan 1977, 97)⁸.

There are no distinct lines that demarcate *klimata*, and if there were they'd operate very differently from lines of longitude and latitude. Rather than provide a homogeneous substrate, a system of measurement in which all coordinates are provisionally equal, these zones delimit “regions of difference” (Curry 2002, 506). Unlike *Topos*, *Choros* is not based on a singular subjectivity, but is rather indicative of tacit knowledge, shared within a community. The relationships are not hierarchical, as in *Geos*, since it does not propose a singular viewpoint. Rather than a Judeo-Christian god looking down on us from above, there are many gods, each with different overlapping domains, attributes, and internal disputes. The forces of governance are themselves internally heterogeneous. Further, as demonstrated in the *Odyssey*, the gods step among us and interfere in our affairs; their actions and desires are not held at a remove, but are instead intertwined with the human.

In *Choros*, events are described in terms of recurring patterns governed by hidden forces. For example, the budding of trees (an event) is observed every spring (a recurring pattern) and signifies fruition and bounty (an outcome). The hidden governance that “makes sense” of this cycle is Persephone returning from the Underworld. Such relationships express a poetic view of the world, rooted in metaphor. These circuits of symbolic exchange are complex and interwoven. Gods and other mythic figures engage in activities on the earth, but are then abstracted into the heavens, represented by configurations of stars. These constellations become aspects that influence the zone under their sway. This continuous flux between particular and generalised patterns, between the observable and the unseen, and between different metaphorical registers, is characteristic of *Choros*.

We have already seen how Debord used *Topos* in writings from 1958. But in an account three years earlier, he also evokes *Choros*:

7. This work is also known as the *Tetrabiblos*, as it is structured as four books.

8. Though important to Ptolemy, this paper will not consider *Choros* as divination, nor *Choros* as a means of stereotyping people based on their place of origin.

The sudden change of ambiance in a street within the space of a few meters; the evident division of a city into zones of distinct psychic atmospheres; the path of least resistance that is automatically followed in aimless strolls (and which has no relation to the physical contour of the terrain); the appealing or repelling character of certain places – these phenomena all seem to be neglected (Debord 1955).

Debord explicitly ties the chorographic in with marginalised approaches to place. The *dérive* is indicative of an outsider position, one that has only grown in popularity and application in this century. It may be explicitly linked to practices of the soundwalk and field recording, where these allow for non-directed activity guided by a sense of the poetic. This psychogeographic approach has already been illustrated by Westerkamp and Cardiff, but Choros is more explicitly demonstrated in the works to be considered in the next two sections.

7. Choros and the paradox of the particular

Robert Curgenvén is an Australian artist whose training as an organist informs his field recordings and sound installations. While living in Cornwall he discovered a Skyspace, an architectural light installation designed by American artist James Turrell. Curgenvén subsequently travelled to fifteen of these locations worldwide, “recording a piece of music one note at a time” (Csoma 2016, np). His method was to tune two oscillators to produce a beat frequency, resonating the air in the space. Curgenvén’s interest is in the sculptural aspect of sound, and how this impacts the listening body. With *Climata*, he aims to produce a tactile experience similar to loud concerts:

This physical movement of the air is the swooshing/fluttering sound that moves between your legs, in and out of your mouth and nose, that makes your shirt move – that also makes the sound appear to come from everywhere, with no definable source.

As the name implies, Skyspaces are designed for observation of the sky, mediated by the topology of the interior and installed LEDs. Hence these structures have an aperture in the ceiling. Curgenvén leveraged this interplay of exterior and interior, attending to weather patterns and other local specifics as he made his recordings. The decision to combine sounds from multiple locations follows Turrell’s own model, which views the many Skyspaces (over eighty exist) as a singular interconnected work.

[This] was ideal for the connected, rhizomatic concept that I wanted to present with my project, especially expressed by the name *Climata* and the relations that that has to ancient ways of connecting and dividing the world.

Curgenven names the piece with an explicit invocation of Choros, recognising that this ancient view of place has relevance to post-structuralist attempts to get outside established hierarchies and organising principles. His piece re-integrates disparate zones, under a guiding principle established by his own precise method. This is evident even in the retail package, which consists of two compact disks. These are, designed to be played simultaneously, allowing the listener to re-enact in miniature the process of the composer.

Climata represents a form of escapism, an escape into pure sound. But paradoxically this is also an “escape into the world”:

A planetarium usually projects the stars onto the ceiling, but imagine instead if the layered projections of the world were up on that ceiling and you could be in them [all at] once. That’s what *Climata* is under the best listening circumstances and one of the reasons to play both albums together: to experience the differences in those layers and combinations physically as a world you can escape into, an augmentation of what constitutes your present physical reality and what it is to inhabit that space.

Choros reduces the world to zones in which certain generalisations can be made. Yet at the same time it makes us aware of difference, of those particulars that distinguish one place from another. “Skyspaces don’t exist in a social, cultural or geographical vacuum”, Curgenven acknowledges.

8. Choros and sonic memory

This author has been engaged for some years with field recordings as material for sound installations, fixed compositions, and performance. The goal has been to present sonic aspects of place in a manner that de-emphasises the overt manipulations typical of acoustic music. The aim in eschewing sonic transformations is not to pretend to any inherent “purity” of nature recordings, but rather to de-emphasise the hand of the composer, to reveal the context of the original sounds as recordings, within a chorographic system. A successful example of this approach is “Caged Birds (Augmentation)” (2012), a fixed composition that derives from a suburban recording of the dawn chorus⁹. Various subtle transformations were

9. This premiered at 100x John: A Global Salute to John Cage in Sound and Image (New York City, 2012) and has subsequently been presented in Ireland, England, and Portugal.

made to the birdsong, analogously to how their calls have been shaped by life in an urban environment. The title is a play on John Cage, but also a reminder that a recording is a sound that is no longer at liberty (Parmar 2014b).

This approach reached its apotheosis with *In that place, the air was very different* (2016). This sound installation proposes an integrated approach to place, invoking Topos in its construction and Choros in its presentation¹⁰. This piece explicitly incorporates the recording process into each instantiation, by insisting that the installation must follow a period of local residency by the artist. During this time, place is “sounded” through walks, social encounters, and quiet listening sessions. These activities are not constrained in advance of each encounter, but instead develop in an improvisational manner. Audio recording is an important part of this sounding, but it also might include documentary writing, poetic reflection, still photography, video, and even dance¹¹. Following the field recording process, sounds are selected and edited into a collection that represents this specific encounter with place. This *sound pool* is added to those that exist from previous soundings¹². In this way, the piece accumulates an auditory record of the places it has previously been installed, a *sonic memory* of its own circumnavigation, the artist’s *dérive*.

Admittedly, this reliance on Topos might not be evident to those who visit the resulting installation. Instead, the presentation is beholden to Choros. This begins with the configuration of the playback system. Though the installation requires a multi-speaker array, it does not use the symmetrical layout typical of academic concerts, or even cinema. Instead, several pairs of speakers are arranged in the playback space so that each creates a distinct stereo field. The specific arrangement depends on the topology, furnishings, and acoustics of the given room. A sound pool feeds each set of stereo speakers. This creates an environment in which listeners can find their own preferred listening position, or move about the space devising their own mix in the system of overlapping zones. Sounds vary from the very quiet and detailed, to loud swathes of electromagnetic static, rivers roaring in cave systems, and metallic cityscapes. After a long interval, sounds in each pool change. Patient listeners will hear a transition that encourages movement, as one zone goes quiet and another across the room becomes audible. Listeners who happen to revisit the installation might return to quite different sounds. These encounters with changing zones of influence and activity typify Choros.

In that place, the air was very different recognises difference in its title, evoking encounters that are experiential and elusive. The sound pools are a result of traces made by the artist in his encounters with socially-constructed place. The diffusion of these creates new regions

10. This première at Echo Echo Dance Theatre, Derry-Londonderry, Northern Ireland as part of ISSTA 2016: Temporary Autonomous Zones, curated by Brian Bridges.

11. On the final night of the première, dancers from Echo Echo Dance Theatre interpreted the installation through movement.

12. The piece currently has sound pools from residencies in Cobh, Ireland; Škocjan, Slovenia; La Fatarella, Catalonia; and Derry-Londonderry, Northern Ireland. To these will be added Azores, Portugal.

of difference in which the participants take active listening roles. As the piece travels, the evolving sonic content highlights the changing nature of place itself, commenting on what it means to circumnavigate the globe, in a society in which travel is now perhaps *too* easy.

9. Conclusion

This paper has described three approaches to place known from Ptolemy: Geos, Topos, and Choros. The geometric approach agrees with the empirical thesis and concurrent ocular bias that has dominated centuries of Western linguistic and philosophical tradition. The author proposes that though this method has great explanatory power, it is ill-suited to a phenomenology based on an integrated sensorium. Instead, Topos and Choros deserve greater appreciation as productive models of place especially suited to understanding contemporary sonic practice.

Several artists have taken distinct approaches to expressing subjective experience that traces Topos. The “soundwalks” of Hildegard Westerkamp navigate *through* and *with* sound, a reflective process that enfolds memory and perception with the actual physical places encountered. Janet Cardiff’s “walks” present fictive places and missing people, implicating the listener in sonic time travel. Other examples await further study. Notable are the “electrical walks” of Christina Kubisch, tracings of hidden domains that evade both mapping strategies and the unmediated senses (Kubisch 2016).

Robert Curgenvén’s *Climata* integrates resonant tones from geographically dispersed spaces into a single composition. This models how Choros distinguishes places through difference, while highlighting the process that takes us from the specific to the general and back again. This is the nature of place; though shaped by myriad historical encounters, it acts in the present as constraints on our own phenomenological experience. This author’s own *In that place, the air was very different* accumulates an auditory memory of those places it has been installed. Sound pools are diffused into overlapping zones, a chorographic patterning that stimulates listening in movement. Consider also the approach taken by Dallas Simpson. His environmental performances express a “continual state of communion with the physical realm” (Simpson 2016). Binaural recordings of these performances are not designed as aesthetic objects, but are rather invitations to the listener, encouragements to engage in their own “spatial choreography”.

Such engagements with place create zones of “contemporaneous plurality” (Massey 2005). Every act, inflected and constrained by a specific milieu, *sounds a place*, bringing it into being for a certain duration, within a certain circumambiance. This sounding reveals that place is not static, not simply “location”, but is instead a product of ongoing reflexive and discursive processes. Everywhere are circuits of mutual interaction and influence. The tripartite model of place described in this paper can provide a rich explanatory framework for such diverse praxis. It can also act as a generative model for future sonic creations.

ACKNOWLEDGEMENTS. The research presented here has been conducted as part of doctoral studies at De Montfort University, Leicester. An earlier version was presented at a graduate seminar in November 2016.

REFERENCES

- Berggren, J. Lennart and Alexander Jones.** 2002. *Ptolemy's Geography: An Annotated Translation of the Theoretical Chapters*. Princeton, NJ: Princeton University Press.
- Cardiff, Janet.** 2017. "Walks". *Janet Cardiff & George Bures Miller* [website]. Available: <http://www.cardiffmiller.com/artworks/walks/index.html> (accessed: 10 February 2017).
- Casey, Edward S.** 1996. "How to get from Space to Place in a Fairly Short Stretch of Time: Phenomenological Prolegomena". In *Feld and Basso* 1996, 14–52.
- Csoma, Emőke.** 2016. "Robert Curgenvén: Recording One Note at a Time – Across 9 Countries and 15 Locations", *Sounds of a Tired City* [website], 19 September 2016. Available: <http://soundsofatiredcity.com/robert-curgenvén-interview/> (accessed: 25 November 2016).
- Debord, Guy.** 1955. "Introduction to a Critique of Urban Geography", *Les Lèvres Nues* 6, September 1955. Trans. Ken Knabb. In Knabb 2006.
- . 1958. "Definitions", *Internationale Situationniste* 1, June 1958. Trans. Ken Knabb. Available: <http://www.cddc.vt.edu/sionline/si/definitions.html> (accessed: 25 November 2016).
- Feld, Steven.** 1994. "From Ethnomusicology to Echo-muse-ecology: reading R. Murray Schafer in the Papua New Guinea Rainforest". *The Soundscape Newsletter* 8. Available: <http://www.acousticecology.org/writings/echomuseecology.html> (accessed: 8 March 2014).
- Feld, Steven and Keith H. Basso.** 1996. *Senses of Place*. Santa Fe, NM: School of American Research Press.
- Ingold, Tim.** 2000. *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill*. London: Routledge.
- Knabb, Ken, ed.** 2006. *The Situationist International Anthology*, revised and expanded edition [website]. Berkeley, CA: Bureau of Public Secrets. Available: <http://www.bopsecrets.org/SI/index.htm> (accessed: 25 November 2016).
- Kubisch, Christina.** 2016. "Electrical Walks: Electromagnetic Investigations in the City", *Christina Kubisch* [website]. Available: http://www.christinakubisch.de/en/works/electrical_walks (accessed: 25 November 2016).
- Massey, Doreen.** 2005. *For Space*. London: Sage.
- McCartney, Andra.** 1999. *Sounding Places: Situated Conversations Through the Soundscape Compositions of Hildegard Westerkamp*. Doctoral thesis. Toronto: York University.
- OED.** 2016. "chorography, n." *OED Online* [website] (accessed: 25 November 2016).
- . 2016. "periplus, n." *OED Online* [website] (accessed: 25 November 2016).
- Parmar, Robin.** 2014a. "The Sono Prototype and Alberti's Window". *Urban Soundscapes and Critical Citizenship*, March 2014, University of Limerick, Ireland.
- . 2014b. "Sounding place: towards a practice of field recoding." In *Invisible Places / Sounding Cities: Sound, Urbanism and Sense of Place Proceedings*, edited by Raquel Castro and Miguel Carvalhais, 634–41. Viseu, Portugal.
- Schaud, Mirjam.** 2005. *Janet Cardiff: The Walkbook*. Köln: Walther König.
- Schafer, R. Murray.** 1994. *The Soundscape: Our Sonic Environment and the Tuning of the World*. Rochester, VT: Destiny Books.
- Schütte, Gudmund.** 1917. *Ptolemy's Maps of Northern Europe, A Reconstruction of the Prototypes*. Copenhagen: H. Hagerup.
- Simpson, Dallas.** 2016. "Aspects of Environmental Performance", *Dallas Simpson* [website]. Available: <http://www.dallassimpson.com/statement.php> (accessed: 25 November 2016).
- Tuan, Yi-Fu.** 1977. *Space and Place: The Perspective of Experience*. Minneapolis, USA: University of Minnesota Press.
- Westerkamp, Hildegard.** 1998. "Speaking From Inside the Soundscape". *Zehar* 67: 66–78.
- . 2001. "Soundwalking", revised version. *eContact!* 4.3 [website]. Available: http://econtact.ca/4_3/Soundwalking.html (accessed: 11 February 2017).
- . 2002. "Linking Soundscape Composition and Acoustic Ecology", *Organised Sound* 7.1, 51–56.