Taking Part in the World: Discourses on Music, Time and Place in In-situ Music

Hans Roels

I. Introduction

In the 1960s many artists – musicians included – wanted to break out of the usual artistic institutions and move away from museums and concert halls. From this movement, new sound arts such as soundscape compositions, sound installations, sound sculptures and sound walks arose. Music performed in interaction with the environment, or 'in-situ music', also appeared in this period. More than just being a transition between the old and new sound arts, in situ-music has a rich and diverse history, stretching from the 1960s until the present. In 1970 in Argentina the Movimiento Música Más collective formed by Norberto Chavarri, Roque de Pedro and Guillermo Gregorio - set up a sound performance in a city plaza that was announced as a bird contest (Dewar 2018). More than fifteen years later the Deep Listening Band performed in an American cistern, exploiting its high resonance acoustics. At the beginning of the 21st century Daniel Ott created his 'open air music' Skilift / Klang in the Swiss mountains for trumpet, brass band, ski-lift masts and ringing bells. In 2014 Tomoko Momiyama took a month-long residency in a Japanese village, which led to Searching for the Sound of Taji, a walking concert through the village and its countryside with a sequence of musical performances by local musicians and children. These are just a few examples showing that in-situ music has – almost inconspicuously – become a continuous, international practice over the past 60 years.

Studying these in-situ musical practices, however, is not self-evident; insitu musicians, geographically spread out, often do not connect to other insitu musicians and are locally linked to various (sound) arts. Besides, many different terminologies related to in-situ music are in use and documentation

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or scores may not exist in written form.¹ There are also many one-shot in-situ performances, for example at the request of concert organizers, after which the musician returns to the usual concert hall, studio or research environment. This fragmentation of in-situ music should not prevent us from studying and identifying *common themes* in in-situ music.

In this article I study in-situ music on its own terms; I do not connect it to other audio arts, although in-situ music operates in the border zone of many arts. By bringing the fragmented and isolated in-situ practices together, I consider in-situ music here as a meaningful (historic) phenomenon with its own body of practices and stories. The primary focus in this study is on the *discoursed* that in-situ musicians have developed in texts, interviews, scores and other sources. The discourse concerning their relationship to music, place and time is summarized as 'taking-part-in-the-world' and elaborated by three subconcepts: the physical world, environmental agency, and sharing. This article has an extensive introduction: First, I demonstrate how problematic the study of in-situ music is without treating it as a distinct artistic field. Next, I explain the methods and terminologies in my study and, finally, before the actual research part on in-situ discourses, I give a short history of in-situ music to display the full meaning and diverse spectrum of in-situ practices.

Studying the contours of in-situ music

The main problem in discussing and studying in-situ music is the lack of a domain-specific vision and language: among researchers – and in-situ musicians – there are no common (explicit) concepts, references, histories or

¹ Because this article concerns practices at the intersection of established art disciplines, I clarify an extensive list of terms in this footnote ('sound', 'music', 'sound art', 'sound arts', 'performance' and 'listening'). When talking about the audible result of an in-situ performance, I freely alternate between the terms 'sound' and 'music' because the diversity in in-situ performances is so large that any clear distinction - based on either subjective intention or objective audio features - between both terms is meaningless; for example, in-situ performers may imitate pitched or rhythmic sounds from the direct environment, add noisy sounds to the surrounding soundscape, amplify existing environmental sounds with microphones and speakers, play folk songs at large distances from the audience to scatter them throughout the environment, sing a song while bicycling past the audience, etc. I use the term 'sound art' (singular) to denote the collection of artistic disciplines since the 1960s, such as sound installations, sound sculptures, sound walks, sound design, soundscapes, etc. When using 'sound arts' (plural) I refer to the very broad category of all existing arts with sound or music (concert hall music, church music, pop music, etc. plus all arts previously mentioned under 'sound art'). In general, I use the term 'performance' to refer to the act of producing sound/music with an instrument, voice, body, sound object, etc. The word 'listening' refers to perceiving or experiencing sound, which of course also has an active cognitive or embodied dimension, for example when the audience moves around at a concert location. Using both terms 'performance' and 'listening' in this sense allows me to describe in-situ concerts, the activities involved and mixtures of activities in more detail.

research methods to examine and explain this practice. There are no studies that compare multiple in-situ performances, for example by taking cases from different historical periods, or examining performances with the same concept of a 'natural' site, or with similar preparation and collaboration strategies. There is no international, historical overview of in-situ music, although Kletschke (2012) provides many examples – together with installations and sound walks – in her overview of landscape music; Gonon (2016b) also dedicates two chapters to in-situ music in France. The only historical figures who reappear regularly to contextualize in-situ works are John Cage, Raymond Murray Schafer and the World Soundscape Forum. Moreover, Asian and European composers (such as Nicolas Frize, Momiyama, Ott, Godfried-Willem Raes or Pierre Sauvageot) who have built up a large oeuvre of in-situ works are quasi unknown in English-language research literature, although in recent years the Spanish composer Llorenç Barber has received more attention (Barber 2013; Sánchez 2015).

There are a small number of studies which focus on the broader relationship between sound and space. Their authors (Born 2013; Gottschalk 2016; LaBelle 2015) examine sound installations, sound walks, experimental (concert hall) music and soundscapes, as well as in-situ performances. Authors such as Born (2013) and LaBelle (2015) overlook the unique combination of active sound production and dialogue with the immediate surroundings particular to in-situ music. Nevertheless, the insights and central features of their research have served as important guidelines in the current study to synthesize the discourses of in-situ musicians into one, overarching in-situ concept. These insights are discussed and trimmed down in my search to discover the characteristics and contours of in-situ music.

Most in-situ studies are too narrow in scope to detect the overall characteristics of in-situ music: each small-scale study examines just one in-situ musician, usually situated within other (sound) arts, for example soundscape composition or land art. There are studies by researchers (Brüstle 2016; Nicolas 2015; Piekut 2014; Sánchez 2015; Waterman 1998) and musicians or artistic researchers, reflecting on their own in-situ practices (Fuhler 2016; Hayes 2017; Hogg and Östersjö 2015; Hogg 2018; Jensen 2008; Schafer 2002; Reese 2012; Thorpe 2016; Vogel 2015; Wishart 1974). As the number of in-situ works or musicians is small in these studies, comparisons within the field of in-situ music – thus between different in-situ works or musicians – are lacking. Consequently, results cannot be generalized, and the contours of insitu music remain vague. The study by Groth and Samson (2017) forms the only exception. It examines two in-situ musicians, although the authors do not generalize their results and do not relate them to a history of in-situ music. The authors present a thorough, situated analysis of two 'sound art situations' (On the Productions of a Poor Acoustics by Brandon LaBelle and Green Interactive Biofeedback Environment by Jeremy Woodruff), albeit through an external viewpoint: a combination of perspectives from performance art, sound art and contemporary social art. Further on in this article I elaborate on the five conclusions about sound art situations at which the authors arrive, as these may be applicable to a much larger field of in-situ music than just the two sound artists they studied. While the authors state that "site-specific, performative and social aspects" of sound art were addressed little, if at all, in research literature until the social turn arrived in sound studies around 2010, I claim that these aspects and the conclusions at which Groth and Samson arrive – have been part of a continuous discourse and practice of in-situ musicians since the 1960s.

Comparisons and statements in dialogue with other (sound) arts, rather than in-situ music alone, are found more regularly in these small-scale studies. They usually reveal a kind of unease in their treatment of in-situ works as special or at the periphery of other arts. Hayes (2017) interprets her in-situ practice as both different from and an extension of live electronic music; Hogg (2013, 2018) explains his work with the Landscape Quartet in dialogue and contrast to (discourses on) 'representational' field recordings and soundscape compositions; Fuhler (2017) considers his on-site improvisations (with Splinter) as part of a specific history of mobile, spatial music and finally, Rosani (2019) clearly positions herself as both inside and (stepping) outside contemporary-classical music. Detecting the general contours and characteristics of in-situ music is obscured by examining works from an external viewpoint and treating them as individual, special cases.

Comparing these small-scale studies is further complicated by the large variety of research topics, goals and methods, as the following three examples of in-situ works performed in harbours show. First, the whole oeuvre of the composer Ott is the focus of Brüstle (2016). This historical, musicological article has descriptions of a selection of (in-situ and other) works – including Hafenbecken I & II for the Rhine harbour in Basel – and their preparatory process. It detects lifelong themes and traces in the composer's works. In contrast to this biographical approach, Ryan (2014) focusses on one, single work, Within Our Reach: A Symphony of the Port River Soundscapes by the Australian composer Chester Schultz, and analyses it through the concept of 'shadow' or 'denied' places, derived from the philosophy of Val Plumwood. In the third example, an essay by Finkel (2017), the author gives a *performer's perspective* on a realization of Maritime Rites by Alvin Curran, followed by reflections on the global water crisis and the contributions that music outside the concert hall can make in creating ecological sensitivity and "communities of environmentally attuned listeners." To summarize, the combination of a large number of small-scale studies, incredibly divergent research or artistic perspectives (mainly from outside in-situ music) and the absence of an international, historical overview leads to interesting insights on *individual* in-situ works and musicians, but fails to create a general profile of in-situ music.

Studies on site-specific theatre may serve as a contrast to the problematic fragmentation and lack of a domain-specific discourse on in-situ music studies. A large body of research literature (Pearson 2010; Wilkie 2008, 2002) exists in this field, in which on-site performances are compared with each other, and evolutions, common features and differences in diverse practices of site-specific theatre are detected. In fact, this extensive and profound literature on site-

specific theatre has proven to be an important inspiration and framework for me while structuring and overviewing the dispersed sources on in-situ music.

Research method

To advance studies in in-situ music, larger groups of in-situ musicians and works need to be studied, with the aim of detecting common themes and evolutions in relation to the whole field of in-situ music. These can serve as a context for future studies and deepen our understanding of individual in-situ works. In this article, I research and answer the following two questions: Is there a common discourse among in-situ musicians on the relation between sound (performance) and place? What is the content of this discourse? This article tries to detect a common thread in the stories of musicians as they - or researchers – explain their in-situ music. I pay less attention to the actual music practices. Information was found on the visions, motivations and concepts involved in working outside the usual music institutions in articles, preface notes (to scores), interviews, liner notes (for recordings) and documentaries of 38 musicians and ensembles.² I focus on the shared *productive* concepts: the discourses that reveal what attracts artists in their work outside the concert hall and makes them remain active in parks, streets, public squares or woods. Therefore, most sources come from musicians that have repeatedly given insitu performances at several moments in their career. I study the 'pull' factor of the artistic migration and not the 'push' factor, i.e., I give less attention to their critiques of concert halls, art institutes and standardized ways of experiencing and understanding sound.

With no strict line in in-situ music between composing, performing and improvising, I analyse not only texts by composers but also by improvisers (Fuhler 2016; Greie-Ripatti and Bovermann 2017; Hayes 2017; Vogel 2015), often part of ensembles such as Landscape Quartet, Sonic Wild Code or the Topos Kolektiv, and performers (Dunn 1979; Finkel 2017; Galloway 2010). These are smaller in number than those of improvisers and composers. The term 'in-situ musicians' is used as a general description for all in-situ practitioners.³

² The musicians and ensembles studied here are: Landscape Quartet, Movimiento Música Más, Sonic Wild Code, TOPOS KOLEKTIV, Peter Ablinger, John Luther Adams, Llorenç Barber, Lisa Bielawa, Robert Blatt, Stephen Chase, Carolyn Chen, Alvin Curran, David Dunn, Nicolas Frize, Cor Fuhler, David Helbich, Marc Glenn Jensen, Kathy Kennedy, Pasi Lyytikäinen, Alvin Lucier, Jose Maceda, Tomoko Momiyama, Stephen Montague, Robert Morris, Makoto Nomura, Pauline Oliveros, Daniel Ott, Kirsten Reese, Michel Risse, Jon Rose, Pierre Sauvageot, Richard Murray Schafer, Knut Olaf Sunde, Godfried-Willem Raes, Merlijn Twaalfhoven, Suzanne Thorpe, Manfred Werder and Trevor Wishart.

³ The term 'in-situ musicians' should not be misunderstood as referring to performers, composers or improvisers that *exclusively* make in-situ music. Most in-situ musicians also make sound installations or music for concert halls.

Next, I have synthetized the individual discourses into one concept and compared it with the previously discussed studies on in-situ music and sound arts. The focus is on the *general* concept, common to most musicians working outside concert halls and studios, and not on individual and group variations.

Although I provide a more extensive and diverse description of in-situ music compared to existing studies, the sources on which this study is based mainly originate from 'Western' countries (Europe, North-America & Japan) and artistic disciplines such as experimental music, audio art and performance art. This limitation is related to my knowledge of four languages (Dutch, English, French and German) and the ephemeral, fragmented character of insitu sources – as described in the Introduction – which makes them hard to find, collect and study.

Terminology

In the past 60 years many terms have been used by both musicians and researchers to label in-situ music performances. This abundance of terms is perhaps one of the reasons why no comprehensive studies have been done on performances outside the concert hall. To give an indication of this abundance, ten terms are listed below, the first four of which are used by in-situ musicians – mentioned between brackets – to describe their own practice:

- (1) 'sonic choreography' (Kathy Kennedy),
- (2) 'choreographic music performance' (Cor Fuhler),
- (3) 'large-scale projects' (Stephen Montague),
- (4) 'site-responsive' live electronic music (Hayes 2017).

The following five terms are used in a wider community by both musicians and researchers:

(5) 'installation' - often in combinations such as 'live installation' or *konzertinstallation* - was used in Germany, mostly between 1990 and 2010, to label performed music (of composers such as Marcus Kaiser, Christian Kesten, Ott and Craig Shepard) in unusual venues and places.

(6) Michel Risse, Sauvageot, Décor Sonore and Lieux publics use and combine many terms for their in-situ music: *théâtre de sons* ('sound thea-ter'), works *pour l'espace public* ('for public places'), *en plein air* ('open air'). In France, the broader term *les arts de la rue* ('street arts') also includes insitu music and sound installations (Augoyard et al. 1999).

(7) 'environmental composition': used to refer to performances at natural locations or performances with an activist, ecological content; Schafer's in-situ works are described with this term, by himself and researchers

(Waterman 1998). The term 'environmental event' (or 'environmental theatre') was widely used in the 1970s, for example in the original published scores of Trevor Wishart's *Forest Singularity* (1977) or *Beach Singularity* (1978).

(8) Landschaftskomposition ('landscape composition' in German): in use since 2000 by composer Ott and by researchers (Brüstle 2016; Kletschke 2012); related terms are Landschaftsoper and Stadtoper by composer Peter Ablinger and 'land music' by Knut Olaf Sunde.

(9) 'site-specific': used widely, for example by Gottschalk (2016), Morse (2018) and musicians Momiyama and Wishart on their websites.

(10) 'sound art situations': only applied by the authors Groth and Samson (2017) to describe LaBelle's and Woodruff's performances in outdoor public spaces.

Here, I use the term 'in-situ music' and not one of the more widely used terms (6, 7 or 8), as terms such as 'environmental composition' and Landschaftskomposition only refer to a specific portion of in-situ practices to the exclusion of others. For example, neither the relational performances of Pauline Oliveros or David Helbich, nor performances interacting with indoor locations, such as those of Agostino Di Scipio, fit into these labels and they are not mentioned by Kletschke (2012). The most widely used term, 'site-specific music', partially overlaps with in-situ music but it also refers to installations, compositions or field recordings that are based on (sound) materials or recordings from a specific place but exposed in museums or concert halls without interaction with the concert hall environment (Gottschalk 2016; Hayes 2017; Mace 2016). The term in-situ music starts from a sensitivity for the *direct* environment of the performance and/or concert.⁴ The performers and audience are in a place that is given an important role by the musicians in the sound performance and reception. Moreover, site-specific music - for example soundscapes – does not always involve human performers, while these are crucial in insitu music.

To summarize the content of the term in-situ music in this article, it is newly made music that is meant to be performed by humans in interaction with the performance site, outside the usual concert spaces.⁵ In other words, musicians make music with an intentional integration of the direct

⁴ With 'direct environment' I refer to the sensual field around the performers and audience: what they see, hear, feel and smell around them during the concert. This direct environment can move (e.g. when both audience and performers are walking in a parade) or consist of the sum of many overlapping, decentralized direct environments (e.g. when the audience can choose their own route in a so-called city concert). ⁵ I have excluded typical concert spaces from my source collection because, in general, concert halls, churches and music clubs are enclosed by walls, excluding living beings and sensorial information from around the concert space, and are characterized by a set of habits and expectations, limiting the direct environment (in the space) to the audience and performers.

environment in the sound performance. Usually this means that a dialogue or relation is created with the surroundings and that a selection of these surroundings (for example the wind, passers-by, local community, architecture, etc.) is incorporated, rather than the whole environment. This delineation of in-situ music clarifies the difference with other sound arts that operate without *performers* (field recordings, sound sculptures, installations, etc.), without *newly* made music (in community music or in adaptations of existing classical or pop music to new locations) or in the usual concert hall, club or church space.⁶

The broad historical development of in-situ music and emerging in-situ traditions

In general there have been two historical waves of in-situ music since 1950: one that preceded 1995 and one that followed. After an outburst of musical activity outside the concert hall around 1970, a two-decades period of intense activity and development followed in many locations, indoor and outdoor alike. This rich and diverse outburst was preceded by Fluxus's and Allan Kaprow's events, happenings and Cage's 4'33" (1952) and Variations IV (1963), which opened the borders between closed, isolated, artistic halls and the surrounding environment. In 1967-68, Musica Elettronica Viva started performing in public places, abandoned factories and jailhouses. One year later Meredith Monk presented Juice: A Theatre Cantata in Three Installments for the specific, 'spiraling' architecture and surroundings of the Guggenheim Museum. Two years later she made her audience walk from an old auditorium to a disused rail depot to witness part two and three of her *Vessel* opera. Wishart, together with theatre-maker Michael Banks, produced an inventive sequel of music performances – called *Landscape* – with ice-cream cars, park music and musicians playing from a hilltop in 1970 (Wishart 1974). Around 1970 the movement to leave the concert hall seemed omnipresent: Christian Wolff organized an outdoor Burdock Festival in Vermont (USA) in which several of his Prose Pieces (such as Groundspace) were premiered (Appleton and Schwartz 1970) and Karlheinz Stockhausen situated five groups of performers in a Berlin park in Sternklang (1971). Two years later, David Dunn brought performers to deserts and other natural locations, triggering sound reactions from specific animals.

There are four musicians that started their in-situ practice during this vivid outburst in the 1970s, remained active during the decline of in-situ music in the 90s, continued working in the 21st century and have built up an extensive, influential oeuvre of in-situ compositions. The first one is Curran, who integrated local, cultural diversities and large numbers of performers in his cycle of *Riti Marittimi* and other compositions. The second, Frize, preferred large-scale productions in urban, work-related settings such as car factories,

⁶ My definition of in-situ music is only meant as a research tool to delineate the selection of sources and thus to study and understand in-situ musical practices. In reality, the boundaries between in-situ music and other sound arts are anything but strict.

train stations or libraries. Since her *Sonic Meditations* (1974) Oliveros, the third musician, extended (musical) performance to encompass a variety of listening modes and an embodied awareness of oneself, the other participants and the (performance) environment. The fourth, Schafer, brought audiences and performers to natural locations in his music-theatre cycle *Patria* to re-enact and revive a mythical connection between humans, animals, plants and the earth.⁷

By the beginning of the nineties, the level of in-situ activity had dropped to a low, as noticed and regretted by Landy (1994) in *Experimental Music Notebooks*. Composers such as Alvin Lucier, Wishart and Dunn who – in different ways – had been very active in composing and setting up performances outside concert halls between 1965 and 1985, retreated to concert halls, studios and research institutes in the 1990s or traded in-situ performances for sound installations or field recordings. The 1990s were also a transition period between emerging and 'disappearing' in-situ musicians. Four composers started making in-situ productions in the 1980s, helped to bridge the 1990s and created continuity between the two historical in-situ waves. These are Barber (based in Spain), Raes (in Belgium) and the French composers Risse and Sauvageot.

From the second half of the 1990s onwards, new in-situ music emerged (the second in-situ 'wave') and in the past twenty years there has been a small but steady international growth of in-situ music. Ecological concerns and a preference for outdoor, natural performance sites are recognizable in the work of Erik Griswold, Robert Morris and John Luther Adams. Other musicians (Lisa Bielawa, Merlijn Twaalfhoven, Momiyama, Montague and Makoto Nomura) stress the social process, community-related or political meaning of a concert, its location and preparation. Building upon the work of Cage and Oliveros, and focussing on (performative) listening and relational aspects of a performance, Ablinger, Robert Blatt, Carolyn Chen, Helbich, Marc Glenn Jensen, Suzanne Thorpe and Manfred Werder have added numerous in-situ works since 1995. Finally, there are the previously mentioned improvisation ensembles and in-situ musicians that are hard to categorize, such as Kennedy, Kesten, Ott, Kirsten Reese and Stephen Chase, the latter creating a mix of sound walks and performances in his *Out-of-doors suite* (2011–present).

During 60 years of in-situ performances, new and existing in-situ traditions have emerged and developed. First, the old practice of street music (marches, demonstrations, busking, playing automatic barrel organs and creating a short, attention-grabbing act) was mixed with experimental instrument building, sound installations and (portable) electro-acoustic music, resulting in parades of performers with eye- and ear-catching instruments in the works of Sauvageot, Risse, Raes and compagnies such as Décor Sonore. Second, a tradition of 'city concerts' emerged, with origins reaching back to the *Symphony of factory sirens* (1922) by Arseny Avraamov. A large area (such as a city, town

⁷ Perhaps I should add Meredith Monk to this list of four composers. She has created many in-situ performances, but strangely her influence is mainly felt in (site-specific) theatre and less among in-situ musicians.

or neighbourhood) was turned into one concert hall and made to resound by using machines and loud instruments (church bells, ship horns, sirens, etc.), often involving large numbers of (local) performers. A large part of the in-situ oeuvre of Curran and Barber illustrate this emerging tradition.⁸ The third and fourth in-situ traditions are the previously described relational performances (mainly building on Oliveros's practice) and in-situ performances in natural locations. The latter consists of two overlapping, but not identical, practices: one (in the footsteps of Schafer) focussing on the natural parts of a site and a holistic concept of nature and another (building on Dunn) aiming at interaction with animals (for example, the performances of David Rothenberg).

The next two traditions are harder to localize as their influence is more pervasive and diffused. The fifth comprises Fluxus events and happenings in the 1960s; the desire to fuse daily life and art and rely on games, concepts and imagination, left an enduring influence on elements of in-situ music. The last tradition consists of (educational) sound games and exercises (Davies 2002; Schafer 1992; Oliveros 2013; Wishart 1977), which not only focus on listening but also on producing sound. In each collection of games and exercises there are examples of interaction with the surroundings. Because of their educational background and accessibility, these games have been performed in a variety of (educational and other) situations and locations.

II. Discourses in in-situ music

Although the stories of in-situ musicians are spread across many different countries and are generally modest in size, a common thread is detectable in the thoughts of musicians on sound and place: the idea that music performances in the streets, underground parking lots or natural forests are about *being an active part of the world*. To understand the full meaning of this concept, I first describe the underlying subconcepts of this in-situ worldview: physical world, environmental agency, and sharing. Next, this worldview is summarized and explained in detail. In the discussion part, I point to internal contradictions within two of the previous subconcepts and question their general applicability among in-situ musicians.

Physical world

The notion of the *living, physical world* holds a central position in the discourses of in-situ musicians. This notion is not abstract, like the iconic Blue Marble picture of planet Earth, taken from a spaceship. The world is concretized and specified as a physical, living place where a performance takes place. The particular site on which musicians plan to have their work performed is shaped,

⁸ There are also city concerts by other composers, such as *Bonn Feier* (1971-77) by P. Oliveros, *Ugnayan* by J. Maceda (1974), *Harbour Symphony Vancouver* (1986) and *Harbour Symphony St. John's* (1989) by Hildegard Westerkamp, *Het Geluid van Hasselt en Genk* (2014) by the organisation Musica and composer W. Henderickx, etc.

inhabited and perceived by living beings, forces and powers, other than the musician. Human history, political powers, animals, weather conditions and geological processes all leave their marks on a landscape with a highway or a public square, not to mention more universal laws of gravity, energy and sound dispersion, etc. Thus, a landscape or public square becomes a matter of co-creation: musicians and artists coexist with many others and the world is not their sole property. This notion of the living world – the term 'life' or 'daily life' is also frequently used by in-situ artists – stands in contrast to the concert hall, in which only performers, audience, instruments and technology are highlighted and the rest of the direct surroundings in and around the hall are neglected or hidden.

What attracts musicians in the tangible, living world is the interplay of the many life forms and forces at a performance site and the resulting diversity, complexity, indeterminacy and dynamics (Kletschke 2012). Each musician may choose different (types of) performance sites and interpret them in different ways, but characteristics already present at a site are appreciated in many discourses. Dunn, for example, preferred remote, natural places for his performances in the 1970s. He characterizes nature, and specifically wilderness, as being led "by an innate drive in living organisms toward interaction, growth, and complexity" (Dunn 1981). Other composers interpret a performance site as a human place and - as Groth and Samson (2017) note in their first conclusion – for them a site is about communities, inhabitants, daily activities, history, passers-by, strangers, etc. Curran, for example, prefers places with signs of human presence and history, such as parks, harbours or bridges. He illustrates the diversity of the world with an abundant list of over twenty types of performance sites: "(...) piazzas, houses, façades, fountains, historic buildings, stairwells, elevators, (...)" adding "chaos, stillness, ecstacy, history and transcendence" (Curran 2000).

The complexity and diversity of a living place also implies that sound – and perhaps music – may already be present at the site and is modified by 'unusual' acoustic conditions (compared to the 'ideal' acoustics of the concert hall or studio). This is how Barber describes making his city concerts with local bells:

- the fact of composing for a place as irregular, unrepeatable and unencompassable as a city, unequally seeded with nests of bells — was an endeavor that implied a generous acceptance of redundancies, of the individual and responsible listening point and perspectives of each one, of the atmospheric influences (winds, humidity, storms, heat waves, etc.) of the urbanism (with walls where disorienting clapper-beats bounce, alleys that convert into sonic tubes, corners where different sources and distances cross and blend, squares that act as a vibrant drum, and awful avenues flooded with deafening, speeding engines) (Barber 2013).

In the cited fragment Barber also points to the various listening perspectives in the real world. The diversity and complexity of the physical world is further intensified by the different senses and modes of perception and cognition. The way species or individuals see, hear or feel a place may vary immensely. In the past decade, Laurie Anderson has made performances for both dogs and their owners, simultaneously combining speakers (for dogs) and wireless headphones (for humans) to ensure that both can listen to the same performance, but in the frequency range suitable to their respective ears. Composer Oliveros (2013) explicitly includes different listening and attention strategies in scores of works such as Environmental Dialogue (VIII in Sonic Meditations (1974)) or The Witness (1989). Sauvageot (2006) states that the audience often knows, lives or passes by the performance site in his musical street arts and is not inclined to appreciate the work according to artistic classifications.⁹ At a living, physical site the connection of sound and music with visual information, other sensorial experiences, movements, gestures and both daily and unusual activities creates an enormous range of perception and reception modes, and therefore many possible artistic strategies to filter, neglect, combine or magnify experiences. Barber (2013) stresses the multisensory possibilities in calling one of his works a Concierto de los Sentidos ('concerto of the senses') (1994). Momiyama uses "all the five senses" and ends her Upacara Bayu Ruci (2004) performance with a meal in which the audience drinks and tastes local herbal medicines. Talking about her gugin performances in a duo with Amble Skuse, Chen points to a relaxed, non-intentional way of experiencing music and place, without attracting attention from passers-by:

It is not entirely private, if I am playing on a sidewalk, it is opening the window. We want to do it in a non-confrontational way, the music is not that loud. People stopped sometimes, took a pause to listen for a few minutes and then kept walking. Or they just kept sitting next to us, because it is possible to co-exist without interfering with each other. I also like the idea that you can listen without full intention (Chen 2018).

The diversity and complexity of the world and its multiple locations are further intensified by the flow of time, creating changes of days, seasons, human traffic, etc. Thus, the real world presents itself as a myriad of specific places at specific moments. The music of the real world is not timeless. In-situ composers such as Schafer, Sunde and Wishart attuned their performances to specific (natural or social) rhythms and temporary experiences. They created performances for specific hours, seasons or occasions and exploited the diversity of places and times in artistic ways.

Environmental agency and performance

It is not only the notion of the *physical world* which is central to in-situ discourses, but also the *active relationships* between humans and the diverse, physical world. In-situ musicians underline the importance of activity and

⁹ In a humoristic way Sauvageot (2006) recognizes seven audience behaviours, such as feeling at home at the performance site, welcoming others without really watching the performance ("Les Habitants") or keeping an eye on the 'urban scene', by both observing the artists and the audience members ("Les Observateurs").

experiential learning to understand, appreciate or change the (symbolic, emotional, social, etc.) meaning of a place. By tossing an object around in a room, trying an alternative route or maintaining a garden, people learn about places, nature and other people. They build up a repertoire of experiences and learning practices. By doing so, both people and places (the garden, the room with objects) change and the world appears as a dynamic stage of actors. S. Vogel (2015) recognizes this mutual relationship:

When I enter a wood or a rolling stretch of open field I become part of it. I am always part of a landscape. Landscape is not an abstract thing 'over there' to be observed, rather we are in an eco-systemic partnership. The moment I am there, I influence it and it influences and affects me (...).

Relationships do not passively exist. It is in and through action that they are activated, brought to life and also experienced by others as relationships. Therefore, the affordances of a site to create in-situ music not only consist of visible or audible elements but also of the relational potential a site holds.

In-situ musicians may target different gradations of change with these actions. A minimalistic, transparent approach consists of merely bringing attention to the active surroundings, troubling the difference between performance and reality to create a higher sensitivity to the performance environment. The composer Blatt wants "to re-engage with things in an elemental way" (Estape 2017). When talking about the performances of his trio with Jorge Gomez Abrante and Mark So, he explains:

They have this open multidimensionality to them. They can open to beyond the concert hall, can open up to the living environment, blend into the lived situation, and move in and out between the lived and performed situations.

Artists may also intend to change and substantially *transform* the surroundings, starting from and magnifying a selection of site-specific elements and incorporating historical or conceptual artistic ideas. Urban Sax and composer Gilbert Artman, for example, often work in this way and use light, fireworks, dance and costumes in combination with site-specific audio spatializations to create a staged spectacle of saxophones, different from the daily appearance of the performance place but full of alterations and modifications of site-specific elements (Gonon 2016b).

Another approach is to *trigger* the activity of a site, to set the indeterminate and complex parts in motion and thus reveal the hidden liveness of a place. In the *Background Noise Study* (Audible EcoSystemics n. 3a) (2003) by Di Scipio, a few audio triggers set a feedback algorithm and audio stream in motion (fed by microphones at multiple locations within the site) related to the sounds, acoustics, materials and movements of the space.

Performance is the key issue in experiencing and building an active relationship between the performers and audience on the one hand, and the concert site on the other. Performance is a multifaceted concept (Szerszynski, Heim, and Waterton 2004) but three dimensions in particular are important to understand environmental agency in in-situ music. On a basic level, performance presumes *an action of a (human) body*. Bodies are omnipresent in on-site music: the performer's body, the members of the audience (often walking among the performers when there is no central stage), people passing by, visible animals or embodied apparitions, such as the ghosts or spirits in Wishart's *Forest Singularity* (1978) or Chen's *Human Windchimes* (2017).

A second dimension of the concept 'performance' is its *productive character*: the performing body creates sounds, movements, objects or other changes, which are evident to the other bodies. Listening is not treated as separate from sounding; there is a continuum between both, with both being part of an embodied action-perception loop. "An instrumentalist doesn't stop playing to listen to or adapt his instrument," says the French in-situ composer Frize (1982, my translation). Oliveros and Werder, among others, have elaborated 'performative listening' to point to the many forms of listening, often involving movements and actions of the listening body. There is also something such as a 'listening action': performing music and participating in a performance at a living place is impossible without attuning to the location and integrating listening activities. In-situ musicians have repeatedly pointed out that listening to acoustic phenomena, observing movements of passers-by or performers in other boats, taking weather conditions or the terrain into account, or listening to the general flow and timing of environmental sounds are necessary parts of making sound at a specific place (Finkel 2017; Galloway 2010; Vogel 2015).

A third dimension of 'performance' is the preparation and exercise it takes to create a dialogue with a site and deal with its unexpected, unknown parts. The activities involved in the creative process of in-situ music are incredibly diverse, including exploring the architecture of a site (e.g. to design a musical form based on this architecture); meeting local people to create a collaborative, meaningful ritual for the concert; performing a detailed study of specific birds or animals; planning the musical work in advance (in a diverse range of notation practices) and, finally, rehearsing the performance. The crucial link between performance and preparation appears repeatedly in the words and practices of various in-situ composers. "Preparation is everything" stresses Montague (2017), when talking about his on-site performances such as Apparitions (2008) or realizations of Cage's Musicircus. He states that a few days of practice just before the concert are not enough; he needs to explore the performance site for several weeks or even months in advance. Such time spans are also mentioned when composers such as Momiyama or Frize talk about their residencies in communities. Ott (2008) mentions more than three years of preparation with organizers and musicians for the performance of *Hafenbecken I* + *II* in the harbour of Basel. Building upon the work and experience of Oliveros, composer Jensen (2008) describes his composition Tendency Mapping (2008) as both a performance piece and an individual meditative discipline. In this case – similar to Oliveros's practice – the preparation of a temporary performance in dialogue with the surroundings (including other participants) has turned into an *ongoing* learning process of listening and sounding, almost independent from the public performance and its site.

The 'prepared and exercised' dimension of performance also relates to the concept of musical *instruments*. It comes as no surprise that instruments have a crucial status in discourses of in-situ musicians, as is also (implicitly) noticed by Gottschalk (2016). He summarizes the practice of site-specific sound arts (including installations and concert hall compositions) as depending upon the configuration or features of a specific place and then adds: "using one or more aspects of the site itself as an instrument." The term 'instrument' has a broader meaning in in-situ music than just referring to traditional musical instruments. Site-specific objects, architecture and even the site in its entirety can be considered musical instruments. These instruments need to be connected to each other, co-vibrate and form one ensemble. This extensive, distributed instrument is not just discovered and explored, but thoroughly practiced to get to know and experience its details and behaviour in the hands and bodies of the performers. Statements such as "the site is a crucial part of the instrument itself" (Greie-Ripatti and Bovermann 2017) point to the notion of an active and prepared relationship with a place.

The fourth and final dimension of the concept performance is the intensification of the experience of time. Although the site continues to exist before and after the performance, the performance wants to create a decisive, unique real-time moment within this flow of reality, or as Frize calls it in an interview (Gonon 2016a): "the work exists in its era, in its instant, in its space-time." This accumulation of the 'now' experience is built up through both the sequence of preparatory events and the stream of music. The creative process leads to a unique moment (the concert performance) – mediated by the musical flow - during which audience, performers and the site alike are sucked into the flow of time. Sunde's performance of *Himdalen* (2018) takes place at a remote facility for nuclear waste in the Norwegian woods; it starts at 6 p.m. on one (ice-cold) November evening and lasts through the entire night, until 7:00 a.m the following morning. The effort to reach this unknown place and the attempt to conceptualize extremely long durations of time (during which nuclear waste has to be safely stored) are central to this challenging work. As the composer explains:

The time of year and the terrain have consequences for how the music is composed. The effort involved and the use of time – the duration – are absolutely central. What the audience has to invest affects the total experience. (Sunde 2020)

Just as Groth and Samson (2017) note in their third conclusion on the performances of LaBelle and Woodruff, *Himdalen* "works with temporal processes that reach beyond the presence, and the experienced timeframe of the artwork."

A collective and shared performance

In-situ music is treated as a collective and shared activity in the discourses of in-situ musicians. Essentially, this means that the audience is present at the

site and directly experiences the place and performance. The notion of a shared activity also points to a common moment during which the performance will take place (similar to a concert hall concert and in contrast to the more individual timing of sound sculptures or headphone sound walks). The audience, performers and organizers meet each other before, during or after the concert. They talk to each other, socialize and perhaps discuss the performance. In this way the performance site becomes a meeting place and the performance a social event.

In-situ musicians think in advance about the audience's role in the performance and they design a joint performance space. They "create a place in a place" (Vogel 2015): a subplace of the overall performance site (a city, village, forest, etc.) where the audience and performers can hear and see each other and experience those parts of the direct environment which are crucial for the in-situ work. In the preface to his *Inuksuit* (2009) score, the composer Adams calls this staging of the site "defining the physical boundaries of the performance space" by taking visual and aural boundaries, wind speed, elevation, vegetation and other elements into account.¹⁰

A shared moment and unity of time and place is still possible if the performers, audience or both are in motion. In parades or intervention-like works – such as Helbich's *Shouting Piece* (2009) or Raes' *Singing Bicycles* (1980) – the performers walk, drive, cycle and try to attract the attention of passers-by in a street or public space. The many experiences of the here-and-now by the individual audience members happen at slightly different moments and places, but these micro-events have enough in common for them to experience it as a shared, common event. In mosaic-like performances – for example, one of Barber's city concerts – with moving and shifting performers and audiences at several locations, the *general* experience of the in-situ performance is created by *gathering* the multiple perspectives and experiences. A common, shared moment – usually at the end – becomes crucial in 'com-posing' the in-situ performance.

In-situ music often, but not always, involves audience participation. In these cases the experience of performing and being part of a place is not just witnessed in real-time, but strengthened by giving the audience an active role. In-situ music performances "open up for direct experience and participation" as Groth and Samson (2017) explain while discussing two of them. There are many gradations and flavours of participation and collaboration in in-situ music, related to the content and timing of the participation. No strict line can be

¹⁰ Another example of the integration of the audience in the performance is given by Kennedy, preparing a performance with musicians on boats in a bay while the audience sees the performance from any given vantage point along the shore and listens with (portable) FM radios in their cars. The following fragment about exploring singing on the boat makes clear that she is creating one overarching, outdoor concert space for performers and audience: "The experience of being so alone out there and yet so central in this huge field of vision gives a very special feeling to this performance. While I sing I'm thinking of the listener, and hoping they can feel the delicate splendour of the water, sun and sea air on my body" (Kennedy 2018).

drawn, though, between an active and passive role for the audience. People can be involved in performing sound (Sauvageot's *le Concert de Public* (2002)), moving, listening or awareness exercises (Thorpe 2018), organizational tasks (Galloway 2010) or any combination of these activities. By distributing effort and engagement among many participants, in-situ musicians want to create a web of relationships and enhance the common, shared character of the performance. In the introduction to the published score of the *Sonic Meditations* (1974) Oliveros expresses her desire to "erase the subject/object or performer/audience relationship by returning to ancient spectators." Momiyama goes one step further and aims to empower the local communities and minorities with whom she participates in performances such as *Searching for the Sound of Taji* (2014) or *The Zoo, the Ship, and the Beggar* (2012).

Through their focus on a *simultaneous* integration of the actor and observer, the performing and witnessing experience, in-situ performances are shared and collective events. Although the unity in time and place may consist of micro-variations and different perspectives, it ensures that the embodied, multisensory, spatial and unexpected character of the performance is fully experienced by the audience. The common and shared character of in-situ performances can be further strengthened by relying on different amounts and flavours of audience participation.

Taking part in the world

The described discourses on the physical world, environmental agency and sharing can be summarized into one notion that characterizes in-situ music: performing music as taking part in the world. The 'world' in this notion is complex, diverse, full of unexpected events, concretized into one place and moment, and also interpreted and moulded by the artistic sound performance. 'Taking part' presumes a sounding activity and engagement, an acting human body, in the middle of other human and non-human actors influencing each other. The musician is not the sole actor – let alone creator – at the place of performance. Taking-part-in-the-world accepts that others are also taking part and thus, it has a shared and collective dimension, independent from the degree of activity or influence of the other co-actors.

The notion of in-situ music that I present here is similar to Hayes's notion of site-responsive sound art – and specifically live electronic music – as music-as-action-in-the-world (Hayes 2017). Hayes talks about accepting the unplanned, complex nature of sites and entering into a dialogue with the specificities of a place. While she pays less attention in her general description of site-responsive music to the shared nature of in-situ music and the prepared, exercised dimension of the dialogue with a site, she explains both aspects later on when writing about her own in-situ performances, such as 15 seconds (2015).

How do sound and music fit into this notion of taking-part-in-the-world? It is clear from in-situ discourses that sound and music become less an autonomous work of art under the full control of the artist. In-situ musicians are fascinated by the complexity and diversity of the real world and aim at hardto-define experiences in the liminal space between art and daily life. The (fifth) conclusion at which Groth and Samson (2017) arrive about sound art situations is relevant here, although they do not include natural agency as part of the given situation:

[sound art situations] are unpredictable in the sense that the given situation, with its richness of social and cultural complexity, influences the work of art beyond the intentions of the artist.

In-situ music is less centred on sound constructions, gestures and signals referring to the artwork itself or the artistic tradition(s) of which it is part. Born (2013) describes this situation as "moving beyond the musical or sound object" when writing about sound installations, events and soundscapes. In-situ musicians have less control of the many actors and forces at the performance site. The sound experience becomes part of a multisensory, action-based situation. This gives sound/music many potential meanings beyond the aesthetic one. It may become a vehicle to create awareness of yourself, others and the environment (Oliveros), express the cohesion (or lack of cohesion) in a community, rebuild a relationship between a community and a historical building (Momiyama), learn about how sound travels through environments (Lucier 's *Quasimodo* (1970)), give a social or communal meaning to a functional, neutral space such as a parking lot or a street (Gonon 2016a; Sauvageot 2011), etc. An in-situ performance artist has more possibilities to play with different meanings and functions of sound, but less to control the performance situation.

It might seem as if there is a contradiction between two subconcepts of the notion taking-part-in-the-world: the 'physical world' contains an element of acceptance – treating a place as already inhabited and recognizing its complex living beings and forces - while 'environmental agency' supposes changes being made and actions taken. In an in-situ mindset though, there is no contradiction between acceptance/observation and action/change: the world is considered to be full of actors, and the musician – part of the world – cannot but act and create change. The complexity of the world is absorbed by its embodiment: the way individuals or species see, hear or feel is different but luckily, each human – and animal – has one body, integrating all these experiences and ensuring that they act. In-situ musicians who explicitly use the ambiguity and gradual zone between being/listening/accepting and acting/sounding/changing include Oliveros and Werder. The latter formulates this ambiguity as "our complex situation of being the world, and at the same time observing the world" (Saunders 2009). In performances such as 2005^{1} the participants balance between being at a place and acting there. The paradoxical co-existence of givens and actions in the world is not only noticeable in the symbiosis of listening and performing described earlier, it is also part of discourses on the concept of resistance. These are found in texts and documentations, that discuss instrument building, materials and site-specific performance (Hogg 2013; Taylor 2015). A site, its materials and forces (for

example, the wind) can be turned into instruments by both accepting some parts and changing or moulding others into a new, playable constellation.

The tension between acceptance and action also displays itself in political in-situ performances that involve an element of protest. The protest is not expressed outside the conflict zone, in a neutral space. Upon closer examination the protest is preceded by partly accepting the place and situation, followed by transforming it into a landscape of tension or confrontation. The Australian composer Schultz, for example, denounces how a site near Port Adelaide was environmentally degraded by industrialization and how the aboriginal Kaurna people were evicted (Ryan 2014). But he also uses the same site as a performance location for Within Our Reach, exploits its sound possibilities and cooperates with both aboriginal and non-aboriginal people living in and near this site. In a more politically dangerous situation - Argentina in the 1970s, where violence and imprisonment were common - the in-situ musicians of Movimiento Música Más accepted the risk and snuck into a public place to protest. They disguised their performances as daily events, accepted funding from local authorities and let the "apolitical or apathetic silent majority" participate in their bird-contest performance (Dewar 2018). But at the same time they created a simple image with an overt political message: people sitting and playing in a huge (bird) cage in a park. In the in-situ mindset, acting without taking the given situation into account is not taking-part-in-the-world, but acting in a void.

The previous discussion on the co-existence of acceptance and change also sheds light on the relation between the notion of taking-part-in-the-world and the broader research vision on music since the 1990s. The attention for embodied, active and context-related dimensions of music has grown in the past decades, in anthropology, philosophy and sound studies (Born 2013; Ingold 2000; Feld 2012; Pinch and Bijsterveld 2012). So how different is the discourse of in-situ musicians from this research vision? To answer this, I limit myself to Small's concept of musicking (Small 1998), which also pops up in discourses of in-situ musicians such as Hayes (2017) and Hogg (2013). In general, there are many similarities between this in-situ discourse of takingpart-in-the-world and Small's musicking. The studied in-situ discourses broadly fit Small's theory: both point to the active dimension of music and the many relations created. But there are also two important differences. First, besides stressing active performance and relations, in-situ musicians also accept inherent features of places as a determinate part of the performance. As explained in the previous discussion of resistance and in the section of this article entitled *Physical world*, a place is seen as having its own particular soundscape, character and personality; it expresses itself (Abram 1997) through its characteristics, inhabitants, (natural) forces and movements. It influences the performance and perception modes of humans and non-humans and both offers and constrains artistic possibilities. According to Hogg (2013) - in his article on an in-situ violin performance and the notion 'resistance' -Small lays too much weight upon the subjective dimension by insisting that music is solely an action. Materials and forces resist and co-create human

(sound) activities. Hogg refuses to remain bound by the epistemological binary of subject and object and underlines how both the (human) 'I' and the 'other' (human and non-human) are involved in musical creation. In line with other in-situ discourses, he claims that resistance and performing music are "an immediate and embodied relation between actions and worlds that are mutually constitutive" (Hogg 2013). Second, while Small's relationships are often rather abstract, and even idealized, in-situ relations are generally created at the spot between bodies, animals, forces or elements that the participants hear, feel or see.¹¹ As described above in the section *Environmental agency and* performance, an in-situ performance creates noticeable changes in the elements that are being connected. In Small's writing about relationships, it is not always clear if he is talking about experiences between performers, suggestive thoughts of the audience or the after-thoughts of a researcher. Experiencing a relationship becomes the crucial element of a performance in Small's view: "During a musical performance, any musical performance anywhere and at any time, desired relationships are brought into virtual existence so that those taking part are enabled to experience them as if they really did exist" (Small 1998). In his theory even a social, community-based interpretation of music is possible when a flautist is playing solo in a natural setting.¹² But in in-situ discourses, immediacy and sensuality - what the participants see, hear and feel - cannot be represented by, or reduced to, general ideas on nature, the world, society, politics, relationships, etc. The $\partial irect$ environment – and the many relations interconnecting the living beings at one place - are not considered the same as the (more abstract) context. So far, I have found no in-situ solo piece in a natural site in which the musician refers to social meanings or relations.

III. Discussion

In the previous sections I have discussed the common visions of in-situ musicians – based on their discourses – on the physical world, environmental agency and the collective nature of in-situ music, synthesizing these three subconcepts into one idea of taking-part-in-the-world. In what follows I add two

¹¹ The abstract character of relationships becomes clear in Chapter 12 ("What's really going on here?") of Small (1998), for example when he writes about "relationships between relationships" and "relationships between relationships between relationships", or when he describes musicking at the beginning of the chapter: "Musicking is about relationships, not so much about those which actually exist in our lives as about those that we desire to exist and long to experience: relationships among people, as well as those between people and the rest of the cosmos, and also perhaps with ourselves and with our bodies and even with the supernatural, if our conceptual world has room for the supernatural. During a musical performance, any musical performance anywhere and at any time, desired relationships are brought into virtual existence so that those taking part are enabled to experience them as if they really did exist."

¹² Here I am referring to Chapter 13 "A Solitary Flute Player" of Small (1998).

reflections on the first and third subconcept. They examine in detail how common these two subconcepts are among all in-situ musicians.

Contradictions in the concept of shared in-situ performances

Interpreting the notion of taking-part-in-the-world as a shared and collective event is not found in every discourse of in-situ musicians. The story on the presence and meeting of the audience at the performance site is less coherent and more contradictory, compared to the subconcepts of the 'physical world' and 'environmental agency'. The following three remarks point to audiences who experience an in-situ work without being present at the performance site.

First, some in-situ works have additional, off-site audiences: people reading or listening to a documentation of the work. A documentation is a collection of different media (texts, photographs or video or audio recordings) that provides more information on the time, place, situation, background or preparation of an in-situ performance. When in-situ music appeared in the 1960s, musicians felt a need to document their in-situ performances. They included photographs or texts with the scores, describing a performance and its location. This is probably related to the fundamental integration of work, performance and environment in in-situ music and the difficulty of making a score, detached from the place where the work had originally been performed. This documentation practice happened in scores such as Dunn's Skydrift (1977), Schafer's Music for Wilderness Lake (1979) and Wishart's Landscape (1970). The rise of the internet has also created new documentary and archival possibilities: many recordings, texts and photographs can be juxtaposed non-hierarchically on one webpage or blog, as the Another Timbre website shows in documenting realizations of Werder's piece 2005¹ (Reynell 2013).

The focus of these in-situ musicians creating additional documentation remains on the direct experience by ensuring that an audience is present at the performance; the documentation is merely a by-product. But the discourse on the collective, shared character of in-situ music becomes slightly blurred because other composers 'upgrade' their recording and documentation material. They present and re-work it as another work of art (Davis 2017) or heavily edit the audio recordings. In its new format the documentation is no longer a by-product, as illustrated by Stockhausen's recording of Park Music (1971). This composition was originally composed for several ensembles at different locations in a park. Afterwards, Stockhausen recorded the separate ensembles again in a studio and created a new, artificial mix of the composition. Thus, while the discourse of in-situ musicians stresses the direct presence and participation of the audience at the actual performance site, other publics learn and experience those works through (reworked) documentations; hence, new off-site audiences are created, which had not been part of the realtime, in-situ concert. In one studied case, the transformation of Dunn's in-situ performance Sky Drift into a 'performance/documentation' for an art venue, Davis (2017) concludes: "When relocated - away from its original outdoor

context – Sky Drift is deprived of much of its potential to communicate meaning."

The preceding remark was still concerned with additional audiences reached through recordings or documentations. There are also in-situ performances with only performers and no on-site audience. One example is Matthew Burtner's Sandprints (2009) performed in the Namib Desert. The material from these performances was used in new works of art such as sound installations or concert hall compositions; *Sandprints* was also released on CD and DVD. Thus, as a second remark, I would add that - in contrast to the previous additional off-site audiences - other musicians aim at an *exclusive* off-site audience by reworking the in-situ performances into a new artwork, suitable for a concert or exhibition hall. In the discourse of the musician, though, the focus may still be on the direct, participatory experience of the environment or, as Hogg (2018) writes about the performances of the Landscape Quartet, "you find yourself experiencing landscape". In other publications (Hogg and Sansom 2015; Hogg and Östersjö 2015) he elaborates this 'presence' argument further, although a large part of the Landscape Quartet performances happened without an on-site human audience, and mainly served as material for mixed-media works of art in exhibition or concert halls.

A third remark on the shared nature of in-situ music is that some in-situ musicians consider non-humans as their audience. Here the notion of taking-part-in-the-world concerns all living beings at the site. Their performance wants to engender a dialogue with specific *animals*. Musicians such as Rothenberg (2009, 2016) aim to explore and learn about a non-human animal through their performance. In most cases this means that the human presence at the site is limited to performer(s) – and perhaps logistics assistants.¹³

How general is the concept of a shared and collective in-situ performance among in-situ musicians? And to which groups does it relate? The answers to these questions can be summarized as follows: on a basic level the shared experiential nature always applies to the musical performers. In in-situ music they are present and take part at the physical site. But the collective character can also relate to three other groups: first, the on-site (human) audience, participants, passers-by, etc.; second, the natural environment (animals, plants, etc.) and third, the off-site additional or exclusive audiences, reading or listening to a recording, documentation or new artwork, based on the original site or performance.

A world encompassing nature, culture and technology

I have already described how in-situ musicians have a common concept of the physical world (and its diversity and dynamism), but in the following section

¹³ Communication and interaction with specific animals do not necessarily have to happen in the absence of human audiences, as demonstrated by Laurie Anderson's *Concert for dogs* (2016) (Barone 2016), in which she performs together with – and for – dogs and their (human) 'owners'.

I question if there have been two opposing interpretations of that concept, envisioning the natural and human worlds as two radically different and unbridgeable systems and seeing technology as a mighty, autonomous force created – and controlled? – by 'unnatural' humans. Outside the arts – in science and politics - nature and culture were often considered binary notions in the twentieth century. In philosophy, for example, the "classical philosophical approach" (Achterhuis 2001) consisted of treating technological tools and experiences as a contradiction and even threat to the natural world or society. It's tempting to presume that this nature-culture rupture would be prominent in in-situ discourses – especially those of the first historical wave – stressing direct presence and embodiment. One immediately thinks of Schafer and the way he set nature against culture. Schafer was one of the most influential insitu composers, and very reluctant to use technology in his environmental and live compositions in the 1970s. He not only equated nature with untouched wilderness but also all modern technology with polluting, large-scale, centralized factories (Galloway 2010; Schafer 2002).

Based on the multiple sources of this study, however, I cannot claim that the nature-culture rupture was characteristic of most in-situ discourses. In fact, Schafer was more or less an exception. Looking at in-situ music in detail, ever since its beginnings at the end of the 1960s, there was a strong tendency to fuse nature and culture and involve technologies to bridge this gap. There were many discourses that explicitly did not treat humans, technology and nature as separate, static entities. For example, there was Dunn (1984), who called for multiplying the complexity and diversity of ecosystems through technology; Wishart (1974), who stressed the importance of nature in the city for the quality of life of its inhabitants and pointed to the relation between (human) creativity and their environments; and Lucier (Lucier and Simon 1980), who aimed to connect the artistic, scientific and natural worlds with each other. Later on, composers such as Thorpe (2016) and Rosani (2019) dealt with the potential of technology to connect to nature or specific social groups, which are usually excluded from participation in art.

When surveying the broad range of in-situ music, the nature-culture rupture is almost completely absent from the discourses, apart from Schafer's texts. Consequently, the notion of the physical world (in 'taking-part-in-theworld') is to be understood as *encompassing* artificial and technological subworlds; the unity of time and place also encompasses links with other places and times. Although in-situ artists underline the direct presence, physicality and immediacy of the world, this notion of the world is not a romantic, 'authentic' one, standing in contrast to sophisticated, technological culture. The real, physical world in in-situ discourses is inclusive: technology is *situated* within the world. Experiences and activities created or mediated by technology are embedded in places, similar to the way memories, histories, intentions and expectations inhabit a place and its life forms. Technology is *situerpreted* as technology in daily life, as it is used, abused and adapted to many people's ends: it is not autonomous technology. Artists leave the concert hall with its autonomous art and the laboratory with its almighty technology not to dismiss

culture and technology, but to actively discover and relate to the world through a culturally, and often technologically mediated, human body. In *Les Chantiers de L'O.R.E.I.* (2009) by Risse and Décor Sonore, outdoor urban spaces are treated as open-air laboratories in which participants and performers listen to the sound of walls, fences and machines through a diverse range of microphones, stethoscopes and wireless devices. Décor Sonore describes the performance as 'poetic-scientific visits' to archaeological sound sites.

IV. Conclusion

In this article I have sought an underlying, common discourse on how place and music meet in in-situ music, relying upon a large collection of sources. The identified notion of taking-part-in-the-world envisions a lively, complex, inhabited world where living beings and forces act simultaneously, with the former perceiving and learning about their part in the world in many different ways. A performance site is a dynamic meeting place for actors, histories and technologically-mediated experiences, some of which were already present before the concert. Performing at a location becomes a prepared and practiced dialogue: it requires getting to know the diversity of a site, or including the existing, practise-based knowledge (to act, to sound, to listen, etc.) of its inhabitants and users. The notion of taking-part-in-the-world also encompasses the idea that an in-situ performance is a collective and shared activity. Many in-situ musicians stress the presence - and often participation - of the audience at the performance site, although additional or even exclusive off-site audiences may also exist (experiencing a recording, documentation or new work of art, based on the original in-situ performance). In cases without an on-site human audience the notion of taking-part-in-the-world acquires a more limited meaning, mainly relating to the human *performers*.

In this notion of taking-part-in-the-world, sound and music become less autonomous, less controlled by the artist and less centred on references to the artwork itself or to artistic traditions. Although in-situ musicians vary in the degree to which their stories relate to 'usual' discourses on sound and music (from contemporary-classical music, soundscape composition, etc.), they all emphasize how sound becomes part of a lively, multisensory, action-based situation and how it creates meaning beyond the aesthetic one. The relational potential of sound is given a crucial role in their discourses, as performances activate or even transform relations between (specific) people and (specific) places. In-situ discourses treat music as a "vibrational practice" (Eidsheim 2015). When writing about this vibrational view and its disruptive role on our traditional understanding of music, Eidsheim adds that this approach "recognizes, and hence encourages, idiosyncratic experiences of and with music.' Idiosyncratic and site-specific references are abundant and detailed in in-situ discourses, when musicians talk about how the performance builds upon, interacts or is affected by temporary or local situations, individuals, inhabitants, materials, etc. Many in-situ musicians share a conviction that the immediate, local reality of the concert site constitutes a substantial element of a music

performance: it is a force next to – even resisting – other performance elements (such as performers, audience, musical structure, social context, ideas elaborated in an art work, etc.). The discourse of taking-part-in-the-world also displays a self-portrait of the in-situ musician as a local visitor or guest, engaging in local and temporary sound activities and not (only) as a highly specialized artist with timeless skills.

In this study I have treated in-situ music as a distinctive and coherent field of practice. I have not started from the more usual, implicit viewpoint, which situates in-situ performances at the periphery of other (sound) arts such as soundscape composition, contemporary-classical music or land art. This usual vision hinders us from studying the *totality* of in-situ music in depth, looking for similarities and differences within 60 years of in-situ practices and distinguishing individual characteristics from those of (sub)groups. For example, by merging Groth and Samson's (2017) conclusions with the summarized discourses, I have made clear that they are applicable to a much larger group of in-situ musicians than the two who appeared in their study. More specifically, I believe that concerts of in-situ musicians interpreting places as human sites with social communities, such as those by Curran, Frize, Momiyama or Wishart, share most of the conclusions on participation, history and unpredictability reached by Groth and Samson.

In the introduction to this article I described how in-situ music currently lacks a common profile and vision. In-situ musicians are geographically spread out, often not connected to each other, although they may be locally linked to other (sound) arts. By studying in-situ music as a field on its own and focussing on what in-situ discourses have in common, I have created a context for future studies. Individual and group features within in-situ practices can now be researched, for example to distinguish 20th-century in-situ approaches from more recent ones. Because direct experience, knowledge, sharing and communication are so intertwined in these works, which depend heavily on their immediate surroundings and temporary situations, future studies of in-situ practices are crucial to gaining new insights into the overall profile of in-situ music. This article may also form the basis for more interaction and sharing among international in-situ musicians and interested researchers. I believe that in-situ music – in dialogue with organizations outside the arts – has an important social and ecological potential. To make natural and human diversity viable, sustainable and, above all, productive is a great challenge in the 21st century. In-situ performers have developed a repertoire of sensual, time- and place-related practices to deal with the diversity of the world and act together.

Bibliography

- Abram, David. 1997. The Spell of the Sensuous: Perception and Language in a More-Than-Human World. New York: Vintage Books.
- Achterhuis, Hans, ed. 2001. American Philosophy of Technology: The Empirical Turn. Bloomington: Indiana University Press.
- Appleton, Jon, and Elliott Schwartz. 1970. "Current Chronicle." The Musical Quarterly 56 (1): 116–24.
- Augoyard, Jean-François, Martine Leroux, Catherine Aventin, Julie Augoyard, and Didier Pernice. 1999. "Médiations Artistiques Urbaines." [Rapport de recherche] 42b Cresson. Ministère de la culture.
- Barber, Llorenç. 2013. "A Music out of Doors." Translated by Rafael Liñan. Leonardo Music Journal 23 (1): 3–5.
- Born, Georgina, ed. 2013. *Music, Sound and Space: Transformations of Public and Private Experience*. Cambridge: Cambridge University Press.
- Brüstle, Christa. 2016. "Musiktheater aus dem Vorhandenen: Der Klangkünstler und Komponist Daniel Ott." *Neue Zeitschrift für Musik*, no. 3: 40–43.
- Chen, Carolyn. 2018. "Interview with Carolyn Chen." Accessed April 2, 2018. http://location.hansroels.be/#post8.
- Curran, Alvin. 2000. "Out of Place." Accessed May 15, 2019. http://www.alvincurran.com/writings/out%20of%20place.html.
- Davies, Hugh. 2002. Sounds Heard A Potpourri of Environmental Projects and Documentation, Projects with Children, Simple Musical Instruments, Sound Installations, Verbal Scores, and Historical Perspectives. Chelmsford, UK: Soundworld Publishers.
- Davis, D. Edward. 2017. "The Map and the Territory: Documenting David Dunn's Sky Drift." Organised Sound 22 (1): 122–29. https://doi.org/10.1017/S1355771816000406.
- Dewar, Andrew Raffo. 2018. "Performance, Resistance, and the Sounding of Public Space: Movimiento Música Más in Buenos Aires, 1969–1973." In Experimentalisms in Practice: Music Perspectives from Latin America, edited by Ana R Alonso-Minutti, Eduardo Herrera, and Alejandro L Madrid. New York: Oxford University Press.
- Dunn, David. 1979. Sky Drift: 1976-1978. La Jolla, California: Lingua Press.
- —. 1981. "An Expository Journal of Extractions from Wilderness Notes toward an Environmental Language." Accessed February 2, 2019. http://www.davidddunn.com/~david/writings/journal.pdf.
- -. 1984. "Mappings and Entrainments." Accessed June 25, 2019. www.davidddunn.com/~david/writings/mappings.pdf.
- Eidsheim, Nina Sun. 2015. Sensing Sound: Singing and Listening as Vibrational Practice. Durham: Duke University Press.
- Estape, Taylor. 2017. "In Experiments on the Periphery, Miami and Its Locals Create the Music." *Miami New Times*, May 12, 2017. http://www.miaminewtimes.com/arts/experiments-on-the-periphery-robert-blatt-jorge-gomezabrante-and-mark-so-create-miami-soundscapes-9332155.
- Feld, Steven. 2012. Sound and Sentiment: Birds, Weeping, Poetics, and Song in Kaluli Expression. Third Edition. Durham: University of Pennsylvania Press.

- Finkel, Joseph. 2017. "Building Environmentally Attuned Communities: The Politics of Alvin Curran's Maritime Rites." *Leonardo* 51 (3): 300–01. https://doi.org/10.1162/leon_a_01522.
- Frize, Nicolas. 1982. "Vivre de Concert." Accessed January 7, 2020. http://www.nicolasfrize.com/uploads/vivre-de-concert.pdf.
- Fuhler, Cornelis. 2016. "Splinter at Mungo: The Art of Communication." In SONIC ENVIRONMENTS - ACMC2016, edited by Lindsay Vickery, 52–57.
 Brisbane, Australia: Australasian Computer Music Association.
- 2017. "Choreographic Music Performance, Connecting with Space." Accessed April 20, 2019. https://www.corfuhler.com/words.
- Galloway, Kathleen Anne. 2010. "Sounding Nature, Sounding Place': Alternative Performance Spaces, Participatory Experience, and Ritual Performance in R. Murray Schafer's Patria Cycle." PhD, Toronto: University of Toronto. https://tspace.library.utoronto.ca/handle/1807/26175.
- Gonon, Anne. 2016a. "J'ai besoin que les gens s'entendent exister Entretien avec le compositeur de musique contemporaine Nicolas Frize." In *Tout Ouïe* - *La création musicale et sonore en espace public*, 72–77. Lavérune, France: Entretemps.
- -. 2016b. *Tout Ouïe La création musicale et sonore en espace public*. Lavérune, France: Entretemps.
- Gottschalk, Jennie. 2016. *Experimental Music Since 1970*. New York: Bloomsbury Academic.
- Greie-Ripatti, Antye, and Till Bovermann. 2017. "Instrumentality in Sonic Wild{er}ness." In *Musical Instruments in the 21st Century: Identities, Configurations, Practices*, edited by Till Bovermann, Alberto de Campo, Hauke Egermann, Sarah-Indriyati Hardjowirogo, and Stefan Weinzierl, 243–62. Singapore: Springer.
- Groth, Sanne Krogh, and Kristine Samson. 2017. "Sound Art Situations." Organised Sound 22 (1): 101–11. https://doi.org/10.1017/S1355771816000388.
- Hayes, Lauren. 2017. "From Site-Specific to Site-Responsive: Sound Art Performances as Participatory Milieu." Organised Sound 22 (1): 83–92. https://doi.org/10.1017/S1355771816000364.
- Hogg, Bennett. 2013. "When Violins Were Trees: Resistance, Memory, and Performance in the Preparatory Experiments for Landscape Quartet, a Contemporary Environmental Sound Art Project." Contemporary Music Review 32 (2–3): 249–73. https://doi.org/10.1080/07494467.2013.775811.
- —. 2018. "Weathering: Perspectives on the Northumbrian Landscape through Sound Art and Musical Improvisation." *Landscape Research* 43 (2): 237–47. https://doi.org/10.1080/01426397.2016.1267719.
- Hogg, Bennett, and Stefan Östersjö. 2015. "Patterns of Ecological and Aesthetic Co-Evolution': Tree-Guitars, River-Violins and the Ecology of Listening." *Contemporary Music Review* 34 (4): 335–49. https://doi.org/10.1080/07494467.2016.1140867.
- Hogg, Bennett, and Matthew Sansom. 2015. "Introduction: Perspectives from Practice." *Contemporary Music Review* 34 (4): 259–61. https://doi.org/10.1080/07494467.2016.1140472.

Ingold, Tim. 2000. The Perception of the Environment. London: Routledge.

- Jensen, Marc Glenn. 2008. *Open Spaces: Environmental Listening and Sounding*. New York: Deep Listening Publications.
- Kennedy, Kathy. 2018. "Water and Radio." Accessed May 15, 2019. https://waterandradio.wordpress.com/.
- Kletschke, Irene. 2012. "Landschaftskompositionen." Archiv Für Musikwissenschaft 69 (3): 196–206.
- LaBelle, Brandon. 2015. *Background Noise: Perspectives on Sound Art*. Second edition. New York: Bloomsbury Academic.
- Landy, Leigh. 1994. *Experimental Music Notebooks*. Performing Arts Studies. Chur, Switzerland: Harwood Academic Publishers.
- Lucier, Alvin, and Douglas Simon. 1980. *Chambers: Scores by Alvin Lucier*. Middletown, Connecticut: Wesleyan University Press.
- Mace, Francis. 2016. "From Traffic Rises: Site Specificity and the Compositional Process." In SONIC ENVIRONMENTS - ACMC2016, edited by Lindsay Vickery, 44–51. Brisbane, Australia: Australasian Computer Music Association.
- Montague, Stephen. 2017. "Interview with Stephen Montague." Accessed May 15, 2019. http://location.hansroels.be/#post9.
- Morse, Barry Ray. 2018. "Site-Specific Music Composition and the Soniferous Garden." In *Invisible Places - Sound, Urbanism and Sense of Place: Proceedings,* edited by Raquel Castro and Miguel Carvalhais, 342–66.
- Nicolas, Arsenio. 2015. "From UGNAYAN to UDLOT-UDLOT : The Music of Jose Maceda." Paper presented at *The 1st International Conference on Ethnics in Asia: Life, Power and Ethnics, Naresuan University, Pitsanulok, August 20-*21, 2015.
- Oliveros, Pauline. 2013. *Anthology of Text Scores*. Edited by Samuel Golter and Lawton Hall. New York: Deep Listening Publications.
- Ott, Daniel. 2008. "Am Umschlagplatz Klang: Anmerkungen zum Experimentellen in der Musik." In *Sound Studies: Traditionen - Methoden - Desiderate: Eine Einführung*, edited by Holger Schulze, 267–76. Bielefeld: transcript Verlag.
- Pearson, Mike. 2010. *Site-Specific Performance*. Houndmills, Basingstoke, Hamp-shire: Palgrave.
- Piekut, Benjamin. 2014. "There Must Be Some Relation Between Mushrooms and Trains: Alvin Curran's Boletus Edulis - Musica Pendolare." In *The Oxford Handbook of Mobile Music Studies: Volume II*, edited by Sumanth Gopinath and Jason Stanyek, 172–86. Oxford: Oxford University Press.
- Pinch, Trevor, and Karin Bijsterveld, eds. 2012. *The Oxford Handbook of Sound Studies*. Oxford: Oxford University Press.
- Reese, Kirsten. 2012. "Formung Und Verwandlung: Aspekte Des Umgangs Mit Wirklichkeit Im Klanglichen Medium." *Positionen*, no. 93: 31–33.
- Reynell, Simon. 2013. "Another Timbre: Werder 2005/1 by Manfred Werder." Accessed May 16, 2019. http://www.anothertimbre.com/werder2005(1).html.
- Roels, Hans. 2018. "Adding Voices to the World's Polyphony: The Role of Technology in In-Situ Composition." In *The Global Composition 2018: Conference on Sound, Ecology and Media Culture: Proceedings*, edited by Sabine Breitsameter and Cansu Karakiz, 232–43. Dieburger Schriftenreihe Zur

Akustischen Ökologie 4. Darmstadt/Dieburg: Darmstadt, Mediencampus, Fachbereich Media.

- Rosani, Silvia. 2019. "The Use of Voice Sound Analysis and Synthesis and Visual Art to Engage with New Audiences in Public Spaces and Encourage Social Transformation: A Composer's Perspective." Paper presented at From Authorship and Spectatorship to Usership in Music, Orpheus Institute, Ghent, February 21-22, 2019.
- Rothenberg, David. 2009. "Introduction: Does Nature Understand Music?" In *The Book of Music & Nature*, edited by David Rothenberg and Marta Ulvaeus, 2nd edition, 1–10. Cambridge, Massachusetts: Wesleyan University Press.
- -. 2016. "Why Bring Nature into Your Music?" In *Environmental Sound Artists:* In Their Own Words, edited by Frederick Bianchi and V. J. Manzo, 1st ed., 137–43. New York, NY: Oxford University Press.
- Rutherford-Johnson, Tim. 2017. Music after the Fall: Modern Composition and Culture since 1989. Oakland, California: University of California Press.
- Ryan, Robin. 2014. "Toward a New, Musical Paradigm of Place: The Port River Symphonic of Chester Schultz." *Environmental Humanities* 4: 41–67.
- Sánchez, María Teresa García. 2015. "A 'Sound Grammar' for the City: The Spatial and Temporal Dimension of Barber's Concerts." Organised Sound 20 (2): 207–21. https://doi.org/10.1017/S1355771815000096.
- Saunders, James, ed. 2009. "Manfred Werder." In *The Ashgate Research Companion to Experimental Music*, 353–57. Aldershot: Ashgate.
- Sauvageot, Pierre. 2006. "J'ai beaucoup aimé ton dernier public." In *La relation au public dans les arts de la rue*, edited by Anne Gonon, 71–72. Carnet de Rue. Vic la Gardiole, France: l'Entretemps.
- —. 2011. "Art et espace public, points de vue de l'œuf et de la poule." L'Observatoire 38 (1): 77–79.
- Schafer, R. Murray. 1992. A Sound Education: 100 Exercises in Listening and Sound Making. Indian River, Canada: Arcana Editions.
- -. 2002. Patria: The Complete Cycle. Toronto: Coach House Books.
- Small, Christopher. 1998. Musicking: The Meanings of Performing and Listening. Middletown: Wesleyan University Press.
- Sunde, Knut Olaf. 2020. "Site Awareness in Music Recontextualizing a Sensation of Another Place." PhD, Oslo: Norwegian Academy of Music. https://www.researchcatalogue.net/view/565811/565812/0/27.
- Szerszynski, Bronislaw, Wallace Heim, and Claire Waterton, eds. 2004. *Nature Performed: Environment, Culture and Performance*. Oxford: Wiley-Blackwell.
- Taylor, Hollis. 2015. "Bowing Australia's Outback Fences: A Sonic Cartography." Contemporary Music Review 34 (4): 350–63. https://doi.org/10.1080/07494467.2016.1140474.
- Thorpe, Suzanne. 2016. "Resonance and Resemblance." *The Experimental Music Yearbook 2016*, 2016. http://experimentalmusicyearbook.com/Resonance-and-Resemblance.
- —. 2018. "Interview with Suzanne Thorpe." Accessed May 12, 2019. http://location.hansroels.be/#post11.
- Vogel, Sabine. 2015. "Tuning-In." *Contemporary Music Review* 34 (4): 327–34. https://doi.org/10.1080/07494467.2016.1140475.

- Waterman, Ellen. 1998. "Wolf Music: Style, Context, and Authenticity in R. Murray Schafer's And Wolf Shall Inherit the Moon." Canadian University Music Review / Revue de Musique Des Universités Canadiennes 18 (2): 72–88. https://doi.org/10.7202/1014655ar.
- Wilkie, Fiona. 2002. "Mapping the Terrain: A Survey of Site-Specific Performance in Britain." New Theatre Quarterly 18 (2): 140–60. https://doi.org/10.1017/S0266464X02000234.
- —. 2008. "The Production of 'Site': Site-Specific Theatre." In A Concise Companion to Contemporary British and Irish Drama, edited by Nadine Holdsworth and Mary Luckhurst, 87–106. Malden, MA: Blackwell Publishing.
- Wishart, Trevor. 1974. Sun: Creativity and Environment. London: Universal Edition.
- -. 1977. Sounds Fun 2: Second Book of Musical Games. London: Universal Edition.



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