

**Site-specific sound art  
as a means of creating a multidimensional sense of place:**

**A case study of the Klankenbos (Sound Forest) in Pelt, Belgium**



**Lore Londot**

**Master's thesis Urban and Cultural Geography**

**Radboud University Nijmegen**

**2022-2023**

**Site-specific sound art as a means of creating a multidimensional sense of place:**

**A case study of the Klankenbos (Sound Forest) in Pelt, Belgium**



MUSICA  
IMPULSCENTRUM

Lore Londot (s1107495)

Supervision: Dr. Friederike Landau-Donnelly

Master: Human Geography

Specialization: Urban and Cultural Geography

Radboud University Nijmegen

2022-2023

## **Acknowledgements**

In the context of this master's thesis research, I would like to express my special thanks to my supervisor Dr. Friederike Landau-Donnelly and my internship organization Musica, Impulscentrum voor Muziek vzw.

Dr. Friederike Landau-Donnelly guided me through the entire research process and challenged me to critically position and question myself. I am very grateful for the valuable knowledge she added to the research.

Musica also had a significant contribution to the research. Their willingness to introduce me to their project of the Sound Forest and to provide and let me collect all the data I needed was indispensable within the scope of this master's thesis.

## Abstract

The research on site-specific sound art as a means of creating a multidimensional sense of place investigates the potential of the integration of site-specific sound artworks in public places. The sonic stimuli of places have a major influence on how these places are perceived and appreciated. However, in our everyday lives, sounds are often overheard (Maeder, 2014). In addition, a fragmented and disrupted sense of belonging to place has risen due to modernity and globalization, especially in places that are subject to processes of urban regeneration (Najafi & Shariff, 2011; Ashley & Weedon, 2020). The research does therefore not only aim to elaborate on the relationship between site-specific sound art and a (multidimensional) sense of place, but also tries to stimulate meaningful spatial experiences as interpreted in terms of connection and validation of the place and awareness of sensory stimuli. The research focusses in particular on the following three aspects: (1) the site-specific character of sound installations, (2) visitor experiences of public sound art and (3) the difficulties, requirements and potentials of the integration of site-specific sound art in public places. The research is based on a qualitative research design which follows an exploratory case study methodology. The topic of the case study is the intensive examination of Musica's project of the Sound Forest (Klankenbos) in Pelt, Belgium, during a period of three months.

## Table of contents

Introduction.....	1
Societal relevance.....	3
Scientific relevance.....	5
Research objective and research question(s).....	7
Literature review and conceptual framework.....	8
- Defining place .....	8
- A (multidimensional) sense of place .....	9
- An introduction to sound and sound art .....	13
- The potential of site-specific sound art .....	14
- Summary.....	16
Methodology .....	18
- Research approach .....	18
- Data collection .....	20
- Data analysis .....	26
Introduction to the Klankenbos (Sound Forest).....	28
- Introduction to the site.....	28
- Introduction to the project .....	29
- Funding .....	30
The creation of site-specific sound art: in harmony with the place?.....	33
- The development of a site-specific sound installation .....	33
- The materiality & power source of the sound installations .....	36
- The sensory response of the sound installations to environmental stimuli.....	38
- Sounds intentionally produced by the sound installations .....	42
- Spatial positioning of the sound installations in the environment.....	44
- Summary and reflection on the site-specific characteristics of sound installations	45
Practical implications of public sound art .....	47
Experiencing sound art, experiencing place? Visitors' perspectives.....	49
- Audience of the Sound Forest .....	49
- Experiences and opinions .....	51

A multidimensional sense of place.....	56
- The potential of sound art to respond to a multidimensional sense of place .....	56
- Awareness of the physical, sociocultural and political economic elements of the place.....	58
- Individual perception of the place.....	61
- Behavioral and emotional characteristics of the place .....	82
The future of the Sound Forest .....	86
Discussion .....	88
Conclusion .....	90
References .....	94
Appendix 1: Questionnaire semi-structured interviews (Dutch/English) .....	99
Appendix 2 – Questionnaire for visitors (Dutch) .....	101
Questionnaire for visitors (English) .....	102
Appendix 3: Sound installations of the Sound Forest .....	103
Appendix 4: Endnotes (Dutch interview extracts).....	122

## Introduction

### Gong:

(...)

***No longer for ears, ... sound***

***That like a deeper ear***

***Us, apparently hearing, hears.***

***Revolving of spaces. Creation***

***From inner worlds into the free.***

(...)

*R.M. Rilke (Translated from Dutch)*

Senses are of great importance in the (sub)conscious of every human being and sensory perceptions are often associated with certain environments. The poem of R.M. Rilke illustrated above shows how the senses, and in particular hearing, may contribute to our experience of places on a deeper level and how it furthermore may stimulate our imagination. Social structures constantly generate acoustic environments that people live in (Maeder, 2014). The inherent sonic stimuli of places have a major influence on how the places are perceived and appreciated. However, in everyday practice sounds are often overheard, creating a gap between the physical sounds and the object of listening (Maeder, 2014). This is not surprising as spatial design often does not take into account the role of the different senses or favors visual aspects. This raises the question of how places can be designed in a more conscious way to stimulate the senses, specifically hearing, and make people more aware of their surroundings. This research attempts to answer this question on the basis of a practical example of the 'Klankenbos' (Sound Forest). The Sound Forest is a project of Musica, Impulscentrum voor Muziek vzw (abbreviated as Musica) and encompasses a physical forest at Provincial Domain Dommelhof in Pelt, Belgium, where various sound artworks are designed and exhibited in relation to public place (Musica Impulscentrum [1], n.d.). Sound art in this context refers to site-specific sound installations that focus on humanly audible sounds and sounds created for humans, not taking into account the role and hearing of more-than human actors.

To investigate how the integration of sound art in the landscape may contribute to a more 'conscious' experience of place, the research will focus on the role of sound art as a means of creating a multidimensional sense of place. Sense of place is a concept that both refers to the range of factors that define the character or uniqueness of a specific place and to the ways in

which people use, experience, and understand the place (Convery et al., 2012). By combining theories on the different factors or dimensions that contribute to a sense of place with theories on the potential and capacities of site-specific sound art, a theoretical framework will be proposed on the significance of sound art in creating a multidimensional sense of place. The validity of this theoretical framework will then be tested in practice as a case study in the Sound Forest. Although the integration of sound art in place-making practices has been considered in previous research, it was usually in the context of a single sound artwork and not in relation to a multidimensional sense of place (e.g. Birchfield et al., 2006) (see scientific relevance). The research of the Sound Forest is therefore unique. The research reflects on the entire process of the development of site-specific sound art, going from the creation of a site-specific sound installation over the (practical) implications to the visitor experiences and opinions.

By doing so, the results of the research shall contribute to the knowledge on the possibilities and difficulties of site-specific sound art in public places and to give practical suggestions on how it can be used as a tool to create a (multidimensional) sense of place. It also offers a reflection on the strengths and areas for improvement of Musica's project of the Sound Forest. This reflection may be beneficial for the design of future sound installations. Finally, the ultimate goal of the research is to provide information on (new) ways to encourage a more inclusive and conscious interaction with our environment where sensory stimuli are responded to.

## Societal relevance

The role of space and places is in transition in this postmodern globalized world (Ashley & Weedon, 2020). Especially places that are subject to processes of urban regeneration are believed to suffer from the tensions between place-making practices and losses of what has been in these places before, such as older architectures or empty spaces that however may still possess cultural value for many people (Ashley & Weedon, 2020). Consequently, a fragmented and disrupted sense of belonging to place has risen due to modernity and globalization, leading to a sense of 'placelessness' (Relph, 1976; Najafi & Shariff, 2011; Ashley & Weedon, 2020). Placelessness describes settings which do not have any distinctive personality or sense of place, referring to the physical characteristics of nonplace or culturally unidentifiable environments (Relph, 1976; Gustafson, 2001; Najafi & Shariff, 2011). Sense of place and more specifically, a multidimensional sense of place, contributes to the recognition of the uniqueness of each place and the individual's connections with it (Ardoin, 2006). Sense of place has the capacity to transform a place into a place with significant behavioral and emotional characteristics for the visitors (Hashemnezhad et al., 2013). The place then creates a center of human existence to which people are emotionally and psychologically bonded (Convery et al., 2012). Places have different levels of sense of place and an increased level of sense of place encourages people to contribute to social activities, to dwell and to connect with other people, improving the well-being of these people (Najafi & Shariff, 2011). A better understanding of a (multidimensional) sense of place can therefore respond to questions about the attachment of people to places. The recognition of the uniqueness of a place can furthermore also stimulate place protective behavior and engagement among visitors or residents (Ardoin, 2006). Since a sense of place is believed to make people feel more connected to the place and/or appreciate it more, people also tend to develop the desire to care for and protect the place in terms of, for example, community-based conservation and environmental involvement, action and learning (Ardoin, 2006). Consequently, the stimulation of place-protective behavior is beneficial for both the quality of the environment as well as the integrity of human life within it (Rodaway, 1994; Najafi & Shariff, 2011).

The focus on the potential of sound art and more specifically the conscious stimulation of the senses in the creation of a multidimensional sense of place may even enhance the spatial experience. The senses are actively involved in the processing of significant information of our environment (Rodaway, 1994). However, in spatial design, attention is often mainly paid to visual aspects, excluding certain groups of society such as blind people. In the case sound is taken into consideration, it is most of the time in relation to the elimination of disturbing noises such as passing trains or airplanes taking off (Brown, 2012). However, more creative use of sound in public places can do more than just eliminate unwanted noise, since sound can be regarded as a building block itself in place-making. The integration of sound as an artwork may therefore encourage a more inclusive and conscious experience of place in terms of awareness of the multiplicity of sensory stimuli of the environment.

Art practices can furthermore stimulate urban change since art itself is situated within a symbolic framework of connected narratives and works as a mediator for multiple meanings (Marques & Richards, 2014). More specifically, according to the Organization for Economic Co-operation and Development (OECD) (2018, p.22), (sound) art and cultural productions in general are considered to pose transformative capacities in the development of places: 'Cultural productions can contribute to the development of a territory by creating jobs and economic value, and by improving the quality of life. One of the drivers of local economic development is a positive image of a place or a region, by identifying and valorizing own cultural assets. Whether urban or rural, culture can also contribute to a better living environment'. Art-making in public place thus reconsiders relationships to place and may increase a sense of connection, understanding and well-being (Ashley & Weedon, 2020).

## Scientific relevance

Place, and more specifically sense of place, has been a topic of interest in many disciplines such as geography, sociology, psychology and architecture (Convery et al., 2012). Given the multidisciplinary approach to sense of place, different theories have been proposed to describe the concept (Convery et al., 2012). Although there is no clear consensus on a definition, common factors that contribute to a sense of place have been identified and visualized into models (Ardoin, 2006). Integrating this knowledge into place-making practices makes it possible to design more meaningful places (see societal relevance). Especially human geographers from the 1970's and early 1980's have made a significant contribution to theories on place by linking a sense of place to everyday practices and the idea of the rooted and healthy self (Convery et al., 2012). The aim of this research is to contribute to the knowledge on how a (multidimensional) sense of place can be created through site-specific sound art from a geographical point of view.

Within the field of cultural geography, art has been recognized as strongly connected with notions of space, place and place-making (Landau-Donnelly, 2023). Geographical concepts such as place and site have long inspired artist's conceptual and material engagement (Hawkins, 2013; Landau-Donnelly, 2023). Art's 20<sup>th</sup> – century evolution has led to an expansion beyond the traditional exhibition places such as museums, galleries and studios towards the production of art in relation with the site. Especially site-based socially engaged art practices have caught special attention (Kaye, 2000; Suderburg, 2000). Additionally, the relationship between art and a sense of place has been considered in research, taking into account the unique spatial and affective characteristics of place (Barnes, 2019; Landau-Donnelly, 2023). This development of art raises some questions for those working in the field of geography, such as how art should be integrated in research projects as a critical object with all its possibilities. This implies a reflection on both the integration of art as a research method and the research of art itself within geography. The research on sound art as a means of creating a multidimensional sense of place tries to respond to this developing field by providing a new perspective on the possibilities of art in relation to public place. What makes this research unique is that it is conducted as an empirical case study, which makes it possible to provide a critical reflection on the contribution of sound art in place-making. In addition, the scale on which the sound art is integrated into the landscape offers extra value to the research. With a collection of 18 sound art installations, which can be consulted in Appendix 3 and the additional sound map in Google Earth Pro (see methodology chapter), the Sound Forest in Pelt (Belgium) is the largest of its kind in Europe. This allows to look at different facets of place from the perspective of multiple sound artworks.

The research does not only focus on the relationship between art and a sense multidimensional of place, but also on the role of the senses in experiencing and processing places. The research however mainly focusses on the senses hearing and sight and to a lesser extend touch, because these are the senses that the sound installations of the Sound Forest respond to (smell and taste are not actively stimulated by the sound artworks). Sensuous geographies, described as geographies of the experience of the senses, examines the changing role of the senses in everyday experiences of place (Rodaway, 1994). Although a study of

sensuous geographies contributes to the knowledge on everyday life and the living world as multisensory and multidimensional, it is an often neglected domain within geography (Rodaway, 1994). Especially in the case of sound, acoustically aware approaches often restrict their interest to sound as a language and as a form of communication (Maeder, 2014). Few studies focus on sonic effects, auditory cultures and sound practice as a means of creating a sense of place and almost certainly not from a qualitative point of view (Maeder, 2014). By purposefully investigating the influence of the senses in creating a (multidimensional) sense of place from a qualitative perspective, the research will hopefully generate more interest in this field and contribute to its expertise.

## Research objective and research question(s)

The main objective of the research is to provide a (better) understanding of how sound art can be used as a tool to create a multidimensional sense of place. The main research question is therefore:

- *How can site-specific sound art contribute to a multidimensional sense of place?*

To answer this main question, a case study at the Sound Forest in Pelt, Belgium, will be conducted where the significance of sound art in the creation of a multidimensional sense of place can be examined in practice. By zooming in on a practical example, the research aims to obtain meaningful results that can later be extrapolated to more general recommendations within the domain of spatial design to develop places that are appreciated more by the people who visit them and that respond to the identity of the place. Furthermore, the research seeks to contribute to the theoretical knowledge of sensuous geographies and the use of art within the field of geography. Beside general recommendations, the research also aims to offer a reflection on Musica's own practice and site-related suggestions for the creation of new sound artworks in the Sound Forest in the future.

Since the research is based on a case study, the main research question can be rewritten as follows:

- *How does site-specific sound art contribute to a multidimensional sense of place in the Sound Forest?*

In the framework of this research, a four-dimensional model will be used to describe the 'multidimensional sense of place'. As mentioned before, a multidimensional sense of place can contribute to a meaningful spatial experience, which means that the visitors appreciate the place more and feel more connected to it (Ardoin, 2006; Ardoin et al., 2012).

The following sub-questions (applied to the case study) are then proposed to gain a better understanding of the role that site-specific sound art can play in creating a multidimensional sense of place:

- *1. What makes a sound art installation site-specific?/ How does a site-specific sound installation affect a multidimensional sense of place?*
- *2. How do visitors experience the Sound Forest?*
- *3. What are the (practical) difficulties, requirements and potentials of integrating site-specific sound art in public places?*

## Literature review and conceptual framework

### Defining place

To understand sense of place, it is first important to define the term place itself and how it relates to and differs from the concept of space. Cresswell (2015) argues that space is a more abstract concept than place. Spaces have a geometry, areas and volumes, meanwhile places have space between them. Space is also often related to outer-space (Cresswell, 2015). However, space can become place when it is given value and when people get to know the at first undifferentiated space (Tuan, 1977). Space and place therefore require each other for definition (Tuan, 1977). Place furthermore refers to a strong affective bond between a person and a particular setting as distinct from space (Sime, 1986). Place can be considered as a center of human existence to which people are emotionally and psychologically connected and through which both individuals and groups define themselves as people and their environments, places and identities are mutually constructed and constituted (Harvey, 2001; Convery et al., 2012). According to Teo and Huang (1996, p. 310) 'places are not abstractions or concepts but are directly experienced phenomena of the lived world.' These experiences are not only provided by the natural environment, but consists of a mix of both natural and cultural features of the landscape and the people living there (Convery et al., 2012). More specifically, places can be understood as multifaceted spaces including the topographical, the spiritual, the built environment and the emotional and psychological bonds people have with the place (Convery et al., 2012). Places help to understand the world as they provide a way of seeing, knowing and understanding the environment in which we live and the attachments and connections people have with it (Cresswell, 2015).

Within the field of cultural geography the concepts of space and place have received special attention. A conceptual analysis of the use of both terms by cultural geographers, provided by Anderson (2015) confirms that place and space cannot be more different (Anderson, 2015). 'Spaces are scientific, open and detached; places are intimate, peopled, and emotive. You may travel through spaces, but you will live your everyday life in places. Place then is the counterpoint of space: places are politicized and cultured; they are humanized versions of space' (p.51). Places are thus considered as created out of space by human culture, although some nuances need to be acknowledged here (Anderson, 2015); Not only humans are involved in place-making practices, but also more-than-human actors are taking and making place. Related, places are most of the time intentionally constructed by cultural groups, but place meanings can also be influenced unintentionally. Lastly, the scale of places plays an important role in cultural geography and it is important to realize that places exist both physically as well as in our mind or imagination (Anderson, 2015).

## A (multidimensional) sense of place

Strongly related and partly already included in the previously given definition of place is the concept of sense of place. Sense of place has been a topic of interest in different disciplines, building on different theoretical and methodological knowledge and leading to a multiplicity of theoretical frameworks that complicate clarity in place-related studies (Convery et al., 2012). This implicates that it is almost impossible to provide an all-encompassing definition of sense of place despite the substantial body of literature available (Escobar 2001; Convery et al., 2012). According to Relph (1976), one possibility to describe sense of place is ‘the ability to recognize different places and identities of a place’ (p. 63), however, as he remarks, this is the most meagre meaning of sense of place. Sense of place research furthermore considers the subjective and often shared human experience or attachment to the landscape and includes emotional, cognitive and functional aspects (Galliano and Loeffler, 1999). The concept of sense of place thus describes the connection between social experiences and geographic areas (Galliano and Loeffler, 1999; Jorgenson and Stedman, 2006). In general two ways exist in which the term ‘sense of place’ has been used and described in the academic literature as argued by (Convery et al., 2012, p. 2). The first one uses sense of place ‘to explore a range of factors which together define the character, or local distinctiveness of a specific place.’ The second conceptualization of sense of place uses the term ‘to emphasise the ways in which people experience, use and understand place, leading to a range of conceptual subsets such as ‘place identity’, ‘place attachment’, ‘place dependency’ and ‘insiderness/insiderness’ (Convery et al., 2012, p. 2). However, the descriptions provided still remain vague to some extent and are difficult to investigate or measure in practice. A more unambiguous explanation of sense of place in addition to the previously mentioned modes of interpretation and in terms of its multiple characteristics is therefore desirable when investigating the role sound art can play.

The concept should therefore be clarified further by considering place as multifaceted and by taking into account the various characteristics or properties of place, such as location and personal involvement to investigate how they contribute to the experience of sense of place (Relph, 1976). Consequently, a variety of factors have been recognized which may contribute to a sense of place. Based on an interdisciplinary literature study and field-based research, Ardoin (2006) has proposed sense of place as a holistic concept, consisting of four dimensions: (1) The biophysical setting, (2) the psychological (individual) elements, (3) the sociocultural elements and (4) the political economic elements (Figure 1). Additional field-based research conducted by Ardoin et al (2012) which compared the potential of different models of sense of place, has shown that this four dimension model provides the best conceptualization of sense of place. The four different dimensions will be clarified and elaborated below.

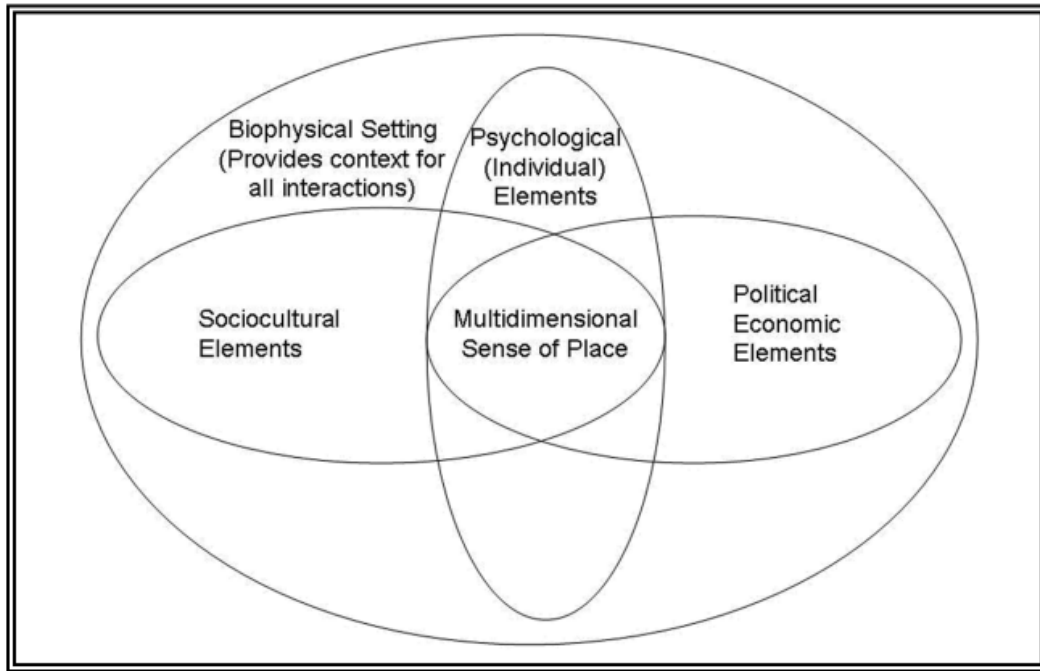


Figure 1: model of the different dimensions of sense of place (Ardoin, 2006, p. 114)

- The **Biophysical setting** provides a context for all interactions. It is impossible to speak about a sense of place without taking into consideration the physical environment (Ardoin, 2006). Place has a physical form – a landscape and this is the most obvious and the easiest characteristic of the place to describe (Relph, 1976). This biophysical setting can be an outdoor place as well as the built environment and may contain plant and animal species that interact within the ecosystem (Stedman, 2003; Ardoin, 2006). The clearest expression of the biophysical setting are distinct centers or prominent features such as river valleys or walled towns as provided in geographical descriptions (Relph, 1976). The physical features of a place are often the first thing people perceive and judge when they create a mental image of the place and are therefore important determinants for the development of attachment (Stedman, 2003). As mentioned by Durrell (1969), cultural productions and even human beings themselves are expressions of their physical environment. Although this dimension consequently forms the foothold for the development of the other dimensions and meaningful human-environment connections may arise from direct experience with places, the impact is often neglected (Pyle, 1993).
- The **psychological (individual) dimension** refers to the individual elements that create a sense of place. All individuals experience places differently based on personal characteristics and their relationship with the place (Ardoin et al., 2012). Individual attitudes, experiences, intentions and own unique circumstances are essential to understand the experience of place (Lowenthal, 1961; Relph, 1976). Moreover, a place can even have different identities for one individual (Relph, 1976). Between individuals the differences are even more distinct (Relph, 1976). Three concepts related to the

psychological dimension are place identity, place dependence and place attachment (Ardoin, 2006). Relationships between people and places that represent the setting for everyday life develop the place's identity (Moore & Graefe 1994). Place identity depends both on the experiences of people and on the physical appearances of the place and it is important to note that it is not only related to the distinctiveness or uniqueness of individual places but also to the sameness between places (Relph, 1976). Place dependence on the other hand refers to the capacity of a place to provide the conditions for desired activities or specific goals (Williams & Vaske, 2003). Place identity and place dependence together contribute to place attachment, an individual's experience building on cultural and shared experiences among families, communities and societies (Low, 1992). More specifically, place attachment considers the bond between people and places and how their relationship evolves over time (Altman & Low, 1992; Giuliani & Feldman, 1993; Convery et al., 2012).

- The **sociocultural dimension** considers the ways in which humans create and recreate place through social interactions and is built on the community attachment construct (Williams, 2002, p123; Ardoin et al., 2012). Individual functions as a part of society as well as cultural and symbolic elements sustain society's views of and beliefs related to place (Ardoin, 2006). These cultural elements and meanings of the place are specific to particular societal groups and are inseparable from it (Graham et al., 2009; Convery et al., 2012). The identity of a place as described earlier is therefore not only related to the psychological dimension of sense of place, but is also connected to the sociocultural dimension and more specifically communities since all individuals are also members of society and therefore places are experienced both individually and in a group context (Relph, 1976). The relationship between a community and a place can be very powerful and both influence and reinforce each other (Relph, 1976). The landscape should thus be considered as a medium of communication between place and community and as a tool to make communities explicit (Relph, 1976). However, traces of location and community such as signs and laws may give a feeling of belonging, but also of exclusion. As such, places are culturally ordered (Anderson, 2015). It is important to note here that cultural ordering should be considered as a dual process that is connected with geographical bordering. Borders reinforce the sense of belonging by physically imposing limits to movement, people, and places and define the organization and limits of the place and the people who claim it (Anderson, 2015).
- The **political economic** dimension also takes into account a community-based understanding and image of place. Although places may be demarcated by orders and borders, places are not isolated entities, but are part of a larger environment at different scales (Anderson, 2015). The political-economic elements focus on the understanding of the larger-scale implications of people-place connections (Ardoin, 2006). Because of globalization processes and the related flows of for example money, people and cultural influences as well as the increasing importance of translocal networks of organization and authority, places are transforming as they become more dynamic due to the integration in global networks (Amin, 2004). Massey (2007) speaks

of a so called 'constitutive interdependence' between places (p. 21). Places are (globally) influenced and connected in a spatial network, but in this network, they still possess their unique (local) characteristics (Anderson, 2015). In addition, the political economic dimension takes into account the features, such as landmarks or central points or focuses, which make certain places stand out from the surrounding area. The places possess a 'high imageability' as they distinguish themselves from other places because of their centrality, architecture, natural features or because of associations with events of great significance (Lynch, 1960; Relph, 1976). It is important to note, however, that the imageability of a place is not fixed and may therefore change over time although places with a high imageability tend to persist and provide a foothold for common experience (Relph, 1976). Another remark is that places with high imageability may not always be innocent as they could possibly be put-upon to express grandeur, authority, power and repression (Relph, 1976). The expression of power in geographical places and cultural acts and the power to transform place is also crucial to consider in the description of the political economic dimension. Although all individuals are believed to be able to express power, one should be aware that power can sometimes dominate and may induce the transformation of a place or oppositely resist changes (Anderson, 2015).

## An introduction to sound and sound art

The aim of the research is to investigate in practice how site-specific sound art can contribute to the perception or creation of a multidimensional sense of place as previously defined. This implicates that the sound artworks should contribute or respond to the experience of (different) dimensions of sense of place as described by Ardoin (2006). To gain a thorough understanding of the potential of site-specific sound art, an overview of the definition and characteristics of sound art and sound in general will be given first.

According to Bull (2018), two common definitions in sound studies exist to describe sound: the definition provided by *The Concise Oxford Dictionary* and the definition of the *American National Standards Institute* (ANSI). The 10<sup>th</sup> edition of *The Concise Oxford Dictionary* describes sound as ‘Vibrations which travel through the air or another medium and are sensed by the ear.’ This definition is further elaborated by the ANSI that clarifies sound as either ‘(a) Oscillation in pressure, stress, particle displacement, particle velocity etc., propagated in a medium with internal forces or the superposition of such propagated oscillation’ or ‘(b) Auditory sensation evoked by the oscillation described in (a).’ However, objections to these definitions have been made by professionals in the field of sound studies, such as that they do not support the phenomenology of everyday hearing, and therefore another definition has been proposed by Grimshaw & Garner (2015): ‘Sound is an emergent perception that arises primarily in the auditory cortex and that is formed through spatio-temporal processes in an embodied system.’ Although this definition may still sound abstract it is especially important to recognize that sound consists of vibrations or oscillations that travel through a medium and provoke auditory sensations. In addition, the human factor involved is also crucial as it allows to imagine sound (Bull, 2018). This refers to the numerous and diverse psychological impressions produced by the sounds that could almost directly be linked to the physical reality (Grondin, 2016).

The integration of sound in creative or artistic ways has taken different forms of which music is probably best known. However, in the context of this research, the focus will be on the properties and the potential of sound art in place-making practices. As described by Licht (2009) it is almost impossible to provide a universal definition and history of sound art as the development of it as a separate art movement cannot be dated back to a specific time period, geographic location or artist. The first appearance of the term itself must be attributed to the William Hellermann’s Sound Art Foundation in the late 1970’s (Licht, 2009). However, a definition of sound art remains elusive as it is often not clearly separated from music or has nothing to do with sound or art with the consequence that any experimental sound composition, performance or recording can get the label of sound artwork (Licht, 2009). To make a distinction from other sound related artistic expressions, the use of the term sound art is mainly of value in crediting site or object-specific works that are not intended as music per se and which consider both the apparent sounds of the environment as well as the unapparent sounds (Licht, 2009). In the framework of this research, sound art will be considered as sound installations focusing on human audible sounds and sounds created for humans. Sound installations are interpreted here as all types of installations where sound is the input and/or

output modality. Sound installations 'define the exhibiting place as an acoustic space where sound, space and time converge in interesting and challenging ways for the listener/perceiver' (Bandt, 2006, p.353). Sound installations can be both site-specific or not, but regarding the potential of sound art in creating a multidimensional sense of place the interest is mainly in site-specific sound installations.

### The potential of site-specific sound art

To gain a better understanding of the potential of site-specific sound art and how it may contribute to a (multidimensional) sense of place, the three components of the term will be further elaborated separately: the relationship with the site (site-specificity), sound (the role of the senses) and art.

The focus on the creation of art in **relation with place** was brought to attention in the first years of the 21st century with the terms of 'site-sensitivity' and 'site-responsiveness' (Ashley & Weedon, 2020). The artwork does not simply impose itself as an external entity in the environment, but is created in collaboration with the site by taking into account the unique characteristics and elements that define the place (Hunter, 2005; Ashley & Weedon, 2020). The site of the sound installation is thus not only part of the artwork, but is the point of departure for the artistic concept. Integrating sound art in a particular place involves the installation of a place in another existing place, creating transitional places (Klein, 2009). The 'atmosphere' or feeling of a certain place is taken into account by the artist as well as the acoustic, visual and architectonic characteristics to emphasize the uniqueness and specificity of the place (Klein, 2009). In addition, the experiences and perceptions of the people visiting the place are important for the understanding of the place (Hunter, 2005; Ashley & Weedon, 2020). It is believed that site-specific (sound) art has the greatest influence or potential in public and semi-public places that are influenced by everyday practices that are far removed from art (Klein, 2009). However, some remarks related to the site-specificity of sound artworks and art in general should be taken into account. By stressing the uniqueness of the place, a sense of authenticity is proposed that differentiates the place from other places as argued by Kwon (2002). This differentiation can be considered as the hidden attractor in site-specificity (Kwon, 2002). She further elaborates that the production of differences might in its turn be linked to expressions of power and capitalism. Kwon therefore suggests to consider site-specificity more as an open, fluid concept instead of taking it as fixed and grounded. In this contemporary world where places are integrated in networks of flows, multiple identities and meanings can be assigned to places. Consequently, one needs to see site-specificity as a balancing act 'between mobilization and specificity' – 'to be out of place with punctuality and precision' (Kwon, 2002, p. 166).

Sound in the context of sound art refers to the conscious **stimulation of the senses**. According to Rodaway (1994), the four senses: touch, smell, hearing and sight (possibly also taste as a fifth sense) are considered to be the most relevant to geographical experience. Instead of being passive receptors of the environment, they are actively involved in the processing of significant information in relation to the overall sense of the world (Rodaway, 1994). This implicates that sense and reality are connected to each other and that the everyday experience of place is multisensory, although some sensory modes are believed to be more passive and direct than others (Tuan, 1975; Rodaway, 1994). Through smell and touch, sensations provoked by external stimuli are registered. Hearing and seeing help to actively explore the world around us (Tuan, 1975). Hearing and seeing furthermore complement each other to become a holistic experience of place that is intensified by the supplement of the other senses (Rüth, 2006; Klein, 2009). The experience of the senses, described as the sensuous, thus creates the base for a wider geographical understanding (Rodaway, 1994). According to phenomenologists, place is part of an environment with which we can create an emotional connection by experiencing its symbols and meanings through the senses (Najafi & Shariff, 2011). By stimulating the senses, sound art can therefore contribute to a deeper processing of place, leading to a better understanding of our environment.

The last component to explore is **art**.

Art is closely related to notions of space, place and placemaking as it possesses a strong spatial component (Landau-Donnelly, 2023). Art always takes place somewhere and may possibly also travel through physical and/or digital places since art can take different forms (Landau-Donnelly, 2023). In addition, art also has the ability to move affectively or create an image of feelings about past, present and future imaginaries of places (Tuan, 1975; Landau-Donnelly, 2023). Where for example literature and paintings are able to induce an awareness of place, sculptural art and architecture create a place both materially as well as in the imagination (Tuan, 1975). Art is able to provoke a strong sense of place by representing communal life and values and when considering its material presence in space, experiences accumulate in its proximity (Tuan, 1975). Put differently, art is able to reconnect, reimagine and recalibrate our relationships with place (Hunter, 2005; Ashley & Weedon, 2020). Consequently, artists are often involved in place-making processes (Landau-Donnelly, 2023).

Art is composed as a multiplicity through different interacting dimensions. 19 dimensions have been identified that relate to different areas and that continuously exchange with each other (Figure 2) (Marques & Richards, 2014).

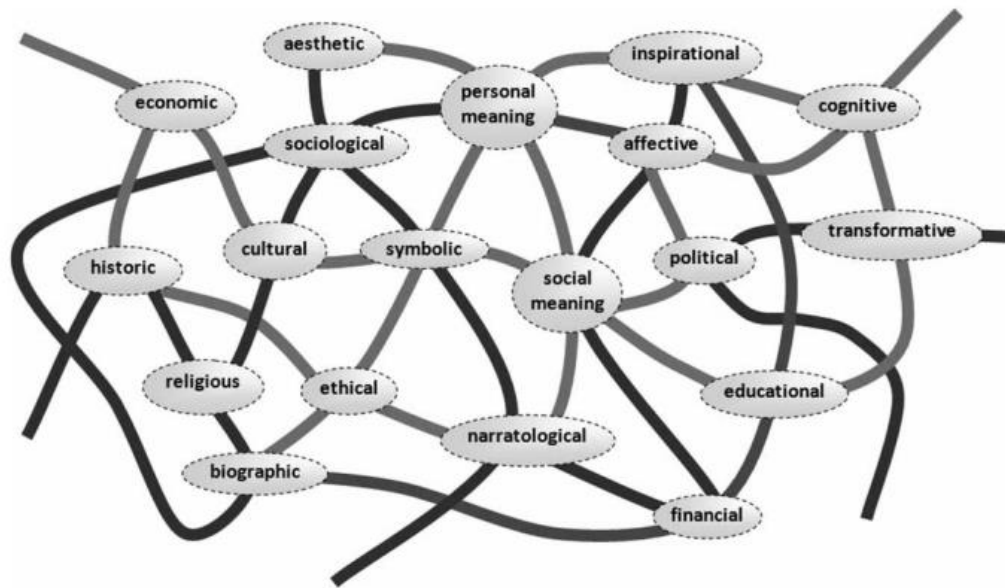


Figure 2: the interacting dimensions of art (Marques & Richards, 2014, p. 5)

As illustrated in figure 2, the different dimensions of art are strongly related to the different dimensions of sense of place, since almost all the 19 dimensions can be linked in some way to the psychological (individual), sociocultural and/or political economic dimensions. Only the biophysical dimension is not explicitly mentioned in the figure as a separate dimension, but may however still be a determining component of an artwork and may for example relate to educational purposes such as environmental learning. Therefore, art and sense of place are strongly connected as art may on the one hand influence the feeling of the place, but is on the other hand also influenced by the place itself. However, it should be remarked here that the social and political dimensions of art impose social and political responsibilities to artists (Bain & Landau, 2017). Artists are considered important actors in place-making processes and thus also in creating a sense of place, but the often formally administrated processes of place-making may prevent their engagement with the place (Bain & Landau, 2017). The challenge here is to deviate from existing (power) structures regarding the use of art in place-making processes towards more collaborative practices with the purpose of not only creating place-narratives for communities, but also with them (Bain & Landau, 2017).

### Summary

The literature review about site-specific sound art and its relationship with sense of place has learned that the best way to describe sense of place in the framework of this research is to consider it as a two-folded concept; The range of factors that define the character or uniqueness of a specific place and the ways in which people use, experience and understand place. More specifically sense of place is a multidimensional concept consisting of 4 dimensions: the biophysical dimension, the psychological (individual) dimension, the sociocultural dimension and the political economic dimension (Ardoin, 2006).

A further analysis of the characteristics of site-specific sound art show that its potential in creating a (multidimensional) sense of place is situated in its close relation with the place (site-specific), which is the starting point of the design process, the ability of art to create a place both materially as well as in the imagination and to represent communal life and values since art is composed as a multiplicity through different interacting dimensions. Finally, in addition to the visual aspect, the strong focus on sound and the stimulation of the senses in general enhances the processing of the significant information in relation to the overall sense of the world and thus contributes to the experience of place.

## Methodology

### Research approach

The research on site-specific sound art as a means of creating a multidimensional sense of place is based on a qualitative research design which follows an exploratory case study methodology. The focus of the case study was the intensive examination of the Sound Forest during a period of three months from March 1, 2023 to May 31, 2023. During this period, data was collected using different qualitative data collection methods such as (semi-)structured interviews, participant observations and participatory drawing to answer the question how site-specific sound art contributes to a multidimensional sense of place in the Sound Forest. The case study research is based on three pillars with the purpose to keep the research structured and to provide a reflection on the entire process of the development of site-specific sound art in relation to a multidimensional sense of place: 1) documentation and analysis of the sound installations, 2) practical implications of the integration of sound art in public places and 3) visitor experiences of the place.

### Case study selection

To conduct research on the potential of site-specific sound art as a means of creating a multidimensional sense of place, three requirements had been taken into account in the selection of the case study.

First of all, the sound art should be located in public place(s). The positioning in public place allows to consider the widest audience, since everyone can visit the sound artworks as they are freely accessible around the clock. In addition, it is believed that site-specific art has the greatest potential in public places that are influenced by everyday practices (Klein, 2009).

Second, a multiplicity of diverse sound artworks, preferably by different artists, was desirable. The presence of multiple artworks in a relatively narrowed area not only facilitates the research but also makes it possible to analyze and compare the characteristics of different sound installations and people's experiences and interaction with these artworks. When these artworks are created by different artists, the analysis may be even more interesting, since they have been designed from more diverse perspectives.

Third, since the research focuses on visitor experiences for which interviews are required, it is an advantage to speak the local language to eliminate a possible language barrier. Since the interviewer is proficient in Dutch, English and French a location where any of these languages is natively spoken is preferred as it maximizes the number of people who can be interviewed. This was however the least decisive condition.

Based on the three criteria, the 'Klankenbos' (Sound Forest) in Pelt, Belgium, was chosen to conduct research. The Sound Forest or Klankenbos is an initiative of Musica, Impulscentrum voor Muziek vzw (abbreviated as Musica) and comprises a permanent collection of 18 outdoor sound installations (Klankenbos [1], n.d.). A description of the 18 sound installations can be

consulted in Appendix 3 (retrieved from Klankenbos [2], n.d.). The Sound Forest is situated in Provincial Domain Dommelhof in Pelt, owned by the province of Limburg (Provincie Limburg, n.d.). Pelt is a municipality in the north of the province of Limburg in Belgium, close to the Dutch border (See chapter 'Introduction to the site' in the results section for a more detailed description). Figure 3 illustrates the localization of Pelt on a map of Flanders.



Figure 3: Localization of Pelt (blue placemark) on a map of Flanders (yellow area) (retrieved from Vlaamse overheid [1], n.d.).

The integration of public sound art in Provincial Domain Dommelhof originates from a European Interreg program in 2004 and since then, the collection has grown to the 18 sound installations that are exhibited in the place today (Musica Impulscentrum voor Muziek, 2021). Nowadays, the Sound Forest has the largest permanent collection of sound installations exhibited in outdoor public place in Europe (Klankenbos [1], n.d.). The Sound Forest is therefore unique in its kind. Most of the time when sound artworks are integrated in public places, it concerns only one sound installation. In the case multiple sound installations are exhibited, they could often only be visited temporarily and/or they are not located in public places, but for example in art galleries. There have however been projects that included multiple sound artworks in public place such as Cultuurmijl Enschede (The Netherlands), but because of a lack of maintenance and clear planning/finance the sound installations have deteriorated or have been removed (AD, 2018). The Sound Forest was therefore considered as the most suited project to conduct research on.

## Data collection

### **1. Documentation and analysis of the sound installations**

A first step in the research process was the documentation and analysis of the sound installations in the Sound Forest (see Appendix 3). The documentation part of the data collection aims to give a descriptive and sensory overview of the Sound Forest and to discover the elements that contribute to the site-specific character of the artworks.

#### Sound map

The description of the Sound Forest consisted of a short summary of the 18 artworks, including the artist and the sound installation's meaning as provided to the visitors on different information panels distributed around the forest (Appendix 3). Since the stimulation of the senses is central in the creation of sound installations, a visual and auditive overview of the forest has been provided in the form of a sound map based on sound recordings and images of the 18 sound installations of the Sound Forest. Sound maps combine visual and sonic information and practices and represent them in a simple and organizational way. Sound maps therefore contribute to a situated and more sensorial perspective on place (Thulin, 2018). The sound map of the Sound Forest was created in Google Earth Pro, since the map can easily be shared in this way and additional information of the sound installations together with audio recordings could be included. When 'mapping' the sound art, not only the auditory aspect, but also the visual aspect should be taken into consideration. For this reason also pictures of the artworks were added to the map in addition to the audio files. Since the sound installations are located in a forest environment, Google Earth Pro however only shows a (closed) canopy of trees. To be able to locate the different sound installations and to show the walking trails, a map created by Musica for visitors was added as an image overlay (the map can be removed if desired by unchecking it in the 'Places' panel).

#### Semi-structured interviews

To investigate how the sound installations are related to and interact with the place itself, the next step was to analyze what elements contribute to the site-specific character of a sound sculpture. A semi-structured interview with the artistic coordinator responsible for the Sound Forest, who was actively involved in the design process, as well as a semi-structured interview with the coordinator of the production team of the artworks has been conducted to collect the necessary information. Semi-structured interviews require consistent and systematic questions about identified topics but allow for more elaborate responses. Interpersonal conversations between the interviewer and interviewee produce questions and answers (Qu & Dumay, 2011). The potential of this method is that the style, pace and ordering of questions can be modified to obtain exhaustive responses. It furthermore provides a flexible method that may reveal important and often hidden facets of human and organizational behavior (Qu & Dumay, 2011). However, the flexibility can also be a disadvantage as the outcome of the interview depends on the interview skills and characteristics of the interviewer and the

interview process might not be neutral (Denzin & Lincoln, 1998; Qu & Dumay, 2011). A careful planning of the interviews and the ways in which questions are asked and interpreted is therefore essential (Qu & Dumay, 2011).

The purpose of the semi-structured interviews was to obtain insights into the creation and functionality of the sound installations and how the artists took into account the unique characteristics of the place in the design of the sound artworks. It furthermore focused on the practical necessities and difficulties in the construction of a sound installation. The guiding questions for the semi-structured interviews with the artistic coordinator and the coordinator of the production team are listed in Appendix 1.

## **2. Practical implications of sound art in public places**

### **Semi-structured interviews**

Since the research aims to focus on the entire process of the development of site-specific sound art in relation to a multidimensional sense of place, information on the practical difficulties and requirements in integrating site-specific sound art in public places is essential. Specifically, it concerns information about the ownership and funding of the project, the maintenance of the sound installations, the difficulties related to its positioning in public places and future prospects regarding the preservation and expansion of the collection. Again semi-structured interviews with the artistic coordinator and the coordinator of the production team as well as with the financial coordinator of Musica and the head of the leisure department of the municipality of Pelt have been chosen, given the previous mentioned reasons on the potential of this data collection method. The interviews with the employees of Musica have been conducted in the main building of the organization, located next to the Sound Forest in Pelt. The interview with the employee of the municipality has been conducted in Cultural Center Palethe in Pelt. After gathering permission, all the interviews have been recorded. The questions (in Dutch/ English) listed in Appendix 1 guided the interviews and consider the previously mentioned topics in this paragraph.

## **3. Visitor experiences of the Sound Forest**

Since the purpose of the research is to investigate how site-specific sound art can be used as a tool to create a multidimensional sense of place, the experience of the place (Sound Forest) by the visitors plays a crucial role. This part of the research therefore focused on an evaluation of the Sound Forest from the point of view of the visitors. An ethnographic approach, consisting of structured interviews, participant observations and participatory drawing was proposed here, as it allowed the researcher to get an insider's view through observation and participation in social settings that reveal reality as experienced by the people in those settings (Chatman, 1992; Baker, 2006).

## Participants

Musica tries to promote inclusivity in their projects including the Sound Forest, where everyone is welcome and can walk around freely all day long. However, some first observations in the Sound Forest learn that the audience mainly consists of Dutch speaking Belgians from all ages, living in the area of Limburg (province). Occasionally, Musica organizes guided tours through the forest and activities such as a treasure hunt. Everyone can participate in these tours and activities, but it mainly attracts kindergartens and primary schools. To provide an expanded representation of how the Sound Forest is experienced and more specifically how it creates a multidimensional sense of place, the different age groups were taken into account. This required different ethnographic research methods. The research also aimed to provide a more detailed overview of the audience itself.

## Structured interviews

In contrast to the semi-structured interviews mentioned earlier, structured interviews are more suited to conduct with larger groups of participants. Structured interviews consist of a series of pre-established questions that are (almost) not deviated from (Qu & Dumay, 2011). The advantages of this method are that the findings are easier to organize and analyze since all interviewees are asked the same questions in the same order to elicit relatively brief answers (Qu & Dumay, 2011). A disadvantage may however be that it is more difficult to capture detailed answers and that there is little room for flexibility (Qu & Dumay, 2011).

Structured interviews were conducted with the visitors of the Sound Forest. The purpose of the interviews was to examine how the visitors experience the Sound Forest and if the sound art had an influence on their perception of the place. In addition, the interviews were conducted to provide a better overview of the audience of the Sound Forest and their motives for visiting the place. The visitors of the Sound Forest were thus the target audience for the interviews, but since answering the questions requires well-developed language skills, the focus was on visitors aged 10 and older. To sufficiently describe the visitors' findings, but considering a limited time period, the aim was to speak with approximately 30 visitors within the age group of above 10 years. The interviews were conducted during a guided tour and by approaching people in the forest. The interview location was therefore the Sound Forest itself. In order to hear the voice of a diverse group of people, an attempt was made to address different age groups and compositions of people (e.g. individuals, couple, family, friends, colleagues,...) for the interviews. A total of 30 visitors divided in ten interviews according to their different group compositions have been interviewed. The demographic data of these visitors is listed in the table below (Table 1). Note that children younger than 10 years old have not been interviewed, but were however included because they were part of the group composition and most of them engaged in the participatory drawing (see next section). All the visitors also gave permission to record their answers to the questions.

Table 1: Demographic participant information

	<b>Gender + age</b>	<b>Origin</b>	<b>Language</b>
<b>Interview 1</b>	-Three women (37, 36 and 36) -Two boys + three girls (between 2 and 8) -Teenage girl (16)	Genk, Sint-Truiden and Turnhout (Belgium)	Dutch
<b>Interview 2</b>	-Woman (53) -Man (64)	Maaseik (woman) and Mol (man) (Belgium)	Dutch
<b>Interview 3</b>	-Woman (33) -Man (33) -Boy (3)	Germany	German (Interview in English)
<b>Interview 4</b>	-Man (85)	Hamont (Belgium)	Dutch
<b>Interview 5</b>	-Woman (57) -Man (57) -Two teenage girls (16 and 18)	Antwerp (Belgium)	Dutch
<b>Interview 6</b>	-Two women (both 36) -Man (43) -Girl (9) -Boy (6)	Mol (Belgium)	Dutch
<b>Interview 7</b>	-Woman (61) -Man (65)	The Netherlands	Dutch
<b>Interview 8</b>	-Two women (34 and 50) -Teenage boy (18)	Mol (women) and Pelt (boy)	Dutch
<b>Interview 9</b>	-Five teenage boys + three teenage girls (between 13 and 15)	Germany	German (Interview in English)
<b>Interview 10</b>	-Woman (52) -Man (62)	Heist-op-den-Berg (Belgium)	Dutch

Because most of the visitors of the Sound Forest are Dutch-speaking, the research questions were written in Dutch and English. The list of research questions (Appendix 2) consists of basic information questions (question 1 – 6) that ask for general visitor information and the purpose for visiting the Sound Forest and situational questions (question 7 – 12) that focus on the experience of the Sound Forest. The questionnaire mainly consists of open-ended questions in order not to direct the answers too much and to allow more freedom in the answers.

### Participatory drawing

The Sound Forest attracts (young) children and their voice was crucial to achieve a thorough knowledge on how site-specific sound art influences the experience of place. Children differ from adults in that they do not always have a well-developed vocabulary to express themselves and therefore interviews may not be suited for this group of participants as it requires a level of language proficiency to express emotions and perception and a good understanding of the questions (Wetton & McWhirter, 1998; Gauntlett, 2007). However, this does not implicate that children should be excluded from place-making processes. Often, there is little attention paid to the spatial experiences of children and their needs and views are mostly neglected in local

regeneration structures, leading to a collision between adults' and children's shared environment (Elsley, 2004). Because children use places differently according to their age and circumstances, their voice is nevertheless of great importance in public policy (Elsley, 2004). Participatory drawing could therefore offer a suitable addition to the interviews which allowed to include a wider audience as it was used with both adults and children. Participatory drawing is a visual research method used in qualitative research studies and includes the practice of image-making to express internal realities by visual metaphors (Literat, 2013). When talking about the perception of a place, drawing as a research method might be especially useful since it requires the persons to draw a world, their own mental image of the place, into existence (Literat, 2013). As illustrated by an example of the painter Ludwig Richter, he and three of his friends tried to paint the same landscape in Tuscany in the most realistic way possible, however 'the result was four totally different pictures, as different from one another as the personalities of the artists' (Cassirer, 1970, p160-161). Consequently, participatory drawing has proven to be a suitable research method to gain insight into the psychological experiences of the visitors, linked to the psychological (individual) dimension of sense of place as recognized by Ardoin (2006; 2012). The potential of participatory drawing lies therefore in its capacity to reveal a more nuanced depiction of concepts, emotions and information in an expressive, enjoyable and engaging way, without the requirement of developed language skills (Literat, 2013). In addition, drawing provides a more inclusive and interactive method as it decreases a feeling of hierarchy between the researcher and the participant (Literat, 2013). When drawing, the research participants are also given time to reflect, which may stimulate more thoughtful responses that are more difficult to obtain through verbal interviews (Gauntlett, 2007; Literat, 2013). The analysis of the drawings furthermore provides important information in terms of presences and absences and can reveal more subtle messages (Literat, 2013).

However, some limitations of participatory drawing should be taken into account when integrating this as a research method in terms of implementation and interpretation. It is mainly useful with smaller groups of participants, since logical considerations may prevent its use with larger groups (Literat, 2013). Even more important is the interpretation of the drawings. The validity depends on the subjective interpretation of the researcher and the possibility of over-interpretation exists since drawing or visual data in general is more open than language-based data (Gauntlett, 2005; Literat, 2013). To reduce the risk of mis-/over-interpretation, the research therefore also used short oral interviews whereby the participants explained their own drawings.

In the framework of this research, the participants were requested to make a drawing of how they perceive or experience the place (Sound Forest). The drawings have been made after finishing the interviews. Therefore the location for this data collection method was also the Sound Forest itself. A total of 25 drawings was collected, which are all included and described in the results section on the individual perception of place. When finished, in order to limit the risk of mis-/over-interpretation the visitors were asked to explain their drawings by answering questions regarding what they included in their drawings.

## Participant observations

Observation is an ethnographic research method where the researcher spends time in the field to gain a more comprehensive understanding of the people and environment being studied (Baker, 2006). According to Gorman and Clayton (2005, p. 40), observation 'involves the systematic recording of observable phenomena or behavior in a natural setting'. To collect a well-founded dataset it is crucial that the researcher uses a variety of roles and techniques and uses all his or her senses (Baker, 2006). Which role has to be used depends on the research problem, prior knowledge and the insider's or visitors willingness (Baker, 2006). Gold (1958) described four roles a researcher can play: complete observer, observer-as-participant, participant-as-observer and complete participant. The complete observer is present on the site, but does not interact with the insiders or in this case the visitors. From a distance, his/her role is to listen and observe (Gold, 1958; Baker, 2006). The main task of the observer-as-participant is still observing, but he/she may also conduct short interviews (Gold, 1958; Baker, 2006). The participant-as-observer on the other hand involves active participation so the researcher becomes involved with the activities of the insiders and may develop relationships with them (Adler & Adler, 1994; Baker 2006). Lastly, the complete participant studies a group in which he or she is already a member and is considered as a group member more than as a researcher (Adler & Adler, 1994).

For visitor observation in the Sound Forest, the role of complete observer and observer-as-participant was applied. The advantage of the complete observer was that it allowed to remain detached from the group and thus not influence the behavior. A disadvantage was however that the distance made it difficult to hear conversations which prevented information exchange (Baker, 2006). As part of the research, a guided tour was therefore also followed to allow a role as observer-as-participant. During the tour, observations were made of the visitor behavior and short structured interviews were conducted with hem as described earlier. An advantage of this role was that conversations between visitors could be heard more easily. However, since the interviews conducted were rather short (about 10 minutes), this could have contributed to misunderstandings (Baker, 2006). This problem has partly been solved by asking questions in an unambiguous and clear manner. The ultimate purpose of applying the roles of complete observer and observer-as-participant was thus to gain a better understanding of the visitor behavior, how the visitors interact with the different sound installations and the forest itself, their first reactions and opinions when they encounter it and to obtain more information about the audience.

Some final considerations that were kept in mind were the length of time in the field, the ways of data collection and ethical issues. The amount of time needed for observations depends on the research problem and the role of the researcher (Baker, 2006). Since the Sound Forest consists of 18 sound installations, the observation spots were chosen in the vicinity of these installations and for a time span of half an hour observations were made as a complete observer. The purpose here was to provide an overview of who is interacting with the sound installations, how the visitors behave in the forest in general (e.g. are they just passing through or consciously looking/listening at the sound art?) and if some of the installations are interacted with more than others. This last question might provide information on how sound

installations could contribute to a (more) successful multidimensional sense of place by analyzing the characteristics of the installations that stimulate the visitor interaction.

In addition observations at the sounds installations were also made during a guided tour as explained earlier, which made it possible to see the same people react to the different sound installations. Lastly, written field notes of what has been observed were used as type of data collection, since more visual methods such as pictures were not ethically suited due to privacy concerns.

## Data analysis

### Interviews

The first step in the analysis of the interviews existed of transcribing all the audio recordings. Afterwards the transcripts were manually analyzed by creating different coding schemes for the semi-structured interviews and the structured interviews. For the semi-structured interviews, four topics had been determined beforehand to address in the interviews, namely the funding, the creation process of a site-specific sound installation, (practical) implications regarding the integration of sound art in public places and the future of the Sound Forest. Afterwards, each of the interviews was vertically scanned from beginning to end by allocating conceptual labels to the different responses. Based on these conceptual labels, each of the responses was afterwards assigned to one of the previously mentioned categories. Lastly, analysis of the information of each category allowed to structure the information within the category based on common patterns and to classify some of the results further in sub-categories. Regarding the structured interviews, the predominantly fixed character of the research questions made it possible to analyze and compare the responses of all the visitors that participated in the interviews. First, the responses of the visitors to each of the questions were compared to investigate whether common patterns could be observed or not. Afterwards, some of the questions with the corresponding answers were grouped together, since the content was strongly connected, as indicated in the results section on the visitor experiences.

### Observations

The visitor observations had two objectives in mind: to provide an overview of the audience of the Sound Forest and to analyze behavioral and emotional visitor reactions to the sound installations. All the visitors first had been divided in three groups of people: people interacting with the artworks, people visiting the forest, but not actively engaging with it and people crossing the forest to go somewhere else. Afterwards, the ways of interaction with the sound installations by the first group of people was focused on. A comparison of the observations allowed to recognize similar behavioral and emotional reaction patterns of visitors which could then be explained in more detail.

## Drawings

The analysis of the visitor drawings partly followed the same method as the structured interviews. First, all the drawings were compared to each other to look whether common themes did occur. Three themes have been recognized and within these themes, most of the drawings could be further subdivided in different categories. Although the drawings mainly focused on individual visitor impressions of the place, the coding in different themes and categories clarified and facilitated the description of each of the drawings and improved the overall readability of the results.

## **Introduction to the Klankenbos (Sound Forest)**

### Introduction to the site

The Sound Forest (Klankenbos) is situated in Provincial Domain Dommelhof in Pelt, Belgium, as already shortly described in the methodology section. On January 1, 2023, the municipality of Pelt had 34.100 inhabitants (Statbel, 2023). The municipality consists of two sub-municipalities: Overpelt and Neerpelt, which have merged in January 2019 (ON2019PELT, n.d.). Domain Dommelhof accommodates different institutions for culture, performing arts and sports. The theater building has an extensive infrastructure including a theater, rehearsal, conference, meeting and exhibition rooms, an artists' quarter, cafeteria and a residential building with a restaurant. In addition, the domain gives space to a sports complex with indoor and outdoor accommodation. The combination with the surrounding park and the hotel facilities make Dommelhof an ideal place for cultural education, training days, sports internships or sports camps (Provincie Limburg, n.d.).

The core tasks of Provincial Domain Dommelhof include (Provincie Limburg, n.d.):

- Theater op de Markt (theater on the market): distribution and creation of circus and open-air theater via a summer festival and an autumn festival and a production cell for (inter)nation creation assignments and residencies.
- TAKT: the support and dissemination of creation by talent within the performing arts.
- Sports centre: facilitating regional sports activities
- Accommodation building: facilitating multi-day training for the socio-cultural field.

The surrounding park is not only a suitable place for recreational activities such as walking or jogging, but in the forest there is also a lot to discover for both children and adults. Both the Sound Forest and the BeweeG-bos (Move Forest) provide additional activities that stimulate the senses (Sound Forest) or that stimulate movement (Move Forest). A more in-depth description of the Sound Forest is given in the next section. The BeweeG-bos (Move Forest) consists of a movement path of 1 km with 12 natural obstacles for children and disabled athletes, such as defying a monkey bridge over the water, a balance course and much more. Children have to use all their movement skills as they have to jump, balance, climb and so on (Visit Limburg, n.d.).

## Introduction to the project

The Sound Forest or Klankenbos is an initiative of Musica, Impulscentrum voor Muziek vzw and comprises a permanent collection of 18 outdoor sound installations, which is unique in Europe (Klankenbos [1], n.d.). An overview of the various sound installations with a short explanation of their concept and operation can be consulted in Appendix 3. Since the text will often refer to examples of sound installations to clarify certain aspects, it is highly recommended to read the appendix first before moving on with the results of the research because a thorough knowledge of the sounds installations contributes to a better understanding of these results. In addition, a sound map of the different sound installations has been created in Google Earth Pro, to give a sonic and visual overview of the project.

Musica is a structurally subsidized non-profit organization, recognized within the Flemish arts decree (Musica Impulscentrum voor Muziek, 2021). Musica tries to stimulate an adventurous and conscious use of sound and music. The goal of the organization is to build bridges between the arts, education, the welfare sector and the broad socio-cultural field (Musica Impulscentrum [2], n.d.). The sound installations are situated in Provincial Domain Dommelhof in Pelt, where the main office of Musica is also located. Musica owns the collection of sound artworks and has permission to exhibit the works on the domain. With the project of the Sound Forest, Musica wants to make sound art known to a large, diverse audience in an accessible setting and to encourage visitors to discover sounds in a creative and conscious way. More specifically, they describe their objectives as follows (Musica Impulscentrum voor Muziek, 2021):

- 1) Making sound art known to a larger audience, giving sound art a place within the cultural sector.
- 2) The development of a collection of outdoor sound installations, integrated in nature and in interaction with people and nature.
- 3) Stimulate children, young people and adults to discover sounds and let them deal with sounds and noises in a creative way.
- 4) Make the public aware of the multitude of sounds in daily live and make them reflect on the beauty of sound and even silence, which has become scarce.

The Sound Forest originates from a European Interreg program in 2004 (Musica Impulscentrum voor Muziek, 2021). Back then, a European application with various partners was submitted to develop sound sculptures in public space (Musica Impulscentrum voor Muziek, 2021). From that moment on, the collection started to grow to the permanent collection of 18 sound installations that is exhibited today. Not only has the number of artworks grown, the Sound Forest has also expanded over the years and is no longer limited to the forest area situated on the Dommelhof, but also includes a sound installation at the Scouts Rally (*Time Flies*), next to the Dommelhof, and an installation at the Hageven nature reserve in Pelt (*Xylibraphone*) (Musica Impulscentrum voor Muziek, 2021). Because the sound

installations of the Sound Forest are located in public space, they can be visited free of charge, day and night, 7 days a week (Musica Impulscentrum voor Muziek, 2021).

However, the location of the Sound Forest in a corner of the province of Limburg makes the place not always easily accessible for visitors. Musica therefore also regularly organizes additional activities in the Sound Forest to introduce a larger audience to sound art coming from different regions within Belgium and even abroad (Interview 1, 11/04/2023). Guided tours and treasure hunts are organized in the Sound Forest on request and in addition, Oortreders festival is organized every two years and the 'Klankenbos' Nocturne every year (Interview 1, 11/04/2023). The treasure hunt is a game developed for children in which they have to find a treasure, which involves listening exercises in relation to the sound installations. The Oortreders festival and 'Klankenbos' Nocturne are public programmes where, for example, additional temporary installations are placed in the Sound Forest or performances are organized (Interview 1, 11/04/2023).

### Funding

A semi-structured interview with the financial coordinator of Musica (Interview 3, 27/04/2023) and the head of the leisure department of the municipality of Pelt (Interview 4, 15/05/2023) revealed that the organization invests approximately 30.000 euros on average per year in the maintenance and development of the installations of the Sound Forest. Musica has a contract with the artists regarding the development and purchase of the sound installations (Interview 3, 27/04/2023). Musica consequently owns the collection of sound artworks (Interview 3, 27/04/2023).

The source of the financial support for the Sound Forest has changed over the years. Since the start of the collection of sound installations in 2004, the organization has expanded the collection with financial support from a European Interreg program. The subsidy ended at the end of 2007 (Musica Impulscentrum voor Muziek, 2021). Since 2008, Musica has been drawing on its own operating resources and additional budgets to continue supporting the project (Musica Impulscentrum voor Muziek, 2021). Funds for the maintenance came from subsidies within the arts decree because of Musica's Flemish operations (initially funded by the 'Kunstendecreet' (Arts decree) as published in 2014 by the Flemish government on the support of the professional arts (Vlaamse overheid, 2014)). However, because the Sound Forest needed a significant proportion of the budget and they also needed to give new impulses to their other projects, this budget was not enough as mentioned by the financial coordinator:

*[Interview 3, 27/04/2023]*

*The Sound Forest as idea, I am speaking for the period 2016/2017, so actually the previous policy plan, there the Sound Forest was registered in our general working, as a project of Musica. Funds for the maintenance came from our Flemish working, subsidies within the Arts Decree. But it started to be a serious part, because those installations did require some maintenance, new installations are expensive and that just wasn't in proportion to the other things we were doing. Plus also, as an impulse center you have to be able to renew, give new impulses and the budget was not enough to do that in the Sound Forest. So that didn't quite add up anymore. But yes, just tearing down this collection tabula rasa is not nice either, and it is true that the Sound Forest has always been a very good attraction point for tourism, for cyclists, people who are actually not that specifically interested in sound art, but it appeals to the imagination.*

*(...)*

*So we think part of the funding is also for the municipality of Pelt, because it's right here in Pelt in the Dommelhof, that's actually quite an attraction.<sup>1</sup>*

An agreement was therefore made with the municipality to finance the maintenance and preservation of the collection during this six years legislature (Interview 3, 27/04/2023). Consequently, the organization thus started a partnership with the municipality of Pelt and also Provincial Domain Dommelhof since 2020. This translates into structural support from the municipality and collaborations at various levels (Interview 3, 27/04/2023).

The head of the leisure department of the municipality of Pelt (Interview 4, 15/05/2023). added that it had not been an easy decision regarding the cooperation with Musica. Before the two municipalities of Overpelt and Neerpelt merged to Pelt, there was a cooperation between the two municipalities and Musica, but rather as regards to content and they organized projects together. When the municipalities merged in 2019, Musica asked for funding for their project of the Sound Forest. This was discussed policy-wise and translated into an agreement. The original intention was that Musica would remain responsible for the conceptual aspect of the sound installations and the municipality for the realization and maintenance of these concepts. The municipality replied that they did not have the necessary resources and this was then eventually translated into a subsidy of 30.000 euros per year to Musica so that they could carry out their tasks in the same way as before the subsidy (Interview 4, 15/05/2023). A grant was for the municipality also the most visible way of their contribution to the Sound Forest as described by the head of the leisure department:

*[Interview 4, 15/05/2023]*

*Because you see the 30.000 euros. On paper. You know, that's how much the Sound Forest costs. If we have to do it with our own people from the technical service and our communication department would have taken over the website and we would have taken over the guided tours, then we put hours into it. Those people are also paid, but then you don't know what the Sound Forest costs. If someone asks what it costs then in this case (with the subsidy) it is clearly visible.<sup>2</sup>*

Exceptionally, the municipality does also offer labor for help with, for example, the construction of a sound installation, but this is not the norm. They also agreed with Musica that the collection should be maintained at its current level. Renewal may occur, but the collection should not grow any more (Interview 4, 15/05/2023).

Regarding the distribution of the budget of 30.000 euros per year, the financial coordinator clarified that one third is used for the maintenance of the sound installations and communication (Interview 3, 27/04/2023). Another third can partly be used to pay staff members. The last third is for the creation of new installations. However, the 10.000 euros turned out to be insufficient for the development of new sound artworks. Musica therefore tries to find extra resources from their artistic activities and from any other possible subsidies that are available to add to those 10.000 euros in order to increase the budget. The artistic operation of Musica includes the 'Oortreders festival' and the Nocturne, which have already been described, or sometimes workshops in the Sound Forest or other participatory projects. The guided tours and treasure hunts are part of their public activities and forms a separate line in their budget, where the income and expenditures have to be break even. These activities can therefore not really contribute to the budget for new installations (Interview 3, 27/04/2023).

In addition, Musica writes other grant applications for the creation of new sound installations (Interview 3, 27/04/2023). An example was the application for the Flemish subsidy line: 'Stimuleringsinstrument kunst in opdracht in de publieke ruimte' (Promoting instrument for commissioned art in the public space) (Interview 1, 11/04/2023). This grant had two calls, one in 2021 and one in 2022 and was allocated to project proposals that responded to specific locations in the public space and/or projects that had social added value for a community (Vlaamse overheid [2], n.d.). The applicant also had to enter into a cross-sector partnership for the realization of the project (Vlaamse overheid [2], n.d.). The requested subsidy amount had to be between 10,000 and 245,000 euros and amounted to a maximum of 50% of the final total project budget (Vlaamse overheid [2], n.d.). *Time Flies*, for example, has been subsidized by this Flemish subsidy line and was allocated a grant of 16,000 euros (Interview 1, 11/04/2023; Vlaamse overheid [2], n.d.).

## The creation of site-specific sound art: in harmony with the place?

### The development of a site-specific sound installation

To understand how site-specific sound art may contribute to a multidimensional sense of place, an analysis of the relationship and interaction between the sound artworks and the place itself is crucial. The (multidimensional) sense of a place is partly defined by the characteristics or dimensions which together establish the unique character or distinctiveness of the place and in turn determine the sense of the place. It is therefore essential to take these unique characteristics of the place into account when creating a sound installation that stands in relation to the place. In other words, the sound installation should be site-specific. However, although literature on the character of site-specific artworks exist, it is rather vague about specific needs or guidelines to create the artwork in relation with the place. In the specific case of sound artworks, where the stimulation of multiple senses is also important to consider, the literature is even more limited. Consequently, the components that contribute to the site-specific properties of a sound installation and how the design process actually looks like needed to be determined. The development process of a sound installation will be described first before moving on to the site-specific aspect of the sound art.

Regarding the development process of a sound installation, the artistic coordinator of the Sound Forest (Interview 1, 11/04/2023) clarified that when the opportunity arises of creating a new artwork, the first step is to find and contact a sound artist. Sometimes artists are already on the radar because they presented themselves beforehand with a portfolio or a search for new artists is initiated (Interview 1, 11/04/2023). The first selection is made by the artistic coordinator of the Sound Forest based on how innovative, how inclusive, how sustainable and how intriguing the concept of the artwork is (Interview 1, 11/04/2023). The artistic coordinator then proposes the concept to the complete artistic and production team (E. Ursem, personal communication, July 10, 2023). The artistic team pays attention to the visual and sound quality of the sound installation and the complementarity with the Sound Forest. The production team takes the construction, safety and maintenance into consideration (E. Ursem, personal communication, July 10, 2023). After the concept has been approved by both teams, the realization of the sound installation can begin. Subsequently, professionals in the domain of art, science, engineering and construction work must be found to turn the concept into reality (Interview 1, 11/04/2023). An extensive range of knowledge is necessary since certain expectations in terms of safety inspections have to be met, because people will not always use the installation in the way it was intended to be with the risk of injury (Interview 1, 11/04/2023). In addition, it sometimes involves very large installations for which a thorough construction knowledge is required (Interview 1, 11/04/2023).

The artistic coordinator (Interview 1, 11/04/2023) furthermore explained that participation was also a determining factor in the development of their most recent sound installations (*Doors of Listening* and *Time Flies*). The concept of *Doors of Listening* originates from the idea of a diaspora to illustrate the stories of people on the run who were temporarily staying in a refugee center in Pelt. By working together with these people and by displaying their stories

in the form of a sound artwork, something permanent is left (Interview 1, 11/04/2023). *Time Flies* was developed in partnership with Akindo, an organization located in Lommel (Belgium) who organizes holiday camps for children living in socially vulnerable environments (Interview 1, 11/04/2023). Together, Musica and Akindo organized workshops where these children could play with sand to look at how they engage with it and what it means to listen to sand. The prototype of the sound installation was then developed based on the findings of the workshops (Interview 1, 11/04/2023). The design of *Time Flies* was furthermore stimulated by the Flemish-subsidy line 'Stimuleringsinstrument kunst in opdracht in de publieke ruimte' (Promoting instrument for commissioned art in the public space) as elaborated on earlier in the section on funding (Interview 1, 11/04/2023). The previous examples illustrate the role of community engagement in art making and how children's perspective can actively be taken into account in public place-making processes.

Besides this the coordinator of the production team (Interview 2, 21/04/2023) stressed that the sustainability and durability of the sound installations is also important to consider. The sound artworks are located outside in a forest, which means that different weather conditions must be taken into account, for example wind, drought and rainfall. All the aforementioned factors make it sometimes a challenge to realize the sound artwork while still meeting the artist's concept. Usually a prototype is used first before the work is exhibited on a larger scale in the public space (Interview 2, 21/04/2023).

In addition to the previous requirements, the relationship between the sound artworks and the place itself, or in other words, the site-specific characteristics of the installations, are also important to consider. Although some of the sound installations existed already before going to the Sound Forest and were adapted to the place afterwards, most of them were created specifically for this place (Interview 1, 11/04/2023). The integration of each artwork in the forest and the possible interactions with its surroundings is also specifically mentioned in Musica's objectives regarding the Sound Forest: *The development of a collection of outdoor sound installations, integrated in nature and in interaction with people and nature (Musica Impulscentrum voor Muziek, 2021)*. Therefore, most artists visit the Sound Forest for inspection during the creative design process to adapt the work to the location (Interview 1, 11/04/2023). The coordinator of the production team explains this relationship between the sound artworks and the place itself as follows:

*[Interview 2, 21/04/2023]*

*'Because it is located in a forest, it has to engage in a conversation with its environment. This can also be at odds with the natural aspect or the artwork can become part of the natural aspect. (...) Also regarding different aspects, that for example one installation blends very well with the environment over time (stresses the word time). That after a long time it also becomes a part of the environment, that it becomes a part of the forest actually. I find that very interesting. Then the magic remains in it, of how it ended up there and things like that.'*<sup>3</sup>

A combination of the information obtained from the semi-structured interviews with Musica's artistic coordinator (Interview 1, 11/04/2023) and the coordinator of the production team (Interview 2, 21/04/2023), together with own in-situ observations of the place and the different sound artworks furthermore allowed to formulate a new conceptual framework on the site-specific characteristics of the sound installations. The research was able to identify four components that determine the site-specific relationship between the sound artworks and the environment (Figure 4). In the next four paragraphs, the site-specific components will be elaborated on in more detail.

- 1) the materiality of the sound art and the power source
- 2) the sensory response of the sound art to environmental stimuli
- 3) the sounds intentionally produced by the sound art
- 4) the spatial positioning of the sound art in the environment

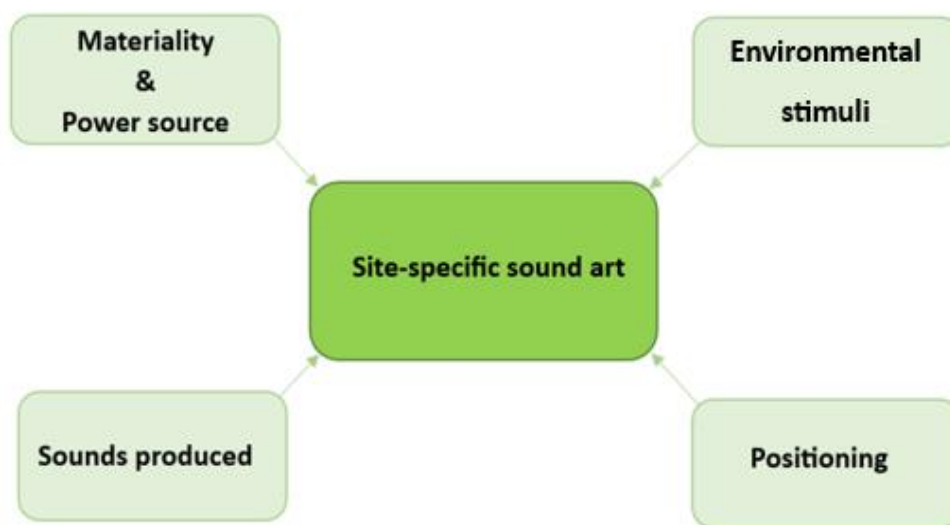


Figure 4: The four components that determine the site-specific character of a sound installation (own creation).

## The materiality & power source of the sound installations

A first component to consider in the creation of a site-specific sound installation is the materiality and the power source.

The materials used for the construction of the installation and the power source that makes it work are important to consider, as they influence how the artwork relates to its environment. According to the coordinator of the production team (Interview 2, 21/04/2023), the materiality determines how the artwork is situated within the environment, whether it is in equilibrium with it or whether it supersedes it. A thorough knowledge of the place itself is required for this. The following questions should be kept in mind: What kind of environment are we in, is it more natural or urban? Which materials are already available locally? What is the story I want to tell and how does it relate to the place? *The Xylibraphon*, a multiplayer mallet percussion instrument designed by Volker Staub (see Appendix 2), provides a good example of how the local characteristics have been taken into account in the choice of materials. The *Xylibraphon* incorporates elements of both a xylophone (wood), a lithophone (stone) and a vibraphone (metal) (Klankenbos [4], n.d.). All the bars of the instrument are made of 25 natural materials that each have their own timbre (Klankenbos [4], n.d.). The combination of the cherry wood and granite does not only produce a unique sound spectrum, but the materials used also tell a story of the local history of the place, as the artist collected old objects that he received from farmers in the region since the instrument is located at the Agricultural Cycle Route (Klankenbos [4], n.d.). However, as mentioned before by the coordinator of the production team (Interview 2, 21/04/2023), the durability of the installations is also an important factor which cannot be neglected and it has turned out that it is not always easy to create a robust installation with materials that fit within the concept. Therefore, a solution should be found that is good for the artwork and meets the expectations of the artist/creator, the production team and the visitors. The coordinator of the production team elaborates on the example of the *Xylibraphon* to illustrate the sometimes difficult dilemma between the concept and the sustainability of the artwork:

*[Interview 2, 21/04/2023]*

*Yes and we noticed that when playing the Xylibraphon that the stone underneath it breaks very quickly, also because of the fact that children are sometimes fierce and with the wood and the metal it's no problem, but with the stone they have to be a bit careful. (...) Then those things break, but then we had a conversation with the artist to choose whether, for example, we would make a very large piece in metal or whether we would go for a thicker stone. Then the conversation arose that it's a Xylibraphon, so to keep the concept of the installation of wood, stone and metal we still have to use stone and we can't replace it with metal, which would be a more durable and solid material. So then we went for a thicker stone.<sup>4</sup>*

Besides the materiality of the sound installations, the power sources that make it possible to produce sound should also be considered. In the framework of this research, the power source can be defined as the energy source that allows the sound installations to produce sound and/or move. It is important to note here that the energy source is not necessarily the stimulus that actually activates the sound installation. These environmental stimuli are addressed in the next paragraph.

The sustainable aspect of the installations is very important regarding the power source. The artistic coordinator mentions that the sound installations are situated in a primarily natural forest environment and therefore the sound installations should also focus on the natural characteristics of the place:

*[Interview 1, 11/04/2023]*

*Yes, something purely acoustic that doesn't need electricity, something that speaks much more on an equal scale, on an equal level with nature than something that's going to put itself above nature through a lot of human interventions. It's an artist's intervention anyway, so a human intervention, but there can be things that are close to nature I think.<sup>5</sup>*

This implicates that the power source of the installation should also meet these natural and eco-friendly requirements. The artistic coordinator (Interview 1, 11/04/2023) recognizes two categories of power sources: naturally (acoustic) and electrically driven. To create a symbiosis between the artwork and the environment, the former is preferred, meaning that it is mainly powered by natural energy sources such as wind, water or sun. The *Oor van Noach* for example, is an acoustic installation that uses a mechanism with a water wheel driven by the current of the river to produce sound (Interview 1, 11/04/2023). Another example is the *Scaffolded Sound Beehive* that works completely on sun energy because of the integration of solar panels in its design (Interview 1, 11/04/2023). However, although it slightly contrasts the vision of the artistic coordinator, this does not necessarily mean that installations that use electricity as energy source should be banned completely. Observations learn that it also depends on the story that the artist wants to tell. When reflecting on the natural aspect of the place, natural energy sources might be the right choice, but we also live in a world where human presence and disturbances are shaping our perception of place and this is also something that might be focused on in the artwork. *Doors of Listening* for example is electrically driven and is based on the idea of diaspora, about people without permanent residence that ended up at the refugee shelter of Pelt before they had to move to another place (Interview 1, 11/04/2023). By shaping their stories in different doors, something permanent of these people remains in this place. Just as electrical interventions make us aware of human presence, their presence has also become partially visible. A final remark here, however, is that the artwork should fit within the current spirit of time, and the assessment must be made whether the integration of electrical boxes and cables in the environment is still appropriate. As mentioned by the artistic coordinator of the Sound Forest (Interview 1, 11/04/2023), one of his future selection conditions for the sound installations will therefore be the environmental friendliness of the installations, with acoustic installations being preferred.

### The sensory response of the sound installations to environmental stimuli

To understand the relationship between the sound art and the place itself it is furthermore important to look at how the sound installations respond to environmental stimuli. In-situ observations of the working of the different sound installations have revealed that the environmental stimuli should be interpreted as the input signals that make the sound installations work and produce sounds. Although the reaction of the sound installations to these signals was purposely integrated in the design of the sound installation by the artist (hence the choice to call it stimuli), the input signals themselves can both intentionally (e.g. human behavior) and haphazardly (e.g. falling twigs) activate the sound installations. As such, the sound installations are able to stress how not only humans, but also more than-human actors are taking and making place. An understanding of these stimuli is crucial since it provides insights into how the sound installations interact with their environment and how they may respond to everyday practices of the visitors in this place. Places are not fixed entities, but are constantly changing, depending on various human and non-human factors and by reacting to these factors, it may make people become more conscious about the place and their own role in shaping it.

To provide an overview of the environmental stimuli, a categorization of the different sound installations will be made based on a taxonomy of the acoustic environment from Brown et al. (2011, p. 390), developed for soundscape studies (Figure 5).

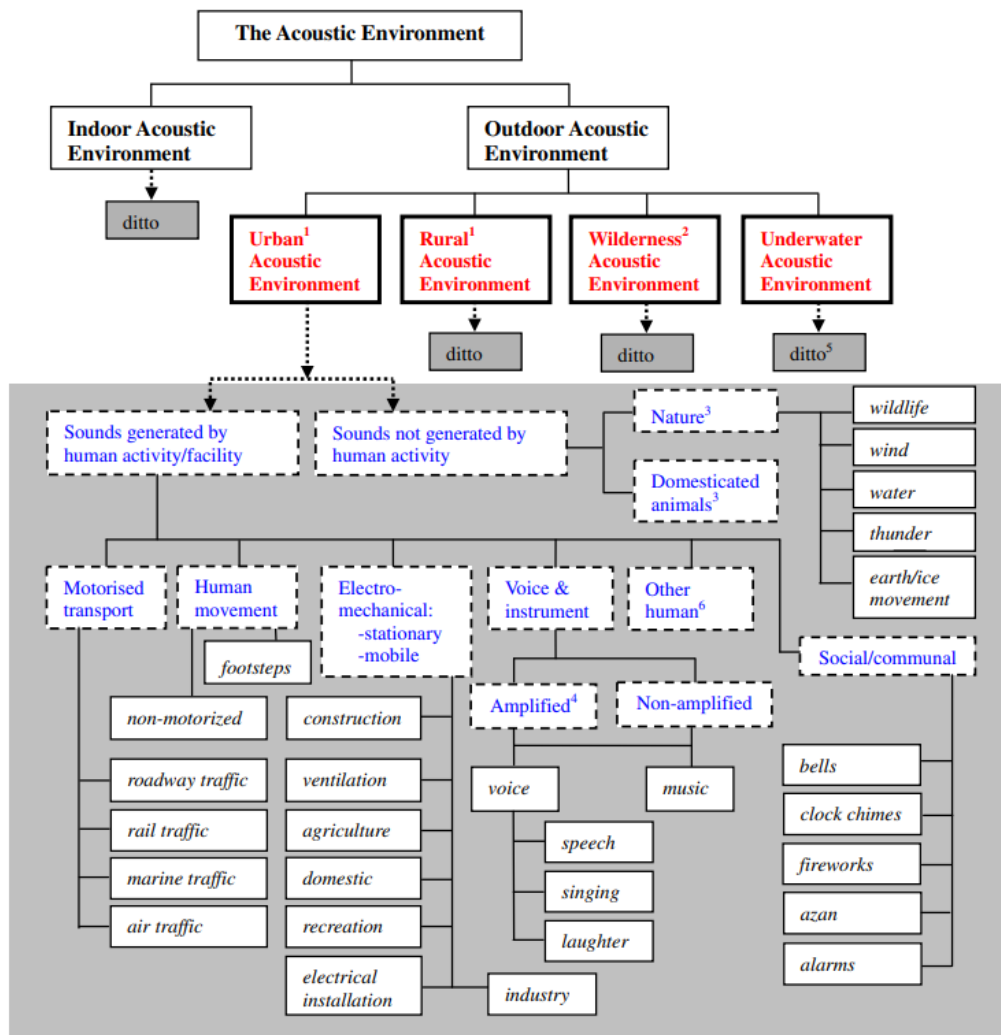


Figure 5: Classification scheme for soundscapes (Brown et al., 2011, p. 390).

A soundscape can be defined as ‘an environment of sound with emphasis on the way it is perceived and understood by the individual or by society’ (Truax, 1978). The Sound Forest can thus be considered as a soundscape created by different sound artworks and therefore the taxonomy of Brown et al. (2011) provided a suitable basis for the classification of the sound installations in terms of their response to environmental stimuli. The taxonomy (Figure 3) provides a systematical way to describe soundscapes and takes into account different aspects in terms of place (in red), categories of sound sources (in blue) and the sound sources itself (Brown et al., 2011). Especially the categories of place (red) and the categories of the sound sources (blue) are important for the classification of the sound installations. Although the taxonomy was created for a categorization of sound itself and not for the stimuli of sound, it still provides a useful scheme for the latter purpose. The taxonomy was however slightly adapted as it has not proved to be all-encompassing for all sound installations.

The Sound Forest in Pelt is situated in Provincial Domain Dommelhof and can be described as a forest in which sound artworks are integrated. The Sound Forest should therefore be classified as an **outdoor acoustic environment** and within this category the **rural acoustic environment fits best**. This categorization implies furthermore that the sound artworks should

respond to these rural outdoor stimuli that can be both natural and human. When designing the installation, it is therefore essential that the artist observes what all these stimuli are.

Based on the taxonomy, the sound installations of the Sound Forest are further divided into categories of sound sources (the ditto listed in the scheme clarifies that the categories of the urban acoustic environment can also be used for a rural acoustic environment). Since most sound installations are controlled by electro-mechanical mechanisms (with both natural and electrical driven sources, see previous section), they should in principle be classified within the category of sounds generated by human facility and more specifically electro-mechanical driven. However, the goal of this classification is not to look at the (technical) process of how sound is produced, but to look at the stimuli that activate the (electro-mechanical) mechanism of the sound installation or in other words to what category of environmental stimuli the installations respond.

Figure 6 shows a class diagram of the different sound installations. The suggested taxonomy of Brown et al. (2011) was slightly adapted since not all categories were applicable when classifying the sound installations and some new categories were furthermore added because the existing taxonomy was not all-encompassing in the context of the stimuli of sound installations. In concrete terms, in addition to human activity/facility and non-human activity/facility a third category was added to classify the 'other' sound stimuli including silence. One can argue whether silence belongs to (non)-human activity/facility or not and if it can be considered as a stimulus here, but the third category was therefore added to stress the unique and ambiguous character. Sand was furthermore added to the natural stimuli and digitality was added to the electro-mechanical stimuli (use of phone). The following remarks are important to keep in mind when interpreting the classification scheme. The scheme is intended to provide a general overview of the environmental factors that the sound artworks respond to. However, not all the sound installations could be classified within one category because they respond to multiple stimuli and are therefore divided into several categories (underlined in classification scheme), nor are all installations equally sensitive to and dependent on these stimuli. As mentioned earlier, the categorization is based on own experiences of how the sound installations work and the accompanying information panels as well as additional information from the semi-structured interviews. A last remark is that one sound installation, *Radio Forest*, was left out from the classification scheme, because it acts more like a social space and listening pavilion (Interview 1, 11/04/2023). Visitors can for example meet and eat their lunch inside, but also soundscapes created by sound artists are broadcasted here (Interview 1, 11/04/2023).

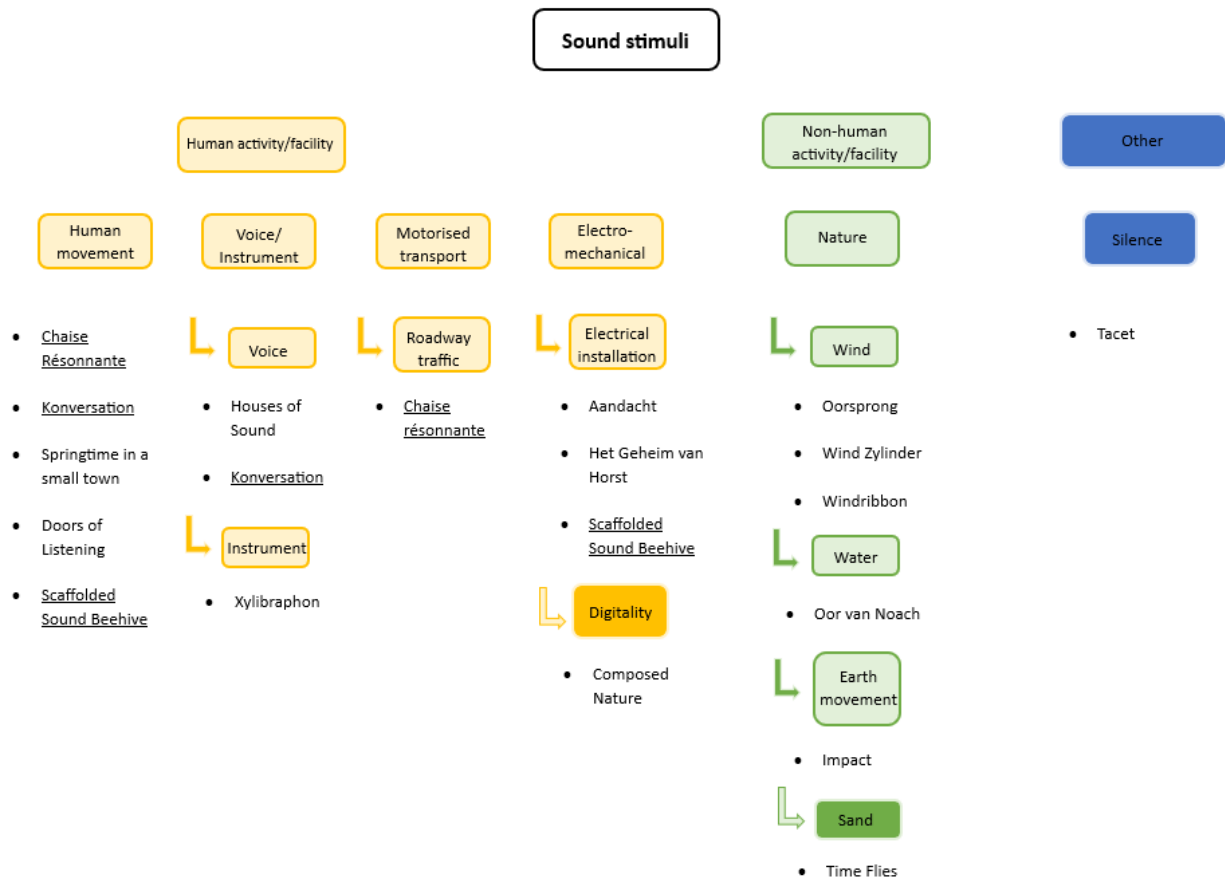


Figure 6: Classification of the sound installations based on the environmental stimuli (own creation).

The scheme illustrates that most of the sound installations could be classified under human activity and/or facilitation. This is remarkable since the place itself was categorized as a rural acoustic environment and one might expect that the natural stimuli (non-human activity/facility) would be dominant, especially since the name of the place is Sound Forest. However, still a significant part of the installations responds to the natural stimuli and also in rural environments human activities and facilities are of course present. The three electrical installations require special attention. They are not sensitive to environmental stimuli and interact less with the place itself. They are not site-specific in this regard. The last category 'other' contains silence. In a sense, the accompanying sound installation is also not sensitive to environmental stimuli. However, this is arguable since the effect of silence can only be experienced when the visitor enters the glass box of the artwork and whether he himself is silent inside.

### Sounds intentionally produced by the sound installations

In-situ observations in the sound forest furthermore learn that it is not only important to know to what environmental stimuli the sound installations respond, but also what kind of sounds they produce and how they situate themselves in the environment. The sounds can be listened to via the sound map and will therefore not be described separately, but a categorization will be made based on Schafer's (1994) categorization of soundscapes which consists of three different types of sounds: keynote sounds, signals and soundmarks. Keynote sounds form fundamental tones (Schafer, 1994). The keynote sounds of a landscape are those created by its geography and climate (Schafer, 1994). Signals are foreground sounds that are listened to consciously (Schafer, 1994). Soundmarks refer to a community sound which is unique or possesses qualities which make it specially regarded or noticed by the people in that community (Schafer, 1994). Schafer's categorization of soundscapes has been chosen because the recognition of these types of sounds is important, because they form significant features of the soundscapes and are important either because of their individuality, their numerousness or their domination (Schafer, 1994). The sounds of the sound installations will then be classified depending on whether they reproduce or amplify the keynote sounds or soundmarks of the environment in which the sound art is situated or whether they create signal sounds. A description of the Sound Forest based on this classification scheme may provide a better understanding of the different sounds of which the place is composed and thus also a better understanding of the place itself. Figure 7 shows the classification scheme. Again a new category was added to classify the no audible sound installations that cannot be assigned to the keynote sounds, signals or soundmarks. The reason for this fourth category is that the sounds produced by the installations are not perceptible to the human ear or the vibrations that are produced could not be felt. Again, *Radio Forest* was left out from the classification because of the earlier described reasons.

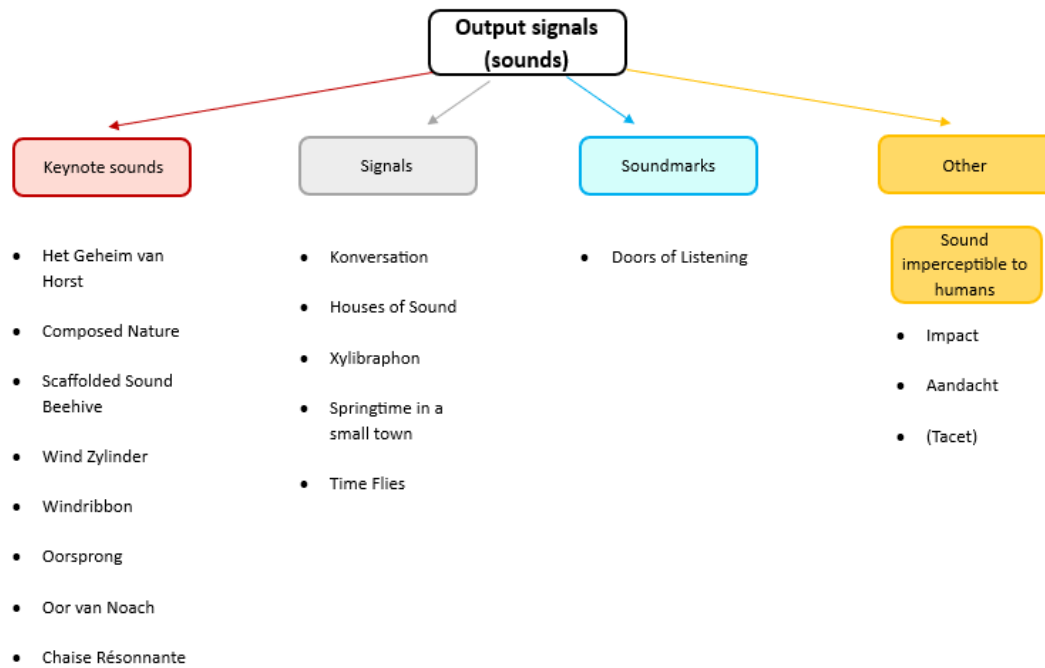


Figure 7: Classification of the sounds produced based on Schafer's (1994) categorization (own creation).

The scheme shows that most of the sound installations reproduce or amplify the keynote sounds of the environment. Some examples of these sounds retrieved from the in-situ observations of interactions with the sound installations are the rustling of leaves (*Composed nature*), the raging of wind (*Oorsprong*) and the sound of a Woodpecker (*Het geheim van Horst*). A significant proportion of the installations also create signal sounds that are based on the interaction with the environment such as the unexpected sounds of *Konversation* or the mechanical sounds of *Springtime in a small town* reminiscent of a factory. Only one installation can be linked to soundmarks. As described earlier, soundmarks refer to community sounds which are specially regarded or noticed by the people in that community. The doors from *Doors of Listening* express the songs, memories, stories, voices and dreams of people on the run (Klankenbos [5], n.d.). At the time of the recording, the people were staying at the Red Cross Refugee Center Overpelt and in different languages they try to take the listener into a new world. Together they form a polyphony which, depending on who is listening, always sings a different tune (Musica Impulscentrum, 2021). The polyphony resembles not only personal stories, but it resembles also the sounds of life in the Red Cross Refugee Center. The example of *Doors of Listening* furthermore illustrates how site-specificity can be used to stress multiple identities and meanings of places as a balancing act 'between mobilization and specificity' as recognized by Kwon (2002, p. 166). The last category of sounds are the sounds imperceptible to humans. The sounds produced by these installations are expressed as inaudible vibrations through the earth (*Impact*) or air (*Aandacht*) due to the movement of the installations. Again the question arises where Tacet (the silent box) belongs. Depending on the perspective, on the one hand, one can judge that absolute silence is imperceptible, because you can still hear your own breathing or heartbeat. On the other hand, one may also wonder whether an installation that uses silence belongs to this categorization of sound, since silence is, in a sense, the absence of sound. For these reasons, *Tacet* was placed in parentheses.

Finally, it is important to mention that, although we are talking about sound here, most sound installations are multi-sensory and therefore also stimulate other senses. Almost all the sound installations are designed in an aesthetical way to please the eye and some installations convert the sounds into perceptible vibrations. An example is *Chaise Résonnante*, a chair where you can also feel the vibrations when you sit on it.

### Spatial positioning of the sound installations in the environment

The spatial positioning of the sound installations is the last, but also very important, component that determines the relationship between the sound artworks and the environment as recognized in the interview with coordinator of Musica's production team (Interview 2, 21/04/2023). By positioning the artwork in a suitable location it should be able to start a conversation with its surroundings. Sometimes this can be a conversation with the natural elements such as trees where both are in harmony with each other, but this may also be with other elements where the sound installations may draw the attention away from or bring attention to. To give an illustration of what is meant with the conversation between the artwork and its environment, two examples of sound installations in the Sound Forest will be briefly discussed: *Doors of listening* and *Chaise Résonnante*. *Doors of listening* is a sound installation that consists of twelve separate doors created by Félix Blume (see Attachment 1). The sound installation does not belong to the natural aspect of the forest and is actually at odds with the vision of natural elements, but however, it still belongs to this place because of its position in the landscape and the interaction with its surroundings. The coordinator of the production team elaborates on this interaction as follows:

*[Interview 2, 21/04/2023]*

*There are twelve doors. It's not like any other installation where it's just a block. There you really have twelve different pieces, so it is also about how they look from different angles because you can go around them on different paths. And then how they (the doors) talk to each other. Even with those trees in between them. So, for example, we consulted the artist and a landscape architect back then when building this artwork. The doors sometimes follow the twisting of a tree in their positioning, so that they are not actually straight, but that they are a bit out of balance because they are actually harmonious with nature. (...) And it was also in the concept phase of the Doors of Listening installation that those doors actually started to float. Then, also for maintenance and accessibility reasons, we kind of made the decision that they would be positioned on the ground. As a result, they actually got legs or roots. So basically it's like they have their own roots and they then communicate with sort of Mycelia with those trees here in the forest.<sup>6</sup>*

The second example given by the coordinator of the production team is *Chaise Résonnante*, a vibrating chair developed by Toni Di Napoli. The chair is located near the main road and starts vibrating when you sit on it because of an underground system with stones that works based on the Doppler Effect (see Appendix 2). We live in a society where everything must keep on running continuously as for instance roads with cars show. Therefore, instead of hiding the artwork from the roadway, the sound artist wanted to put it as close as possible to it as explained in the interview:

[Interview 2, 21/04/2023]

*Now it (the chair) really vibrates when you sit on it, then you feel the sound produced which goes in consultation with the road. Because it's louder now, you can hear the Doppler effect as a result of the cars passing by. The tone also changes. (...) Yes, that's what I mean by putting a sound artwork in the right environment where it can start a conversation. Sometimes this is with natural elements such as a tree where it may be in harmony or at odds with and sometimes it is the road where it draws attention away from or bring attention to. So that's really cool, sometimes that's really cool.<sup>7</sup>*

However, practical requirements also have to be taken into account again when positioning the sound installations. The artworks should be accessible for maintenance and should therefore not be placed too high, for example. According to the coordinator of the production team, the interaction with the installations should furthermore also be easily possible (Interview 2, 21/04/2023). The installations of the Sound Forest have been placed in such a way that they try to reach both targeted visitors as well as casual passers-by such as joggers (Musica Impulscentrum voor Muziek, 2021). In addition, the power source and environmental stimuli are also important to consider as the sound artwork should be able to have access to the power source or environmental stimuli as explained by the coordinator of the production team. Windribbon, for example, works like a string and amplifies the sounds of precipitation, wind and mainly falling objects such as branches. Nowadays, Windribbon is hidden in the forest between the trees, but it is a difficult balancing act to find the right spot where it has access to enough wind to function, but at the same time might not suffer damage from stormy weather which might be the case when it is placed in open space (Interview 2, 21/04/2023). A possible solution could then be to conduct wind measurements in certain places during certain periods of the year to move the installation to the location where it fits best (Interview 2, 21/04/2023).

### Summary and reflection on the site-specific characteristics of sound installations

By conclusion, the research recognized four components that may determine the site-specific character of a sound installation: 1) the materiality of the sound artwork and the power source, 2) the sensory response of the sound artwork to environmental stimuli, 3) the sounds intentionally produced by the sound artwork and 4) the spatial positioning of the sound artwork in the environment.

The site-specific components as identified in this research respond to theories on site-specific art as elaborated on in the literature review. The sound installations are not imposed in the environment as external entities, but were created in collaboration with the site (see Hunter, 2005; Ashley & Weedon, 2020). Especially the spatial positioning of the sound artworks is important here, because the positioning determines whether the artwork is able to start a conversation with its surroundings. This shouldn't necessarily be in harmony, as the sound installation can also be at odds with its environment to bring attention to certain elements or draw the attention away from it. The acoustic, visual and/or architectonic characteristics of the place are furthermore important to emphasize the specificity of the place (Klein, 2009).

The materiality and sounds produced by the sound installation are the most significant components that relate to this aspect. Lastly, it is believed that site-specific (sound) art has the greatest influence or potential in public and semi-public places that are influenced by everyday practices that are far removed from art (Klein, 2009). Although this refers mainly to the localization of the sound installations, the response of the artworks to environmental stimuli of which the visitors are also part emphasizes these everyday practices by providing different experiences to the visitors based on their personal actions in the place.

The four site-specific components are related to a multidimensional sense of place since they establish the unique character of the place. The components are furthermore connected to the four dimensions of sense of place as proposed by Ardoin (2006). All four components relate to some degree to the biophysical dimension by stressing for example the natural elements by using them as power source or material for the sound installation, by considering the (biophysical) elements as triggers for the installation, by amplifying the (biophysical) sounds of the environment or because of the spatial relationship of the artwork with its surroundings. In addition, the site-specific components are also associated with the socio-cultural and political economic dimensions of sense of place. Especially the sounds intentionally produced by the sound artworks and more specifically the soundmarks are of importance here since they stress the presence (or absence) of communities. The psychological (individual) dimension is more difficult to take into account in the site-specific character, because this dimension refers mainly to personal characteristics and earlier experiences of the visitor. However, because of the response of some of the sound installations to visitor actions in the place, the artworks provide different individual experiences. The role of everyday practices in relation to a (multidimensional) sense of place was not explicitly included in Ardoin's (2006) description of the four dimensions of a multidimensional sense of place, but might also play a role.

The identification of the four site-specific components nevertheless do not mean that all of the four components are equally important. It is the task of the artist to decide which of the components are most important or fit best within the concept of the artwork. However, it might be argued that the spatial positioning should always be carefully considered, since it not only determines the relationship with the environment, but it also influences the degree of interaction with the sound installation as will be demonstrated in the chapter on the audience of the Sound Forest. In addition, the sounds intentionally produced by the sound artwork should also receive special attention, since it is the integration of sound that differentiates sound art from other art forms.

## Practical implications of public sound art

The integration of sound art in an outdoor public environment is not always an easy task and several practical aspects have to be taken into account. The semi-structured interview with Musica's artistic coordinator (Interview 1, 11/04/2023) and the production team coordinator (Interview 2, 21/04/2023) provided useful information on the practical implications. Some of the difficulties that the team encounters in maintaining the sound artworks, explained by the coordinator of the production team, is the resistance of the sound installations to different weather conditions such as wind, drought and heavy rainfall. Not all the installations are equally resistant. If there is, for example, a storm in the forest, the maintenance team has to carry out a check of all installations the next day to ensure that nothing has been damaged and verify if everything still works. It occurs regularly that for example the wires of *Houses of Sound*, which are stretched over the river, are damaged or even collapse when a branch falls. For installations powered by natural energy sources, the weather elements may be even more important regarding their optimal functioning. The *Oor van Noach* is dependent on the water level of the river the Dommel to produce sound, but during periods of drought, especially during the summer months, the water level might be too low and prevents the waterwheel from turning, resulting in the installation being out of action. Some other sound installations are sensitive to cold and freezing weather conditions and are therefore kept indoors during the winter months, such as the Sound beehive (Interview 2, 21/04/2023).

The production team coordinator furthermore added that in general, every week, two inspection rounds of the sound artworks are carried out in the Sound Forest, at the beginning and end of the week (Interview 2, 21/04/2023). As mentioned earlier, during extreme weather conditions additional inspection rounds are required. On average, one or two days a month are devoted to the effective maintenance or repairs of the sound installations. During the winter months, the Sound Forest is in winter mode and some of the installations are brought in or shut down, although most of them keep working. Consequently, the maintenance is related to change of seasons: the maintenance team is mostly involved with Sound Forest related maintenance tasks before the spring opening and during the spring period (Interview 2, 21/04/2023). Another factor to take into account is that some of the artworks are almost twenty years old and have reached a stage where they are beginning to show defects and require more thorough maintenance. *Springtime in a small town* for example has been standing in the Sound Forest for almost seven years without any problems, but now the wood is rotting and it is time to replace the wooden boxes. The aim is to carry out one major investment or renovation per year, but throughout the year, also smaller maintenance works need to be carried out. As mentioned earlier when describing the funding of the Sound Forest, Musica has a certain budget that they have to stick to, so it is sometimes a difficult task to distribute the budget as well as possible, since it is not always possible to estimate in advance which installations will require maintenance during the year (Interview 2, 21/04/2023).

An additional reason for this is that the Sound Forest is located in public space. Since everyone has free access to the forest, vandalism is an additional problem mentioned by the production team coordinator that should be dealt with when integrating artworks in public spaces (Interview 2, 21/04/2023). The sound installations are sometimes handled in unintended and unwanted ways. This is acceptable to a certain point, but a lot of damage may be caused. To give an example, the glass walls of the sound installation *Tacet* have been cracked twice in recent years and it is a very large cost to replace them. It was quite sure a case of vandalism, since pieces of a bottle were found next to the artwork that matched exactly with the cracks in the wall (Interview 2, 21/04/2023). In such an incident, there might not always be enough budget left for repairs and it is a balancing act to find the best solution. Musica tries to make a repair as quickly and best as possible, but sometimes an interim solution is required before they can make long-term adaptations (Interview 2, 21/04/2023). An additional disadvantage of art in public space, as mentioned by the artistic coordinator of Musica, is that it cannot be privatized and turned into a museum (Interview 1, 11/04/2023). This implies that the organization is not able to appeal for certain funds or operational resources reserved for museums to keep the Sound Forest running (Interview 1, 11/04/2023).

Nevertheless, they consider it as an advantage that the Sound Forest is located in public space as the production team coordinator describes it as follows:

*[Interview 2, 21/04/2021]*

*I think that we consider it as an advantage. Yes, yes, yes. That really everyone can experience it. That's cool. And that it is freely accessible. Of course we have opening hours of our information point, so you only have access at certain times, but other installations such as the doors (*Doors of Listening*) and such as *Houses of Sound* actually run very late in the evening. This is especially interesting in the summer, then you can really have a different experience on a beautiful summer evening than you would have during the day. And then sometimes I understand that those loiterers come here at certain times, because that is a completely different experience. I say loiterers, but I don't know who it is, but they come at a different time, they have a different experience and that has a different magic. In the dark, for example, *Houses of Sound* is a completely different installation than during the day. So I can understand that in a certain way you would love that. (...) And when it snows here it's magical too. (...) *Composed Nature* for example was full of snow and if you call for the first time that day then all the snow falls of those leaves and that is really fantastic to see.<sup>8</sup>*

## **Experiencing sound art, experiencing place? Visitors' perspectives**

To answer the question whether site-specific sound art can be used as a tool to create a multidimensional sense of place, one should not only take into consideration how the sound art strengthens the unique character of the place, but it is essential to also hear the voice of the visitors. The visitor perspective is important because the ways in which people experience, use and understand place are believed to determine whether the sound art contributes to a multidimensional sense of place. First, this research aims to provide a description of who the audience of the Sound Forest is. Afterwards, the experiences and opinions of the visitors regarding the Sound Forest will be considered. To collect the necessary data, a total of 30 visitors in different compositions (e.g. individuals, couple, family, friends, colleagues,...) have been interviewed. In addition, 9 observations of half an hour in the vicinity of various sound installations have been made as well as observations during a guided tour of 1,5 hour in the Sound Forest. The observations will be used in addition to the visitor interviews, because they are able to show the ways in which people interact with the sound installations (visitor behavior) and to give some of the visitors first impressions. However, the observations and how they relate to the results of the visitor interviews will also be discussed separately in more detail in the chapter on the behavioral and emotional characteristics of the place.

### Audience of the Sound Forest

As mentioned earlier, the Sound Forest is situated in a public place and is freely accessible to everyone. The forest has furthermore several access roads that make it difficult to get a clear overview of the audience of the Sound Forest. Consequently, the organization itself does not have access to this information. However, in order to obtain an overview of the demographic visitor data, interviews and observations have been useful to collect information about the age categories of the visitors and where they come from. Understanding this data can help to develop sound installations and activities that are better suited to the public and to provide an overview of the scope of interest for the project.

During the structured interviews, the participants were asked about their age, which resulted in exact data, while during the observations estimates of the ages were made, since it was impossible to conduct interviews with all the visitors. In this way, a larger and more representative dataset for the total audience could be collected. During the interviews additional information about the origin (place of residence) of the visitors was also collected. This was not possible during the observations. The participant compositions, age, place of residence and native language are listed in Table 1 in the methodology chapter.

While making observations, three categories of people have been recognized:

- 1) People interacting with the artworks
- 2) People visiting the forest, but not actively engaging with it
- 3) People crossing the forest to go somewhere else

It might however be possible that people assigned to the second or third category do interact with the sound installations, but not at the moment that the observations were made and therefore actually belong to the first category. Although the dataset is not very large, the results still allow to provide a cursory overview of the audience of the Sound Forest. The sound installations integrated in the forest seem to attract mainly children, sometimes accompanied by adults, but also other age groups engage with the sound artworks. The fact that children are attracted to the sound installations might not be surprising since Musica specifically responds to this target group by providing additional activities such as a treasure hunt as already clarified in the chapter that introduced Musica's project of the Sound Forest. The interview data (Table 1) has furthermore shown that the place appeals to people coming from different locations in Flanders and even abroad. One of the four objectives of the Sound Forest, as listed by Musica (see Introduction to the project), was to make sound art known to a larger audience and to give sound art a place within the cultural sector and it seems that they have succeeded in their aim.

The reasons why people visit the Sound Forest will be discussed in more detail in the next section on experiences and opinions. However, the observations have also shown that a remarkable number of people belong to the other two categories (not interacting with the sound installations). People cycling through the forest, people jogging on one of the trails or a group of teenagers who are chatting and having a drink at a pond are some of the examples. Although some of the people are just passing through the forest, the sound artworks do however sometimes catch their attention, as they are actively observing the sound installation while crossing them (Observation 7, 30/04/2023). The positioning of the sound installations is also important here as described earlier regarding the site-specific characteristics. Although observations were made near different sound installations in the forest, the artworks located near hiking trails seem to get the most interaction. It is however difficult to compare sound installations by popularity based on visitor observations, since this should have required observations in similar circumstances and preferably at the same time which was impossible given the large number of sound installations.

Also the audience that interacts with the sound installations depend on the localization of the sound installation in its environment. *Time Flies* for example is situated in an outdoor playground near the Sound Forest and only children were interacting with the artwork. *Time Flies* is a good example of an artwork that was not only created for a specific audience, but also in co-operation with the audience, since workshops with children were organized to develop the sound installation (Interview 1, 11/04/2023).

## Experiences and opinions

The previous section gave insight into the audience of the Sound Forest, but in-depth information on the experiences of the visitors of the Sound Forest is furthermore required. Based on structured questions and visitor observations, the following three topics were surveyed and will be described in this paragraph: Intentions for visiting the Sound Forest, experiences (expectations and validation of the place) and awareness of sensory stimuli of the environment.

To discover the intentions for visiting the Sound Forest the following three questions were asked to the visitors: *'What is the reason for visiting the Sound Forest?', 'Is it the first time that you visit the Sound Forest and if not, how long ago was your last visit?'* and *'How did you hear about the Sound Forest?'*. Various answers have been collected.

Of the 30 participants divided into 10 interviews based on their group composition, there were:

- 24 1<sup>st</sup> time visitors
- 2 2<sup>nd</sup> time visitors
- 3 3<sup>rd</sup> time visitors
- 1 regular visitor

From this group of returning visitors, the people who are returning more regularly (almost daily or once in a few months) also live in the closest vicinity of the Sound Forest (same village or neighbouring village). The other visitors come from further situated cities or villages (Antwerp and Mol).

When looking at the reasons for visiting the Sound Forest, the answers of the 30 participants also differ. All the respondents with (little) children (Interview v1, 14/04/2023; Interview v3, 15/04/2023; Interview v6, 15/04/2023) mention the presence of activities for the children as one of the main reasons for visiting the Sound Forest. 6 interviews furthermore mention that the visitors were looking for an additional activity that could be combined with other diverse activities in the area or that the visitors were just passing by. Other diverse reasons were a school excursion (Interview v8, 21/04/2023), revalidation (Interview v4, 15/04/2023) and the European Music Festival for Young People (Interview v9, 30/04/2023).

The interviews furthermore provided information about how the visitors discovered the Sound Forest. The main reasons are that the respondents live in the close vicinity of the place and therefore evidently knew of its existence (Interview v4, 15/04/2023; Interview v8, 21/04/2023) or it was suggested to them by someone else who lives in the vicinity (Interview v1, 14/04/2023). Digital platforms such as *Google Maps*, *TripAdvisor* and/or *Uit in Vlaanderen* also seemed to be successful in attracting visitors (Interview v2, 14/04/2023; Interview v3, 15/04/2023; Interview v10, 7/05/2023). A couple mentioned that they had read about the Sound Forest, but they could not remember where exactly (Interview v7, 21/04/2023). Coincidence sometimes plays a role (Interview v5, 15/04/2023; Interview v6, 15/04/2023).

Organized activities in the Sound Forest (European Music Festival for Young People) was the last reason mentioned (Interview v9, 30/04/2023).

Maybe even more important than the intentions for visiting the place are the experiences of the visitors. The following questions tried to achieve information on the validation and expectations of the Sound Forest. *'How did you experience your visit in the Sound Forest?'*, *'Did the visit meet your expectations?'* and *'Did the integration of sound art make you appreciate the place more?'*. A common answer when asking the visitors about their experiences in the Sound Forest is that they stress the unique character of the place by emphasizing its original, distinct, surprising, interesting and/or beautiful characteristics as shown in the following extracts:

*[Interview v1, 14/04/2023]*

*'I like it because it's something completely different. With those sounds.'*

*'It's something very original'.<sup>9</sup>*

*[Interview v2, 14/04/2023]*

*'I'm glad I found it because there are beautiful things'.<sup>10</sup>*

*[Interview v5, 15/04/2023]*

*'It's peaceful.'*

*'... It contains a lot of beautiful concepts and it's nice to be here.'*

*'Surprising sounds'.<sup>11</sup>*

*[Interview v9, 30/04/2023]*

*'Good. Wonderful. It was interesting.'*

*[Interview v10, 7/05/2023]*

*'I found it interesting, I liked it actually'.<sup>12</sup>*

In addition, the integration of the sound artworks made some of the visitors eager to examine and discover the place:

*[Interview v3, 15/04/2023]*

*'The weather is perfect for being outside and there is something to discover everywhere.'*

*[Interview v6, 15/04/2023]*

*'The children like to touch and to discover everything'.<sup>13</sup>*

Although most of the people had a great experience, it was however mentioned in two interviews (Interview v2, 14/04/2023, Interview v7, 21/04/2023), that it was not very easy to follow a certain trajectory in the place to view all the 18 sound artworks and to find all the information regarding these installations. However not everyone experienced it as a disadvantage that you have to find your way in the forest. As illustrated earlier in the excerpts of the transcripts, some of the visitors liked the fact that they had to discover all the artworks and one of the interviews added the following:

*[Interview v5, 15/04/2023]*

*'I think it's a very beautiful location. I like how it integrates into nature'.*

*'It is not prominent present. You always have to look a bit for the artworks, that actually has it charms'.<sup>14</sup>*

Finally, two visitors mentioned that the artworks themselves weren't of great value to them, but that the presence of other people, in this case the presence of friends or playing children, was an important factor that influenced their experience of the place in a positive or negative way (Interview v4, 15/04/2023; Interview v8, 21/04/2023).

Subsequently, when asking the visitors if their experience in the Sound Forest met their expectations, all the visitors responded in an affirmative way; they liked it or responded that it even exceeded their expectations although not everyone had clear expectations beforehand.

Related to the previous two questions, the interviews have furthermore proven that most of the visitors, related to eight out of the ten interviews, appreciate the place more because of the integration of sound art. The people in the other two interviews were neutral about it or mentioned only one specific sound artwork that they appreciate (Interview v4, 15/04/2023; Interview v8, 21/04/2023). A common argument why people appreciate the place more is that it distinguishes itself from an ordinary forest through the sound art and therefore it also attracts people that would otherwise never have come here:

*[Interview v7, 21/04/2023]*

*'I think so, because otherwise it is just a normal forest'.*

*'Then I wouldn't have been here I think'.<sup>15</sup>*

The visitors sometimes refer to their experience of the place, because there is something to see and hear everywhere which provides an additional source of entertainment besides the basic characteristics of a forest and the sound art also makes people remember the place better:

*[Interview v1, 14/04/2023]*

*'Yes, there is a lot to see and experience which is nice. Yes, like in the beginning when they (the children) all started listening and shouting'.<sup>16</sup>*

*[Interview v5, 15/04/2023]*

*'Yes, I'll remember it better, I think, than an ordinary forest'.<sup>17</sup>*

*[Interview v9, 30/04/2023]*

*'Yes, definitely. It's a yes because if not, you would just think it's a normal forest and now there are other things you can see here'.*

Lastly, the integration of sound art may even stimulate reflection (thinking) on the experiences:

*[Interview v10, 7/05/2023]*

*'It provides added value'.*

*'Yes, because otherwise it's just a forest with some paths and stuff'.*

*'Otherwise it's a forest like many and now it stands out from a normal forest. You have much more... stimuli may not be the word? More animation, I don't know if I can call it like that?'*

*'Yes or things to think about'.<sup>18</sup>*

The last aspect of the visitor experiences focusses on the awareness of sensory stimuli of the environment. As stated in Musica's objectives of the Sound Forest, the organization wants to make the public aware of the multitude of sounds in daily life and make them reflect on the beauty of sound and even silence (Musica Impulscentrum voor Muziek, 2021). In addition, as described earlier in the theoretical framework, sense and reality are connected to each other and the everyday experience of place is multisensory (Tuan, 1975; Rodaway, 1994). Therefore, the sensory awareness of visitors in the Sound Forest may in turn contribute to a multidimensional sense of place, which will be further elaborated in the next section.

The question *'Has the sound art made you more aware of the sensory stimuli in the environment?'* was asked to all the participants of the interviews and the answers vary. In two interviews (Interview v1, 14/04/2023; Interview v6, 15/04/2023), it was stated that the sound art did not make the visitors more aware of the sensory stimuli of the place, although this was nuanced by one person who explained that they had too many children with them to be able to consciously listen to their surroundings (Interview v1, 14/04/2023). In three out of the ten interviews (Interview v2, 14/04/2023; Interview v4, 15/04/2023; Interview v5, 15/04/2023), the respondents answered that they already consciously listen to their environment most of the time without the need for the spatial integration of sound art. Lastly, the persons related to four other interviews seemed to use their senses, mainly listening and seeing a little more conscious than normally (Interview v3, 15/04/2023; Interview v7, 21/04/2023; Interview v9, 30/04/2023; Interview v10, 7/05/2023) and in one other interview (Interview v8, 21/04/2023) with a group of three people the opinions varied. One person became more aware of the sensory stimuli of the environment while the other two persons did not notice a difference in sensory reception.

Of this last group of people who became more aware of the sensory stimuli of the place, the following conversation between two respondents during an interview aims to provide an example and clarification of the sensory experience in the Sound Forest and how the sound artworks have succeeded in amplifying this, although the visitors often already listen with attention to their environment.

*[Interview v10, 7/05/2023]*

*'But I think that we automatically listen to the sounds around us anyway'.*

*'Yes, absolutely and it really left an impression. And yes, we always listen to wind in the trees and those birches (Composed Nature) reminds us even more of it'.*

*'Yes'.*

*'And then the special effects, I notice that very often. For example, that tube (Oorsprong)... Because of the wind that can interact with things. I found the tube very special. And also, I am very often annoyed by the sound of traffic and so on and the glass house (Tacet), glass house may be a wrong expression, but the silent house was really very special'.*

*'Yes, that's actually something we often notice because we walk a lot, that so much noise can be heard from the road. And you actually have that here too, don't you?'*

*'Yes'.*

*'If you walk around in the forest you can hear the cars, but in that glass house it is really blissful silence'.*

*...*

*(Later in the interview the following was added)*

*'I mean, because of that glass building you realize that you are actually constantly surrounded by sound. And that's kind of a self-reflection that I can't close my ears because I'm always surrounded by sound. That is something that hits you very strongly at that moment'.<sup>19</sup>*

Because of their experience with the sound installations, these visitors realize how important sound (natural or induced by machinery such as traffic) is in sensing places.

## **A multidimensional sense of place**

### The potential of sound art to respond to a multidimensional sense of place

The previously described visitor experiences in the Sound Forest focused mainly on the intentions for visiting the place, the expectations and validation of the place and the awareness of sensory stimuli. It has shown that most of the visitors appreciate the place more because of the integration of sound art which gives the place its unique character and contributes to the spatial experience since it provides an additional source of entertainment that makes people remember the place better. Part of the visitors has furthermore become more conscious of the sensory stimuli of the environment. The question then rises whether sound art may also be able to respond to a multidimensional sense of place. As explained in the theoretical framework, sense of place and more specifically, a multidimensional sense of place, contributes to the recognition of the uniqueness of each place and the individual's connections with it (Ardoin, 2006). Sense of place has the capacity to transform a place into a place with significant behavioral and emotional characteristics for the visitors (Hashemnezhad et al., 2013). The results of the visitor interviews suggest that this might be the case since most of the visitors recognized indeed the uniqueness of the place because of the sound art. For some, the increased perception of the environment through the senses might also be beneficial for a better understanding or awareness of the place which in turn may contribute to a multidimensional sense of place. However, it is important to realize that this does not necessarily imply that the sound art actually provides a better understanding or multidimensional sense of the place. The sound art may indeed contribute to the recognition of the uniqueness of the place, the individual's connections with it and provide it with significant behavioral and emotional characteristics for the people there, but this does not implicate that it responds to the unique characteristics of the place itself. The purpose here is to strengthen the local identity of the place and not to bring a completely new image into existence by integrating sound art in public place. The term 'site-specific' was therefore crucial to consider and define in the framework of this research to investigate how sound art may possible be able to act as a tool to create a multidimensional sense of place. Four components have been recognized that determine the site-specific character of a sound installation based on in-situ observations of the place and the eighteen sound installations and based on interviews with employees of the organization regarding the design process of the sound installations. These four components are the materiality & power source of the sound installations, the sensory response of the sound installations to environmental stimuli, the sounds intentionally produced by the sound installations and the spatial position of the sound installations in the landscape. As such, the artworks aim to gather the elements and sense of the place and consequently, the site-specific character of the sound artworks is important to create a bridge to a multidimensional sense of place. The four dimensions related to a multidimensional sense of place as collaborated on in the theoretical framework are the biophysical setting, the psychological (individual) elements, the sociocultural elements and the political economic elements. Considering the description of the site-specific characteristics of the sound installations given in the chapter on the creation of site-specific sound art, the sound

installations indeed pose the potential to make people aware of the multidimensional nature of the place, for example, by responding to physical elements such as the movement of wind or by (re)producing soundmarks related to sociocultural and political economic elements of the place. But site-specificity and sense of place are not the same concept since (a multidimensional) sense of place both explores a range of factors which together define the character, or local distinctiveness of a specific place and furthermore emphasizes the ways in which people experience, use and understand place (Convery et al., 2012, p. 2, see chapter on 'a (multidimensional) sense of place' in the literature review). It is clear that the site-specific components could take into account the local distinctiveness of the place, but the way in which people will experience a sound installation and consequently understand the place is difficult to gather in the design of a sound artwork. Therefore the question *'Did the sound art make you more aware of the physical, sociocultural or political economic elements of the place?'* was proposed to the visitors during the interviews to discover if the sound art was able to create a multidimensional sense of place. The question *'Did the integration of sound art change your view of the place?'* was additionally asked to the visitors to find out whether the sound art has actually indeed contributed to their understanding of the place and/or if it was able to transform the place with significant behavioral and emotional characteristics. The question *'Did the integration of sound art change your view of the place?'* focused however only on three out of the four dimensions: the biophysical setting, the sociocultural elements and the political economic elements. The psychological dimension was considered separately in the interviews since it relates to the individual aspect that influences the perception of the space. To discover how the visitors actually view and experience the place, the visitors were asked to make a drawing of their impression or perception of the place. Participatory drawing was chosen here as a research method since it is able to provide a more sensory overview of people's perception of the Sound Forest (see methodology).

### Awareness of the physical, sociocultural and political economic elements of the place

As mentioned before, the sound artworks of the Sound Forest are believed to respond to multiple dimensions of sense of place and in particular the physical, sociocultural and political economic dimension. However, how the sound artworks are actually experienced and interpreted by the spectators only becomes clear from the moment that they are exhibited to the public. When asking the visitors if the sound art made them more aware of the physical, sociocultural or political economic elements of the place it was mentioned in five out of the ten interviews that the visitors were not aware of it. During one interview the visitors were resolute that they did not notice how the artworks are related to the previously mentioned elements of the place (Interview v2, 14/04/2023). However, the other four interviews elaborated further on the reasons why it might not have been noticed. In two of them it was stated by the respondents that they had too many little children with them who drew their attention and which made it difficult to read the information on the accompanying panels next to the artworks (Interview v1, 14/04/2023; Interview v6, 15/04/2023). Because of the children, the artworks were discovered in a playful way without focus on the background. In one interview it was furthermore mentioned that the visitors did not see all the artworks yet, so they had not yet been able to form a clear picture of them (Interview v3, 15/04/2023) and in the fourth interview a respondent explained that it was sometimes difficult to understand the meaning or operation mode of some of the artworks (Interview v4, 15/04/2023).

In the other five interviews the visitors responded that the sound art did make them more aware of the elements of the place, although it was mentioned in one interview that the artworks didn't really contributed to the awareness of the physical environment but helped to think about the people who live or have lived in this place (sociocultural/political economic elements) (Interview v5, 15/04/2023). However, the respondents were not sure if they also really know these people better now because of the sound art as illustrated below in an extract of a conversation between three people about the sound artwork *Doors of Listening*. This sound artwork was also recognized by some of the other visitors as mainly related to the sociocultural dimension:

*[Interview v5, 15/04/2023]*

*'Yes, by listening to those doors, you immediately get an impression of the people who are here or are no longer here, that is also possible. And it is nice to hear all those languages and the music. Some actually sing. But yes, do you then become more aware of the environment, of the people?'*

*'Maybe of those people, but...'*

*'No, I don't understand the language'.<sup>20</sup>*

Thus although the participants of the interview acknowledge the connections or presence of certain groups of people in the place (in this case not really the forest itself, but the village Pelt) because of the sound artwork, they don't really understand these people and their stories better which can partly be attributed to language barriers.

The people of the other four interviews did recognize the different elements of the place and here, the biophysical characteristics were sometimes explicitly mentioned:

*[Interview v7, 21/04/2023]*

*'Of course. Yes absolutely. We were there by the water where the reeds move (referring to sound installation Aandacht). Yes, then you are very aware of the environment there at that pond'.<sup>21</sup>*

In another interview it was even stated that the visitors had the feeling that most of the sound artworks respond to the physical characteristics of the environment (Interview v10, 7/05/2023).

So by conclusion, in five out of the ten interviews the visitors gave some form of acknowledgement of the biophysical, sociocultural and/or political economic characteristics of the place. It is however important to remark here that a multidimensional sense of place does not necessarily requires that the place or in this case the artworks respond to all the dimensions. Also each of the separate dimensions do contribute to some extent to the sense of the place.

All the visitors were additionally asked if the sound art was able to change their view of the place to confirm if it really was able to improve their understanding or awareness of the place or if it was able to transform the place with significant behavioral and emotional characteristics. Although part of the visitors did not recognize the characteristics of the place related to the earlier described dimensions, some of them (mentioned in two interviews) did however acknowledge that the sound art was able to change their view of the place. The arguments are often related to the fact that the sound art made them appreciate the place more since it differs from a normal forest as collaborated on in the section about the visitor experiences and opinions. One person explained that the integration of sound art defined their trajectory through the forest because they wanted to discover everything (Interview v1, 14/04/2023). In another interview it was also mentioned that there were a lot of things to discover with all these installations (Interview v3, 15/04/2023). All the people who did recognize the multidimensional characteristics of the sound installations on the other hand furthermore confirmed that the sound art was able to change their view of the place, mostly because of the same reasons as already stated. During one interview the visitors additionally explained that the artworks changed the atmosphere or feeling of the place and added surprising elements that you don't experience when you walk in a normal forest (Interview v5, 15/04/2023). Lastly, in another interview (Interview v10, 7/05/2023) two visitors clarified that although the sound art is artificial it gives sort of a total experience of the place that goes further than a normal museum with artworks is able to do as shown in the extract below.

*[Interview v10, 7/05/2023]*

*'Yes, of course it remains artificial everything we saw and experienced here. But the look at... I actually think it's more art that stands somewhere than pure sounds. For example especially those doors (Doors of Listening), a door normally serves to go through and this time you could only go around the door and you heard something that supposedly came through the door. That has stayed in my memory'.*

*(...)*

*'But the good thing is that you have art, culture, the landscape and the outdoors... Because most museums are always indoors or some statues here and there and stuff, but this goes much further than just a statue somewhere, this is really... The sum of experience of all senses almost'.<sup>22</sup>*

It thus seems that the sound artworks were at least for some of the visitors able to transform the place with significant behavioral and emotional characteristics and also partly contributed to the awareness of the place itself.

## Individual perception of the place

Next, an attempt was made to gain insight into the individual experiences of the visitors in the Sound Forest. Because of the response of some of the sound installations to environmental stimuli (site-specific component) of which the visitors themselves are also part, the sound installations provide different individual experiences to the visitors of the Sound Forest based on personal actions in the place. In other words, the sound artworks accentuate the visitor's spatial presence and how the visitors play an active role in place-making through their (everyday) practices. However, the purpose here is to get an overall view of the different perceptions of the people who visit the place, which also depends on earlier experiences and personal characteristics. Therefore the visitors (both adults and children) were asked to make a drawing of their impression of the Sound Forest. As mentioned in the methodology section, participatory drawing is a visual research method used in qualitative research studies and includes the practice of image-making to express internal realities by visual metaphors (Literat, 2013). When talking about the perception of a place, drawing as a research method might be especially useful since it requires the persons to draw a world, their own mental image of the place, into existence. The potential of participatory drawing lies therefore in its capacity to reveal a more nuanced depiction of concepts, emotions and information in an expressive and engaging way (Literat, 2013). Consequently, participatory drawing has proven to be a suitable research method to gain insight into the psychological (individual) aspects or dimension of sense of place perception. After making their drawing, the visitors were asked to describe what they drew and why. A total of 25 drawings has been collected.

In general, one of the first observations when asking people about their impression or perception of the Sound Forest is that some people tend to stay close to reality by drawing mainly objects such as trees or sound installations that can be perceived in reality, while other people let their imagination speak more by integrating elements that are not directly observable and in this way show how the forest is given a new life through the integration of sound artworks in the place and how it stimulates their imagination. A last group focused on the sensory perceptions in the forest while drawing. However, sometimes drawings can be assigned to multiple categories, but to keep a clear overview, they will be described under the category or group that is most significant for them.

What is striking about the first group of people who included **observable elements**, is that the aspects that stood out the most or were most remarkable to the visitors, for various reasons, were usually drawn. These aspects can be further subdivided into three categories, which will be discussed below on the basis of a few examples with accompanying description.

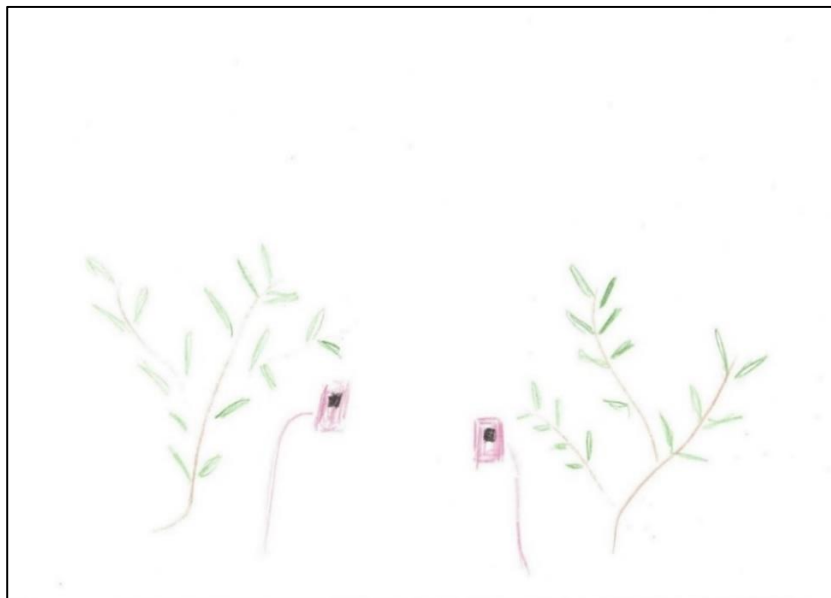
A first category related to the largest group of people, consisting of 14 visitors, made drawings of specific sound installations. Sometimes other elements such as trees were also included in addition to the sound installation(s), but were not specifically mentioned in the description of the drawing by the maker. As the descriptions of the drawings show, the sound installations were drawn because of a multiplicity of reasons (multiple reasons were sometimes cited by the same person):

- 1) The sound installation(s) are remarkable because of the challenge to discover how they work (Figure 8 and 9)
- 2) The sound installation(s) are preferred because of their special characteristics described as intriguing, exciting, funny, mysterious and/or unique. In other words, they stand out in their environment (Figure 8 to 17).
- 3) The sound installation(s) respond to own experiences and living environments, one can identify with it (Figure 18).
- 4) The sound installation(s) create new, distinct places and worlds of experiences, which may even feel unreal (Figure 19, 20 and 21).

Another remark when looking at the drawings of sound installations is that certain sound installations were drawn repeatedly, while others are only once or not even illustrated. From the 18 sound installations of the Sound Forest, six were included in the drawings. The most 'popular' sound installation in the drawings was *Tacet*, which was drawn five times. The reasons for drawing *Tacet* (see above) were mainly that the artwork is able to create a new, distinct (sense of) place or world of experiences which may even feel unreal due to the absence of sound and because of the special characteristics that make it stand out of its environment. Another sound installation that was drawn four times is *Doors of Listening*. The reasons mentioned here were mostly the special characteristics, one person called it funny, that make it stand out and the ability to respond to own experiences and living environments. *Oorsprong*, *Konversation* and *Composed Nature* were furthermore drawn three times. Again the special characteristics were mentioned for each of the sound installations and in addition, the challenge to discover how it works was stated for *Konversation*. Finally, *Houses of Sound* was illustrated once because of its intriguing character and also the search for its working.



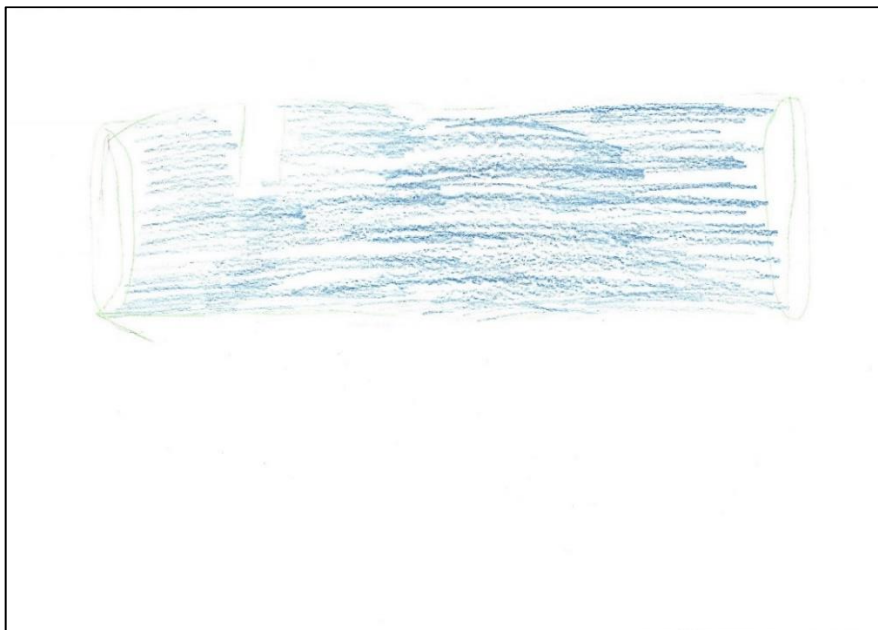
**Figure 8, Description:** Drawing created by woman (36y). The drawing gives an impression of *Houses of Sound*, which are the main objects in this drawing; the river 'The Dommel' and some trees are used to situate the artwork. The artwork was experienced by this woman as intriguing and puzzling, as it was not easy for her to discover how it works and therefore it was the most memorable for her. She drew the artwork as figures which she colored entirely in contrast with the other objects which serve merely as situational.



**Figure 9, Description:** Drawing created by man (33y). It illustrates *Konversation* (sound installation) of which he drew 2 elements, surrounded by some branches. This sound installation grabbed his attention because the sound installation was experienced as funny and it took some time for him to understand if the working was related to the distance the visitor stands from the elements or whether these elements just reacted to human sound.



**Figure 10, Description:** Drawing created by girl (7y). She drew a door from *Doors of Listening* because it was her favorite sound installation. She emphasizes the panels in the door and draws explicit waveforms and musical notes coming from the vicinity of the door, while the surrounding is limited to the surface the door is positioned on.



**Figure 11, Description:** Drawing created by teenage girl (16y). It illustrates *Oorsprong*, because she preferred this sound installation. She explained that she experienced the artwork as exciting when the door of the sound installation closed and the wind blew through it while undergoing the sound when feeling trapped in it. This must indeed have been quite overwhelming as she clearly drew the door entrance and the opening through which wind makes the sound.



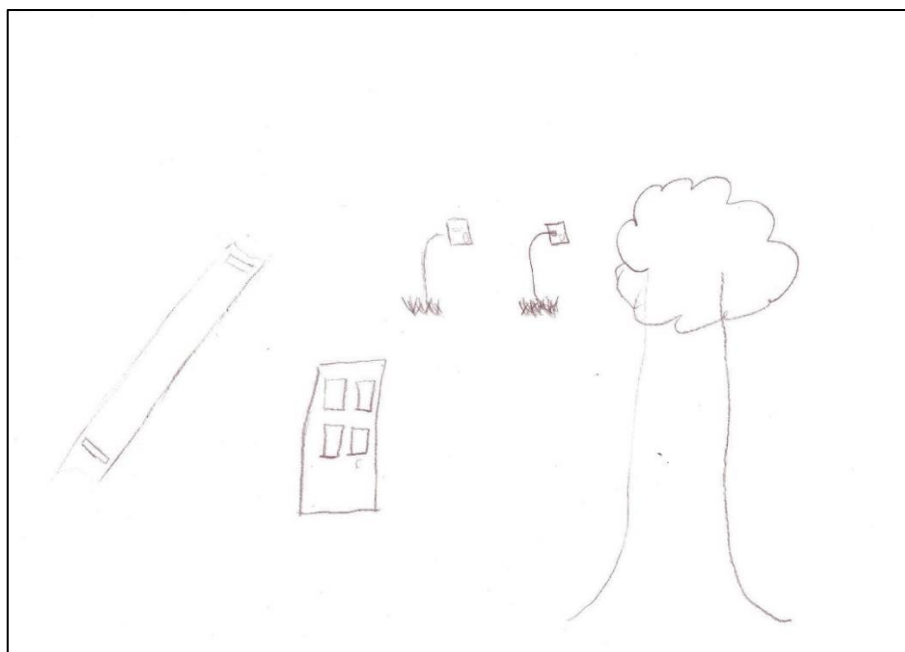
**Figure 12, Description:** Drawing created by girl (7y). She drew several doors of the sound installation *Doors of Listening*. She said it was a very ‘funny’ installation because some of the doors were singing as she tried to express in the drawing by literally including two human figures with open arms surrounded by musical notes. (Remark: the girl preferred to keep her drawing, so a picture of the drawing was made on location).



**Figure 13, Description:** Drawing created by teenage boy. He drew his imagination of the forest with what he called mysterious machines that make the trees shake (*Composed nature*). This was his favorite sound artwork. Remarkable is the fact that he puts the trees in a ‘thought balloon’, while he puts himself outside the area of the drawing which expresses his own individual observation as a thought.



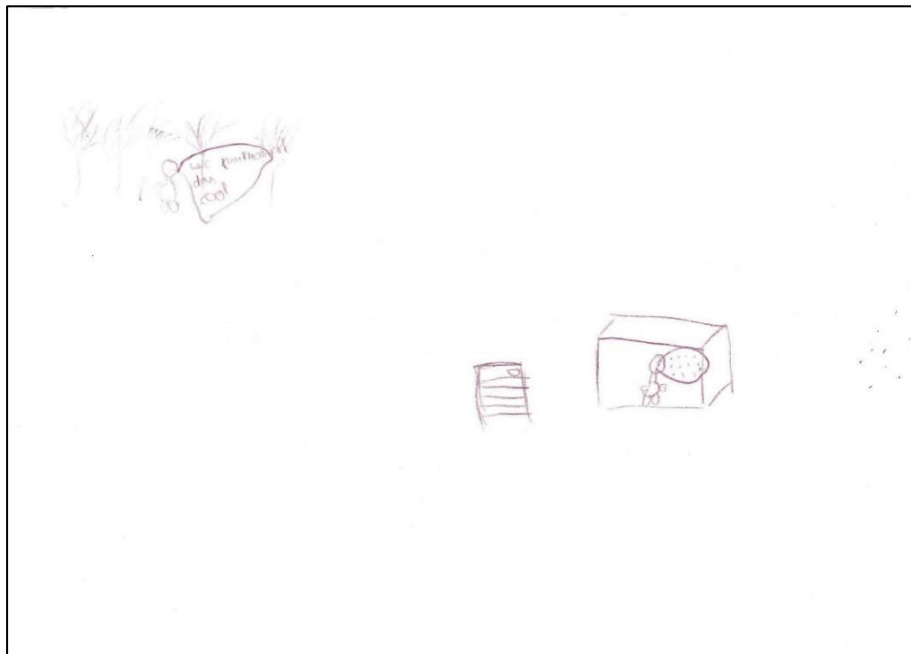
**Figure 14, Description:** Drawing created by teenage girl. She drew a tree because it was in a forest and a rainbow and a sun, because it was a sunny day. She also included the glass box (*Tacet*), the flute (*Oorsprong*) and the red boxes where you could speak to (*Konversation*). These were the things that she liked the most in the forest. Overall this drawing expresses a happy feeling (smiling sun and a tree with a smiling face with welcoming branches as arms). She also drew the pathway from one artwork to the other and even signs her drawing in the lower right corner.



**Figure 15, Description:** Drawing created by teenage girl. She drew three sound installations: *Konversation*, *Doors of Listening* and *Oorsprong* because these were her favorite ones. She clearly only focused on the artworks and left the surrounding scenery completely out in her drawing.



**Figure 16, Description:** Drawing created by teenage boy. He included his favorite sound installation: *Composed nature*. He could really feel the trees when they were shaking, which he liked. The shaking is expressed by wavy branches of the trees, which is even reflected in the wavy bodyline of the person touching two trees at the same time, emphasizing how important he felt about the movement of these trees.



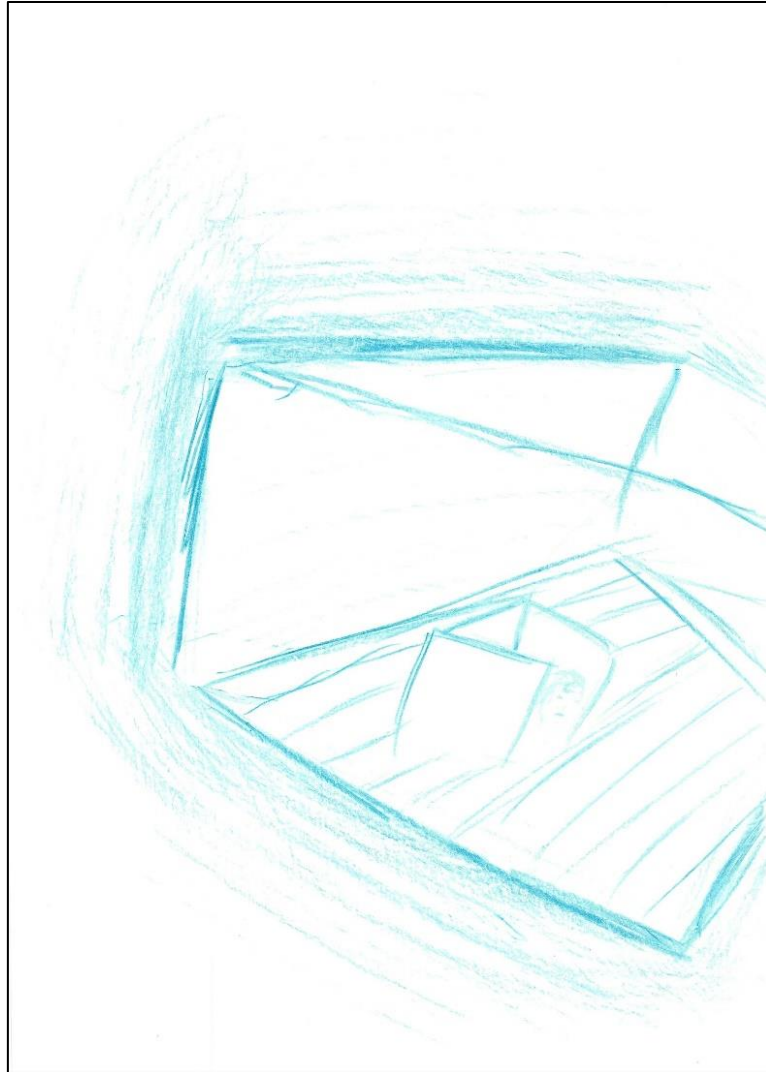
**Figure 17, Description:** Drawing created by teenage boy that consists of two separate drawings: The trees that you can call to let them move (*Composed nature*) and the window box where it is quiet (*Tacet*). He included it because he found it great, impressive and magical. He made it clear in his explanation afterwards that he experienced this as something he never experienced before.



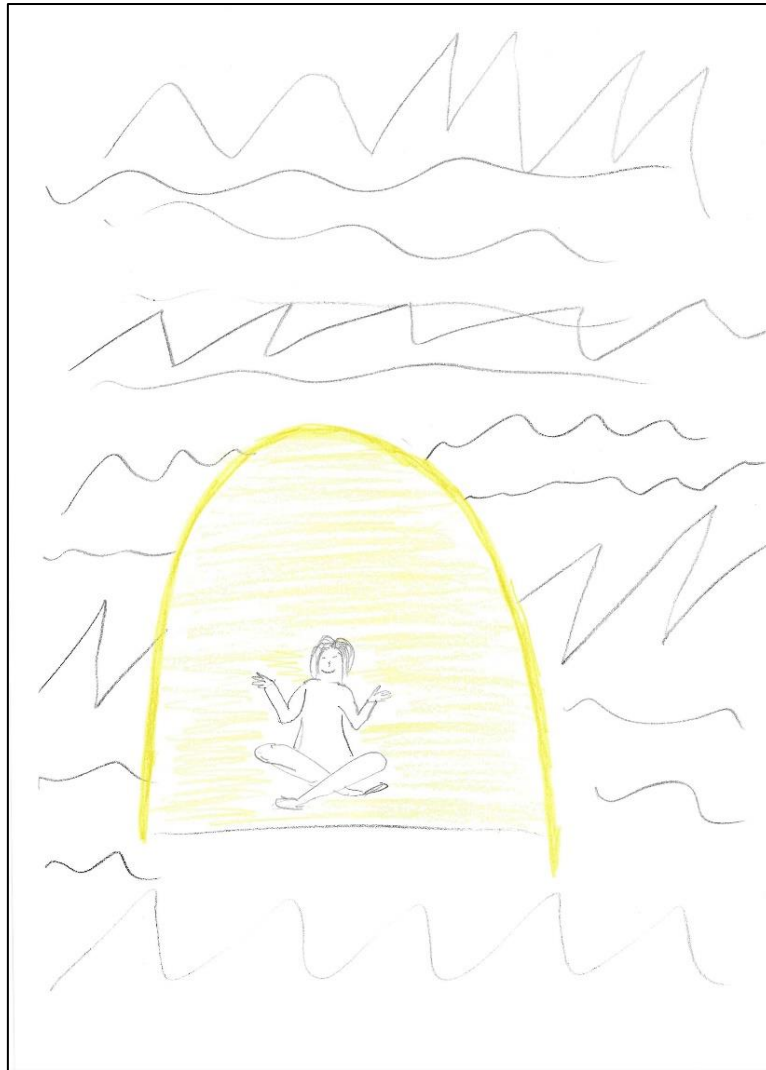
**Figure 18, Description:** Drawing created by teenage boy (18y). The drawing illustrates some of the doors of the sound installation *Doors of Listening*. Each color symbolizes a different sound coming from the doors and the colors black, yellow and red were chosen because they are the colors of the Belgian flag. The artwork is about the sounds and the voices of people who have come to Belgium. The teenage boy found this sound installation the most interesting because it relates to his own living world and experiences, since he came originally from Ukraine, but had to flee his country to come to Belgium because of the war with Russia.



**Figure 19, Description:** Drawing created by teenage girl. It illustrates *Tacet*, her favorite sound installation in the forest, because she explained that one feels alone in the box since one cannot hear any sounds from outside. Note how she drew only one person in the installation and the scenery as not violent (sun and a few clouds), while all elements are drawn on one horizontal line, making the trees and the artwork equally important.



**Figure 20, Description:** Drawing created by teenage boy. He drew the glass box (*Tacet*) and it shows the inside of the box where you hear nothing. When you are inside, the box is everything and when you look outside it doesn't seem to be reality because there is no sound. This was his favorite sound installation.



**Figure 21, Description:** Drawing created by woman (52y). She drew *Tacet*, because this sound installation was most impressive to her. The glass box was illustrated as a dome, in which you feel safe. The person in the house is sitting in a 'zen' position, because the sound installation gives her a very 'zen' feeling and it makes you think about the enormous hustle around us, which cannot enter the box. The black irregular lines around the box represent all the noise around us on different levels.

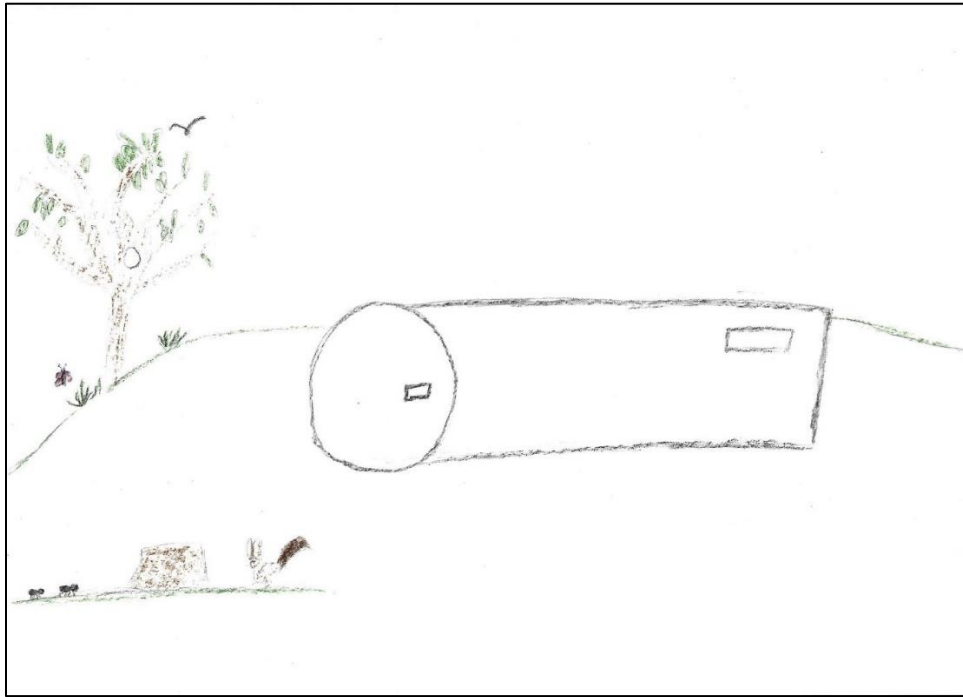
A second category of visitors did not only include sound installations, but tried to represent the diversity of the Sound Forest. Three of the four drawings that could be classified under this category focused on both the natural aspect of the forest in combination with the human aspect in their experience of the place (Figure 22, 23 and 24). This human aspect contains the sound installations, but also exercises from the movement trail. A remarkable description of the drawing of one of the visitors (Figure 23) was that, although the place has a natural and human aspect, the person experienced everything as one integral whole, where everything merges with nature and is part of it. Beside the flora of the forest (mainly trees), two visitors also included fauna such as birds, squirrels and butterflies which had been heard or seen or which were imagined to live in this place. Another person on the other hand, did not integrate the natural aspect, but drew *Doors of Listening* and an exercise of the movement trail (Figure 25). Although the person did not actively engage with these elements, the purpose was to illustrate that the place attracts a lot of children because of the diversity of activities and the person enjoys their presence and to see them playing in the forest. Also this time, when looking at the sound installations, *Doors of Listening* has proven to be a remarkable sound installation for the visitors and is included in three of the four drawings. *Oorsprong* was drawn twice and *Tacet* and *Houses of Sound* were each drawn once.



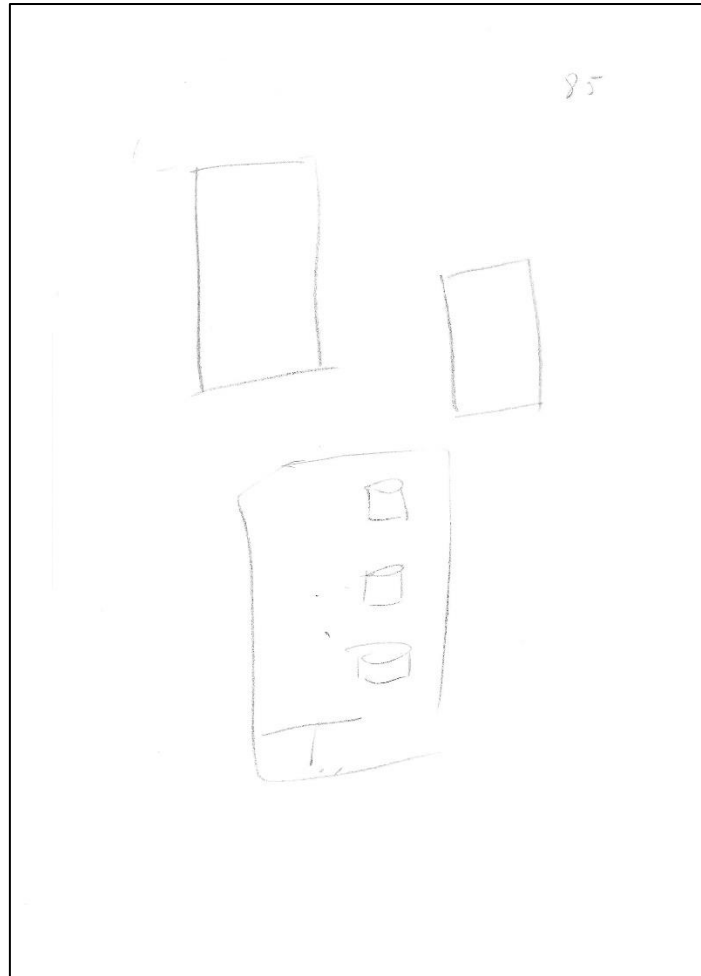
**Figure 22, Description:** Drawing created by woman (36y). The trees represent the forest itself and the woman has furthermore tried to represent the diversity of the Sound Forest. For example, the trees represent the natural aspect, but the forest also includes sound installations (*Houses of Sound* and *Doors of Listening* on the drawing) and movement exercises (person on tightrope on drawing).



**Figure 23, Description:** Drawing created by man (62y). It illustrates the combination of forest, animals (birds) and the artworks that appealed to him most: *Doors of Listening*, *Oorsprong* and *Tacet*. Locks were installed in the doors because the man likes that they cannot be looked through, but can be listened to. He wanted to present everything as one integral whole, that everything merges with nature and becomes part of it.



**Figure 24, Description:** Drawing created by woman (36y). It illustrates *Oorsprong* because this is her favorite sound installation. In addition, some animals were drawn: a squirrel, butterfly, bird and ants because she likes natural environments such as forests because of all the animals. The woman has seen the squirrel and has heard the chirping of the birds when walking through the forest. She didn't notice the butterfly and ants, but assumed they also live there.



**Figure 25, Description:** Drawing created by man (85y). It illustrates *Doors of Listening*. The man really likes how children walk around there and look behind the doors. The three pillars at the bottom of the drawing represent an exercise activity of the movement trail, which seem to be on the same level and importance to him as the sound artworks.

The last category of drawings which represented observable aspects only consists of two drawings that could not be classified under another category. However, the drawings illustrate different aspects of the Sound Forest. One of the drawings focused on the natural aspect, but did not integrate other elements (Figure 26). The other drawing on the other hand represents an exercise of the movement trail (Figure 27).

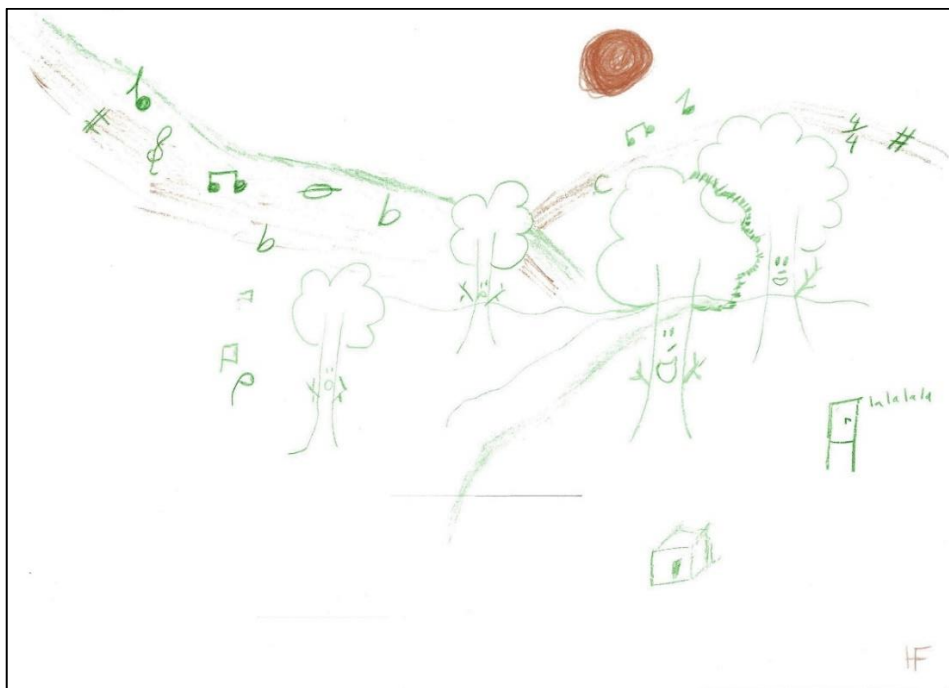


**Figure 26, Description:** Drawing created by boy (3y) with the help of his mother (33y). It illustrates the forest with a three, a flower, the sun and the grass because the boy liked the nature the most.



**Figure 27, Description:** Drawing created by girl (9y). It illustrates a jump exercise of the movement trail with the distances that different animals can jump written down on the drawing. The girl thought this was a fun exercise and it was easy to draw.

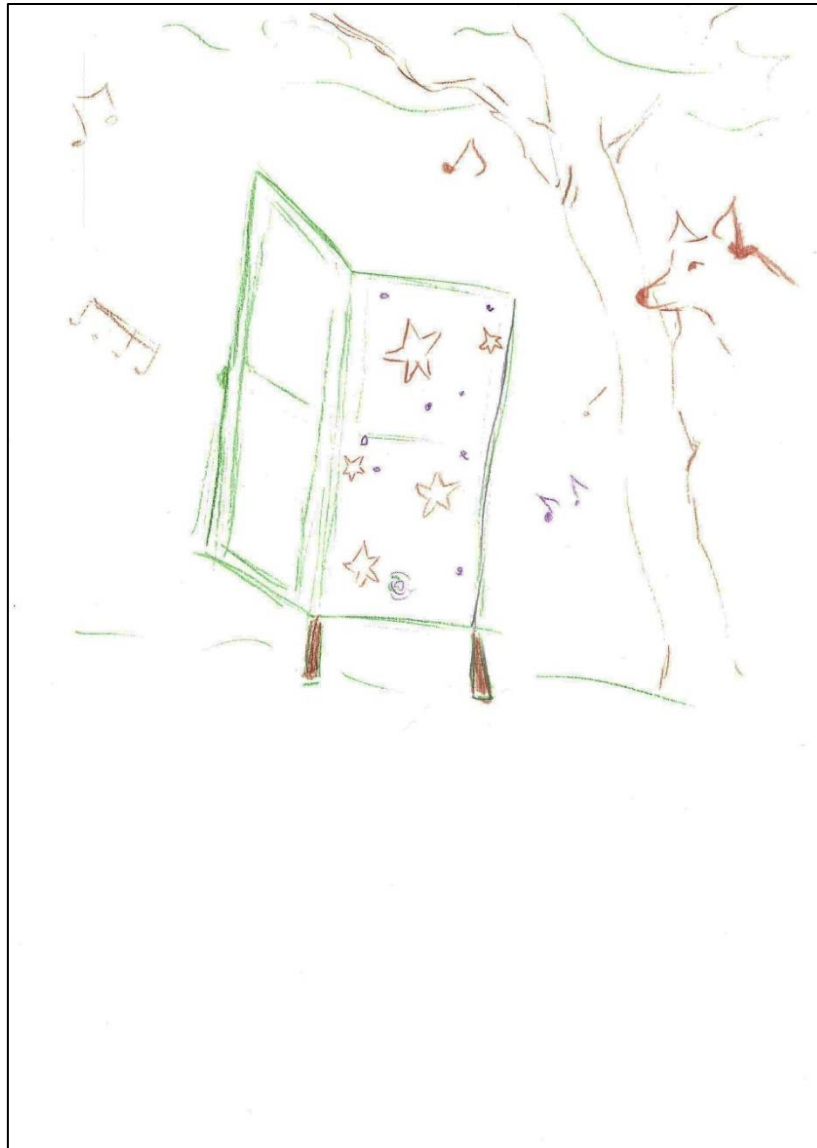
In contrast to the previously described group of drawings which tended to represent or stay close to reality, a second group of visitors, consisting of three people, created drawings in which the forest was given a new life by focusing on their **imaginary perception** of the place and how the sound art triggered their imagination by integrating not directly observable elements. Two of the drawings illustrate how the trees sing to each other, however the reasons why they are singing differ. One person explains how the different sound installations and the sounds they produce contribute to the unreal character of the place and as such provide different experiences than other forest like places (Figure 28). The singing trees resemble this unreal character. The other person who drew singing trees describes how she felt that all the trees are connected with each other through the different sounds in all directions, which are able to transcend language (Figure 29). The last drawing focused on one sound installation in particular, *Doors of Listening* (Figure 30). The closed doors had caught the attention of the maker as she explained how she was curious about what was hidden behind the doors and how she imagined that a universe may unfold when they are opened.



**Figure 28, Description:** Drawing created by teenage boy. He drew a forest where the trees are singing to each other since the place didn't feel real in his experience, not like a normal forest. This is made clear by all the drawn trees having faces and arms bringing them alive as real characters, while musical symbols float in lanes from one tree to another. He also included some of the artworks (*Tacet* and *Doors of listening*), because he thinks they are beautiful and he likes what the organization is doing here.

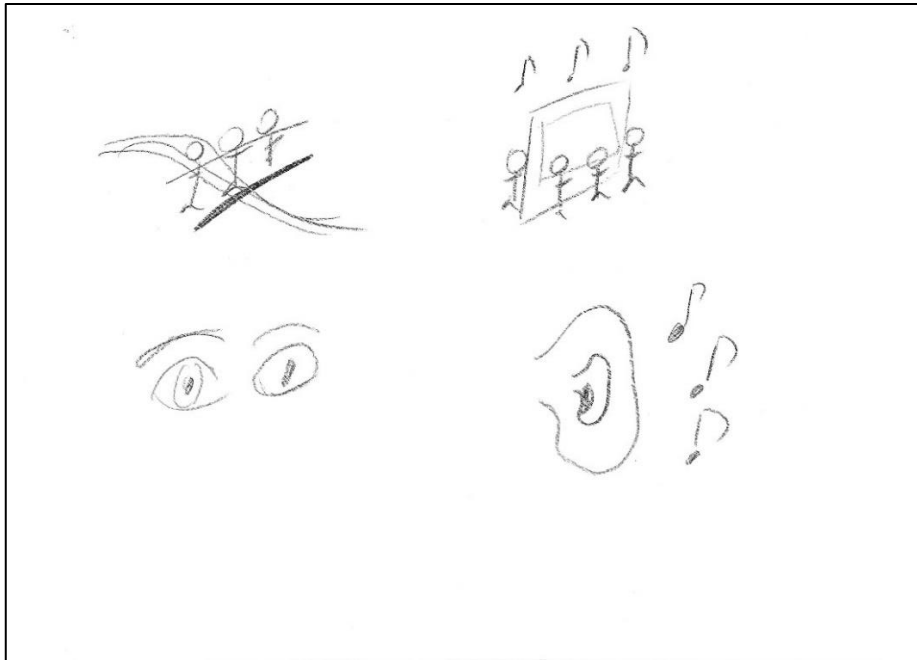


**Figure 29, Description:** Drawing created by woman (57y). It illustrates the movement of sound in different directions, which transcend language. The trees were drawn to look less good by purpose (there are no leaves on the branches and even the branches are drawn by interrupted lines) as a reference to the trees in Europe that are doing very badly at the moment according to the woman. The trees try to make contact with each other and sing to each other. Consequently, the trees are all connected through the sounds, illustrated by notes on a wavy staff on one hand and thinking 'Oooo's' and a spiral of thought on the other hand.



**Figure 30, Description:** Drawing created by teenage girl (16y). It illustrates one of the doors from the sound installation *Doors of Listening* with music notes. Contrary to the actual installation, where all doors are closed and locked, she drew one door wide open, while stars are shining through, music is surrounding the door and a fox is looking upon the door (but the fox was drawn to hide a mistake she made). She really liked the concept of the doors and imagined how a whole universe unfolds behind the door when you open it.

Finally, the last group of drawings, created by two visitors, focus in particular on the significance of **sensory stimuli** in the perception of the place (Figure 31 and 32). Both persons stress the importance of seeing and hearing as the two dominant senses in the Sound Forest which are stimulated by the presence of the sound installations and how they influence their experience of the place. In addition, Figure 31 also shows the diversity of the place, by integrating one of the sound installations, *Doors of Listening* and an exercise from the movement trial.



**Figure 31, Description:** Drawing created by woman (37y). It shows how the senses, mainly seeing and hearing (eyes and ear respectively), are stimulated in the Sound Forest. She also drew *Doors of Listening* as it was her favorite artwork. The door in this drawing is surrounded by 3 different characters on one side, and one character on the other side while music notes are above them and can be heard by all of them. The illustration at the top left is a rope course over the river that is part of the movement trail.



**Figure 32, Description:** Drawing created by man and woman (64 and 53y). It illustrates how the different paths in the forest resemble a maze as they had difficulties finding their way. At the top of the drawing, two eyes and two ears are drawn that refer to how the senses seeing and hearing are triggered in the Sound Forest because of the different sound installations.

## Behavioral and emotional characteristics of the place

The previous results retrieved from the visitor interviews have already collaborated on the ways in which people experience and understand the place and how this relates to a multidimensional sense of place. However, the results depend on what has been told by visitors about their intentions, experiences and perception of the Sound Forest, but weren't fully able to capture the behavioral and emotional characteristics connected to a multidimensional sense of place and related to the psychological (individual) dimension. Therefore, in addition to the visitor interviews, observations of visitor behavior have proven to be useful to clarify how sound art may influence the ways in which people use and interact with their environment and the sound installations in particular. Especially observations during a guided tour in the Sound Forest with eight teenagers and their supervisor provided useful information (Observation 8, 30/04/2023), as it allowed to see the same group of people interact with different sound installations and to hear their first reactions when encountering the artworks. The following constataions regarding the behavioral and emotional reactions provoked by the sound installations have been made:

- 1) Awareness of sensory stimuli and corresponding behavior
- 2) Emotional response(s) to the experiences
- 3) (Critical) reflection on experiences
- 4) Interaction between visitors

### 1) Awareness of sensory stimuli and corresponding behavior:

As listed in Musica's objectives of the Sound Forest (Introduction to the project), the organization wants to stimulate children, young people and adults to discover sounds and let them deal with sounds and noises in a creative way (Musica Impulscentrum voor Muziek, 2021). Observations have shown that the visitors do indeed become aware of a multitude of sounds when interacting with the sound installations. The awareness of these sensory stimuli may in turn induce certain behavior, but also the other way around as will be explained based on two examples of observations made during the guided tour.

The first example is the interaction of the group of eight teenagers with *Tacet* (Observation 8.4, 30/04/2023). One by one, the teenagers entered the box of glass while the other part of the group was waiting outside. Next, the persons waiting outside screamed at the person inside the box to see if this person could hear them. As a response, the person inside the box was surprised and signalized that he/she was not able to hear them. This action has been repeated several times. Consequently, some of the teenagers also started shouting from inside the box to see if it also counted the other way around. The screaming from the inside could be heard.

Another observation during the guided tour has been made at the sound installation *Composed Nature* (Observation 8.5, 30/04/2023). After one of the teenagers activated the artwork, the foliage of the trees started shaking. Another person of the group wondered if you could also feel the vibrations of the shaking trees and decided to test it by hugging one of the trees. The other teenagers followed the example and started hugging the other trees.

The two examples show how the visitors adapt their behavior to fully become aware of the sensory stimuli that might be provoked by the artwork or as a response to the perception of these sensory stimuli.

## 2) Emotional response to experiences:

Interaction with the sound installations may furthermore evoke emotional responses. These emotional responses depend on the characteristics of the sound installations encountered and will again be illustrated based on two examples of observations, made during a normal visit at the Sound Forest and during the guided tour.

The first observation has been made in the vicinity of the sound installation *Oorsprong* (Observation 5, 30/04/2023). A boy (about 6 years old) and his mother (about 30 years old) observed the sound installation whereafter the boy said that he wanted to enter the tube. The boy then disappeared in the tube after which he no longer could be heard. However, a little bit later the mother seemed to respond to her son with the following: *'And if I hold the door, what does that give?'* A minute later she added: *'Do you dare to challenge yourself and go one step further?'* Apparently, the boy was scared of being locked in the tube. Next the Mother asked: *'Shall I go with you?'* and she also entered the tube. When they both left the tube again the mother said to her son: *'So you see, if you had not done it, you wouldn't have known that there was light at the end and another sound. I think it's great that you did that, together with mom.'*

The other observation had been made at the sound installation *Konversation* during the guided tour (Observation 8.7, 30/04/2023). A teenage girl following the tour crossed one of the red boxes of the installation and as a response it produced a sound. She was shocked by the sudden noise. When the teenagers discovered that the red boxes responded to sound and movement, they all started dancing and screaming. When the voice of one of the teenagers was transformed by one of the boxes they all laughed.

The previous observations show how the integration of sound art has transformed the place with emotional characteristics as the visitors may experience different emotions induced by the (accidental) interaction with the sound installations. The artworks can provoke fears, but also a sense of pride when these fears are overcome, as shown in the first example, or surprise and joy which was the case in the second example. The second example also gives a clear example of how people adapt their behavior and have interaction with each other while encountering the sound installations. This was also confirmed by the visitor interviews/drawings which illustrated how the sound installations were experienced as intriguing, exciting, funny.

### 3) (Critical) reflection on experiences:

Besides the behavioral and emotional aspect mentioned before, the sound installations also seem to stimulate a (critical) reflection on what has been experienced and/or if the information provided is correct.

One example is the experience of *Doors of Listening* during the guided tour (Observation 8.1, 30/04/2023). The group of teenagers together with their supervisor listened to each of the doors and when they returned, their supervisor told how he was impressed by one door in particular. When you listened to the door, you could hear the story of a boy who talks about how a pen is the most important thing in your life and how it determines your future. Because no pen, no studies. No studies, no diploma. No diploma, no job. And so on (audio from the door). It made him reflect on these issues (Observation 8.1, 30/04/2023).

A second example, also from the guided tour, is *Chaise Résonnante* (Observation 8.2, 30/04/2023). The guide of the tour explained how the chair vibrates and produces tones with pitches around a low F. Consequently, one of the teenage boys opened an app to tune a music instrument on his phone to verify if it is indeed a low F.

The sound installations therefore not only seem to make people reflect on their experiences and the meaning behind them, but some of the visitors are also critical about the information provided and want to validate it. That the sound art makes you reflect on your experiences was also stated in one of the visitor interviews.

### 4) Stimulation of interactions between visitors:

The visitor observations furthermore show that the integration of sound art in public spaces may stimulate interactions between visitors.

Visitor observations of *Time Flies* clarify these interactions (Observation 4, 15/04/2023). Two boys (probably brothers) were first looking at the sound installation whereafter they tried to examine how it worked. They discovered that they could put sand in the little metallic cones. While they were playing, another girl also became interested in the sound installation and joined the two boys. Consequently, they were playing all together with the sound installation for a while by putting sand in the metallic cones and by rotating the outer circle.

Some of the previously given examples also illustrate these interactions between visitors and how they may influence group dynamics (e.g. Tacet, Oorsprong, Konversation).

Lastly, it is however important to note that most of the sound installations in the Sound Forest have (an) intended way(s) of interaction, often explained on accompanying information panels. However, as mentioned in the chapters on the creation of a site-specific sound installation and the practical implications of sound art in public spaces, multiple ways of interaction with the sound installations exist which are sometimes causing a lot of damage in the case of vandalism.

The visitor observations have shown that most of the visitors interact with the sound installations in ways intended by the artist/organization. However, during an observation in the vicinity of the sound installation *Oorsprong* (Observation 5, 30/04/2023), a teenage boy had climbed on top of the tube of the sound installation and ran over it. Although no accident happened, he could have fallen from the tube and could have suffered an injury. Although measures can be taken to a certain extent to prevent undesirable behavior, one should be aware that this behavior remains partly unavoidable in public places.

## The future of the Sound Forest

The practical implications of sound art in public spaces have already shown that it is not always easy to realize and maintain a sound artwork. The semi-structured interviews with the artistic coordinator (Interview 1, 11/04/2023), the coordinator of the production team (Interview 2, 21/04/2023), the financial coordinator (Interview 3, 27/04/2023) and the head of the leisure department of the municipality of Pelt (Interview 4, 15/05/2023) all reveal that the future is a little uncertain. The current installations need maintenance and luckily Musica has a very committed team that is involved in this, but the available budget is limited and is the biggest stumbling block with regards to the future as explained below by the artistic coordinator:

*[Interview 1, 11/04/2023]*

*'Even a woodpecker (sound installation Geheim van Horst), that's not something big, but there's all the wiring and technology behind it and that does cost something. That does require an investment in people who can develop that and I don't feel that at the moment there is money for that. So my story about the Sound Forest is actually not very positive. It's not an idyllic place where we say that we can make a new sculpture every year and that there's enough money for that. I also think that when you walk around in the Sound Forest... With the people and the resources that are available here, they really do try very hard to maintain everything... But when you walk around you often do see the deficiencies. Is this working now or is this not working? And that should not be allowed of course, then you have to go and remove it there, because I think it is worse for a visitor if something is there, but no longer works. Although it's also unfortunate if something is no longer there'.<sup>23</sup>*

As already mentioned in the chapter about the funding of the Sound Forest, Musica is searching for ways to have additional budget, because the budget of the municipality is not sufficient. In addition, as stated by the financial coordinator, the negotiations with the municipality date from 2017/2018 and since then, everything has become more expensive. They do increase the budget according to the index, but it does not go up in the same line. The sound installations are furthermore becoming older and more costs are coming now than in the past (Interview 3, 27/04/2023). The financial coordinator admits that they misjudged that it would deteriorate so quickly, when talking to the municipality at the time, and they will raise the problem with the municipality with a view to the next legislature (Interview 3, 27/04/2023). The new legislature however also brings additional uncertainties. The head of the leisure department of the municipality of Pelt explained in this regard that the agreement with Musica ends in 2025, the year after the municipal elections. Then it will remain to be seen what will happen to the agreement. Although he does not say that it cannot be renewed, he does point out that it is possible that another coalition will emerge that has a different opinion on this issue than the current one (Interview 4, 15/05/2023).

According to the artistic coordinator and the financial coordinator regarding the future, the goal is mainly to maintain the existing installations and invest in them. This is the primary concern. However, when it is not possible anymore to conserve the artworks in a relevant way, an alternative solution is searched. The reasons that the artworks are sometimes removed is because they are difficult to maintain, the adequate resources are not available or the contract with the artist for the installation is expired. It is then examined whether the installation is going to be preserved and how or if other museums or places are interested in it where the

artwork can find a new environment where the link with the Sound Forest might still remain. The Sound Forest is therefore not always the final destination for some installations (Interview 1, 11/04/2023).

In addition, the artistic coordinator also mentioned that a small new project is under development based on the idea of the collection of sound artworks in the Sound Forest, but designed for a welfare campus in Genk. Just like *Time Flies*, the project is (partly) funded by the Flemish subsidy line: 'Stimuleringsinstrument kunst in opdracht in de publieke ruimte'. So the Sound Forest is taken further and is no longer specifically viewed on the site in Pelt (Interview 1, 11/04/2023). Although the main focus is the maintenance of the installations, new artworks will be created in the future as long as it is financially possible, because Musica still believes that the Sound Forest is a fantastic concept that has to be kept alive to remain a point of attraction (Interview 3, 27/04/2023). The financial coordinator adds that nowadays, a large number of visitors continues to come, people remain enthusiastic and it is regularly picked up by the media so they try to keep it moving. Also the head of the leisure department of the municipality recognizes the potential of the sound installations for Pelt as he describes it as follows:

*[Interview 4, 15/05/2024]*

*'It definitely adds value to the municipality of Pelt because it's a pretty unique collection. (...) To my knowledge, there are not many places where there is such a range of sound installations. Where sound artists exhibit permanently, apart from the fact that Musica also develops all kinds of activities around the Sound Forest (...) And it definitely adds value because it brings sound art into public space in a special way. There are installations there that you would never think of. The Woodpeckers (Geheim van Horst) for example, but also others. Sometimes very crazy constructions, but that's what makes sound art so unique. So yes, it brings absolutely added value. It also does attract specific tourists, but also ordinary people and also children just go there'.<sup>24</sup>*

By conclusion, some installations will leave the collection in the future and new ones will probably be added and if it is really no longer possible to keep the collection, it is possible that the number of artworks decreases, but it is Musica's ambition to keep a collection of 18 installations in a well maintained condition. Despite the uncertainty of the municipality regarding the next legislature, the head of the leisure department also confirms that there are currently no signs that the municipality will stop funding the project as he recognizes that the Sound Forest has become a fixed value in the region.

## Discussion

The case study of the Sound Forest (Klankenbos) aimed to investigate the potential of site-specific sound art as a means of creating a multidimensional sense of place. The research distinguished itself from previous research on sound art because of the multiplicity and the diversity of the artworks that have been examined and the focus on the connection between sound art and a multidimensional sense of place. Based on a qualitative research design which followed an exploratory case study methodology, the research was able to recognize the potential of sound art in public places and how it contributes to a multidimensional sense of place. Different qualitative data collection methods such as (semi-)structured interviews, observations and participative drawing were required to obtain rich, but also complex data on the topic. Although the research has succeeded in its objective, there are however a few limitations to acknowledge and to take into consideration for future research.

First, the visitor interviews have been conducted by approaching visitors in the Sound Forest. The place has however multiple entrances and no clear trajectory to follow. Consequently, most of the visitors did not see all the sound installations yet when participating in the interview. Interviews conducted with the participants at the end of a guided tour in the forest were therefore very valuable, since they had seen most of the sound installations and it was known that they received all the information from the information panels. Observations during the guided tour also contributed to the knowledge on visitor behavior, since the role of observer-as-participant could be applied more easily.

However, guided tours are not often organized so that only one guided tour could be followed where the age range was limited to eight teenagers between 13 and 15 years old and their supervisor (about 40 years old). In addition, data collection during a guided tour nevertheless has its own limitations. The research focused on the potential of sound art in public spaces and one may wonder if a guided tour really resembles 'normal' experiences of the place, since the presence of a guide may influence the behavior of the visitors and visitors who are exploring the forest freely do not always read the accompanying information panels. Therefore the combination of interviews and observations of both free visitors and visitors during a guided tour was necessary since they complemented each other. Interviews and observations are however qualitative research methods and the quality of the data, as well as the coding and analysis afterwards, was also dependent on the research capacities of the researcher and the (subjective) interpretation of the data. A challenge when conducting interviews was to not unintentionally suggest certain answers to the visitors and to ask questions in a clear and unambiguous manner.

Moreover, participatory drawings of the visitors provided useful information on the individual impressions of the place and could also include the voice of little children, but the downside was that not everyone who participated in the interviews was willing to make a drawing. A collection of 25 drawings has however been collected. The interpretation of these drawings can furthermore be considered as partly subjective, since they were described from the perspective of the researcher. By asking additional questions on the content and meaning of

the drawing the risk of mis-/over-interpretation was reduced, but the description of the drawings nevertheless still remains subjective to some extent.

Lastly, although part of the research focused on the design of a site-specific sound installation, the artists of the installations were not interviewed. Although they might add more in-depth information on the design process, interviewing all the artists of the 18 sound installations would have been very time consuming. Despite the practical considerations, artists were not actively involved in the research because the information panels of the sound installations provided by Musica already gave insights into the development process of the sound installations and the intentions of the sound artist(s). The research was furthermore aimed at the entire collection of sound installations and not one installation in particular and therefore the information provided by the artistic coordinator of the Sound Forest, who has a central and guiding function within the development process, was considered as more valuable.

Although not all the previously mentioned limitations of the research can easily be solved, more case studies on different locations including multiple research methods and with more visitors are desired to obtain a larger dataset and to mitigate the limitations. In addition, the perspective of the sound artists themselves might be included for more detailed information on the actual design process of a site-specific sound installation. Nevertheless, the research has proven to be successful to gain first insights into the potential of sound art in public spaces and how it contributes to a multidimensional sense of place.

## Conclusion

This research on the integration of sound art in public places tried to provide knowledge on the potential of sound art as a means of creating a multidimensional sense of place to encourage a more inclusive and conscious interaction with our environment where sensory stimuli are responded to. Although multiple definitions of sense of place exist, the research was based on the description of Convery et al. (2012), who recognized two ways in which the term has been used and interpreted in previous research: 1) a range of factors which together define the character, or local distinctiveness of a specific place and 2) the ways in which people experience, use and understand place. However, since the descriptions still remained vague to some extent and were difficult to investigate or measure in practice, the concept was further clarified based on Ardoin's (2006) conceptual model that represents sense of place as a holistic concept, consisting of four dimensions. These four dimensions are: 1) the biophysical dimension, 2) the psychological (individual) dimension, 3) the sociocultural dimension and 4) the political economic dimension.

A case study on Musica's project of the Sound Forest (Klankenbos) in Pelt, Belgium, allowed to examine the research question in practice. More specifically, the research focused on the site-specific character of sound installations, visitors experiences and the (practical) difficulties, requirements and potentials of the integration of sound art in public places.

Semi-structured interviews with Musica's artistic coordinator, the coordinator of the production team and the financial coordinator, as well as a semi-structured interview with the head of the leisure department of the municipality of Pelt allowed to collect the necessary data regarding the site-specific character of a sound installation and the (practical) difficulties, requirements and potentials of the integration of sound art in public places. To gain insight into the visitor experiences, structured interviews, visitor observations and participatory drawing has been used as research method.

First of all, the research was able to recognize and define four components that contribute to the site-specific character of a sound installation to stimulate the integration of the sound artworks in their environment;

- 1) The materiality and power source of the sound installation.
- 2) The interaction with environmental stimuli.
- 3) The sounds produced by the sound installations.
- 4) The position of the sound installations in the environment.

Regarding visitor experiences, the research first determined the audience of the Sound Forest. Apparently, the place seems to attract both children, youth and adults coming from different places within Belgium and some people from abroad. The reasons why people are visiting the place differ. Some people mentioned the presence of activities for children, while other explained that they discovered the place by coincidence or searched for an activity to combine with a visit to another place in the neighbourhood. These were the most recurring responses. Regarding the validation of the Sound Forest, many visitors stressed the unique character of

the place by emphasizing its original, distinct, surprising, interesting and/or beautiful characteristics. A minority of the visitors however explained that it is not necessarily the sound installations that give the place its value, but the presence of other people does. The research has furthermore proven that most of the visitors appreciate the place more since the place distinguishes itself from an ordinary forest because of the integration of sound art and therefore the Sound Forest attracts people that would otherwise never have come there. Some visitors also mentioned that the presence of sound installations provides an additional source of entertainment, because there is something to discover everywhere. Lastly, a few less than half of the interviewed visitors recognized that the presence of sound art has made them more aware of the sensory stimuli of the environment. In addition, about a third of the visitors explained that they are most of the time already conscious of their environment and about a fifth mentioned that the sound art did not make them more aware of the sensory stimuli of the place. However, this was nuanced by some of the visitors as it might also be because they had too many children with them to focus on their surroundings.

The recognition of these site-specific characteristics of the sound installations and the visitor experiences allowed to clarify the potential of site-specific sound art as a means of creating a multidimensional sense of place.

First of all, the site-specific character of the sound installations stresses the character and local distinctiveness of the place and furthermore relates to three of the four dimensions of sense of place: the biophysical dimension, the sociocultural dimension and the economic political dimension. Half of the visitors interviewed confirmed that they also have become aware of these aspects of the place because of the sound art, although the depth in which they understand the place better changed between the visitors. The other half of the visitors were not aware of the physical, sociocultural and/or political economic elements of the place because of the sound art. Some of the visitors elaborated further on the reasons why it might not have been noticed. Part of these groups of visitors did not read the accompanying information panels next to the artworks or they had little children with them, and therefore the artworks were discovered in a playful way without focus on the background. One person also had difficulties to understand the meaning or operation mode of some of the artworks.

Regarding the ways in which people experience, use and understand place, the research furthermore focused on the psychological (individual) dimension of sense of place. Although part of the visitors did not recognize the characteristics of the place related to the three earlier described dimensions (biophysical, sociocultural and economic political), a few less than half of them did however acknowledge that the sound art was able to change their view of the place. The integration of sound art in the place made them appreciate the place more since it differs from a normal forest and it also defined their trajectory through the forest since they wanted to discover everything. All the people who did recognize the multidimensional characteristics of the sound installations furthermore also confirmed that the sound art was able to change their view of the place, mostly because of the same reasons as already stated. One person also mentioned that the artworks changed the atmosphere or feeling of the place and added surprising elements and another person clarified that although the sound art is

artificial it gives sort of a total experience of the place that goes further than a normal museum with artworks is able to do. In addition, drawings created by the visitors about their individual impression of the place show how most of them perceived the (particular) sound artworks as the most significant elements of the forest because of the following four reasons:

- 1) The sound installations are remarkable because of the challenge to discover how they work.
- 2) The sound installations are preferred because of their special characteristics described as intriguing, exciting, funny, mysterious and/or unique. In other words, they stand out in their environment.
- 3) The sound installations respond to own experiences and living environments, one can identify with it.
- 4) The sound installations create new, distinct places and worlds of experiences, which may even feel unreal.

Another part of the visitors, although not as numerous as the people who included a sound installation in their drawing, illustrated how the diversity of the place is the most important aspect that determined their impression of the place. Another group focused on their imaginary perception of the place as they explained how the sound installations contribute to the 'unreal' character of the place. The last category of drawings that has been recognized, focused on the significance of sensory stimuli in the perception of the place.

The last paragraph on the potential of sound art as a means of creating a multidimensional sense of place was specifically concentrated on the behavioral and emotional characteristics of the sound installations. A sense of place is believed to transform places into places with remarkable behavioral and emotional characteristics as recognized by Hashemnezhad et al (2013). The results of the research have shown that the integration of sound installations did indeed stimulate additional behavioral and emotional visitor reactions, namely:

- 1) Awareness of sensory stimuli and corresponding behavior
- 2) Emotional response(s) to the experiences
- 3) (Critical) reflection on experiences
- 4) Interaction between visitors

Given the potential of sound art in public places, there are however some (practical) requirements and difficulties to take into account. The sound installations are located in an outdoor environment and therefore they should be resistant to different weather conditions. The durability of a sound installation is thus an important factor to consider in the design process. The localization of the sound installations in public places furthermore implicates that people will sometimes interact with the artworks in unwanted/unpredicted ways. Safety measurements should therefore be taken into consideration, but vandalism poses another threat against which few precautions exist and which may entail additional costs. Besides the unforeseen costs in the case of vandalism, the integration of sound art furthermore requires budget for the creation and maintenance of the sound installation. Sound installation have a certain lifespan and as they become older, they need more maintenance.

The future of the Sound Forest therefore strongly depends on the budget that will be available for the maintenance and creation of sound installations. The municipality of Pelt, which subsidizes the project, is a determining factor here.

By conclusion, although the integration of sound art in public places has its challenges, it certainly brings added value to the place and has the potential to create a multidimensional sense of place as elaborated on in this research. The results of the research have also shown that Musica largely succeeded in their objectives regarding the Sound Forest. They made sound art known to a larger audience, they developed a collection of outdoor sound installations in relation to the environment, they stimulated children, young people and adults to discover sounds and let them deal with sounds and noises in a creative way and they were partly able to make the public aware of the multitude of sounds in daily live and to let them reflect on the beauty of sound and even silence. However, some future recommendations are to provide the visitors more information on the background of the project and to indicate more clearly the different sound installations, for example by offering maps at several entrances instead of only one. General suggestions on the design of future sound installations are furthermore to take into account the components that determine the site-specific character as defined in this research and to focus on the elements and properties that were most significant for the visitors in their impression of the place.

A final remark is that the case study was focused on the integration of sound art in a predominantly natural environment. It might however be useful to conduct similar research in different places, such as urban areas. Not only might a larger dataset contribute to a better understanding of the potential of sound art, but it can also provide meaningful information about the most suitable locations to include sound artworks.

Since the biggest challenges associated with the integration of site-specific sound installations in public places are budget related, policymakers can stimulate the development of these sound artworks by awarding grants to new project proposals or for the renewal/repairs of depreciated existing projects. The criteria for these projects should respond to the site-specificity of the sound artworks and should preferably also focus on the active involvement of communities.

## References

- AD (Algemeen Dagblad). (2018). *Cultuurmijl Enschede verdient tweede kans*. Accessed 10 July, <<https://www.ad.nl/enschede/cultuurmijl-enschede-verdient-tweede-kans~a82db8a1/?referrer=https%3A%2F%2Fwww.google.com%2F>>.
- Adler, P. A., & Adler, P. (1994). Observational techniques. in N. K. Denzin, & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 377–392). Sage Publications, Inc.
- Altman, I., & Low, S. M. (1992). *Place Attachment*. Plenum Press, New York.
- Amin, A. (2004). Regions Unbound: Towards a New Politics of Place. *Geografiska Annaler: Series B, Human Geography*, 86, 33-44.
- Anderson, J. (2015). *Understanding cultural geography : Places and traces (second edition)*. Routledge, Oxford & New York.
- Ardoin, N. (2006). Toward an interdisciplinary understanding of place: Lessons for environmental education. *Canadian Journal of Environmental Education*, 11.
- Ardoin, N. M., Schuh, J. S., & Gould, R. K. (2012). Exploring the dimensions of place: a confirmatory factor analysis of data from three ecoregional sites. *Environmental Education Research*, 18(5), 583–607.
- Ashley, T., & Weedon, A. (2020). Introduction: Sensing place, a moment to reflect. In T. Ashley, & A. Weedon (Eds.), *Developing a Sense of Place: The Role of the Arts in Regenerating Communities* (pp. 1–16). UCL Press.
- Bain, A., & Landau, F. (2017). Artists, Temporality, and the Governance of Collaborative Place-Making. *Urban Affairs Review*, 55(2), 405-427.
- Baker, L. (2006). Observation: a complex research method. *Library Trends*, 55(1), 171–189.
- Bandt, R. (2006). Sound installation: blurring the boundaries of the eye, the ear, space and time. *Contemporary Music Review*, 25(4), 353-365.
- Barnes, A. (2019). *Creative Representations of Place*. Routledge Taylor & Francis Group, New York.
- Birchfield, D., Phillips, K., Kidané, A., & Lorig, D. (2006). Interactive Public Sound Art: a case study. *New Interfaces for Musical Expression*. Paris, France.
- Brown, L. (2012). A Review of Progress in Soundscapes and an Approach to Soundscape Planning. *International Journal of Acoustics and Vibrations*, 17, 73-81.
- Brown, L., Kang J., & Gjestland T. (2011). Towards some standardization in assessing soundscape preference. *Applied acoustics*, 72(6), 387-392.
- Bull, M. (Ed.). (2018). *The routledge companion to sound studies* (Ser. Routledge media and cultural studies companions). Routledge.
- Cassirer, E. (1970). *An Essay on Man*. Bantam Books, Toronto.
- Chatman, E. A. (1992). *The information world of retired women*. Greenwood Press, Westport.
- Convery, I., Corsane, G., & Davis, P. (2012). Introduction: Making Sense of Place. In I. Convery, G. Corsane, & P. Davis (Eds.), *Making Sense of Place: Multidisciplinary Perspectives* (Vol. 7, pp. 1–8). Boydell & Brewer.

- Cresswell T. (2015). *Place: an introduction* (2nd ed.). Wiley Blackwell, Chichester.
- Denzin, N.K., & Lincoln, Y.S. (1998). *Collecting and Interpreting Qualitative Materials*. Sage, Thousand Oaks, California.
- Durrell, L. (1969). *The Spirit of Place*. Dutton, New York.
- Elsley, S. (2004). Children's experience of public space. *Children & Society*, 18(2), 155–164.
- Escobar, A. (2001). Culture sits in places: reflections on globalism and subaltern strategies of localization. *Political Geography*, 20, 139–74.
- Galliano, S. J., & Loeffler, G. M. (1999). *Place assessment: How people define ecosystems*. U.S. Department of Agriculture, Portland.
- Gauntlett, D. (2005). Using creative visual research methods to understand media audiences. *Medienpädagogik: Zeitschrift Für Theorie Und Praxis Der Medienbildung*, 9, 1–32.
- Gauntlett, D. (2007). *Creative explorations: New approaches to identities and audiences*. Routledge, London.
- Giuliani, M. V., & Feldman, R. (1993). Place attachment in a developmental and cultural context. *Journal of Environmental Psychology*, 13, 267–74.
- Gold, R. L. (1958). Roles in sociological field observations. *Social Forces*, 36(3), 217–223.
- Gorman, G. E., & Clayton, P. (2005). *Qualitative research for the information professional* (2nd ed.). Facet, London.
- Graham, H., Mason, R., & Newman, A. (2009). *Literature review: Historic Environment, Sense of Place, and Social Capital*. International Centre for Cultural & Heritage Studies, Newcastle University.
- Grimshaw, M., & Garner, T.A. (2015). *Sonic Virtuality: Sound as Emergent Perception*. Oxford University Press, New York.
- Grondin, S. (2016). *Psychology of perception*. Springer International Publishing.
- Gustafson, P. (2001). Meanings of place: Everyday experience and theoretical conceptualizations. *Journal of Environmental Psychology*, 21, 5-16.
- Harvey, P. M. (2001). Landscape and Commerce: creating contexts for the exercise of power. In B. Bender, & M. Winer (Eds.), *Contested Landscapes: Movement, Exile and Place*. Berg, Oxford.
- Hashemnezhad, H., Heidari, A. A., & Mohammad Hoseini, P. (2013). Sense of Place and Place Attachment. *International Journal of Architecture and Urban Development*, 3(1), 5-12.
- Hawkins, H. (2013). Geography and art. an expanding field : site, the body and practice. *Progress in Human Geography*, 37(1), 52–71.
- Hunter, V. (2005). Embodying the Site: The Here and Now in Site-Specific Dance Performance. *New Theatre Quarterly*, 21 (4), 367–81.
- Jorgensen, B.S., & Stedman, R.C. (2006). A comparative analysis of predictors of sense of place dimensions: attachment to, dependence on, and identification with lakeshore properties. *Journal of environmental management*, 79 (3), 316-27 .
- Kaye, N. (2000). *Site-specific art : performance, place, and documentation*. Routledge.

Klankenbos [1] (n.d.). *Over Klankenbos*. Accessed 3 May, <<http://www.klankenbos.be/nl/over-klankenbos>>.

Klankenbos [2] (n.d.). *Installaties*. Accessed 3 May, <[http://www.klankenbos.be/nl/projects?f%5b0%5d=field\\_interesses%3A258](http://www.klankenbos.be/nl/projects?f%5b0%5d=field_interesses%3A258)>.

Klankenbos [3] (n.d.). *Composed Nature*. Accessed 3 May, <<http://www.klankenbos.be/nl/projects/klankinstallatie-composed-nature>>.

Klankenbos [4] (n.d.). *Xylibraphon, multiplayer mallet percussion instrument*. Accessed 3 May, <<http://www.klankenbos.be/nl/projects/klankinstallatie-xylibraphone>>.

Klankenbos [5] (n.d.). *Doors of Listening*. Accessed 5 May, <<http://www.klankenbos.be/nl/doors>>.

Klein, G. (2009). Site-sounds: on strategies of sound art in public space. *Organised Sound*, 14(1), 101–108.

Kwon, M. (2002). *One place after another: site-specific art and locational identity*. Massachusetts Institute of Technology, Cambridge & London.

Landau-Donnelly, F. (2023). Art. In L. Lees, & D. Demeritt (Eds.), *Concise Encyclopedia of Human Geography*. Edward Elgar Publishing Limited, Cheltenham.

Licht, A. (2009). Sound art: origins, development and ambiguities. *Organised Sound*, 14(1), 3–10.

Literat, I. (2013). “a pencil for your thoughts”: participatory drawing as a visual research method with children and youth. *International Journal of Qualitative Methods*, 12(1), 84–98.

Low, S. M. (1992). Symbolic ties that bind: Place attachments in the plaza. In I. Altman, & S. Low (Eds.), *Place attachment* (pp. 165-185). Plenum Press, New York.

Lowenthal, D. (1961). Geography, experience and imagination: Towards a geographical epistemology. *Annals* (Association of American Geographers), 51, 241-260.

Lynch, K. (1960). *The image of the City*. MIT Press, Cambridge.

Maeder, C. (2014). *Analysing sounds*. SAGE Publications, Inc.

Marques, L., & Richards, G. W. (2014). The dimensions of art in place narrative. *Tourism Planning & Development*, 11(1), 1–12.

Marvasti, A. (2014). *Analysing observations*. SAGE Publications, Inc.

Massey, D. (2007) *World City*. Polity, Cambridge.

Moore, R. L., & Graefe, A. R. (1994). Attachments to recreation settings: The case of RailTrail users. *Leisure Sciences*, 16, 17-31.

Musica Impulscentrum [1]. (n.d.). *Klankenbos: Artistieke ontwikkeling rond klankkunst*. Accessed 19 February 2023, <<https://www.musica.be/nl/werkterrein/klankenbos/>>

Musica Impulscentrum [2]. (n.d.). *Over ons*. Accessed 19 February 2023, <<https://www.musica.be/overons/>>

Musica Impulscentrum [3]. (2021). *Doors of Listening*. Alamire muziekuitgeverij, Pelt.

- Musica Impulscentrum voor Muziek. (2021). *Gidsenmap Klankenbos: Context, installaties en activiteiten*. Not published.
- Najafi, M., & Shariff, M.K.B.M. (2011). The concept of place and sense of place in architectural studies. *World Academy of Science, Engineering and Technology*, 80, 1100-1106.
- OECD (Organisation for Economic Co-operation and Development). (2018). *Culture and Local Development: Background Document*. Organisation for Economic Co-operation and Development, Paris. Accessed 8 July 2023, <<https://www.oecd.org/cfe/leed/venice-2018-conference-culture/documents/Culture-and-Local-Development-Venice.pdf>>
- ON2019PELT. (n.d.). *Pelt on air*. Accessed 3 May 2012, <<http://on2019pelt.nolino.be/>>
- Provincie Limburg. (n.d.). *Provinciaal Domein Dommelhof*. Accessed 9 May 2023, <<https://www.limburg.be/provinciaaldomeindommelhof>>.
- Pyle, R. M. (1993). *The thunder tree: Lessons from an urban wildland*. Houghton Mifflin Company, Boston.
- Qu, S.Q. & Dumay, J. (2011). The qualitative research interview, *Qualitative Research. Accounting & Management*, 8 (3), 238-264.
- Relph, E. (1976). *Place and placelessness*. Pion, London.
- Rilke. R.M. (n.d.). *Gong*. In Musica Impulse Centre for Music (2015). *Het laat zich niet vangen: Gedichtenparcours 10 jaar Klankenbos*. Uitgeverij P, Leuven.
- Rodaway, P. (1994). *Sensuous Geographies: Body, Sense and Place* (1st ed.). Routledge.
- Rüth, U. (2006). Die Vermittlung von Klangkunst. Präsentation als Raumerfahrung (The Communication of Sound Art. Presentation as Spatial Experience). In G. Weckwerth, M. Osterwold (eds.), *Catalogue sonambiente*. Heidelberg, Kehrer.
- Schafer, R., M. (1994). *The soundscape: Our sonic environment and the tuning of the world*. Destiny Books, Rochester.
- Sime, J. D. (1986). Creating places or designing spaces? *Journal of Environmental Psychology*, 6, 49-63.
- Statbel (2023). *Structuur van de bevolking*. Accessed 30 June 2023, <<https://statbel.fgov.be/nl/themas/bevolking/structuur-van-de-bevolking#figures>>
- Stedman, C. R. (2003). Is it really just a social construction: The contribution of the physical environment to sense of place. *Society and Natural Resources*, 16, 671-685.
- Suderburg, E. (2000). *Space, Site, Intervention: Situating Installation Art*. Bibliovault OAI Repository, the University of Chicago Press.
- Teo, P. & Huang, S. (1996). A Sense of Place in Public Housing: a Case Study of Pasir Ris, Singapore. *Habitat International*, 20, 307-25.
- Thulin, S. (2018). Sound maps matter: expanding cartophony. *Social & Cultural Geography*, 19(2), 192-210.
- Truax, B. (1978). *Aesthetic Research Centre of Canada & World Soundscape Project*. Handbook for acoustic ecology. A.R.C. Publications : A.R.C. The Aesthetic Research Center : World Soundscape Project.

Tuan, Y. F. (1977). *Space and Place*. Arnold, London.

Tuan, Y.-F. (1975). Place: an experiential perspective. *Geographical Review*, 65(2), 151–165.

Visit Limburg (n.d.). *Beweeg-bos*. Accessed 9 May 2023, <<https://www.visitlimburg.be/nl/wat-te-doen/beweeg-bos>>.

Vlaamse overheid (2014). *Decreet betreffende de ondersteuning van de professionele kunsten*. Accessed 7 July 2023, <[https://www.ejustice.just.fgov.be/cgi/article\\_body.pl?language=nl&caller=summary&pub\\_date=14-05-19&numac=2014035384](https://www.ejustice.just.fgov.be/cgi/article_body.pl?language=nl&caller=summary&pub_date=14-05-19&numac=2014035384)>.

Vlaamse overheid [1]. (n.d.). *Geopunt*. Accessed 14 July 2023, <<https://www.geopunt.be/>>.

Vlaamse overheid [2]. (n.d.). *Stimuleringsinstrument kunst in opdracht in de publieke ruimte*. Accessed 10 July 2023, <<https://www.vlaanderen.be/cjm/nl/platform-kunst-opdracht/kennisontwikkeling/stimuleringsinstrument-kunst-opdracht-de-publieke-ruimte>>.

Wetton, N. M., & McWhirter, J. (1998). Images and curriculum development in health education. In J. Prosser (Ed.), *Image-based research: A sourcebook for qualitative researchers* (pp. 263–283). Falmer Press, London.

Williams, D. R., & Vaske, J. J. (2003). The measure of place attachment: Validity and generalizability of a psychometric approach. *Forest Science*, 49(6), 830-840.

Williams, D. R. (2002). Social construction of Arctic wilderness: Place meanings, value pluralism, and globalization. In A. E. Watson, L. Alessa, & J. Sproull (Eds.), *Wilderness in the circumpolar North* (pp. 120-132). U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Ogden.

## Appendix 1: Questionnaire semi-structured interviews (Dutch/English)

Questions interview artistic coordinator:

- *Wie is de opdrachtgever van het Klankenbos?  
(Who took the initiative and funded the Sound Forest?)*
- *Wat wilt Musica bereiken met het Klankenbos?  
(What is Musica trying to achieve with the Sound Forest?)*
- *Wie zijn de doelgroepen van het Klankenbos?  
(Who is the target audience of the Sound Forest?)*
- *Hoe is het Klankenbos ontstaan en hoe is het nadien verder geëvolueerd?  
(Where did the Sound Forest originate from and how did it evolve afterwards?)*
- *Hoe worden de kunstenaars geselecteerd en hoe ziet het ontwikkelingsproces van een klankinstallatie eruit?  
(How are the artists selected and how does the development process of a sound installation look like?)*
- *Welke activiteiten organiseert Musica in het Klankenbos?  
(What activities does Musica organize in the Sound Forest?)*
- *Hoe speelt het Klankenbos in op de kenmerken van de plaats (bijvoorbeeld natuurlijke omgeving, socio-culturele elementen,...)?  
(How does the Sound Forest respond to the characteristics of the place (for example natural environment, socio-cultural elements,...)?)*
- *Wat zijn de toekomstplannen voor het Klankenbos?  
(What are the future plans for the Sound Forest?)*

Questions coordinator production team:

- *Wat zijn de praktische vereisten voor de integratie van klankkunst in openbare ruimten?  
(What are the practical requirements for the integration of sound art in public spaces?)*
- *Wat zijn moeilijkheden bij het onderhouden van klankkunst in openbare ruimten?  
(What are the difficulties in maintaining sound art in public places?)*
- *Hoe vaak hebben de klankinstallaties van het Klankenbos onderhoud nodig?  
(How often do the sound installations require maintenance?)*

Questions financial coordinator:

- *Wie is de opdrachtgever van het Klankenbos?  
(Who took the initiative and funded the Sound Forest?)*
- *Wie financiert het Klankenbos?  
(Who finances the Sound Forest?)*
- *Waarvoor wordt het budget van het Klankenbos gebruikt? Is dit voldoende budget?  
(What is the budget of the Sound Forest used for? Is the budget sufficient?)*
- *Haalt Musica inkomsten uit het Klankenbos?  
(Does Musica receive income from the Sound Forest?)*
- *Hoe zien jullie de toekomst van het Klankenbos?  
(How do you see the future of the Sound Forest?)*

Questions municipality:

- *Vinden jullie het Klankenbos een meerwaarde voor de gemeente Pelt? Waarom wel/niet?  
(Do you think the Sound Forest has added value for the municipality of Pelt? Why (not)?)*
- *Waarom financieren jullie dit project?  
(Why is the municipality financing the project?)*
- *Wordt naast een financiële bijdrage het project ook op andere manieren geholpen?  
(Does the municipality also facilitate the project in other ways than a financial contribution?)*
- *Heeft de gemeente Pelt inspraak in de ontwikkeling van klankinstallaties?  
(Does the municipality of Pelt have influence in the development of sound installations? Why (not)?)*
- *Hoe zien jullie de toekomst van het Klankenbos?/ Zijn jullie bereid hierin te blijven investeren?  
(How do you see the future of the Sound Forest?/ Are you willing to continue to invest in the project?)*

## Appendix 2 – Questionnaire for visitors (Dutch)

- 1) Leeftijd:
- 2) Geslacht: Man 0 Vrouw 0
- 3) Woonplaats:
- 4) Wat is de reden van uw bezoek aan het Klankenbos?
- 5) Hoe heeft u van het Klankenbos gehoord?
- 6) Is het de eerste keer dat u het Klankenbos bezoekt?  
Zo niet, van wanneer dateert uw vorige bezoek aan het Klankenbos?
- 7) Hoe heeft u uw bezoek aan het Klankenbos ervaren?
- 8) Voldoet uw bezoek aan uw verwachtingen?
- 9) Heeft de integratie van klankkunst in de publieke ruimte u meer bewust gemaakt van de zintuiglijke prikkels van de omgeving?
- 10) Heeft de integratie van klankkunst in de publieke ruimte uw blik op de plaats veranderd en op welke manier?
- 11) Heeft de integratie van klankkunst in de publieke ruimte u meer bewust gemaakt van de fysische (natuurlijke) elementen, de socio-culturele karakteristieken en/of de politiek-economische karakteristieken van de omgeving? Op welke manier?
- 12) Heeft de integratie van klankkunst in de publieke ruimte ervoor gezorgd dat u de plaats meer waardeert en op welke manier?

## Questionnaire for visitors (English)

- 1) Age:
- 2) Gender: Male 0 Female 0
- 3) Place of residence:
- 4) What is the reason for your visit to the Sound Forest?
- 5) How did you hear about the Sound Forest?
- 6) Is it the first time you visit the Sound Forest?  
If not, when was the last time you visited the Sound Forest?
- 7) How did you experience your visit to the Sound Forest?
- 8) Does the visit meet your expectations?
- 9) Did the integration of sound art in public space make you more conscious of the sensory stimuli of the environment?
- 10) Did the integration of sound art in public space change your view on the place and how?
- 11) Did the integration of sound art in public place make you more conscious of the physical (natural) elements, the sociocultural characteristics and/or the political economic characteristics of the environment? How?
- 12) Do you appreciate the place more because of the integration of sound art in public space and how?

## Appendix 3: Sound installations of the Sound Forest

### 1) Aandacht



#### Philipp Hawlitschek

2018

This small artificial pond is one of the most poetic places in *Het Klankenbos*. It is surrounded with bamboo and has a tree right in the middle. But there is something unusual about this place: as a subtle manipulation of the existing situation, sound artist Philipp Hawlitschek has induced a constant motion into one of the surrounding plants.

A gentle swaying, back and forth, like an inaudible oscillation or the pendulum of a very slow clock, attracts our attention the same way our eyes adjust themselves to a dark room. The work doesn't aim to be our sole focus of contemplation, but rather intends for all perceptions, sensory or atmospheric, to be included in its presence. The Dutch word 'aandacht' translates as attention; a similar word in German is used to express a sense of concentration, commitment or devotion.

*Philipp Hawlitschek (DE) is an artist focusing on spatial and time-related sound installations that strive to develop a poetic situation through a subtle transformation of space. Generally, no loudspeakers are brought into play: the works use mechanical processes based on tangible materiality. The works are often highly fragile and reward the attentive visitor.*

*This installation was developed as the result of the Klankenbos residency with 'sound art' students from the Hochschule der Bildenden Künste Saar (HBK Saar) led by Andreas Oldörp. A temporary prototype was exhibited in the Summer of 2017 before the current, permanent version was created. With the support of C-Takt platform for the arts.*

## 2) Chaise Résonnante



### Tony Di Napoli

2012

A wooden seat invites passers-by to take a break and sit down for a moment. The bench is anchored in a buried case containing a lithophone. This instrument is made of six limestone bars tuned to slightly different pitches around a low F (at micro-intervals of a ninth of a tone). Whenever anyone approaches the Chaise Résonnante, they trigger a mechanism that makes the six stone bars inside the lithophone start vibrating, which in turn makes the seat itself vibrate. Pipes with the same natural frequencies as the musical stones act as resonators. They conduct the sound up out of the ground. Physical contact with the seat means you can feel the sound as well as hear it.

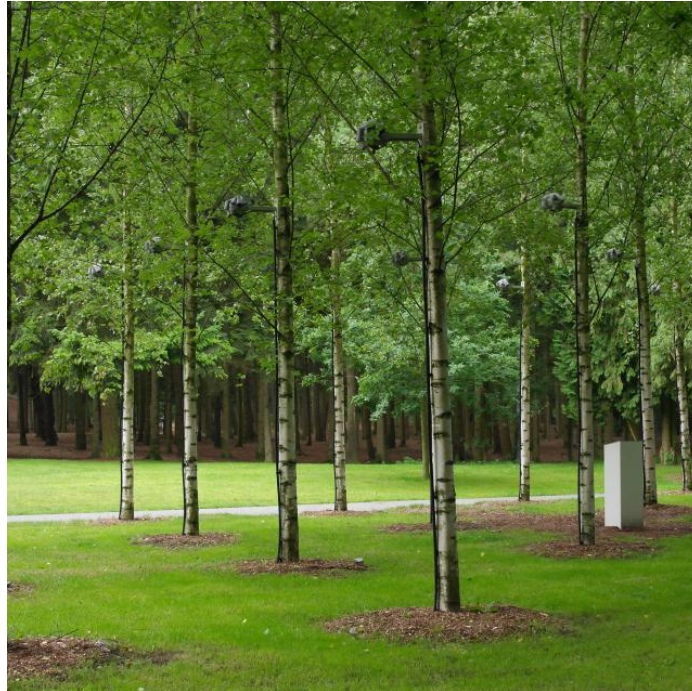
*With the support of the Centre Henri Pousseur – Musique électronique / Musique mixte, Liège*

*Tony Di Napoli (FR) studied sculpture and bookbinding in Liège and Brussels. Di Napoli teaches at the Walloon International Summer Academy, where he leads a workshop in ‘Sculpture and Sounding Stones.’ Since the very beginning, stone has been a constant theme of Tony Di Napoli’s oeuvre. His work is characterized by ‘complementary oppositions’: on the one hand stone as material and a durable element, on the other vegetation as an ephemeral element. He enjoys experimenting and is particularly fascinated by the creation process.*

*Di Napoli combines his skills as a sculptor with his interest in music. He has designed and produced a series of stone instruments which are also used during concerts and other productions. In 2002 he was awarded a grant from the SPES Foundation to study the history of the use of lithophones in Vietnam. This included work with a Vietnamese composer and percussionists.*

*Since 2011, Di Napoli has been a member of the Ensemble Orchestral de la Freta, a company in which professional musicians make music alongside people with a disability.*

### 3) Composed nature



#### **Staalplaat Soundsystem & Lola landscape architects**

2012

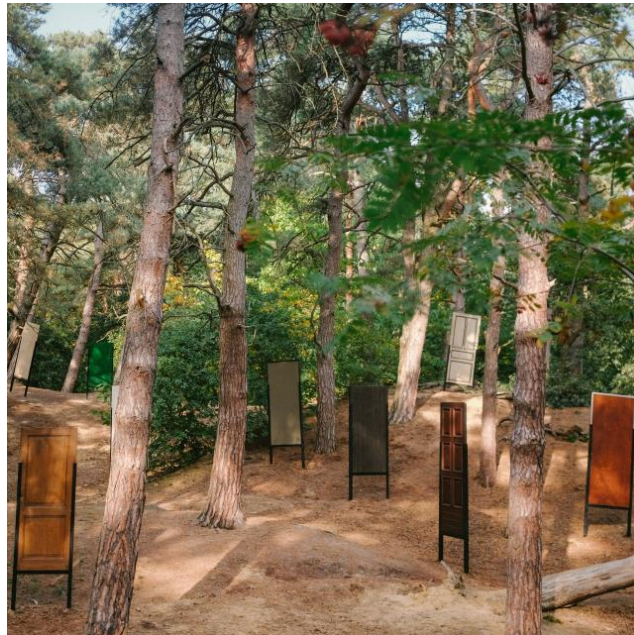
Twenty-four birches are equipped with vibrating motors that can be activated from a distance to make the leaves rustle. The controllable vibration generates noise fields that surround the visitors. The group of motorized trees forms a sensitive but powerful and interactive instrument that invites to improvise and compose. A (super)natural experience is created with apparently passive actors in everyday life: trees.

*Staalplaat Soundsystem (NL) is the platform on which Geert-Jan Hobijn designs and builds all kinds of sound installations. These projects originate from his interest in the acoustic elements and the social function of the public area.*

*LOLA landscape architects is a Rotterdam based design office founded in 2006 by Peter Veenstra, Eric-Jan Pleijster and Cees van der Veecken. With spot-on ideas and actions based on a combination of research and design, LOLA (Lost Landscapes) wants to bring new life to forgotten, worn-out and changing landscapes.*

*A co-production by Musica, Z33 – Kunst in de Open Ruimte & PCT Dommelhof. Z33 Kunst in de Open Ruimte is supported by the Flemish Government's Fund for Cultural Infrastructure.*

#### 4) Doors of listening



#### Félix Blume

2020

The residents of the refugee shelter in Pelt take you along in their stories and living environment. Listen to their voices and soundscapes, in the middle of the forest, through the doors of some villagers. With this work, Sound artist and field recordist Felix Blume invites everyone to listen as a means of mutual understanding and critical thinking. Like a tacit mass; the doors wait for you to approach, press your ear against them and make time to meet those who may already be in a different place. Their sounds vibrate deep inside the material of the door.

The installation is the result of a collaborative process with the residents of the Red Cross Refugee Center Overpelt. In a participatory process they were guided to express themselves through sound. Through the doors, you hear songs, memories, stories, voices and dreams of people on the run. They literally get a place in the landscape and in this way claim their presence and audibility.

*Félix Blume (FR) is an international sound artist and sound engineer. His work focuses on listening and uses sound as the basic material for compositions, videos, actions and installations. His process is often collaborative, with different communities, with the public space as context.*

*A project by: Abeer, Ahmad, Bashir, Dieubéni, Familia Kadicana, Farhad, Getou Kabika Tshingambu, Gerebrhan, Isaac Junior, Manuel, Mila, Najem Alhamoud, Patricia Abigail, Rejoice, Safet, Sali, Sebastián, Yasin Dawoud and Félix Blume.*

*'Doors of Listening' is a collaboration of CC Palethe, C-TAKT, C-TAKT+, Gemeente Pelt, Musica Impulse Centre, Provinciaal Domein Dommelhof, Province of Limburg and Red Cross Refugee Center Overpelt.*

## 5) Het Geheim van Horst



### Horst Rickels

2006

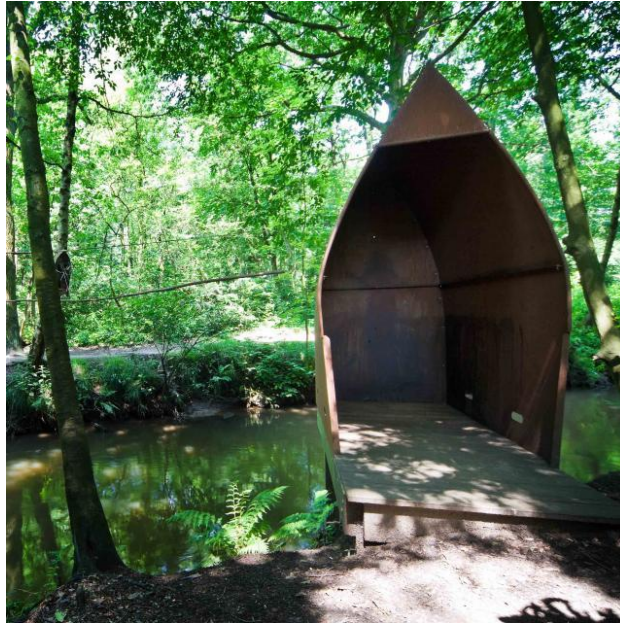
A woodpecker's tapping against a tree is surely one of the most amazing sounds in a wood. Listeners try to locate the bird by tracing the direction of the sound. Every fifteen minutes during the day, this installation creates a sound game of woodpecker noises in the trees, leaving the audience uncertain whether it is real or an artistic interference.

*Composer, performer, graphic artist and tutor Horst Rickels (DE) creates works around the instable component of sound processes. He designs new instruments and multimedia projects.*

### **Practical information**

*Het Geheim van Horst* only works between 8.00 and 19.00.

## 6) Houses of sound



### Pierre Berthet

2005

A network of steel wires and tin can resonators connects two sheds made from Cortensteel on the banks of the Dommel. A resonance emerges in the sheds thanks to sinus waves originating from loudspeakers without membranes that set the wires in vibration. Random ambient sounds are recorded by microphones and mixed into the soundscape. Visitors are completely absorbed in the soundmix in and around the sheds.

Programming and realisation in cooperation with Patrick Delges.

*Pierre Berthet (BE) has studied percussion, improvisation, composition and music theory. He builds objects and installations from different materials. He regularly partakes in expositions and performances and has released two records.*

## 7) Impact



### Nick Steur

2020

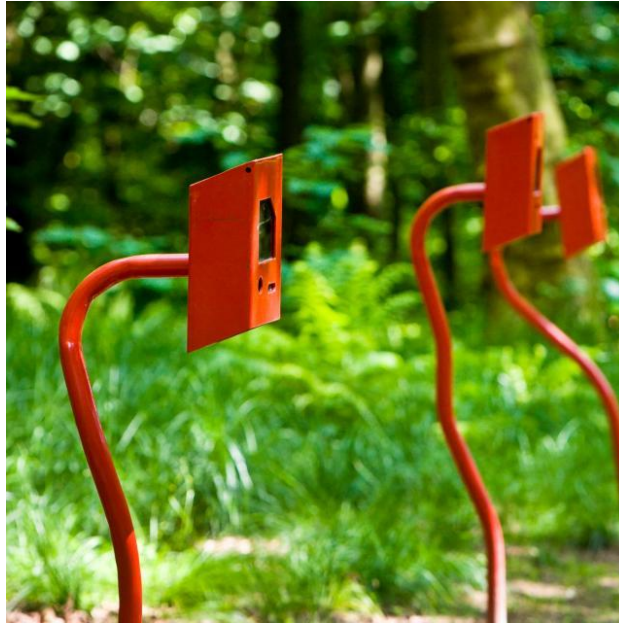
Nick Steur was inspired by a meteor sighting in the desert and started investigating the impact of an impact. An apple that suddenly falls out of a tree, the meteor that caused the extinction of the dinosaurs, the pandemic; there are events that are unforeseeable. With the (literal) release of an enormous weight, attention is focused on this inevitable, unexpected moment, which leaves us with an impression. The question is which one.

Both the preparation of the impact, the falling of the stone, and the stone that remains permanently lying, are part of the work. Just as the stone has (made) an impact on this spot, so the spot makes an impact on the stone ... For the coming 10 years, it will be photographed every fortnight, in order to follow this 'slow' impact.

*Nick Steur (NL) is an artist working primarily with unprocessed materials, with stone being his favourite medium. Though many think of him as a visual artist, Steur is keen on live performance. Rather than grand gestures or symbolism, his actions appear purely functional; connecting steel, moving a boulder or catching a drop of water... However through skill and intense focus he is able to connect an inner dialogue with an external reality. This holistic approach succeeds in communicating subtle changes in time and space, and perhaps in people.*

*Concept and performance: Nick Steur | Production: Famke Dhont & C-TAKT | A production of SoAP, In Situ, C-TAKT, Musica Impulse Centre and Gemeente Pelt*

## 8) Konversation



### Erwin Stache

2006

*Precautions regarding COVID-19: Avoid touching surfaces as much as possible.*

A group of seven and a row of five red chests pop up like plants in nature. They chat and interchange signs or sounds. A number of boxes use orchestral sounds that vary in pitch and timbre according to the distance visitors take from the cases. Other chests record voices or ambient sounds. Sheer coincidence creates a surprising ensemble for the visitors during the day.

*Erwin Stache (DE) has studied physics and mathematics, and is a piano and organ player. His career as a musician, luthier and composer started in 1985. He mainly designs installations for particular public spaces.*

## 9) Oor van Noach



### Robert Lambermont

2010

The Dommel in Pelt looks like a mere scribble when you look at a map of the area. If you have a closer look though on the bank of the river and listen, you realize that it is the sum of a great number of events. The stream consists of millions of splashing waves, rolling pebbles, floating leaves, nibbling fish. In turn they are made up of molecules and atoms, floating in an endless restless stream.

Robert Lambermont constructed *Oor van Noach* (Noah's Ear) to make the Dommel's identity audible. The sound installation is made up of a wooden floating barge. It is connected to a bent arm that ends on the bank in a trumpet form. The higher the water, the deeper *Oor van Noach* bends. Just as the needle follows the groove in a record the impressive creation explores the streaming water. The forces of the fickle Dommel on the work are transformed into sounds that leave the object at the trumpet on the riverbank. Works like *Oor van Noach* are Robert Lambermont's path on the search of a universal language to express his wonder for things in relation to the passing of time. Seemingly slow processes, like the turn of the seasons; in relation to incidental events, like the falling of a leaf, are the central theme of the installation.

*Robert Lambermont* (°1976 - NL) is both a pianist and a visual artist. He graduated at the Gerrit Rietveld Academy in Amsterdam in 1999. He was a piano student of H  l  ne Hammerstein's and Paul Huijts'. He was accompanied as a pianist by Arielle Vern  de, Simeon ten Holt and Willem Jeths. It was during his studies at the Rietveld Academy that Lambermont got interested in Simeon ten Holt's music, especially in the dance worthy and obsessive character of the music. Lambertmont connected his spatial moving objects to music. Many of his piano

*recitals at the Academy ended in confronting his audience with his sculptures and installations. The reactions from the people in the room proved to be a valuable source for new projects.*

*After his studies Robert Lambermont formed a piano quartet that specialized in performing Simeon ten Holt's music for two and four pianos. They played in Music Centre Vredenburg and in Ijsbreker in Amsterdam, amongst other venues. In 2002 Lambermont and Bastiaan Brink formed a new quartet, the Bergen Quartet. Simeon ten Holt became a close friend, who asked Bergen Quartet several times to perform his music.*

*The process of creation of Robert Lambertmont's designs is an organic and intuitive journey. He collects forms and movements that strike his attention in buildings and landscapes, but also in less material matters like conversations or music. He then conducts a poetic selection of these impressions. The next step is to sketch forms that will be used for different types of movement. When he draws a conclusion on the type of (often repetitive) movement the object gradually takes form. In his combined exhibitions and piano concerts Lambertmont explains the poetic nature of the objects. His sculptures can be admired in several museums and collections in The Netherlands, amongst others Museum Het Domein in Sittard and the Rijkscollectie (Zuiderzeemuseum Enkhuizen). He received several grants from the Fund for Visual Arts, Design and Architecture for his work as a visual artist and musician.*

## 10) Oorsprong



### Hans Van Koolwijk

2007

Visitors can literally step into a giant flute and experience the turbulent vibrations of the air that is blown in the sound installation from the other side of the instrument. After closing the door, it becomes obvious that “sound is substance”. The effect of the installation is at its strongest at the labium, because that is exactly the spot where the sound is created: the origin.

*Hans Van Koolwijk (NL) is fascinated by sounds that can be heard and felt. He has studied graphic arts and has made a name with his ‘Bambuso Sonoro’, flutes that can be played simultaneously by just one solo performer.*

## 11) Radio Forest



### Amy Franceschini & Stijn Schiffeleers / Koen Deprez

2009

*Radio Forest* was initially developed as a radio station to broadcast the moods of the forest. Artist Koen Deprez transformed the small building by slicing it in two and placing a layer of glass between the two halves. His source of inspiration for this artistic intervention was the tale of The Bremen Town Musicians.

*Radio Forest* constantly broadcasts soundscapes by promising sound artists. You can also see mobile sound installations there, such as Muziekdozen (Music Boxes) (2005) by Moniek Darge, FluisterOren (Whispering Ears) (2005) by Baudouin Oosterlynck and Musiscopes (2007) by Eric Van Osselaer.

The radio station is also used as an info point for visitors and the place where guided tours and other activities in *Het Klankenbos* begin. It has a digital information stand where you can consult a map, listen to soundscapes, leave your reaction, etc.

Amy Franceschini (US) founded *Futurefarmers*, a co-op including a design studio and an international artist in residence program. Stijn Schiffeleers (BE) reveals the subtleties of life. He is cofounder of *Boutique Vizique*.

Koen Deprez (BE) gives rise to architecture, design, exhibition outline, etc. His projects are consequently obvious, but radical at the same time. Typical for him are chic material choices, concepts emerging from literature, shapes revealing craftsmanship, ...

### **Practical information**

The info point is accessible daily from 8.00 until 18.00.

There is light and sound daily between 8.00 and 22.00.

## 12) Scaffolded Sound Beehive



### AnneMarie Maes

2020

The *Scaffolded Sound Beehive* is an immersive installation which allows you to experience the sound of a beehive. The installation consists of a 2.5 meters tall Warré beehive, in which you can put your head. Here you can listen to an auditory interpretation of the activity in a hive, based on field recordings recorded on the roof of the *Brussels Urban Bee Lab*. The 15-minute recording spans the spectrum of a single day, from midnight to midnight. The increase and decrease in swarm activity in the hive became the guideline for processing the recordings. The audio work tries to embody the bee swarm while simultaneously intersecting the swarm with swirling electronic sound clusters.

*The work of AnneMarie Maes (BE) is situated on the verge between art and science. She studies the interactions and co-evolutions within urban ecosystems, with a strong interest in DIY technology and biotechnology. She works with different biological, digital and traditional media, including living organisms. Her artistic research translates into techno-organic objects, inspired by factual and/or fictional stories. On the roof of her studio in Brussels, AnneMarie Maes built the Urban Bee Lab: an open-air laboratory and testing ground where she studies the processes that nature uses to create forms. Both The Bee agency and The Laboratory for Form and Matter are fertile ground for various installations, sculptures, photographic works, objects and books. With The Bee Agency Project, AnneMarie Maes wants to give back the autonomy to the honeybee and support colonies to live 'in the wild' again.*

### 13) Springtime in a small town



#### Peter Bosch & Simone Simons

2006

This installation is all about vibrations. Wooden boxes on springs start wobbling as soon as visitors approach. In a complex system boxes influence each other. Small changes in movement may cause completely different and unexpected soundscapes. The relation order-chaos is under scrutiny in a constant stream of changes. A powerful experiment by the physician Nikola Tesla that induced a tiny earthquake, inspired the creators.

Hard- and software development in cooperation with Günter Geiger.

*Peter Bosch (NL) has studied psychology and sonology, while Simone Simons (NL) has specialized in audiovisual design. Bosch & Simons have been working on autonomous “music machines” since 1990. They both live and work in Spain.*

## 14) Tacet



### **Hekkenbergarchitects (design) & Paul Beuk (implementation)**

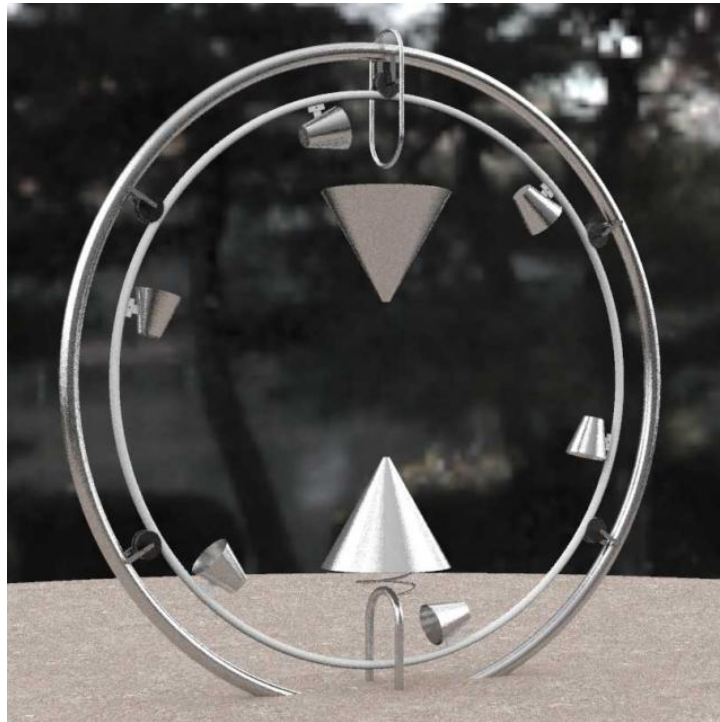
2008

A sound-suppressing glass cube is only accessible via a small subway. The construction affects the environment both visually and acoustically. The huge absence of sound points at silence and the conscious experience of it, whereas the visual impression of the surrounding stays invariable. The design of the installation has been indirectly inspired by the controversial composition 4'33'' by John Cage, a work consisting of three parts 'Tacet' (Latin for 'It is silent').

*Hekkenbergarchitects (NL) was founded in 2002 by Joris Hekkenberg. The office takes care of various projects in which architecture, the arts and other creative disciplines interfere.*

*Paul Beuk (NL) is producer and implements art works on demand as well as complex technical applications for artistic projects.*

## 15) Time Flies



### Erik Vallbo

2022

Time Flies is an interactive sound sculpture that plays with our perception of time by using sand and sound as its main resources. The installation is constructed to resemble a combination of an hourglass and a clock face. The spectator is invited to set it in motion using the surrounding sand. In our perception, time can move faster or slower, and sometimes even come to an (almost) complete standstill. By using sand to materialize the experience of time, our linear sense of time turns into an illusion - created mainly by our own thoughts.

Erik Vallbo (SE) is an artist based in Stockholm with a focus on experimental design. His projects are developed through artistic research and an experimental and playful process with an eye for the unexpected and unseen.

*Time Flies is a project of Musica Impulse Centre (concept, development and coordination) in co-creation with Studio Vallbo, Scoutsrally and C-TAKT. A series of participatory workshops around the project was organized in collaboration with Akindo vzw. This project was made possible in part with financial support from the Flemish Community, within the framework of Kunst In Opdracht. The sculpture was constructed by Spereco and Breetec International. This installation is a concept of Musica Impulse Centre with the support of the Municipality of Pelt & Provinciaal Domein Dommelhof.*

## 16) Wind Zylinder



### **Bernward Frank**

2009

This kinetic sound installation consists of a horizontal and vertical rotating axis, two half discs in steel, various lamellas and clappers. The wind brings the object in the tree in motion and moves the half discs. As a result the clappers sound by hitting the lamellas. The soundmix is often subtle, but can be extreme at times of strong wind. *Wind Zylinder* is the first sound installation in *Het Klankenbos* that entirely uses natural energy.

*Bernward Frank (DE) is leading kinetic artist and founder of Kineticus. His art is all about laws of nature because they fascinate him and offer wonderful experiences when integrated in art.*

## 17) Windribbon



### Leif Brush

2013

*Windribbon* is a long brass strip 0.8 mm thick and 1 cm wide, stretched taut between two trees. The ribbon acts like the string of an instrument. Rain, wind and falling objects such as twigs and pine needles make the ribbon move. The vibrations and sounds of collisions are captured by contact microphones and amplified through a speaker.

The installation in *Het Klankenbos* is a replica of the original installation that the artist, Leif Brush, made in his back yard in 1975.

*Leif Brush (USA) is a pioneer of sound art with a fascination for nature. He studied art at the School of the Arts Institute in Chicago. Some of the work he made as a student already contain the elements that would come to play a central role in his later work. For example, one of his projects was a huge wind harp built on the school roof. Brush later became a professor at the University of Minnesota. He gradually developed his Permanent Forest Terrain in the wooded garden at his home.*

## 18) Xylibraphon, multiplayer mallet percussion instrument



### Volker Staub

2018

This enormous instrument is designed for several players in the open air, and incorporates elements of a xylophone (wood), lithophone (stone) and vibraphone (metal). The bars are all the same length, but they are made of 25 natural materials that each have their own timbre. The combination of cherry wood and granite, for example, generates a unique sound spectrum independent of classical scales and instrument theory. Fascinated by local history, the artist collected old objects he received from farmers in the region. Pick up the mallets and create an environment full of rhythm and sound.

*Volker Staub (DE) is a composer, musician and instrument maker. He studied the piano and composition in Darmstadt and Cologne. He is renowned for his unusual approach to sound. This is expressed in the instruments he develops and the compositions he creates.*

*Artistic concept and realisation: Volker Staub*

*Xylibraphon is a feature of the Landbouwfietroute and a collaboration between the municipality of Neerpelt and Musica Impulse Centre.*

## Appendix 4: Endnotes (Dutch interview extracts)

---

<sup>1</sup> Het Klankenbos als idee, ik spreek dan voor de periode 2016/2017, dus eigenlijk het vorige beleidsplan, daar zat het Klankenbos ingeschreven in onze algemene werking, als een project van Musica. Er kwamen middelen voor het onderhoud vanuit onze Vlaamse werking subsidies binnen het kunstendecreet. Maar dat begon wel een serieus deel te zijn, want die installaties vroegen toch wat onderhoud, nieuwe installaties zijn duur en dat was gewoon niet in verhouding met de andere dingen die we deden, plus ook, als impulscentrum moet je kunnen vernieuwen, nieuwe impulsen geven en het budget was niet genoeg om dat in het Klankenbos te doen. Dus dat klopte niet helemaal niet meer. Maar ja, deze collectie gewoon tabula rasa afbreken is ook niet tof en het is wel zo dat het Klankenbos altijd een heel goed aantrekkingspunt is geweest voor toerisme, voor fietsers, mensen die eigenlijk niet zo specifiek in klankkunst geïnteresseerd zijn, maar dat spreekt tot de verbeelding.

(...)

Dus we vinden dat een deel van de financiering ook voor de gemeente Pelt is, want het ligt hier toch in Pelt in het Dommelhof en dat is eigenlijk toch wel een trekpleister...

<sup>2</sup> Want die 15 000 euro (30 000 euro) die zie je staan. Op papier. Je weet, het Klankenbos kost dat. Als wij dat met eigen mensen moeten doen van de technische dienst en onze dienst communicatie zou de website hebben overgenomen en wij de gidsenwerking, dan steken wij daar uren in. Uren die we niet eens aan kunnen steken, die mensen worden ook betaald en dan weet je niet wat het Klankenbos kost. Als iemand dan vraagt, wat kost dat nu? Of je moet dat gaan bijhouden, maar ja. Dus in dit geval is het duidelijk zichtbaar wat het kost.

<sup>3</sup> Omdat het hier in het bos staat, moet het een beetje in conversatie gaan met de omgeving waarin het zit. Dat kan ook haaks op het natuurlijke aspect zijn of dat kan ook een stuk van het natuurlijke aspect worden. (...) Zoals ik zei ook op verschillende gebieden, dat bijvoorbeeld één installatie heel goed dan blend met de omgeving *over tijd (benadrukt)*, dat het na langere tijd dan ook een stuk van de omgeving wordt, dat het een stuk van het bos wordt eigenlijk. Dat vind ik heel interessant. Dan blijft de magie erin, van hoe is dat hier terecht gekomen en dat soort dingen.

<sup>4</sup> Ja en we hebben gemerkt dat bij het bespelen van de Xylibrafoon dat de steen eronder heel snel kapot gaat, ook omwille van dat kinderen soms hevig zijn en met dat hout en dat metaal is dat geen probleem, maar met die steen moeten die een beetje oppassen. (...) Dan breken die dingen, maar dan zijn we in overleg met de kunstenaar gegaan om te kiezen of wij bijvoorbeeld een heel groot stuk in metaal zouden maken of dat wij voor een dikkere steen zouden gaan. Dan is de conversatie ontstaan van het is een Xylibraphon dus om het concept van de installatie van hout, steen, metaal te behouden moeten wij steen nog gebruiken en we kunnen dat niet vervangen door metaal, wat een duurzamer en steviger materiaal zou zijn. Dus dan is er gegaan voor een dikkere steen.

<sup>5</sup> Ja, iets puur akoestisch dat geen elektriciteit nodig heeft, iets dat veel meer op gelijke schaal, op gelijk niveau met de natuur spreekt dan iets dat zich boven de natuur gaat zetten door heel veel menselijke ingrepen. Het is sowieso een kunstenaarsingreep, dus een menselijke ingreep, maar er kunnen dingen zijn die dicht bij de natuur staan denk ik.

---

<sup>6</sup> Er zijn twaalf deuren. Het is niet zoals een andere installatie waar dat maar een blok is. Daar is het echt zo twaalf verschillende stukken, dus het is ook hoe die er dan uitzien van verschillende invalshoeken want je kan daar allemaal op verschillende wegen terecht. En dan hoe dat die (deuren) in conversatie gaan met elkaar. Ook met die bomen daartussen. Dus, bijvoorbeeld, we hebben rekening gehouden met de kunstenaar en een landschapsarchitect toen bij het bouwen van dit kunstwerk. Dat die deuren soms het kronkelen van een boom volgen in hun positionering, dus dat die eigenlijk niet waterpas staan, maar dat die dan een beetje uit balans zitten omwille van dat die dan eigenlijk met de natuur harmonieus zijn. (...) En ook in de conceptfase van die installatie van Doors of listening was het dat die deuren gingen zweven eigenlijk. En we hebben dan, ook omwille van onderhoudsredenen en toegankelijkheid, een beetje de beslissing gemaakt dat die dan op de grond zouden komen. En daardoor hebben die dan eigenlijk poten of wortels gekregen. Dus in principe is het alsof die hun eigen wortels hebben en die communiceren dan met mycelia of weet ik veel met die bomen hier in het bos.

<sup>7</sup> Nu trilt dat echt als je daar op gaat zitten, dan voel je nog het geluid dat dan naar boven komt en dat gaat dan in samenspraak met de weg. Omdat dat nu luider is, hoor je het Doppler effect dat eruit komt als auto's voorbij razen. De toon verandert ook. (...) Ja, dat is wat ik bedoel met een klankkunstwerk in de juiste omgeving zetten waar die dan in conversatie kan gaan. Soms is dat dan met natuurlijke elementen zoals een boom waar die dan misschien een beetje harmonieus of haaks opstaat en soms is dat de weg waar die de aandacht van wegtrekt of de aandacht naartoe brengt. Dus dat is echt cool, soms is dat echt cool.

<sup>8</sup> Ik denk dat wij dat een voordeel vinden. Ja, ja, ja. Dat echt iedereen het kan beleven. Dat is wel tof. En dat het vrij toegankelijk is. We hebben natuurlijk openingstijden van ons infopunt, dus je hebt enkel toegang op bepaalde uren, maar andere installaties zoals de Doors en zoals Houses of sound die lopen eigenlijk heel laat 's avonds nog. Zeker in de zomer is dat interessant, dan kun je echt op een mooie zomeravond een andere belevenis hebben dan dat je zou hebben tijdens de dag. En dan soms snap ik dat wel van dat die hangjongeren hier komen op bepaalde momenten, want dat is een compleet andere belevenis. Ik zeg hangjongeren, maar ik weet niet wie het is, maar die komen dan op een ander moment, die hebben dan een andere belevenis en dat heeft een andere magie. Bij het duister bijvoorbeeld, Houses of sound is een compleet andere installatie dan overdag. Dus ik kan dat ook snappen op een bepaalde manier dat je dat zou tof vinden. (...) En als het sneeuwt hier is het ook magisch. (...) Composed nature bijvoorbeeld hing vol sneeuw en als je die voor de eerste keer die dag belt, dan valt al die sneeuw van die bladeren af en dat is echt fantastisch om te zien.

<sup>9</sup> Ik vind het leuk omdat het zo eens iets helemaal anders is. Zo met die klanken.

<sup>10</sup> Ik ben al blij dat ik dat gevonden heb want anders... Het is, er zijn mooie dingen bij.

<sup>11</sup> Rustgevend toch wel. ...het zijn heel veel mooie concepten en het is wel fijn. Verrassende klanken.

<sup>12</sup> Ik vond het interessant, ik vond het wel leuk eigenlijk.

---

<sup>13</sup> De kindjes vinden dat wel heel leuk om overal aan te komen. Die ontdekken alles zowat.

<sup>14</sup> Ik vind het een heel mooie locatie. Ik vind het leuk hoe dat het zich integreert in de natuur. Het is ook niet prominent aanwezig. Je moet altijd een beetje op zoek gaan naar de kunstwerken, dat heeft ook wel zijn charmes eigenlijk.

<sup>15</sup> Ik denk het wel, want anders was het een gewoon bos. Dan was ik hier niet geweest denk ik.

<sup>16</sup> Ja, er is veel te zien en te ervaren en dat is fijn. Ja, zoals in het begin dat ze allemaal gingen luisteren en heel veel roepen enzo.

<sup>17</sup> Ja, ik ga dat wel beter herinneren, denk ik, dan een gewoon bos.

<sup>18</sup> Het is een meerwaarde. Ja, want anders is het enkel gewoon een bos met wat paden enzo. Anders is het een bos zoals velen en nu onderscheidt het zich van een normaal bos. Je hebt veel meer... Prikkel is misschien niet het woord? Meer animatie, ik weet niet of ik het zo kan noemen? Ja of dingen om over na te denken.

<sup>19</sup> Maar ik denk dat wij sowieso al wel automatisch luisteren naar de geluiden rondom. Ja, absoluut en het heeft ook echt wel een indruk nagelaten. En ja, wind in de bomen daar luisteren we sowieso al altijd naar en dan met die berken (Composed nature) doet dat er nog meer aan denken. Ja. En dan speciale effecten, dat valt mij dan ook heel dikwijls op. Bijvoorbeeld die buis (Oorsprong) gaf ook echt wel... Ja, door wind die bijvoorbeeld in dingen kan inspelen enzo... Die buis vond ik zeer speciaal. En ook, ik erger mij heel dikwijls aan het geluid van verkeer enzo verder en het glazen huis (Tacet) was op dat gebied... Glazen huis is misschien een verkeerde uitdrukking, maar dus dat stiltehuis dat was echt heel speciaal. Ja, dat is eigenlijk iets dat ons vaak opvalt omdat wij heel veel gaan wandelen, dat er zoveel geluid van de baan te horen is. En dat heb je hier eigenlijk ook wel he? Ja. Als je rondloopt in het bos hoor je wel de auto's, maar in dat glazen huisje is het zo echt zalige stilte... Ik bedoel, met dat glazen gebouwtje (Tacet), dan realiseer je je dat je eigenlijk constant met geluid omringd bent. En dat is een soort van zelfreflectie van, ah wow, ik kan mijn oren niet dichtdoen, want ik ben altijd met geluid omringd. Dat is toch iets dat je dan op dat moment heel sterk binnenkrijgt.

<sup>20</sup> Ja, door die deuren te horen, we luisteren dan, krijg je wel direct zo een indruk van oke, die mensen zijn hier waarschijnlijk of zijn niet meer hier, dat kan ook dan. En het is wel fijn om al die talen te horen en die muziek. Sommige zingen ook echt. Maar dus ja, word je je dan bewuster van de omgeving, van de mensen? Van die mensen misschien, maar... Nee, ik versta de taal niet.

<sup>21</sup> Ja, zeker. Ja, absoluut. Want we waren daar aan het water waar het riet beweegt (Aandacht). Ja, dan ben je je heel bewust van die omgeving daar aan dat vijvertje.

<sup>22</sup> Ja, het blijft uiteraard artificieel alles wat we daar gezien en ondergaan hebben. Maar de blik op... Ik vind het eigenlijk eerder kunst die ergens staat, dan puur klanken. Bijvoorbeeld vooral die deuren (Doors of listening), een deur dient normaal om door te gaan en deze keer

---

kon je alleen maar rond de deur gaan en hoorde je iets dat zagezegd door de deur kwam. Dat is mij enorm bijgebleven ook... Maar het fijne is dat je zowel kunst, cultuur als landschap en de buitenlucht... Want de meeste musea zijn altijd binnen en weet ik wat, of hier en daar wat beelden enzo, maar dit gaat veel verder dan gewoon een beeld dat ergens staat, dit is echt wel... Het summum van ervaring van alle zintuigen bijna.

<sup>23</sup> Maar zelfs zo een specht, dat is niet iets groot, maar daar zit toch allemaal bekabeling en techniek achter en dat kost wel wat. Dat is wel een investering in mensen die dat kunnen ontwikkelen en ik heb niet het gevoel dat op dit moment dat geld daarvoor is. Dus mijn verhaal over het Klankenbos is eigenlijk niet zo heel positief. Het is geen idyllische plek waar we zeggen, "ah, elk jaar maken we een nieuwe sculptuur en daar is genoeg geld voor". Ik vind dat als je rondloopt in het Klankenbos ook... de mensen die hier zijn en met de middelen die er zijn, er wordt echt wel heel hard hun best gedaan om alles te onderhouden... maar als je rondloopt zie je vaak toch ook wel de gebreken. Werkt dit nu of werkt dit niet, en dat zou niet mogen natuurlijk, dan moet je het daar gaan weghalen, want ik denk dat het erger is voor een bezoeker als iets er staat, maar niet meer werkt, al is het ook jammer als iets er niet meer is.

<sup>24</sup> Het is absoluut een meerwaarde voor de gemeente Pelt omdat het een vrij unieke collectie is. (...) Er zijn bij mijn weten niet veel plekken waar een dergelijk aanbod is. Waar geluidskunstenaars permanent tentoonstellen, los dan van het feit dat Musica rond het Klankenbos ook nog allerlei activiteiten ontwikkelt. (...) En het is zeker een meerwaarde omdat het de geluidskunst op een bijzondere manier in de openbare ruimte brengt. Daar staan installaties waar je nooit aan zou denken. De Spechten bijvoorbeeld, maar ook andere. Soms heel gekke constructies, maar dat is net het unieke aan die geluidskunst he. Dus ja, het is een absolute meerwaarde. Het trekt ook wel specifieke toeristen, maar ook de gewone bevolking en ook kinderen gaan gewoon naar daar.