Hochschule Neubrandenburg
University of Applied Sciences

Master's Thesis

For Achieving the **Master's Degree of Engineering (M. Eng.)**

in the Course of Study in
Landscape Architecture and Greenspace Management
of the University of Applied Science Neubrandenburg

First Supervisor: Mr. Prof. Dr. phil. Philip Caston
Second Supervisor: Mrs. Prof. Dr. Caroline Rolka

A Method of Describing the Genius Loci for Designers
–
Examining the Phenomenon of the Term Genius Loci
for Methods that Describe it Comprehensively

**Submitted by Annika Katharina Steinfeldt
on 11th November 2020**

urn:nbn:de:gbv:519-thesis2020-0153-4

Declaration of Originality

I hereby declare that I am the sole author of this master's thesis entitled *"A Method of Describing the Genius Loci for Designers – Examining the Phenomenon of the Term Genius Loci for Methods that Describe it Comprehensively"*. I have not sought or used inadmissible help of third parties to produce this work and I have not used any sources other than those listed in the bibliography and identified as references. I further declare that I have not submitted this thesis at any other institution in order to obtain a degree.

Place, Date — Annika Katharina Steinfeldt

Abstract

The *genius loci*, a kind of over all character or personality (→ *genius*) of a locality (→ *loci*), is a Europe-based and mostly historical term. It refers to the phenomenon that describes the way people perceive over all characters and individual characteristics in places. Because of world wide developments like the globalisation and the digitalisation, the environments that people perceive on a day to day basis changed and continues to change significantly. Thus the need to be able to consciously determine and engage with something like a *genius loci* is becoming increasingly relevant again, especially for the designers creating or maintaining those environments.

Next to this increase in relevance, the author's personal interest in this topic lead to an extensive research about the most pertinent terminology and methods of describing the *genius loci* for designers. Because no contemporary and scientific methods were able to be found, the author then developed a proposal for a new method that is centred around the dynamics of human perception and was created on the basis of her research. In order to demonstrate the operating principles and explore possible content variables of the method proposal, it was then applied to several example places from the city of Neubrandenburg in the north-east of Germany.

Acknowledgements

Table of Contents

1. Introduction

1.1 Inspiration for the Thesis Topic

All in all the *genius loci* refers to a kind of over all character or personality (→ *genius*) of a locality (→ *loci*). In the more distant past this term was used when people analysed places as a whole phenomenon in order to create new uses and designs that aligned harmoniously with the natural, historical and cultural context of that place. Today there are no established and scientifically backed methods that support designers to do the same in their line of work.

Although scientific methods for describing the *genius loci* for designers still need to be found, the evaluation and description of the current situation of a place is already a fundamental step in every design project. This is also manifested in many fee structures and honorarium codes like for example the HOAI, a German honorarium code for architects and engineers, whose first of the nine determined service phases demands the investigation of all fundamentally important facts about the site that are potentially relevant for the new design.[1] Although the current situation of a site and its surroundings is always considered to some level, the extent of this consideration depends on the planning profession and the individual planner's choice. The scale of the project makes no difference in this respect. Whether it is planners for landscape use, city development or singular places, the quality and state of the actual site is never ignored in planning. Nevertheless, the different types of planners usually solely focus on their specific field of expertise like for example flora and fauna, soil or built foundations, historical, social and cultural backgrounds of the site or the health-impact it has on people. In this manner a methodical approach to the place as a whole phenomenon that transcends singular fields of expertise is often missing.

Moreover, the way and degree to which people consider the environmental (natural and cultural) context for their designs is also influenced by societal factors and always depends on what the respective society thinks a "good" design ought to accomplish. Practically all societies in the world have experienced developments like the industrialisation, globalisation and digitalisation which affected the relationship people had and have with their environment and in turn what they value in designs. Two of the trends that are slowly manifesting in today's society are sustainability and individual authenticity. It is for example a trend to use local resources again instead of cheaper and location-independently mass-produced materials.[2] The assumption behind this is that the local materials, techniques or labourer contribute to a building process and finished design that is more sustainable and authentic. The local materials make wasteful shipping efforts irrelevant for example and support the local economy which in turn strengthens the economic system as a whole. In a rapidly changing world such strong ecological and economical systems are very desired.

When a design uses local resources, people also often consider it to be more authentic to its place of origin, natural environment and cultural heritage. In an increasingly global society which has global markets, globally developed and distributed materials, techniques and sometimes labour forces, the designs begin to look more and more similar. Because of this, people find fewer structures and features in their natural and built environments that are recognizably different from other areas which they could either uniquely identify the place with or identify themselves with. Because *identity* always becomes a topic of bigger interest when it is compromised or missing,

---

1   HOAI 2013
2   Mora 2019

reintroducing local elements into designs has become more desirable for people in order to strengthen the identity of places and the parts of them that are identified with those places.

The harmonious alignment of a design with the natural, historical and cultural context of a place, which the *genius loci* was used for in ancient times, can be compared to the sustainable and authentic designs that people ask for more and more today. One can therefore argue that defining and introducing a method for describing the *genius loci* in today's world of designers will become even more relevant in the near future.

In her designs the author of this thesis was always determined to incorporate the place's general character and seemingly inherent atmosphere. Her studies in the German city of Neubrandenburg, Mecklenburg-Western Pomerania, have also shown her how much the above mentioned global developments as well as different cultures and political systems strongly affect how people perceive themselves within their spatial context as well as how people perceive the character of their spatial context. Especially when people are identified with their environment, they appreciate it when designs honour the character the people identify themselves with. Many projects in Neubrandenburg and other sites in the north-east of Germany have acquainted the author of this thesis with the interesting history, identity-conflicts and consequential design manifestations that especially the political division of Germany has had on the country and its population. In her endeavours to honour the *genius loci* she also found that no matter for which design profession she researched, there were no clear and practical tools available to determine and describe the holistic character of places.

1.2   Aim of the Thesis

With this thesis the author explores and presents the historic and contemporary phenomenon of the *genius loci*. The goal is to review whether there already are scientific methods for describing the *genius loci* for designers. If no methods can be found, the author will take inspiration from the research of her thesis and develop a proposal for a new method. Then example applications will provide a check for the applicability of either existing methods or a new one.

In order to achieve this, the historical development of the term and its current interpretations and equivalents are explained first. After the subsequent presentation of the possibly existing or at least related methods, a thorough comparison and analysis of the terms and methods is conducted. This either presents an existing method for describing the *genius loci* or it is the foundation for developing a new method. If an existing method can be found, the author will thoroughly check it for usability for designers, apply it comprehensively to at least one existing place in Neubrandenburg, Germany, and analyse the representative data of that research. If no existing methods can be found, the author develops a new method, conducts a much shorter check of applicability and chooses an appropriate amount of examples that show the operating principles and self-developed aspects of the new method.

The research issues of this thesis:
1. What is a *genius loci* and how did its definition / understanding change over time?
2. What methods describe or evaluate the *genius loci* and what elements are analysed in that process?
3. Which methods could be suitable for designers? Or if there are none: What could a method look like that could be suitable for designers?

1.3   Methodology

TERMINOLOGY

- DESCRIBE THE HISTORICAL TERM "GENIUS LOCI"
- DESCRIBE THE SCIENTIFIC TERM FOR "GENIUS" → IDENTITY
- DESCRIBE THE SCIENTIFIC TERMS FOR "LOCI" → SPATIAL ENTITIES
- DESCRIBE THE LOCALLY RELEVANT HISTORICAL TERM "HEIMAT"

EXISTING METHODS

- DESCRIBE ALL RELEVANT METHODS FROM ENVIRONMENTAL PSYCHOLOGY
- DESCRIBE ALL RELEVANT METHODS FROM ARCHITECTURAL / URBAN THEORY
- DESCRIBE ALL RELEVANT METHODS FROM PSEUDOSCIENCE / ESOTERICISM

ANALYSIS & COMPARISON

- RELATE & COMPARE ALL RELEVANT HISTORICAL BACKGROUNDS
- RELATE & COMPARE ALL DEFINITIONS OF THE GENIUS LOCI IN THE METHODS
- SUMMARISE & VISUALISE THE RESULTS FROM BOTH ANALYSES

CHOOSE A SUITABLE METHOD OR DEVELOP A NEW METHOD

- DEFINE THE CONDITIONS THE METHOD MUST FULFIL FOR DESIGNERS
- DEFINE THE PURPOSES & LIMITS OF A CHOSEN OR NEWLY DEVELOPED METHOD
- DEFINE THE UNDERLYING CONCEPTIONS OF SPATIAL ENTITIES; A GENIUS & GENIUS LOCI IN THE CHOSEN OR NEWLY DEVELOPED METHOD
- DISCUSS SUITABILITIES OF THE EXISTING METHODS FOR DESIGNES

CHOOSE ONE EXISTING METHOD OR PARTS OF EXISTING METHODS	CHOOSE TO DEVELOP A NEW METHOD
	DEVELOP & JUSTIFY THE STEPS OF THE NEW METHOD

APPLICATION OF METHOD

APPLY THE METHOD COMPREHENSIVELY TO AT LEAST ONE EXAMPLE PLACE	APPLY THE METHOD COMPREHENSIVELY TO APPROPRIATE EXAMPLE PLACES
CREATE & DISCUSS REPRESENTATIVE DATA	APPLY SELF-DEVELOPED PARTS OF THE METHOD TO FURTHER EXAMPLES

CONCLUSION

- REVIEW & REFLECT ON THE PROCESSES & RESULTS OF THE FIVE PHASES OF THE THESIS

2. Main Body

2.1   Basic Terminology in Historical Context

The *genius loci* is a Europe-based and primarily historical term. The various either deliberately or coincidentally developed equivalent terms throughout the world have produced different interpretations of the historical *genius loci* that often contradict each other in some parts. In order to understand the phenomenon of the *genius loci,* its main historical and modern perceptions are explored throughout history and in today's research. Since the term *genius loci* is mostly used in philosophical, historical and pseudoscientific or esoteric texts[3], scientific equivalents need to be found as well. To achieve this, the term *genius loci* is split into its two elements *genius* and *loci* and their contemporary scientific interpretations are explored: identities (→ *genius*) and the spatial entities these identities refer to (→ *loci*). When recombined they allow a comprehensive understanding of the way different scientific disciplines understand the development and dynamics of *spatial identities* as the closest equivalent to the *genius loci*. Because this thesis aims at applying the newly formulated method to the German city of Neubrandenburg, the German term *Heimat (similar to homeland)* is added to the research, because it represents a specific spatial identiy.

2.1.1 The Historic Genius Loci and Spirit of Place

Genius loci and *spirit of a place* are synonymously used historical terms that are explored by fewer scientific and more philosophical and pseudoscientific literature.[4] Its meanings have changed considerably throughout time. While some understand those terms as having a metaphorical meaning only, others view it for example as a historic zeitgeist, a sociocultural *spirit of place*, a set of aesthetic and ecological or synthetic qualities of a place, a place-bound field of energy or an actual local spirit and saint.[5]

In ancient Greece it was a common understanding that every place had a spirit which demanded obeisance and could afford answers in oracles. Within this conception people viewed themselves as subordinate to these atmospheric, natural and divine forces.[6] This was, therefore, also reflected in their architecture. The temple grounds, for example, were always adapted to the geography of the place and the choice of the divinity reflected the characteristics of the place. Temples of the god Poseidon (god of the sea), for example, were often positioned towering over the ocean, or were at least built near water[7]. At that time the term *genius loci* did not exist yet. Instead, this *spirit of place* was called a *daimon* (δαίμων) and represented the divine part of an entity like a soul – the part that was said to outlive the mortal life. It encapsulated all potential forces and possibilities of (human) nature, the good and the bad, although the Greek emphasised the dangerous sides of each *daimon*.[8] Roughly around 800 BC the Olympian gods who were universally known in ancient Greece replaced many archaic gods and spirits and became the Olympic-mythical *genius loci* as divinities.[9]

---

3   Arndt 2019, pg 43
4   Arndt 2019, pg 43
5   Kozljanič in Heimrath & Mallien 2009, pg 12
6   Arndt 2019, pg 47-48; Kozljanič in Heimrath & Mallien 2009, pg 15-16
7   Kozljanič in Heimrath & Mallien 2009, pg 17
8   Bischof in Heimrath & Mallien 2009, pg 35
9   Kozljanič 2004a, pg 151-153

In a similar manner the *genius loci* was a guardian spirit in the Roman understanding[10] which focussed on the positive aspects of all human and natural potential which the *genius* stood for[11]. These spirits were innate to all beings, gods and places and represented their protecting companion as well as their character giving entity.[12] Although, as stated previously, the idea of spirits belonging to and shaping a place existed before, the term *genius loci* was founded in Roman times. *Genius* meant an attendant spirit[13] or a person, creature or other entity with a consciousness who / that can produce something or enables the process of producing something (Latin: "genere")[14]. In this manner individuals, items as well as collectives were able to have a *genius*.[15] The term *genius loci* specifically addresses the spirit of the <u>place</u>, since *loci* describes all spatial entities like places, spots or positions.[16] This also explains why the terms *genius loci* and *spirit of place* are used interchangeably, since one is the translation of the other. In the Greek as well as Roman understanding the individual or collective *genius* of creatures was considered to be intertwined with the *genii* of places and other non-creatures.[17]

During the late Roman Empire but especially during the Middle Ages the religion of Christianity shifted this mystic understanding of *spirit of place* into a dichotomous, moral perception of either good or evil spirits and therefore either good or evil places. The ancient way of thinking slowly disappeared as new Christian buildings were erected on the foundations of temples or other pagan places of worship. The supposed spirits of these places either got forgotten or sometimes translated into Christian saints.[18]

In Modern Times (14th century – 18th century) the world view shifted again, now into a subject-centred and rational way of thinking, which changed the understanding and appreciation of the concepts of *genius loci* and *spirit of place*. This process can be grouped into these three stages:

  a) beginning 14th century – end of 16th century,

  b) 16th century – 17th century and

  c) late 17th century – 18th century.

From the beginning of the 14th century to the end of the 16th century, the Renaissance and the movement of Humanism caused the first modern reinterpretation of the terms *genius loci* or *spirit of place*. The terms were used as a metaphor[19], a description of an entity's set of characteristics[20], which people created as they individually interacted with places and attached spiritual, cognitive and aesthetic meanings to them. During the 16th and 17th century and the Reformation local spirits and gods were rejected all together and considered an interference in the preferred direct contact with god.[21] *Genius* now described a natural or inborn set of talents or intellectual capacities.[22] In the era of Enlightenment (late 17th century – 18th century) all concepts of a *genius loci* or *spirit of place* were said to be illogical and fictional. They reasoned that a) people from ancient times were less developed, evolutionarily speaking, b) that there are scientifically examinable mechanisms that

---

10 Norbert-Schulz 1980, pg 18
11 Bischof in Heimrath & Mallien 2009, pg 35
12 Norbert-Schulz 1980, pg 18
13 Popovic 2016, pg 8
14 Bischof in Heimrath & Mallien 2009, pg 33
15 Bischof in Heimrath & Mallien 2009, pg 34
16 Popovic 2016, pg 8
17 Kozljanič in Heimrath & Mallien 2009, pg 47
18 Arndt 2019, pg 48; Kozljanič in Mallien & Heimrath 2009, pg 17-18 & 20
19 Kozljanič in Heimrath & Mallien 2009, pg 22-23
20 Popovic 2016, pg 8
21 Kozljanič in Heimrath & Mallien 2009, pg 22-23
22 Popovic 2016, pg 8

explain the phenomenona that were previously explained with mysticism, c) that the mystical understanding used to serve a sociological function, and d) that people in the ancient times needed mystical explanations since they lacked proper scientific methods and knowledge. Now, that people had these tools and cognitive skills, mystical concepts were unnecessary. This meant that a *spirit of place* was always considered a fictional creation of people, that the aspects which made a perceived *spirit of place* ought to be studied in scientific rather than mystical ways and that the terms *genius loci* and *spirit of place* soon became completely unpopular.[23]

Only since the Romanticism at the end of the 19th century the terms were used again in such disciplines as poetry, philosophy and landscape gardening or landscape architecture. The term attempted to grasp the essential atmosphere of a place and, in case of the designing disciplines, the term was used in order to keep this essence alive in any new designs. In all other areas of science the positivism movement was most prevalent and determined that, in the attempt to methodically understand the world, all metaphysical concepts like the *genius loci* were unusable.[24]

Time Period	Approach to Genius Loci	Genius Loci	Deducible People-Place Relationship
ancient Greece	**Archaic & Mythical** experienced as a feeling and spiritual entities	guardian spirit of place	people see themselves as subordinate to natural & divine forces

people picture themselves (human characteristics, good & evil) within deities |
| ancient Greece & ancient Rome | **Olympic & Mythical** experienced as a feeling and spirit-like entities | Olympian set of *daimons* or guardian spirits of place | people see themselves subordinate to nature & natural forces on big scale

people project their characteristics, ideas of good & evil into place *daimons* |
Roman Empire & Middle Ages	**Medieval & Christian** experienced as demonic or saint-like entities	local demon or saint / good and evil places	people project their ideas of good & evil into places
beginning of 14th – end of the 16th century	**Modern Times & Humanism** experienced as a feeling and as an aesthetically pleasing entity	metaphor	people project their ideas of beauty and sensibilities into places
16th and 17th century	**Modern Times & Reformation** experienced as interference in preferred direct contact with god	none	people should not project god into places god should be worshipped exclusively and directly
late 17th century – 18th century	**Modern Times & Enlightenment** experienced as theoretical and geometric	none	people project their ideas of objective & geometric measurement into places
end of 19th century	**Romanticism & Aesthetics** experienced as a feeling and reverent appreciation for aesthetics	divine / almost divine metaphor	people project their ideas of good & bad into places

people see themselves as protectors of their nature and homeland (Heimat) |

Table 1: the historic genius loci (translated and reduced table from Kozljanič 2004, pg 158)

The next big shift in understanding and working with the terms *genius loci* and *spirit of place* happened in the 20th century and still continues today. The terms are being rediscovered due to the emergence of the phenomenological approach in sciences, which, without any reductions, focusses its research on the full phenomena in life as they are perceived by people.[25] Since then, the more significant contributions to the concept of *genius loci* come from the disciplines of

---

23 Arndt 2019, pg 48-49; Kozljanič in Heimrath & Mallien 2009, pg 22-23
24 Arndt 2019, pg 49-50; Kozljanič in Heimrath & Mallien 2009, pg 24-26
25 Kozljanič in Heimrath & Mallien 2009, pg 26

architecture, anthropology and philosophy.[26] Since the 1970ies, architectural theory, for example, was hugely influenced by the phenomenological approach[27] and produced several conceptions and methods concerning a *genius loci*. While a phenomenological philosopher argued, for example, that the basis of perceiving any concept of *genius loci* is a "contemplative encounter with a place"[28] other theorists described the *genius loci* as the character of a place which consists of both a general atmosphere as well as a specific substance and space-defining elements.[29] Similar to that, the *Québec declaration on the preservation of the spirit of place* from 2008 defines it as consisting of both tangible or physical aspects (buildings, sites, landscapes, routes, objects) as well as intangible or spiritual aspects (memories, narratives, written documents, rituals, festivals, traditional knowledge, values, textures, colours, odours, etc.) that provide a place with meaning, value, emotion and mystery.[30]

Due to the mystical roots of the *genius loci* and the continuous spiritual character of later interpretations, the concepts that were developed for describing the *genius loci* in architecture, anthropology and philosophy have not yet been widely accepted or further developed into more practical methods.[31] However, contemporary urban design practices, among many other design practices and industries, increasingly prioritise creating "character areas", authentic atmospheres and context-conscious designs.[32] Even products are advertised with authentic local background and character. The tourism industry also often markets travel destinations by presenting them with a strong focus on the unique character and properties, showing that the perception of a clear *genius loci* is somewhat of a natural human interest.[33] In this sense they deliberately work with something that can be called *genius loci* or *spirit of place*, even if they do not call it that.

---

26 Arndt, 2019, pg 43
27 Uzzell 2007, pg 6
28 Arndt, 2019, pg 47
29 Norberg-Schulz 1980, pg 6
30 Doroftei 2016, pg 64
31 Vittori 2006, pg 7
32 Popovic 2016, pg 12
33 Norberg-Schulz 1980, pg 18

2.1.2 Spatial Entities

After achieving an overview of the development of the historical *genius loci*, it is time to examine its component parts from a contemporary and scientific point of view. The terms *genius loci* and *spirit of place* are made of two aspects and we will start looking into the locality first.

genius / spirit		**loci / place**
A metaphor, atmosphere, set of properties, character, identity etc. …	+	… that a spirit is located at and identified with.

Although terms that describe spatial entities like *place* are frequently used in all sciences as well as the daily to day basis, there is no universally accepted definition of those terms. Because the component part *loci* is not specific about what type of spatial entity it refers to, the research about *place* is extended to include all of the most popular terms that describe spatial entities: *space, place*, and *landscape* or *region*.

First Conceptions

The earliest accounts of conceptualising *place* are from the philosopher and polymath Aristotle in ancient Greece, who described a place to be an immovable boundary in which other entities can move or be moved. In this manner he defined the characteristics of places as immovable in opposition to the characteristics of the things these places can contain. According to Aristotle the things encompassed by a place are movable because they have changeable bodies / shapes, extents, substances / materials, effects and movements, unlike the place surrounding them.[34] This definition also means that, according to Aristotle, every matter / body within a place is clearly discernable and can be described for example topographically with coordinates.[35]

Middle Ages → 19th Century

The next term that specific definitions can be found for is *landscape*. In central Europe, during the early Middle Ages, the term *landscape* stood for the general gestalt of peoples and areas without reducing it to natural landscapes as well as an area in which certain norms and rules were valid. In the 15th and 16th century "landscape" was used in way of describing paintings which depicted a more rural area of land, which was later properly established as a technical term by the German painter Albrecht Dürer and German poet Johann von Goethe.[36] Like back then, art history to this day views landscapes as something that does not exist on its own, but needs a perceiving subject, which creates it into existence through constructive art.[37] The historical and cultural developments that affected these definitions of *landscape* are the same that affected the historical *genius loci* which, after the Middle Ages was reduced to an artistic and metaphorical term.

In the 17th century the term of *space* was discussed for the first time. Again, parallel to the development that the *genius loci* experienced in the time of Enlightenment, spaces became something rational and objectively measurable. According to the English scientist Isaac Newton, space had concrete characteristics that were autonomous from whatever it contained.[38] He

---

34 Cordes 2010, pg 63
35 Cordes 2010, pg 87
36 Claßen in Gebhard & Kistemann 2016, pg 32
37 eTopoi Journal 2012, pg 170
38 McKenzie & Tuck 2015, pg 6

distinguished the absolute space from the relative space. While he determined the former to be immovable and to stay similar, no matter what external influences were at play, the latter was made up of all those movable aspects of absolute spaces.[39] According to the German polymath Gottfried W. Leibniz, however, any absolute concepts of places or spaces were pointless metaphysics[40] and spaces therefore were all relational, dependant and held no qualities by themselves[41]. He viewed spaces as networks of places and one object always located in relation to another.[42]

The term *landscape* started to encompass both the natural as well as the man-made areas of land for the first time in the 19th century. The folklorist and social theorist Wilhelm Riel was the first to voice the hypothesis that claimed a connection between people and landscapes in 1954. From there onwards a central European ideal of a cultural landscape was established, which reflects the local culture and relationship with their lands.[43]

Input from Japanese Philosophy

The conceptualisation of *places* was taken up again by the Japanese philosopher Kitarō Nishida in the beginning of the 20th century who developed *the logic of basho*. Contrary to Aristotle he detached the definitions of a) *place* and b) *thing within the place*. At the same time he dissolved the dualism of a) the perceiving subject and b) the inanimate objects.[44] In his philosophy, a place was neither a) a subjective consciousness (i.e human, animal) or item experienced through a subjective consciousness nor b) an objectively describable spacial reference (i.e. by coordinates).[45] Instead, a place starts existing in the event when a consciousness and a non-consciousness meet and the consciousness (i.e. human, animal) experiences the non-consciousness (i.e thing). This event, however, also has to happen somewhere. In Nishidas's field-theory this happens in a realm he called *basho*, the empty field, the absolute nothingness. In this idea Nishida referenced many philosophical ideas like the *chora* of Plato (primordial matter – everything and nothing) and the *topos eidon* of Aristotle (place of ideas).[46] Furthermore he was inspired by the Buddhist Zen philosophy. In one ancient text, the Heart Sutra, the formation of form from nothingness is expressed by the well-known statement "Form is empty, emptiness is form.". This text also states that "Emptiness is I" which means that every true or natural animate self is a non-egoic self, a self that is not predetermined by an ego but is like an empty canvas for the self to perceive the world and create its reality. This state of nothingness which was called *wu* in China and *mu* in Japan always described an empty background to any "perception of reality".[47]

The Spatial Turn in Sciences

In the 1970ies and 1980ies the conceptualisations of *space, place* and *landscape* experienced a shift in science as they were allocated a new role. Spatial entities were now considered to influence all social matters and to be a determining factor as well as the manifestation of the way people attach meanings to things, places and themselves.[48] This shift has many names,

---

39 Levinson 2003, pg 7
40 Levinson 2003, pg 8
41 McKenzie & Tuck 2015, pg 6
42 Levinson 2003, pg 8
43 Claßen in Gebhard & Kistemann 2016, pg 33
44 Cordes 2010, pg 78
45 Cordes 2010, pg 87
46 Cordes 2010, pg 79
47 Bea w.y.
48 McKenzie & Tuck 2015, pg 6

like for example the *spatial turn* or *landscape turn*. The term *spatial turn* was mentioned for the first time in an essay about postmodernism by the American literary historian Frederic Jameson in 1988 who described it as the manifestation of a postmodern way of thinking. Another essay, that was written by the American geographer Edward W. Soja in 1989 mentioned the term in the sub-headline and described spaces as a social product. This negates previous conceptions of an essentialist and merely physical conception of spatial entities.[49]

Although there are many names and interpretations and no anthropological or international definitions of *spatial turn*, its ideas have found their way into most sciences today.[50] According to the summary of this movement by the English geographer Doreen Massey the movement first of all claims that *space* is not just perceived as a physical but instead many-layered human experience. Furthermore, some movements argued that the traditional emphasis on historical developments of issues is questionable and that researchers should always equally consider the spatial references while studying a topic.[51] This becomes evident in Soja's statement in which he explained that "scholars have begun to interpret space and the spatiality of human life with the same critical insight and emphasis that has traditionally been given to time and history on the one hand, and to social relations and society on the other.".[52] Some movements of the *spatial turn* also re-evaluate the older conceptions of spatial entities that have been described in this thesis so far and analysed the shortcomings and results of those. While some researchers believe that globalisation and its consequences of creating an inhuman world are unavoidable, other researchers resist this idea. Last of all spatial justice, describing the chances afforded to people by the places they live in, were discussed more and more within that movement as well.[53] Although this movement has received considerable resistance, the turn of sciences towards considering space as much as or more as time is prevalent everywhere.[54] In the movement of the *spatial turn* as well as the environmental change of perception, landscape studies have loosened the dichotomy of nature and man by redefining the landscape.[55] The general definition of *landscape* in the *European landscape convention*, Florence ("… an area, as perceived by people, whose character is the result of the action and interaction of natural and / or human factors.") shows this perfectly.[56]

One contribution to the *spatial turn* is the phenomenological understanding of different types of spaces by the Canadian geographer Edward Relph. These spatial modes describe certain ways that human perception can experience and interact with spaces. The first three spatial modes describe experiences that are perceived instinctively, immediately and physically.[57]

pragmatic space	It is the most basic mode in which people learn to physically relate to their surroundings in their childhood. It pertains the human understanding of directions (left, right, up, down etc.), the way human senses are able to locate stimuli (sight, smell, touch, hearing, taste) as well as human movement such as walking, sitting and standing.[58]
perceptual space	This space has a certain importance to the individual's identity, not just to their basic functions and health. It is an abstracted space that is subjectively defined and is created whenever an individual is emotionally confronted with their surroundings. Depending on the people's individual conditioning, changing needs, movements or actions, the perception of the space can develop and change. For this

---

49 Roskamm 2012, pg 173
50 Döring & Thielmann 2008, pg 10-11
51 McKenzie & Tuck 2015, pg 13
52 Soja in Döring & Thielmann 2008, pg 9
53 McKenzie & Tuck 2015, pg 13
54 Roskamm 2012, pg 171
55 Munárriz 2011, pg 52-53
56 European Landscape Convention 2000, pg 2
57 Seamon & Sowers 2008, pg 3
58 Claßen in Gebhard & Kistemann 2016, pg 21

	reason a *perceptual space* is desired to inhabit items (etc.) that are meaningful and relevant for the perceiving individual's self.[59]
existential space	It describes a place with a meaning to a specific group of people that shares certain memories, values and symbols for example. This again is an abstracted space. It describes how the manifested experience of such a joint culture is perceived by an individual. Depending on how the individual is included in that culture, the symbols et cetera will make sense or seem meaningless and therefore influence the perception of that space.[60]

Table 2: first three spatial modes according to Relph

The next three modes are more intangible, theoretical and idealistic.[61]

planning space	It is the space in which planners like landscape architects develop designs and concepts for usage.[62]
cerebral space	In this space people can reflect and meditate on the ways spaces function from such viewpoints as philosophy and physics. The *cerebral space* does not change like the *perceptual* or *existential spaces* do and is defined by such finite measures as geometry, theories et cetera.[63]
abstract space	It is a more recent addition and similar to the *cerebral space*. The difference is that unlike *cerebral spaces*, *abstract spaces* do not have to reference existing or realistic objects and can be purely logical and abstract.[64]

Table 3: second three spatial modes according to Relph

Nowadays most scientists agree that *space* is an area of land that has not been allocated any meaning or use by people (individuals, groups or societies). Therefore, *place* is a *space* that has been given meaning and purpose to.[65] *Landscapes* or *regions* are most often described as structuring networks of the places they encompass.[66] Veronica Ng differentiates the three main views today: those who refer to place as a social and cultural construct, those who highlight "the 'otherness' of place" and those who highlight the thinking of "place as a 'lived-experience'".[67]

Time Period	Space	Place	Landscape
ancient Greece, ancient Rome	A world created and structured by natural forces that are personified in gods. Aristotle (essentialist): • place = immovable / unchangeable boundary • objects = movable, changeable • everything can be objectively described with i.e. coordinates		
Roman Empire & Middle Ages	A world created and structured by god. • Landscape = general gestalt of peoples and areas without reducing it to natural landscapes; area in which certain norms and rules are valid		
beginning of 14ᵗʰ – end of the 16ᵗʰ century	A world created and structured by god. • Landscape = paintings which depicted a more rural area of land		
late 17ᵗʰ century – 18ᵗʰ century	• Space = theoretical, holds all potentials • argument whether space can also be absolute (Newton) or just relative (Leibniz)	• Place = concrete, geometric	• Landscapes are natural undeveloped areas of land
Romanticism & Industrialisation 19ᵗʰ century	• Space = theoretical, holds all potentials	• Place = concrete, geometric and emotional ○ made up of tangible and intangible aspects	• Landscape = started to encompass both natural as well as the man-made areas of land for the first time

---

59 Claßen in Gebhard & Kistemann 2016, pg 22
60 Claßen in Gebhard & Kistemann 2016, pg 22-23
61 McKenzie & Tuck 2015, pg 7
62 Farshadi 2017, pg 6
63 Claßen in Gebhard & Kistemann 2016, pg 23-24
64 Claßen in Gebhard & Kistemann 2016, pg 24
65 Hauge 2007, pg 2
66 Cordes 2010 pg 90
67 Doroftei 2016, pg 63

1900 – 1940ies	• Space = theoretical, holds all potentials • Landscape = encompasses both natural as well as man-made areas of land	• Place = concrete, geometric + subjectively attached meaning ○ made up of tangible and intangible aspects	
1950ies and 1960ies	• Space = theoretical, holds all potentials	• Place = general space + meaning ○ solely socially constructed (social constructionism in 60ies)	

1970ies – today	• Space = theoretical, holds all potentials
	• when studying any topic:
	  ○ spatial references are more or at least as important as historical references
		• Place = general space + meaning
		  ○ made up of tangible and intangible aspects
		  ○ both spatially as well as socially determined (postmodernism)
			• Landscape = an area, as perceived by people, whose character is the result of the action and interaction of natural and / or human factors

Table 4: summary of historical and current definition of space, place, landscape

2.1.3 Identities

After exploring the historical understanding of *genius loci* and *spirit of place* on the one hand and the scientific points of view on the component part of *place* on the other hand, the scientific perception of the component parts *genius* or *spirit* are left to examine. However, most scientific fields do not work with these two terms[68] and instead use terms like *identity of a place* or *place identity*. For this reason the term *identity* is reviewed next.

genius / spirit		loci / place
A metaphor, atmosphere, set of properties, character, identity etc. …	**+**	… that a spirit is located at and identified with.

Origin of the Term Used Today and the Basic Struggle of the Concept

The word *identity* originated in the late 16th century, was derived from the late Latin word "identitas" (original Latin "idem") and meant "same". It was used in order to describe the state of something or someone having a "quality of being identical" with something or someone else.[69] This definition of the term also explains the difficulty of defining a place's or person's identity[70] that lead to theories about *identity* always having to wrestle with the questions of when something is "the same" enough or "too different" to be identical or the question of how much an entity with an identity can change its properties over time without loosing its sameness and therefore it's identity[71].

The historical developments that were relevant for the definitions of spatial entities also affected the historical conceptions about *identity*. As it was for the term of *place*, the first records about the identities of self and substance that are sufficiently well documented are from Aristotle who had an essentialist view. According to him, every real thing (or person) has a self with a substance and properties.[72] As this thing experiences the passing of time and its properties change, Aristotle differentiated between both accidental and essential changes. Accidental changes do not affect the things' or person's identity (i.e. a house gets a new cladding, a person's hair turns grey), while essential changes cause changes in the identity (i.e. the house burns down, a person dies).[73]

In the attempts to answer the core questions of *identity* that are stated above, Leibniz formulated his rule of an *identity of indiscernibles* in the 17th century which determined that a qualitative indiscernability implied an identity. His second rule, the rule of *indiscernibility of identicals* stated that an identity implies a qualitative indiscernability. In other words this means that if one thing is identical with another, they have to share all their qualities.[74]

The way we use the term *identity* today originated in the 1950ies when the German-American psychoanalyst Erik Erikson wrote about his concept of *identity crisis*. A dictionary, picking up on his descriptions, defined the identity crisis as the internal state of someone who is unsure of their own self, their "character, goals, and origins" – a state that happens most often in adolescence, when people grew up "under disruptive, fast-changing conditions". The new

---

68 Arndt 2019, pg 43
69 Oxford Lexico.com 2020
70 Fearon 1999, pg 3-5
71 Gallois 2016
72 Simpson 2001, pg 10
73 Gallois 2016
74 Gallois 2016

perception of *identity* therefore said that an identity is a self with its character, goals, origin and so on.[75]

From the 1960ies onwards the movement of social constructionism questioned the priorly prominent essentialist understanding of *identity*. They disagreed with the idea of identities having essential or core properties. Instead, they said, that every identity, be it individual or collective, is an ever changing social construct, a reality made of shared assumptions and perceptions.[76] This development is parallel to the effect the social constructionism had on defining places, making them solely socially constructed.

Building on this social constructionist understanding, postmodernism became the strongest movement soon. Postmodernists were also anti-essentialst, however, they feared that social constructionism only created different but just as fixed categories like the essentialists. For this reason they studied why essentialist views resonated so well with many and what the variables within identity categories were in a public discourse rather than through mere observation and deduction.[77]

By the 1970ies, the modern definition and use of the word *identity* had started to seep into the ordinary language.[78] More recent attempts to shed light on defining when something is "the same" enough to claim the same identity, came from the American philosopher David Lewis as well as the American philosopher, Roderick Chisholm. Lewis differentiated between intrinsic and extrinsic properties of an identity. Intrinsic properties were those properties of an object that are rooted in or determined by the own identity like marbles which are always round, cause otherwise they would not be marbles. Extrinsic properties, on the other hand, always depend on an external factors like a person being in a relationship with their partner. If that partner (=extrinsic property) disappears for whatever reason, the identity of the person looses the property of being in a relationship. Roderick Chisholm made the distinction between loose and strict senses of identity. Something was strictly identical in a philosophical sense when two things had all their properties in common. Something was only loosely identical, on the other hand, when the two things in question were slightly different, but the same in most parts.[79]

From the 1970ies → Today

Since the 1970ies and especially since the late 1980ies to 1990ies, the definition of personal or individual identities had settled to describe the way one individual forms and views their own sense of Self. In his book the Canadian philosopher and political scientist Charles Taylor states that a personal identity is more like a "personal moral code or compass, a set of moral principles, ends, or goals that a person uses as a normative framework and a guide to action". The American professor for political science James D. Fearon complements this definition by saying that a personal identity is made of

> *"a set of attributes, beliefs, desires, or principles of action that a person thinks*
> *distinguish her in socially relevant ways and that (a) the person takes a special pride*
> *in; (b) the person takes no special pride in, but which so orient her behaviour that*
> *she would be at a loss about how to act and what to do without them; and (c) the*
> *person feels she could not change even if she wanted to."– Fearon 1999*[80]

---

75 Fearon 1999, pg 9
76 Cerulo 1997, pg 387
77 Cerulo 1997, pg 391
78 Fearon 1999, pg 35-36
79 Gallois 2016

Due to the way postmodernism, technical revolutions and the globalisation affected societies all over the world, researchers now moved to increasingly study the formation, dynamics and agencies of collective identities in the shape of social categories.[81] These social categories have clear distinctions of their members, defined by a set of properties that members with this social identity share and that distinguishes them from others[82] such as gender, sexuality, class, ethnicity, citizenship etc.[83] Further relevant collective types of identity that are researched are *role identities*, where people play particular roles in specific life situations which raise the expectations of them exerting certain actions, behaviours or functions. *Type identities* label people who are expected to have the same properties based on their interests, strengths etc. as some other people.[84]

Because the term *identity* gained popularity and was adopted by various different scientific points of view, its definition became more diversified, especially since the 1980ies[85]. This becomes evident in the range of fields of research that theories about *identity* are embedded in: psychodynamic theories, cognitive theories, social learning theories, humanistic/existential theories as well as interpersonal identity theories.[86] The most prestigious or well-known theories are: *social identity theory, identity process theory* and the *place identity theory*.[87] While the *social identity theory* discusses how individuals define their concept of self by developing a sense of belonging to and distinction from certain social identities to various degrees[88], the *social comparison theory* also claims that people are inclined to have a more optimistic or positive perception of the groups that they identify with and more a negative and unfavourable perception of those they like to distinguish themselves from. This is subconsciously or consciously done in order to heighten the own personal self-esteem[89]. The *identity process theory* considers people in correlation with their built environment. It differentiates between the identity as a structure (made out of thought, action, affect of the individual or collective) and identity as a process (formation guided by the dominant principles of its society) and considers *place* to be one of the identity creating elements.[90] Similar to the *identity process theory*, the *place identity theory* concerns itself with the relationship between people and their, in contrast to the identity process theory, general environment.[91] The original *place identity theory* by the American psychologist Harold Proshansky was first described in 1978 and defined a *place identity* as an equal part of people's personal identity, in the same way previously named theories understood place and ethnic or sexual identities to be equal parts of people's general concept of self.[92] According to the theory, people develop their *place identity* during childhood as they learn to associate themselves with and differentiate themselves from their general environment and specifically meaningful places. Depending on their experiences and personal development, the place identity can also change throughout people's lives. The resulting *place identity*, as a part of the personal identity, becomes the lens through which all experiences with any kind of spaces are

---

80 Fearon 1999, pg 11
81 Cerulo 1997, pg 386
82 Hauge 2007, pg 5
83 Cerulo 1997, pg 386, Fearon 1999, pg 1 & 36
84 Fearon 1999, pg 11
85 Arndt 2019, pg 15
86 Hauge 2007, pg 4
87 Hauge 2007, pg 2
88 Hauge 2007, pg 5
89 Hauge 2007, pg 5-7
90 Hauge 2007, pg 6
91 Hauge 2007, pg 4-5
92 Peng, Strijke & Wu 2020, pg 1-2

perceived.[93] To this day Proshanky's theory has the challenge of being backed by very little empirical data and a rather weak theoretical construct on the one hand[94] as well as the narrow focus on the individual's experience of *place identity* on the other hand[95]. Another criticism of this theory (and the other theories as well) is that it views *place* as an equal factor to other for example social identities. Instead, today scientists agree that *place* is in fact a backdrop to all social and personal identities and not separate (see *spatial turn*). Since places are the manifestations of all parts of personal and individual identities, *place identity* dimensions ought to be studied on a vertical (influencing all equal aspects of identities) rather than horizontal way (equal parts of identities).[96]

Today, *identity* is approached in a holistic manner, working off the premise that there needs to be a balance between the theoretical and empirical considerations of the whole human mechanism with all its cognitive, emotional and behavioural aspects.[97] Furthermore *identity* is perceived as a relative term, since the question of what is identical and not can only be answered by relating two entities. Instead of asking which attributes make or break a person's identity, one searches for attributes of one person in comparison to either another, similar person or in comparison with the same person at a different time and situation.[98] Because contexts and choices can change the dynamic and never concluded character of identities, these contexts are studied in every analysis of people's identities.[99]

No matter if it is individual or collective identities, the process that creates any identity is called *identification*. According to the psychologist Carl Friedrich Graumann, individuals and collectives can either:

- identify something/one else as something/one,
- be identified as something/one by something/one and
- identify themselves with something/one.[100]

Whenever an entity is identified with something, that entity is associated and equated with the identified item and assimilates the properties and general character of the identified item.[101] The context and the degree of the identification determines the quality and intensity of the formed identity. Space- and place-related identities work in the same way.[102] Features and the general quality of landscapes, cities and specific places in cities or landscapes offer an identification-potential which is unique to the spatial entity in question. In the process of identification any identity-bearing entity acquires several layers to their self-identity like component identities. Although some suggest that there is a hierarchy to the component identities of a self-identity (personal > social > collective > cultural > historical > territorial identities), no studies supported any kind of rigid hierarchy and instead they showed that studying the way these component identities all influence each other is much more important.[103]

---

93 Hauge 2007, pg 5
94 Hauge 2007, pg 7
95 Bernardo & Palma-Oliveira 2013, pg 37; Peng, Strijke & Wu 2020, pg 3
96 Bow & Buys 2003, pg 5; Hauge 2007, pg 9
97 Haußer in "Zeitschrift für Kultur- und Bildungswissenschaften" 2000, pg 17
98 Haußer in "Zeitschrift für Kultur- und Bildungswissenschaften" 2000, pg 18
99 Arndt 2019, pg 18
100 Arndt 2019, pg 39
101 Arndt 2019, pg 38-39
102 Arndt 2019, pg 39
103 Arndt 2019, pg 21

Time Period	Identity

ancient Greece	Aristotle about self and substance:
	• every real thing or person has a self with properties that change over time
	   ○ Accidental changes
	      ■ do not affect the things' or person's identity (i.e. a house gets a new cladding, a person's hair turns grey)
	   ○ essential changes
	      ■ cause changes in the identity (i.e. the house burns down, a person dies)

end of the 16th century – 1950ies	being identical = something having a "quality of being identical" with something else
late 17th century – 18th century	Leibniz: rule of identity of indiscernibles & rule of indiscernibility of identicals: ○ if one thing is identical with another, they have to share all their qualities
1950ies and 1960ies	Deduced from Erik Erikson in 50ies: • self with its character, goals, origin and so on Social Constructionism: • ever changing social construct, a reality made of shared assumptions and perceptions

1970ies and 1980ies	Identity = self with its character, goals, origin and so on
	David Lewis
	• Intrinsic properties:
	   ○ properties of an object that are rooted in or determined by the own identity
	• extrinsic properties
	   ○ always depend on an external factor like a person being in a relationship with their partner
	Roderick Chisholm
	• strictly identical:
	   ○ when two things had all their properties in common
	• loosely identical:
	   ○ when the two things in question were slightly different, but the same in most parts

1980ies – today	Personal identity: • = personal moral code or compass, a set of moral principles, ends, or goals that a person uses as a normative framework and a guide to action (Taylor) • = a set of attributes, beliefs, desires, or principles of action that a person thinks distinguish her in socially relevant ways and that (a) the person takes a special pride in; (b) the person takes no special pride in, but which so orient her behaviour that she would be at a loss about how to act and what to do without them; and (c) the person feels she could not change even if she wanted to.(Fearon) • has sub-identities like place identity, gender identity etc. Collective Identity • role and group identities

Table 5: summary of historical and current definition of identity

2.1.4 Spatial Identities

The development of the conceptions of spatial entities and identities share a historical context that shaped them in similar ways. It also became evident that today people experience a massive shift in the relationship to their environment as well as the dynamics of creating and sustaining personal as well as collective identities. To begin the next step, the recombination of the scientific component pieces of the *genius loci* results in *spatial identities* or *identities of place* which makes them the modern interpretation of the *genius loci*.

genius / spirit **identity**	+	loci / place **of place**

or

loci / place **spatial**	+	genius / spirit **identity**

Fields of Study for the People-Place Relationship

The previous chapter already mentioned an approach of connecting spatial entities and identities (→ *place identity*). Despite the criticism of Proshansky's ideas about *place identity*, his ideas were the foundation for the formation of the scientific field of environmental psychology which works like an umbrella term, encompassing all scientific endeavours to explore and evaluate the relationship between spatial entities and people as well as their own or joint identities (place identity, people's identities etc.).

In Gabriela Christmann's study about the urban discourses and identity of Dresden in 2006 she collected the most significant approaches to spatial identities.[104] Environmental psychology is not mentioned, because the approaches to the people-place relationship she mentions can all be considered as part of this umbrella term. She describes that social psychologists study how specific physical attributes and general qualities of places alongside social constructs inform the development of people's personal identities. In social anthropology the community is a symbolic construct that members participate in and therefore receive (parts of) their identity from the community's identity. In the sociological approach people's personal identities are more or less strongly informed by the general picture and understanding of their environment, which is structured into cohesive areas (sub-spatial identities) that can be distinguished from surrounding areas. City planners, architects and landscape architects view environmental features as symbols, which provide people with identity giving and shaping impulses while the historical perspective adds the study of the historic layers of any spatial entity. The last perspective Christmann presents, is the social or human geography. Their conception is also that people establish a bond with their material and social environment by attaching symbolic meaning to the spaces. Social or human geographers also believe that this process of attaching meaning is the step where the identification of people with their environment starts.[105]

When researching *spatial identities* one finds that various disciplines also use different terms such as *regional identities*, *place identities*, *city character*, *landscape character* and many more.

---

104 Arndt 2019, pg 28-29, Christmann 2006, pg 599
105 Arndt 2019, pg 28-29

This thesis will use the term that seems to be the most all-encompassing and the logical result of the two previously studied contemporary component pieces of the *genius loci*: spatial identities.

Although the above mentioned *place identity theory* by Proshansky is often referred to but very seldom applied, the term *place identity* has developed its own momentum and inspired several other theories and methods.[106] Over time these methods have filled the gaps and addressed the criticism of the previously described theories about the people-place-relationship. The Finish human geographer Anssi Paasi managed to sort data about all these *place identity*-related terms and methods into two categories. He explains that, although many researchers have developed great theories concerning the *place identity*, they always seem to only belong to one of two categories. The first category examines the degree and quality of the relationship, attachment or identification people have with a specific place – he called this the *subjective identity of a region* which was later renamed *people's place identity*. In contrast to this stands the second category which does not focus on the people, but on the character of the place itself, perceived and communicated through narratives and discourses of professional and private individuals as well as collectives. He calls this approach *place identity of a place* in order to emphasise that, although it is as always perceived by humans, it is actually the properties and identity of the place, "separate" from human attachment, that is studied.[107]

people's place identity		place identity of a place
relationship, attachment or identification people have with a specific place	vs.	character of the place itself, perceived and communicated through people

Although the concepts were developed separately, Paasi's observation is reflected in the works of the human geographer Peter Weichhart. In this work he describes four manifestations of the individual identification process in connection to the environment. According to Weichhart, the individual or collective experiences of the environment are cognitively as well as emotionally represented in the personal and collective spatial identities. He differentiates that these experiences are either a subjectively (similar to *people's place identity*) or objectively (similar to *place identity of a place*) perceivable identity of a certain spatial entity. Weichhart further distinguishes between aspects of personal and collective spatial identities that either included in the self image and world view of an individual or integrated into the collective's perception of itself ("us") or a dissociated other collective entity ("them"). In this manner he separates the subjective perception and identification of a place (→ *people's place identity*) from an objective place identity (→ *place identity of a place*) which then again informs all affected personal and collective identities.[108]

People's Place Identity

When it comes to studying the relationship, attachment or identification of people with places, the ideas and concepts of *place attachment, sense of place, place identity* and *place dependence* are the most popular.[109] Often these terms mean the same thing, *place attachment* being mostly used by environmental psychologists and *sense of place* by geographers[110], while some

---

106 Hauge 2007, pg 5 & 9
107 Peng, Strijke & Wu 2020, pg 2
108 Arndt 2019, pg 26-27
109 Bow & Buys 2003, pg 2 & 4
110 Vanclay in National Museum of Australia 2008, pg 8

sociologists like David Hummon equal *sense of place* with *community attachment*[111]. Other popular terms associated with *sense of place* or *place attachment* are *topophilia* and *insideness/outsideness*. The relations between these terms are strongly debated. While some argue that *sense of place* is the overarching, more general term and *place attachment* is its "closest component part"[112], others stated that *sense of place*, *place dependence* and *place identity* play a subordinate role to *place attachment*. According to a multi-dimensional approach by Williams et al. from 1992, *sense of place* and *place attachment* mean approximately the same and *place identity* as well as *place dependence* are two aspects of *place attachment*.[113] The following presents and differentiates the terms in four groups.

Term Group I:	Place Attachment Topophilia Sense of Place Community Attachment Insideness & Outsideness	➔ the relationship / attachment / association that people have with their environment
Term II:	Place Identity	➔ the way the environment fits into people's self-identities
Term III:	Place Dependence	➔ the way that people's potentials for action are attached to places
Term Group IV:	Others	➔ the way people are familiar, aware of environments or committed to participating in their environment

Table 6: main terminology for people's place identity

Term Group I: Place Attachment, Topophilia, Sense of Place, Community Attachment, Insideness & Outsideness

The term *place attachment* was used for the first time in the 1970ies with the emergence of phenomenological works on the relationship between people and environments. Although there are different ways of interpreting *place attachment*, it is generally considered to be an affected connection between people and places[114]. This connection is formed by people, who, inspired by consensual collective or personal knowledge, beliefs, emotions and practices of their culture and time allocate meanings to their environment.[115] It is, therefore, an emotional, affective, cognitive as well as behavioural process which takes place on individual and societal levels.[116]

As the term suggests, *place attachment* has often been interpreted as a positive relationship of people with places like a "positive bond" (Altman and Low, 1992), "a state of physical well-being" (Giuliani and Feldman, 1993), "emotional investment" (Hummon, 1992) or "regard and identification with environmental settings" (Moore and Graefe, 1994).[117] In this sense, *place attachment* means the same as the term *topophilia*[118], which is also suggestive of a positive attachment, since its literal translation means love of place[119] (topo = place[120], philia = love[121]). This

---

111 Cross 2001, pg 9
112 Bow & Buys 2003, pg 4; Vanclay in National Museum of Australia 2008, pg 8
113 Bow & Buys 2003, pg 4
114 Kamal & Najafi 2012, pg 1
115 Cross 2001, pg 2; Bow & Buys 2003, pg 4
116 Cross 2001, pg 2; Kamal & Najafi 2012, pg 1
117 Kamal & Najafi 2012, pg 1
118 Vanclay in National Museum of Australia 2008, pg 8
119 Relph 2015; Gifford & Scannell 2014, pg 274
120 Dictionary.com 2020 "topo"
121 Dictionary.com 2020 "philia"

term was established in environmental psychology by the Chinese-American human geographer Yi-Fu Tuan in 1974 and he described *topophilia* as "the affective bond between people and place or setting". However, just like *place attachment*, *topophilia* does not just encompass positive or strong attachments to places, but also apathy and detachment, which one could call *topo-apathy* or *place detachment* as well as negative relationships that one could call *topophobia*.[122]

As previously described, *sense of place* is often used in the same way as *place attachment* and generally stands for a relationship of humans as individuals and collectives with places in general and their local places, more specifically.[123] Its term, however, is less suggestive of describing the process of attaching meaning to places like *place attachment* and more evocative of describing a human sense for experiencing and interpreting places. According to Relph this sense can be developed by individuals as well as collectives and draws from information of all the other human senses like sight, hearing, smell and touch. Next to these individual and most basic senses of perception, the imagination, purpose and anticipation[124] as well as the memories, emotions, experiences, culture and status make a *sense of place*[125]. The American sociologist David Hummon explains that this sense is always a subjective perception that can be applied consciously or subconsciously in order to orient oneself within spaces, act within them as well as react to them.[126] He also proposes five types of *sense of place* or *community attachment* that are determined by people's level of attachment, identification and involvement: ideological rootedness (a strong attachment with an identification of either one (cohesive rootedness) or two distinct communities (divided rootedness)), taken for granted rootedness, place relativity (*sense of place* not tied to a singular or specific place), place alienation (negative association of place, due to moving to a new place or due to the old place changing), and placelessness (no place-based identification for sense of home).[127]

The concept of *insideness/outsideness* of place was developed by Relph and describes the relationship of people and environment, just like most interpretations of *place attachment* and *sense of place*, but focusses on the intensity of the attachment.[128] In general, people feel "inside" a place, when they are in some way attached, involved and identified with that place. They feel "outside" a place, when they are not.[129] He differentiates between seven modes or states of inside- or outsideness. *Existential insideness* describes the strongest feeling of being attached and familiar as well as feeling at home at a place. On the other end of this spectrum *existential outsideness* marks an alienating, uncomfortable or threatening perception of a place. *Objective outsideness* is a mode in which people perceive a place in a dissociated and neutral manner, while *incidental outsideness* describes the perception of a place as an unimportant background to a perceived entity of interest. In opposition to this is the *behavioural insideness*, in which the place itself is the perceived enitity of interest that is consciously observed and engaged with. People feel *empathic insideness* when they are outsiders to place and have a general openness towards information of and experiences

122 Cross 2001, pg 3 & 11-12 & 14; Relph 2015
123 Darmawati & Sumadio 2020, pg 1; Kyttä, Raymond & Stedman 2017, pg 1
124 Vanclay in National Museum of Australia 2008, pg 8
125 Darmawati & Sumadio 2020, pg 1
126 Cross 2001, pg 3
127 Cross 2001, pg 9-10
128 Turner & Turner 2004, pg 342, Stafford 2019, pg 28
129 Stafford 2019, pg 28

with it. Last of all *vicarious insideness* is an involvement with a place that people only experience through mediums/media like art, literature etc.[130]

existential insideness	behavioural insideness	vicarious insideness	empathic insideness	incidental outsideness	objective outsideness	existential outsideness
Strong attachment	Place is consciously observed and interacted with	Involved with place through media	Outsiders to place have general openness to it	Place is unimportant background	Disassociation from Place	Strong detachment

Table 7: Relph's concept of insideness and outsideness

Term II: Place Identity

In the past, the term *place identity* was sometimes used synonymously with or at least with great overlap with *sense of place* and *place attachment*. However, *place identity* focusses specifically on the way the previously described sense and attachments to places relate to personal and collective identities and identification processes.[131] Therefore one could argue that this way of interpreting *place identity* makes it a sub-construct to *place attachment* or *sense of place*.[132] Traditionally *place identity* was interpreted in the way Proshansky and his colleagues described it in the context of the previously explained *place identity theory* – a subordinate construct to the self-identity that gets developed over time and develops in relation to places.[133] In his works on *place identity* Relph differentiated between a) *people's identity of a place* which describes the unchanging uniqueness of a place that people identify in the place from b) *people's identity with a place*, which contains the meanings people attached to the specific physical characteristics of the place, the events and activities that the place affords. The way this can be measured is by questioning how inside or outside of a place people see themselves or in other words, how intensely they identify themselves with a place.[134]

There are three major ways in which *place identity* is viewed or conceptualised in the current literature. First of all the way places can be understood as an extension to the individual as well as collective self and self-image is being studied. The second conceptualisation is the way people's values, attitudes and behavioural dispositions can be consistent with the characteristics of the place. The conceptualisation that is used the most often, is the understanding of *place identity* as an emotional connection to places, in the same way *place attachment* is used. In order to separate this approach to *place identity* from *place attachment*, Hernandes conceptualised *place attachment* as an "affective bond between people and places" and *place identity* as a sub-construct of the self identity as well as "a process by which, through interaction with places, people describe themselves in terms of belonging to a specific place".[135]

In order to determine the *place identity*, researchers often study the people's attachment to the associated community or place[136], because the quality and intensity of the identification with a place is reflected in the sense of belonging or rootedness.[137]

---

130 Turner & Turner 2004, pg 342, Stafford 2019, pg 28
131 Vanclay in National Museum of Australia 2008, pg 8
132 Bow & Buys 2003, pg 4
133 Bow & Buys 2003, pg 4; Hauge 2007, pg 5; Kamal & Najafi 2012, pg 2; Peng, Strijke & Wu 2020, pg 1-2
134 Seamon & Sowers 2008, pg 4
135 Bernardo & Palma-Oliveira 2013, pg 36-37
136 Kamal & Najafi 2012, pg 3
137 Bow & Buys 2003, pg 4, Kamal & Najafi 2012, pg 3

Term III: Place Dependence

Place dependence is also called "functional attachment"[138] or considered the functional component of *place attachment*[139], since it focusses on the way certain aspects of places determine which functions people can fulfil there and how that influences the relationship between those people and places[140]. The concept was developed by Stokels and Shumaker in 1981 and described how people perceive places in a more favourable way when they can fulfil their motivations, needs and goals there. The *place dependence* is strong or high when a place is built in accordance to people's desires. This emphasises how important it is to offer people places with features and conditions that support and satisfy specific activities and endeavours[141]. In 2005 Smaldone added that people develop a *place dependence* as they evaluate both the properties and opportunities of one place in comparison with those of other similar places that could potentially be substituted for the first place.[142] Furthermore, one can distinguish between two types of *place dependence*. People with a generic *place dependence* are attached to types of places while people with a geographic *place dependence* are attached to certain places. In both cases, places that people are attached to, are chosen due to its function features.[143]

Term Group IV: Others

Aside from the functions a place can afford people or the identification people can develop in interplay with places, there are many other aspects of *place attachment* and *sense of place* that are studied. In order to illustrate this, two further aspects can be named, both being related or subordinate to *place attachment* but differ in their focus of study.

The concepts of *place familiarity* and *place awareness*, for example, specifically describe the amount and quality of information and understanding individuals or collectives have about a place, landscape or region. In comparison to *place attachment* or *place identity* they are also easier to measure and study.[144] *Place commitment* or *community commitment* focus on examining the willingness of people to become active participants in shaping their local places. While some argue that this willingness is higher if the attachment is strongly positive, others say that it is higher when the general satisfaction with a place is low.[145]

Place Identity of a Place

The second perspective on studying *place identity* formulated by Paasi is called *place identity of a place*, since this perspective focusses on the place and its character only, instead of the people experiencing and shaping the place.[146] Generally speaking, *place identity of a place* is the objectively measurable over all character of a place that makes it different and recognizable from other places. It is always perceived by people, no matter how attached, inside/outside, identified and dependant they experience themselves in relation to the place in question (meaning: no matter what

---

138 Gifford & Scannell 2014, pg 275
139 Bow & Buys 2003, pg 4
140 Gifford & Scannell 2014, pg 275, Kamal & Najafi 2012, pg 3, Bow & Buys 2003, pg 4, Ujang & Zakariya 2015, pg 712
141 Gifford & Scannell 2014, pg 275, Kamal & Najafi 2012, pg 3, Ujang & Zakariya 2015, pg 712
142 Ujang & Zakariya 2015, pg 712, Kamal & Najafi 2012, pg 3
143 Gifford & Scannell 2014, pg 275
144 Vanclay in National Museum of Australia 2008, pg 8
145 Vanclay in National Museum of Australia 2008, pg 8-9
146 Peng, Strijke & Wu 2020, pg 2

the *people's identity of place* looks like). Despite an increased usage of this interpretation of *place identity*, no consensus is reached as to which methods to use and which elements to examine in places in order to properly describe and define the *place identity of a place*. A review of the currently existing reports, almost every type of aspect or feature of a place is suggested to be studied. For example:

Paasi	every aspect of "*nature, culture, and regional life (inhabitants, people, or population) that distinguish a region from others*" or
Groote and Haartsen	"*a combination of physical and man-made processes, specific elements and structures in places, and meanings ascribed to places*".[147]

The head of municipal planning and building control office in Wuppertal Germany, Sigurd Trommer, for example, worked on the *place identity of place* (did not use that term) in connection to urban areas. He formulated seven ways in which a city can be "talented" and inform its own and its inhabitant's identities. It can either be a centre of 1) knowledge, 2) trade, 3) education or 4) culture or it can be 5) a place of safety, 6) offer an attractive and fulfilling life or 7) have a unique visual presence.[148] The sociologist Detlev Ipsen on the other hand developed certain criteria that a place needs to fulfil in order to have a strong *place identity of a place* and to be called a *poetic place*. For one thing a place needs to clearly define the physical space it inhabits. Moreover, it has to be clearly recognizable and distinguishable from other places, so that it can characterize the subordinate landscape or region that it is part of. And last of all it needs to possess an atmosphere that cannot be recreated.[149]

The Genius Loci and People's Place Identity and Place Identity of a Place

These definitions and descriptions suggest a kinship between *place identity of a place* and the historical interpretation of a *spirit of place* or *genius loci*. The environmental psychologist Fritz Steele, for example, describes the *spirit of place* as a set of properties that create an atmosphere or personality of the place, that are made of physical and social aspects. Steele also deliberately differentiates between *sense of place* and *spirit of place*. While the *spirit of place* encompasses the properties of the place, the *sense of place* describes the human experience of perceiving said *spirit of place*.[150] Although *spirit of place* has sometimes also been used interchangeably with *sense of place*[151], many other scientists agree that *sense of place* is the means by which a *spirit of place* is comprehended, like for example Relph.[152] The sense of a place or attachment to a place is therefore not primarily significant for studying the *genius loci*.

---

147 Peng, Strijke & Wu 2020, pg 4
148 Arndt 2019, pg 36
149 Arndt 2019, pg 37
150 Cross 2001, pg 2
151 Peng, Strijke & Wu 2020, pg 4
152 Relph in National Museum of Australia 2008, pg 314

2.1.5 Heimat (Homeland)

Within the German-speaking area there is one last term concerning the *genius loci* or *place identity* which is vital to be aware of and discuss. The translation of the German words *Heimat* and *Heim* are "homeland" and "home". These words are about one thousand years old and for the longest time, well into the Middle Ages, described a personal place of residence, a person's or collective's "house and home".[153] The term *Heimat* is relevant because it describes a certain set of characteristics and atmosphere that individuals and collectives attach strong and intimate emotional meanings to and identify themselves with.

Just like in the presentation of the historical development of spatial entities and identities, this term's use and relevance has changed according to the people-place relationship at that time. In the medieval rural farming culture of Europe *Heimat* was a piece of land, usually an estate, that one was born to or allocated to own, sell, cultivate, harvest or measure. People that were without a *Heimat* had no steady connection to any part of a land, like vagrants for example.[154]

Alongside wars as well as political and social conflicts, the industrialization in the 19th century changed the relationship between people and their environment for ever. Societal structures fell apart, rural jobs became less feasible and the urbanisation took its course.[155] The home was no longer necessarily attached to a cultivatable piece of land, since many lived in tight quarters in towns and earned their money in ways that were not connected to their home. Due to this shift, the term *Heimat* began to mean something less literal and became an internal, emotional and cognitive experience, describing regions, landscapes or cities. The term quickly received a romantic connotation due to the man-made and unnatural structures that the industrialisation introduced to the society. The stronger the influence of the industrialisation on the society and individual, the more the romantic idea of an idyllic and rural *Heimat* was idealised.[156] This development can be observed in art and literature from the Romantic period, which favoured depicting natural and rural landscapes. In the same way architecture and landscape design began to develop landscape gardens and parks that emanated nature as well as city parks which introduced an urban planning with romantic, hygienic and social objectives. This produced the dichotomy of man-made inventions, science and systemic organisation of agriculture and forestry on the one hand and the romantic ideal of nature, health and purity on the other hand.[157]

In Germany another significant change in the understanding of *Heimat* occurred towards the turn of the century from the 19th to the 20th century as the first German national state was founded. In the course of that process the people's loyalties and identification was directed away from the landscapes and cities to the new German Empire[158], which was founded in 1872[159]. *Heimat* became an ideal of a national or ethnic community, no matter what the actual sociological and demographic facts were. The German psychologist Beate Mitzscherlich views it as a transfer of loyalties from "mother nature" toward "father state/nation".[160] At the same time the movement of *Heimatschutz* started as well and tried to protect native nature and landscapes. Adopting the romantic notion of

---

153 Deutscher Rat für Landespflege 2005, pg 1
154 Mitzscherlich in "Zeitschrift für Kultur- und Bildungswissenschaften" 2000, pg 7
155 Deutscher Rat für Landespflege 2005, pg 1
156 Mitzscherlich in "Zeitschrift für Kultur- und Bildungswissenschaften" 2000, pg 8
157 Deutscher Rat für Landespflege 2005, pg 1
158 Mitzscherlich in "Zeitschrift für Kultur- und Bildungswissenschaften" 2000, pg 8
159 Deutscher Rat für Landespflege 2005, pg 1
160 Mitzscherlich in "Zeitschrift für Kultur- und Bildungswissenschaften" 2000, pg 8

nature and rural landscapes as well as the newfound identification as a nation with its ethics and ideals, the *Heimatschutz* movement formed the umbrella organisation *Bund Heimatschutz* (homeland conservation alliance) in 1904. However, already in the 1920ies nature conservationist groups split from the Heimat and historic monument conservationist groups, the former focussing more on natures ecological mechanisms, not the ideals of the *Heimatschutz* movement. Although both movements were instrumentalised quickly by the National Socialism during the 1930ies and the Second World War, they grew further and further apart from each other.[161]

Attempts of attaching *Heimat* to something other than nationality after the Second World War were mostly unsuccessful in the newly founded Federal Republic of Germany and the German Democratic Republic. The reason is that according to Bausinger (1990) an attachment of the identity or home to a region and regional product only works so long the people in question are involved in the processes of production and distribution.[162]

Today there is very little specific research and few conceptualisations for the terms *Heimat* and *Beheimatung* (making a home). Most research that one could apply to *Heimat* are done considering people's cognitions of place, which does not cover the entire phenomenon by any means. The phenomenon of *Beheimatung* (making a home) is a subjective, more or less conscious process of a person's individual identity interacting with its surroundings and attaching meaning to people, items, places etc. This always includes physical as well as cognitive or emotional aspects and also always has a reference to more than one place and for that reason needs to be studied in an interdisciplinary manner in order to understand in fully.[163] Most people use the term with innocent connotations, often in connection with childhood memories and sentimentalities. However, because *Heimat* was abused to describe a discriminatingly exclusive and nationalistic spatial and social entity in the Third Reich, the term is handled with great caution in the academic circles. Aside from the common speech, in scientific disciplines *Heimat* is mostly used by nature conservationists and landscape managers.[164] Just like it was with the term *identity*, *Heimat* usually is discussed more often or intensely by other disciplines or people when there is some kind of conflict, difficulties or changes in life situations, a lack of feeling at home etc.[165] According to Haußer, a sense of home offers a person certain aspects to their personal identity: a sense of a biographic continuity, ecological consistency, a general accordance of convictions and behaviour, an accordance of feelings and behaviour, individuality and feeling equal (in an egalitarian world view) or superior (in a hierarchical world view) to others.[166]

Due to the *Heimat's* connection to people's perception of landscapes and places[167], all things that are considered *Heimat* have a kind of *place identity* or *genius loci / spirit of place*[168]. Let us remember that a *genius loci* is made of two components: *genius/spirit + place*. The *Heimat* always has a particular *genius loci* or *spirit of place*, since it involves places, which are spatial entity that have been given meaning to. In this manner the homeland has also gained an identity which has both physical (tangible) as well as spiritual (intangible) aspects, like the *genius / spirit of place* does. Just like identities in general, *Heimat* is considered a holistic human experience, always

161 Deutscher Rat für Landespflege 2005, pg 1
162 Mitzscherlich in "Zeitschrift für Kultur- und Bildungswissenschaften" 2000, pg 8
163 Mitzscherlich in "Zeitschrift für Kultur- und Bildungswissenschaften" 2000, pg 5
164 Deutscher Rat für Landespflege 2005, pg 1
165 Mitzscherlich in "Zeitschrift für Kultur- und Bildungswissenschaften" 2000, pg 5
166 Haußer in "Zeitschrift für Kultur- und Bildungswissenschaften" 2000, pg 19-20
167 Deutscher Rat für Landespflege 2005, pg 1
168 Haußer in "Zeitschrift für Kultur- und Bildungswissenschaften" 2000, pg 18

involving cognitive, emotional and behavioural aspects. The psychologist Belschner supports that by enumerating that *Heimat* offers a) a spatial orientation in a persons reality → cognitive, b) certain desirable emotions (i.e safety, stability, community etc.) → emotional and c) freedom of design, self-expression and for activities → behavioural.[169]

Time Period	Heimat (Homeland)
Roman Empire – 18th century	• personal place of residence and/or work, a person's or collective's property or place of personal reference/belonging
Romanticism & Industrialisation 19th century	• internal, emotional and cognitive experience, describing regions, landscapes or cities people identified themselves with ○ no longer bound to work/homeland ○ romantic connotation of idyllic and rural landscapes for Heimat
1900 – 1940ies	• romanticised ideal of a national or ethnic community ○ founded homeland protection and nature protection movements
1950ies and 1960ies	• detachment from nationality failed
1980ies – today	• detachment from nationality still unsuccessful • term used: ○ mostly by people to reference for places in connection with childhood memories and sentimentalities ○ by some people to reference romanticised ideal of a national or ethnic community ○ by sciences like nature conservationists and landscape managers for describing landscapes

Table 8: summary of historical and current definitions of homeland

---

169 Haußer in "Zeitschrift für Kultur- und Bildungswissenschaften" 2000, pg 18

2.2 Existing Methods for Describing the Genius Loci or Similar Terms

The phenomenon of the *genius loci* has several layers. The previous chapter explored the background of how the historical *genius loci* and its various modern reinterpretations were developed over time. This answered what the first research question of this thesis asked for: the definitions of the *genius loci* and their developments throughout time. This chapter will explore the most important specific methods that have been developed in connection to the previously described movements and approaches in order to answer the second research question: *What methods describe or evaluate the genius loci and what elements are analysed in that process?*.

As the presentation of spatial identities showed, the scientific methods concerning the interpretations of the *genius loci* can be found within the overarching field of environmental psychology. Although many aspects in the methods from the field of architecture and city planning are scientifically developed, they are primarily philosophical and will therefore be explored separately from environmental psychology. Last of all the overview of methods is complemented by some elements of ancient Asian approaches to the people-place relationship. Although they are pseudoscientific, they bear many similarities with environmental psychology as well as with the historic *genius loci* and therefore deserve a mention.

2.2.1 Environmental Psychology

Environmental psychology (EP) is a multi-disciplinary field of research which explores the relationships between people and their environment. It emerged from academic psychology and its growing focus on the people-place relationships as well people-place dynamics. This development was lead by the psychologist Harold M. Proshansky, who also published the first book on environmental psychology with his colleagues in 1970.[170] New research in EP concerns itself with qualitative as well as quantitative methods and individual as well as collective levels of analysis. Furthermore it considers all scales of places and issues and the choice or development of new methods by researchers is not discipline- but problem-oriented.[171]

Terminology

Within the field of EP barely any research is executed on the *genius loci* directly, since this term is so deeply rooted in mystical or outdated knowledge. As discussed before, sciences have however developed terms which are used in a similar way. Methods that apply those terms can therefore offer new inspiration on describing the *genius loci*. The terms *place identity of a place* and *people's place identity* are some of the more recent results of environmental psychology, although the term *place identity of a place* is much more directly related to the *genius loci* than *people's place identity*. As described before there are no significant, often-used or in any way popular methods for describing the *place identity of a place* yet. For that reason this chapter will explore all manners by which EP studies the people-place relationship and examine all methods that describe a character or quality of places without trying to strictly separate methods that include people's attachment to places.

---

170 Gee & Spencer 2009
171 De Young 2013, pg 17-18

Research Areas in Environmental Psychology

The works in EP can be divided into six general topics that people focus on as they study the people-place relationship: spatial behaviour, spatial cognition, specific dynamics for certain types of places, environmental concern and resource management, environmental stressors and most of all environmental assessment.[172] Some of these topics are more informative for methods about describing the *genius loci* than others. Let us begin with those that can inspire the way a *genius loci* can be described but that do not directly inform the topic. Spatial and environmental behaviour for example describe the way spatial properties and people's everyday behaviours influence and determine each other either in general or concerning environmental and resource related matters. Spatial behaviour pertains such concepts of human behaviour as territoriality (specific space that people want to own/defend)[173], personal space (person-related space that people want to own/defend), privacy (regulated by territoriality and personal space as well as other factors) and crowding (people's perception and tolerance of people-filled spaces)[174]. On the other hand environmental behaviour informs design that encourages people to adopt environmental friendly behaviour patterns.[175] At the centre of this topic stands the social dilemma of people meeting the choice between actions that benefit either the individual or the collective. Aside from studying the attitudes towards environmental issues, researchers also examine how people's choices are furthermore influenced by their past behavioural patterns, their education on environmental issues, the social and personal norms they are objected to as well as other values or ethical rules.[176]

Another more recent focus in EP is the examination of the psychological people-place relationship considering specific types of places like cities, work-place in- and exteriors, neighbourhoods, hospitals etc.[177] Examples are a model that connects the success of a design to the compatibility of its workers (as individual humans and with their job-specific requirements).[178] Other concepts focus on the ecological "success", meaning its performance, like the city-identity-sustainability model, for example.[179]

Another branch of environmental psychology explores spatial cognition, meaning the psychological, physiological and technical ways people perceive their surroundings by using one technique especially often called cognitive mapping. In this people draw maps of place they know well or just experienced for the first time. The items and aspects that people remember and the way in which they do can offer many answers to orientation and way-finding problems for design.[180]

Equally as important for design is the study of environmental stressors of the physical environment. Aside from studying what properties and designs produce such unhealthy human phenomena as cumulative fatigue, learned helplessness, physiological mobilisation and overgeneralisation, more recent approaches also examine what environmental features can restore human health.[181]

---

172 Bonnes & Carrus 2004, pg 804-805
173 Bonnes & Carrus 2004, pg 804-805
174 Bonnes & Carrus 2004, pg 805
175 Bonnes & Carrus 2004, pg 809
176 Bonnes & Carrus 2004, pg 810-811
177 Bonnes & Carrus 2004, pg 811
178 Bonnes & Carrus 2004, pg 812
179 Bonnes & Carrus 2004, pg 813
180 Bonnes & Carrus 2004, pg 806
181 Bonnes & Carrus 2004, pg 807

The area in environmental psychology that is most interesting for describing the *genius loci* is environmental assessment. This is because the *genius loci* is an entity with a character and qualities, be it literal or metaphorical, that can be assessed and described.

The Five Main Models in Environmental Assessment

All assessments of environments can be done with the following approaches and models: ecological/physical models, aesthetic models, psychophysical models, cognitive models, and phenomenological models. These approaches can be complemented by models focussing on health-related and function-related methods as well as people-related/social representation methods.[182]

Image 1: the five main models of environmental assessment in relation to the objectivist and subjectivist approaches

The most basic perspectives are either ecological/physical models or formal aesthetic models. Both determine the quality of places or landscapes by examining the intensity of "objective" properties that are either physical features like water bodies, buildings or plants or aesthetic properties like symmetries, a scenic structure to the landscape and colours. Both models always need educated personnel and disregard the influence of the perception of people in the people-place relationship.[183] Since the *spatial turn*, *language turn* and *environmental turn*, these purely "objective" methods are not preferred any more.

The psychophysical models are the direct successors of the first two models and they mathematically relate physical (and aesthetic) properties to people's subjective behaviours and preferences. Although scientifically valid they are neither efficient nor flexible enough to reflect the complexity of the people-place relationships.

Cognitive/psychological models seem similar to psychophysical models, but their understanding of human reaction in relation to the space is different. In these models human's reactions are not primarily determined by the qualities of the physical features as they are in psychophysical models, but they are subjective functions of the people instead. Therefore the models study demographic and social contexts instead of the physical objects and properties of places and landscapes.[184]

On the scale of how much these approaches consider either subjective perception or objectively determinable objects in places, the phenomenological approach is the most subjective.[185] It focusses on gathering information about how people perceive phenomena and on extracting the commonalities in these reactions.[186]

---

182 Uzzell 2007, pg 4
183 Uzzell 2007, pg 4-5
184 Uzzell 2007, pg 5
185 Lothian w.y.
186 Uzzell 2007, pg 6

Visual Landscape Assessment

The methods that only use physical/ecological, aesthetic as well as the psychophysical and physiological models fall under the category of *visual landscape assessment*.[187] This shows how the specific methods of assessing landscape never exclusively use one approach, but mix several. Within these methods of v*isual landscape assessment*, the cognitive properties span along two axes: pleasant ↔ unpleasant and low ↔ high arousal.[188] While the pleasure axis describes how comforting or threatening a place seems to people (emotion), the arousal axis marks the degree of intriguing or overwhelming amount of sensual information a place has to offer (cognition).[189] The *information processing theory* of Kaplan and Kaplan (1989), for example, outlines a matrix for human preferences in cognitively computing environments by using the four variables: *coherence* (order and a connectedness), *complexity* (diversity of detail), *legibility* (readable pattern for orientation) as well as *mystery* (interest evoking, hidden, intriguing elements).[190] While some properties (*coherence* and *complexity*) are observable straight away, *legibility* and *mystery* need to be explored over a longer period of time.[191]

Image 2: visualisation of the information processing theory by Kaplan and Kaplan

Because in science natural and man-made landscapes / places have been considered separately until the beginning of the 20th century and its various *turns*, researchers make some effort nowadays to unify methods on ecological / physical environments with those that involve human perception. In the same way the architect Maija Jankevica from the Technical University of Vilnius summarised the most well-known methods of *visual landscape assessment* and developed a method for combining the two perspectives. Beginning with the aesthetic point of view there are those methods that base their criteria of what can subjectively be perceived by people (perception-based aesthetic assessment method). The criteria of *beauty, diversity, harmony, order* and *safety* are graded by each assessor from 1 (weak or negative) up to 3 (strong or positive) and the different scores show the overall, subjectively perceived quality of the place.[192]

Landscape criteria	Assessment		
	1	2	3
Beauty	ugly	likely	beautiful
Diversity	simple	different	complex
Harmony	chaotic	balanced	harmonic
Order	messy	unsettled	orderly
Safety	unsafe	pleasant	safe

Table 9: perception-based method (as in Jankevica 2012, pg 114)

In the design objective method professionally trained assessors evaluate both landscape patterns made of certain elements as well as the visual scenery that can be made of a fore- and

---

187 Atik, Bayrak & Keleş 2018, pg 291
188 Bonnes & Carrus 2004, pg 807
189 Bonnes & Carrus 2004, pg 808
190 Völker in Gebhard & Kistemann 2016, pg 113
191 Bonnes & Carrus 2004, pg 808
192 Jankevica 2012, pg 114

background, particular domains (areas) and side-scenes. While the singular elements of landscape patterns are examined for their shape, scale, colour and texture, the aspects of every scenery is evaluated by assessing the accessibility, visibility and expressiveness.[193]

Landscape pattern	Qualities of landscape elements			
	shape	scale	colour	texture
Example element 1	round	small	grey	coarse
Example element 1	curved	large	colourful	plain
Example element 1	square	wide	vivid	scratchy
Scenery	Quality of landscape scenery			
	Accessibility	Visibility	Expressiveness	
Foreground	available	open	colourless	
Background	closed	limited	neutral	
Side-scenes	limited	partly	inexpressive	
Domain	limited	visible	expressive	

Table 10: perception-based method (as in Jankevica 2012, pg 115)

The well-known *sensitive landscape method* by Kevin Lynch was especially developed for man-made, urban landscapes and is executed by trained personnel who map the main features of these spaces, like landmarks and significant buildings and only a few types of natural features like grasslands, rivers etc. The drawn maps and ergo this method that are part of the visual approach, then show the characteristics the respective landscape or place has to offer.[194]

Fig. 2. Fragment of Jelgava 'City Image' analysis
⌣ physical connection; ⌣ visual connection; ⌇ edges;
＊ node; ⁞⁞ region; ◯ landmark; ⊨ gate; ⌄ view;
✕ tourniquet; ⋏ high object; ⌁ barrier.

Image 3: extract of a map created by the sensitive landscape method (as in Jankevica 2012, pg 115)

The ecological approach first of all offers the *biotope structure analysis* which simply classifies ecological biotopes into such categories as grasslands, deciduous forests, water areas etc.

193 Jankevica 2012, pg 114-115
194 Jankevica 2012, pg 115

and determines four planning categories: core areas, connectivity zones, buffer zones and green developmental areas.[195]

Fig. 3. Fragment of Jelgava Biotope Map

forest with old-growth trees; grasslands and meadows; swamp; water; developed land with dense vegetation cover; developed land without/sparse vegetation cover.

Image 4: extract of a map created by the biotope structure analysis (as in Jankevica 2012, pg 115)

The *method of landscape ecology principles* is, just like the *sensitive landscape method* a cartographic method, which in contrast to the *sensitive landscape method* focusses on the natural features, areas and networks of them. In this manner the *biotope structure analysis* and the *method of landscape ecology* principles do the same job, but the former on a smaller and the latter on a bigger scale.[196]

Fig. 4. Patch – corridor – matrix connectivity.

Image 5: extract of a map created by the method of landscape ecology principles (as in Jankevica 2012, pg 116)

The multi-disciplinary level assessment, that Jankevica developed combines these methods into a big matrix which has aesthetic and ecological categories that trained personnel use to evaluate specific types of areas (Jankevica chose categories that made sense for her research, other can add other types of areas) by rating them from 1 (low quality) to 10 (high quality). Arranged along the

---

195 Jankevica 2012, pg 116
196 Jankevica 2012, pg 117

two axes of ecology and aesthetics, Jankevica could observe a cohesiveness in the way the data of her assessed areas relate to both approaches.[197]

Types of landscape Values	Traditional small gardens	Squares, central piazza	Multi-storey residential areas	French formal gardens	English landscape parks	Wildflower garden	Woodland	Overgrown meadow	Untouched waterbed	Degraded abandoned sites	Industrial areas	Approach
Order, regularity	8	8	4	10	5	5	4	1	1	1	2	
Quality of man-made elements	9	10	8	9	5	6	1	1	1	1	8	
Visible human intention	10	9	6	10	7	8	3	1	1	1	4	Aesthetics
Particularity	7	8	4	10	9	10	6	1	3	1	4	
Use of outlandish species	9	4	4	10	6	5	1	1	1	1	2	
Use of natural forms	6	4	4	3	10	10	10	10	10	5	3	
Accordance with architecture	7	8	4	10	9	10	–	–	–	–	4	
Biodiversity	5	3	3	2	7	9	9	10	9	2	2	
Accordance with landscape type	8	7	5	8	9	9	10	9	9	1	4	
Native species	5	3	4	4	7	9	10	10	9	3	2	Ecology
Natural elements	7	3	3	3	8	10	10	10	10	2	2	
Carelessness	1	1	3	1	4	8	9	10	10	7	1	
Wildlife	4	2	2	2	7	9	10	10	10	2	1	
Unaffected nature processes	1	1	1	1	5	7	8	10	10	3	1	

Table 11: example for applying multi-disciplinary level assessment (as in Jankevica 2012, pg 117)

Image 6: visualisation of exemplary application of multi-disciplinary level assessment (as in Jankevica 2012, pg 118)

As the research about the *place identity of a place* described, there are many proposals and no consensus about what exact properties are needed to characterise a space. In order to gain some more inspiration on this the following enumerates several studies that developed their own set of landscape, place or city properties based off of their own research on current studies.

---

197 Jankevica 2012, pg 117 -118

An Italian study formulated a new approach to assessing the Lombardy region, Italy, which was based on the then newly found definition of landscapes as "a combination of elements, natural and not, that encircle us" by the *European Convention on Landscape* (Florence, 2000).[198] They used *visual landscape assessment* which combines the mapping of man-made and natural features, describing the shape (size, colour, contours), meaning (readability, use, context, visual, value, state) and function (accessibility, usability, profitability) subjectively in a qualitative way only.[199]

From the perspective of assessing historical cultural landscape areas in and around the Turkish city centre of Edirne near the Greek and Bulgarian boarder, the following list of properties[200], which can be rated from 1 (low) up to 5 (high) points[201] and therefore quantified, was accumulated: coherence, imageability, historicity, sense of place, visual impressiveness, stewardship, complexity, legibility, originality, accessibility, naturalness, security, inconsistencies, city (place) identity.[202]

Yet another study determined ten quality indicators for public spaces and cities which they applied and evaluated for the Russian city of Irkutsk in 2018.[203] Each quality indicator was visualised by a spectrum that was not described by numbers but offered prepared evaluational vocabulary to describe the spectrum. The indicators are:

Image 7: indicators for the evaluation of the Russian city Irkutsk (as in Kozlov & Kozlova 2018, pg 2)

---

198 Badiani 2006, pg 341
199 Badiani 2006, pg 343-346
200 Atik, Bayrak & Keleş 2018, pg 287
201 Atik, Bayrak & Keleş 2018, pg 292
202 Atik, Bayrak & Keleş 2018, pg 293
203 Kozlov & Kozlova 2018, pg 1

Other studies used classifications, values and elements that they considered most important to analyse in a place in order to work with its identity. While one study used the classification of landscapes by Mitchell (environmental, visual, spiritual, educational, scientific, recreational elements)[204] another applied Paine and Taylor's classification for elements (natural, cultural, visual, meaning).[205] And last of all the cultural landscape management guidelines in the Australian Alps determined that cultural landscapes ought to have the following values: aesthetic, historic, scientific and social.[206]

Landscape Character Assessment Methods

A method that exclusively describes the character of places instead of their quality are *landscape character assessment* (LCA) methods. Since especially in Europe this general method and its various interpretations became more and more popular tools[207] for sustainably developing and managing land, European experts of the network *LANDSCAPE 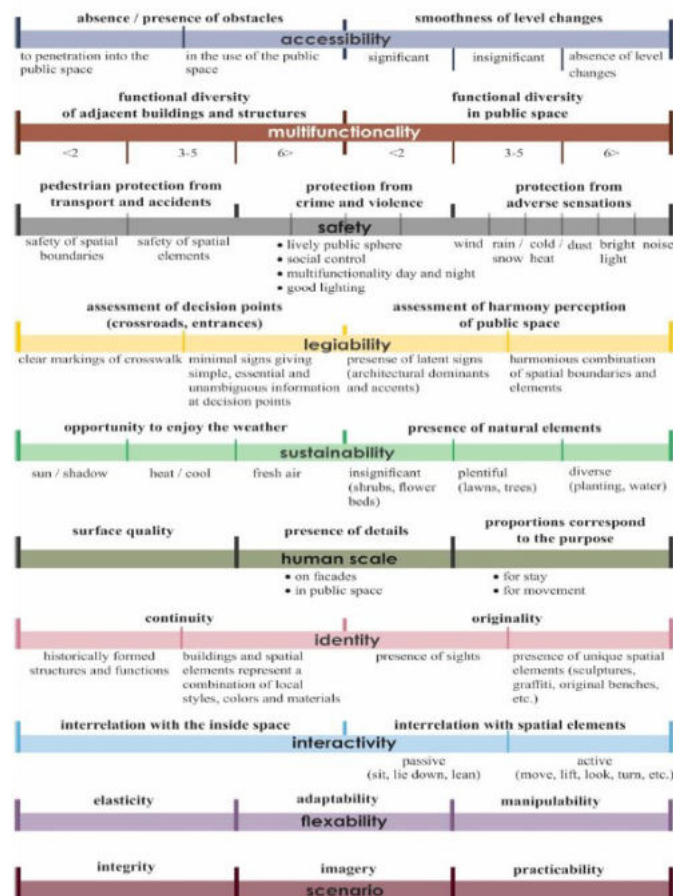EUROPE* instituted an initiative (*European landscape character assessment initiative* – ELCAI)[208] in order to classify and map landscape types and landscape areas[209] by establishing scientifically valid techniques that are orientated towards landscape regions (not political borders) and stakeholder interests. This initiative gathered data produced by their 14 participating countries and analysed their interpretation, application as well as their results of the LCA.[210] They found that there needs to be an equal and differentiated analysis of both landscape character types and areas. While landscape character types are more homogeneous and can be found in many parts of a landscape or country[211], landscape character areas can contain heterogeneous landscape patterns that offer a *sense of place*[212]. *Sense of place* seems to describe a *spirit of place* in this report rather than the human capacity of perceiving places (*sense of place*) as this thesis determined its definition. Furthermore they determined that the areas that need to be covered are:

- biophysical dimensions (form, functioning of the landscape like geology, topography, land form, climate, soil, vegetation, land cover, wild life and biodiversity)
- socio-economic-technical dimensions (human influence on the landscape form like land use, land management practices, land use dynamics, spatial patterns or fields and settlements, historical, "time-depth" aspects, heritage related factors and socio-economic aspects)
- human-aesthetic dimension (human experience of the landscape like sense of place considerations, expressions of tranquillity, beauty, remoteness etc., scenic aesthetic aspects, religion and language) as well as policy
- dimensions (opinions and rights of stakeholders like the general public, land planners and managers and special interest groups).[213]

Two examples of well-known interpretations of LCA show the many steps and layers of information that are achieved through preparations, desk study, field study and the final classification as well as description of the landscape character types and areas.[214]

---

204 Hanachi, Nezam, Nezhad & Ramezani 2019, pg 2
205 Buckle 2005, pg 2-3
206 Australian Alps National Parks 1996, pg 31-32
207 ELCAI 2005, pg 42
208 ELCAI 2005, pg viii
209 ELCAI 2005, pg 32
210 ELCAI 2005, pg viii
211 ELCAI 2005, pg 36
212 ELCAI 2005, pg 43
213 ELCAI 2005, pg 38
214 The Countryside Agency & 2 Scottish Natural Heritage 2002, pg 13; Natural England 2014, pg 15

Image 8: LCA (as in The Countryside Agency & Scottish Natural Heritage 2002, pg 13)

Image 9: LCA (as in Natural England 2014, pg 15)

Both also use a figure that describes all relevant elements to a landscape that can be assessed.[215]

Image 10: relevant elements of LCA (as in The Countryside Agency & Scottish Natural Heritage 2002, pg 2)

Image 11: relevant elements of LCA (as in Natural England 2014, pg 9)

Although the gathered data offers inspiration for developing a method for describing the *genius loci*, it does not offer actual methodologies made for that purpose. In the final project report of the ELCAI the editor clearly distinguishes between the spatial, physical characteristics that are described in the LCA and the character as a "ubiquitous phenomenon, in the sense that there is

---

215 The Countryside Agency & Scottish Natural Heritage 2002, pg 2; Natural England 2014, pg 9

character in everyone, everything and everywhere". Thus they distance themselves very clearly from the "character" in the sense of a *genius loci* because of the subjectivity and lack of scientific method that is associated with describing it.[216]

Health-Related Landscape Assessment Methods

Some environmental assessment tools are directly associated with a <u>health-related approach</u>. The human basis of methods within this approach is that the properties of places affect people's general well-being and that they should therefore be constructed in a way that enables people to lead a "good", meaning healthy life.[217] In the development of the following methods, the phenomenological approach was used as well, in order to determine what people's preference are. They also pick up on the concept of a *biophilia*. This hypothesis claims that humans seem to find environments that incorporate or echo natural objects, materials and shapes more attractive or desirable.[218] The very first time this approach was used was by Frederick Law Olmsted who planned the Manhattan Central Park as a place for the restoration of people's psyches and bodies in the dense and crowded centre of New Your City at the end of the 19th century.[219]

The most well-known specific methods of landscape assessment were, however, only developed much later: the s*tress recovery theory* (SRT) and the *attention restoration theory* (ART). The SRT of Ulrich (1983) is based on the psycho-evolutionary theory which argues that visual stimuli of food, protection, safety and water induce a positive affected reaction in people, because they are indicative of a safe and abundant environment which allows a more relaxed state of being. Ulrich was able to create theory-affirming data by testing people's reactions to landscape as he used the following criteria: complexity, structural features (order, disorder etc.), focal points, spaciousness, surface textures, potential dangers and water.[220] The ART considers the way stimuli of environments affect people's mental and emotional capacities of being alert and attentive. Kaplan and Kaplan (1989) developed several factors like for example the factor of *being-away* (seeing different environments than in daily life) which helps relaxing. Further factors like *fascination* (features that motivate people to explore the environment), *extent* (environment can be viewed as an entity but also offers abundance of detail) and *compatibility* (features are compatible with general and specific needs and desires) play into the primitively natural as well as individual preferences in spaces.[221]

A study about the restorativeness of two Spanish public urban squares followed this approach and designed an evaluation sheet. The researchers included several aspects of both SRT and ART, but also others concerning landscape preferences and landscape aesthetics.[222] Professionally trained personnel evaluated the density and diversity of natural elements, the architectural variation as well as the psycho-environmental indexes (orientation, coherence, enclosure, imageability, prospect, mystery, singularity, identity, uniqueness, exploration, tranquillity).[223] This professionally produced data was compared with the subjective experience of

---

216 ELCAI 2005, pg 1
217 Gebhard & Kistemann 2016, pg 1
218 van Heijgen 2013, pg 46-47
219 San Juan, Subiza-Pérez & Vozmediano 2017, pg 2
220 Völker in Gebhard & Kistemann 2016, pg 114
221 Völker in Gebhard & Kistemann 2016, pg 117
222 San Juan, Subiza-Pérez & Vozmediano 2017, pg 4
223 San Juan, Subiza-Pérez & Vozmediano 2017, pg 6

untrained subjects as they filled in certain forms before and after they experienced the city squares in question. Aside from a form containing the subject's demographic data and the amount of hours they experienced the respective square, the subjects answered the following sheets:

- a *symbol digit modalities test* (subjects pair numbers and symbols),
- a *profile of mood states* (subjects rate 25 adjectives on a five-point Likert-type scale from 0-4 which grouped together make: tension ↔ anxiety, depression ↔ dejection, anger ↔ hostility, fatigue, vigour),
- an *overall happiness scale* & *overall stress scale* (subjects rate own perceived emotion from 0-100),
- a *perceived restorativeness scale* that has 16 items, which contain the components proposed by SRT and ART.[224]

Function-Related Landscape Assessment Methods

Another set of methods comes from the <u>functional use approach</u>, which rather than being part of the psychological model can be considered its own model. While psychological models only consider people's general preferences in places or aspects of places, the functional use model explores what functions, uses or actions these places are preferred for. In this sense the focus lies on the way people perceive the suitability of themselves and places in the combined experience with its physical, social and cognitive components.[225] This shows how much this approach is furthermore influenced by phenomenological thinking which puts people's perceptions at the centre of its studies.[226]

The crucial term to this approach is *affordance*, a term which was developed by the ecological psychologist James Gibson in 1979. An *affordance* was originally an "action possibility" which meant the way that animals perceive physical space and directly as well as without further cognitive processes deduce that it offers or affords them (→ affordance) certain possibilities for action and interaction with their environment.[227] The direct perception that Gibson is describing can be demonstrated by the example that people do not perceive steps of a staircase in centimetres but by asking whether by sense of proportion our foot can step on it safely. Perceiving *affordances* is therefore like perceiving the meaning of the environment in relation to the capacities, limits and preferences of the subject interacting with it.[228] Translating this into design-relevant language, certain physical, aesthetic and biological properties of environments enable or disable people from interacting with it in certain activities. In this sense the *affordances* of places or landscapes can inform the planner or researcher about what general human or specifically individual needs people can satisfy in those places.[229] Although the perception of objects is subjective, the physical objects have a determined and limited amount of activities etc. that they afford the human capacities.[230]

Today there are two basic understandings of *affordances*. One group of researchers considers environments to have *affordances* that emerge when they meet different subjects and can be interpreted differently by those subjects. Another group of researchers believes that *affordances* are not properties of the environment which are influenced by subjects, but instead they argue that

---

224 San Juan, Subiza-Pérez & Vozmediano 2017, pg 5, 8
225 Uzzell 2007, pg 7
226 Heras-Escribano, Lobo & Travieso 2018, pg 4
227 Elena, Fadel, Masoudi & Pagano 2019, pg 1354
228 Heras-Escribano, Lobo & Travieso 2018, pg 7
229 Uzzell 2007, pg 6-7
230 van Heijgen 2013, pg 47

affordances are properties of the organism-environment system.[231] In the first conception *affordance* is fixed by the perception of the subject. In the second conception *affordances* are determined by both the perception of the subject which one could consider the theoretical action possibility as well as the subject's actual performance in using the *affordance* which represents something like a practical action possibility.[232]

Affordances are a good example for how concepts can transcend certain dichotomies that were and are strong in sciences since the era of Enlightenment. One major dichotomy that has been referred to in this thesis before is objectivism versus subjectivism. *Affordances* accept both the objective physical world with measurable features as well as the subjective perception of this world by animals and people that have objectively measurable physiological and anatomic capacities as well as socio-cultural backgrounds.[233] Furthermore, the concept of *affordances* ignites the discussion of another dichotomy: nature versus culture. The question at hand is whether *affordances* are trans-cultural (anatomic and physiological features of the subject determine the interpretation of the environmental affordance) or whether *affordances* are in fact socio-cultural. This last suggestion would mean that socio-cultural backgrounds also influence the amount and quality of affordances the subject can perceive and use.[234] The recent addition to the topic of *affordances* is the *niche construction theory* which addresses the impact and interaction of cultural and biological aspects of *affordances*. As the name of the theory suggests it describes the manner and the degree to which subjects can influence and adapt their environment and therefore also the affordances at the site. The niche that is constructed is not simply a spatial arrangement like ecological niches are. Instead it is a whole set of social structures that influence the natural (i.e. gene-generated) choices of how to use certain affordances. The theory also claims that these constructed niches can then be inherited to future generations because they promise better survival chances for the respective population.[235]

Different researches that used this approach develop different methods and set up their own rules in how to apply *affordances*. One example is supposed to show how the principles can be implemented in a study. The chosen study developed a concept of using *affordances* as the means to assess a place in a geographic information system (GIS). The GIS presents digital information like in this case *affordances* in a geographical map in order to describe the on-site people-place relationships and people-place dynamics.[236] The study picked six aspects of places that they considered the most important to map in their GIS. On the one hand the obvious <u>physical features</u> as well as their functions were be mapped. On that basis they analysed theoretically possible <u>actions</u>. In order to determine their influence on the affordances offered by the place, they created a written account of the <u>socio-economic and cultural factors</u>. This content was then included into the map via <u>symbols</u> which reduce the complex pieces of information into a more user friendly layout. Being able to create these maps for different time periods can further help determine <u>narrative descriptions</u> of the place. The GIS also offers the function of incorporating a system of <u>typologies or categories</u> which helps sorting the singular pieces of information and grouping them for example by type of

---

231 Heras-Escribano, Lobo & Travieso 2018, pg 7
232 Heras-Escribano, Lobo & Travieso 2018, pg 7-8
233 Heras-Escribano & De Pinedo-García 2018, pg 2-3
234 Heras-Escribano & De Pinedo-García 2018, pg 3
235 Heras-Escribano & De Pinedo-García 2018, pg 9
236 Egenhofer, Gartrell, Jordan & Raubal 1998, pg 1

agent or subject etc. In this manner the theoretical *affordances* of the environment are deduced as well as those *affordances* that are likely to be used, desired or needed in a cultural context.[237]

Another paper on the use of *affordances* agreed that both the environment and subjective perception as well as social/cultural background need to be considered. The first step of this method is to determine and describe the artefacts in the environment – a tangible or intangible object that could represent an *affordance*. Tangible objects can for example be described by their properties (weight, volume, shape, colour, texture etc.). Depending on the effects of passing time and behaviours of the object these properties may also change. Intangible objects like the swinging of a pendulum or the changing of a materials colour can for example be determined by observing the dynamics of how the tangible object's properties change over time.[238] Moreover it needs to be considered what aspects of experiences, cultures or believes influence the agent or subject perception.[239] A framework that is supposed to help designers assess and create *affordances* in spaces is a Cartesian graph that shows the weakness or strength of the two functions of *affordances*: framing and classification. On the one hand the degree of <u>classification</u> determines how strongly the content of an *affordance* is expressed and communicated in the space. The degree of <u>framing</u> on the other hand depends on how strongly or loosely the object determines the *affordance* or needs be imposed upon the object by users.[240]

Image 12: visualisation of the intensity of framing and classifying an affordance

People-Related / Social Representation Landscape Assessment Methods

All methods using this approach result from social sciences and have a long tradition. Like the *Quebec declaration on the preservation of the spirit of place* from 2008 and the human geographer Anssi Paasi described, the *spirit* or *identity* of a place is often examined by studying the narratives and discourses concerning places.[241] Since the middle of the 1950ies the approach of studying narratives and life stories has become fully established in social sciences.[242] This development was the first of many previously introduced *turns* in the 20th century, the *linguistic* or *narrative turn*.[243] At the beginning of the 20th century this turn introduced the idea into the world of scientific research that language is not a way to objectively describe reality but the way that people subjectively perceive their world and create and express their own perspective of reality.[244] The assumption that language does not reflect the objective but subjective reality is a constructivist view which is rooted in phenomenological thinking and the basis for the narrative paradigm.[245] This constructivist view has also resulted in the methods that will be described, as well as previously described perceptions of *space*, *identity* and *genius loci*.

---

237 Egenhofer, Gartrell, Jordan & Raubal 1998, pg 10-11
238 Burlamaqui & Dong 2014, pg 9-10
239 Burlamaqui & Dong 2014, pg 10
240 Burlamaqui & Dong 2014, pg 16
241 Doroftei 2016, pg 64; Peng, Strijke & Wu 2020, pg 2
242 Akinsanya & Bach 2014, pg 1
243 Messmer 2005, pg 2
244 Vanheule 2009, pg 1311-1312, Ogamba 2020, pg 540
245 Mahmoud & Tehseen 2020, pg 161-162

Since the analytical approaches to narratives have always been conducted by many more disciplines within and without the social studies and within and without so many cultural circles, the terminology of *story*, *narrative*, *discourse* and *plot* varies. The following very briefly presents the most common understandings and points of discussion concerning the terminology. While some argue whether a narrative is constituted by just one or at least two events[246], others state that narratives can have stories (content happening throughout a period of time) and a discourse (the way and time in which a narrative is written or told), while non-narratives have a discourse but are devoid of a story. Another line of argument says that a story is a kind of account that it is constituted from a narrative (= characters, actions etc.) which has a plot (= happens in a meaningful and linked chain of events) and some add that it also needs to have a discourse (= poetic or other kind of particular delivery and way of story-telling). This, however is considered to be too restrictive, since many accounts of people that could be stories are not told in such a detailed and thought through manner.[247] This thesis will therefore keep to the term of *narrative* and view it as the content of people's accounts of their own perceptions and experiences over the course of their lifetime. Furthermore it will consider the discourse of those narratives, meaning the way these narratives are presented and how they relate to other narratives or facts and observations.

In combination with places, narratives have always played a big role in understanding and communicating the *spirit* or *identity of place*, while their discourses have always been very expressive of the zeitgeist and culture that took effect in that place. Especially in working with identities, narratives have proven to be effective tools.[248] Those narratives express themselves through many mediums (papers, design languages, events etc.), levels of society (individuals, communities, institutions etc.)[249] and levels of narration (institutional stories, invented or adapted stories, first-hand or second-hand stories etc.)[250]. The most important tools used to explore the discourses and narratives concerning the *spirit of place* or *identity of place* are discussed next.

Methods for Assessing Narratives and Discourses

The general goal of analysing narratives is to subdivide or extract pieces of a narrative that are most meaningful for the topic at hand in order to compare them with accounts of a similar topic and explore historical, social or personal phenomena.[251] Lieblich and his colleagues developed an easy model to explain the ways narratives of places can be approached. In that model the narrative exists within four main dimensions of narrative analysis or narrative inquiry along the two axes: holistic ↔ categorical, content ↔ form[252], producing the four analytical categories: categorical-form, categorical-content, holistic-form, holistic-content. The four endpoints of

Image 13: analytical dimensions according to Lieblich and colleagues

the axes are not separate categories but together create a continuum which is filled by the narrative. Within this continuum every narrative exists as a whole, has categories that can be extracted and

---

246 Gothenburg Research Institute 2006, pg 7
247 Gothenburg Research Institute 2006, pg 8
248 Mahmoud & Tehseen 2020, pg 160-161
249 Vanclay in National Museum of Australis 2008, pg 5-6
250 Akinsanya & Bach 2014, pg 1
251 Mahmoud & Tehseen 2020, pg 160-161
252 Lichrou, O'Leary, O'Malley, Patterson 2017, pg 170

contains form as well as content. The categorical-form analysis explores the linguistic or style-related aspects of a narrative by extracting and classifying elements of the narrative to do so. In a similar way the categorical-content analysis, known as content analysis, subdivides and categorises the content of the narrative, like its characters, events etc. In contrast to that the holistic-content analysis explores the meaning of the narrative by always considering every content detail in reference to the whole narrative. Similarly, the holistic-form analysis looks at the whole narrative to determine what structural and stylistic form it has or which general historical or social references is has.[253]

Another metaphor explains a three dimensional space in which inquirers explore a narrative about a place: interaction, continuity and situation. The interaction describes the exploration of the inward and outward dynamics of individuals as well as social collectives. Exploring the temporal layers of a narrative is described by the continuity of the narrative which spans from the past to the present to possible futures. Last of all the locality comes into play, being either a place or several places that offer a backdrop and context for all aspects of interaction and continuity.[254]

Aside from examining narratives or discourses from a variety of media, interviews are a popular tool in order to acquire data of any narrative, like for example conversational or *narrative interviews*.[255] Especially in those interviews, but also in the use of other media, there is some kind of an inquirer or researcher on the one hand and some kind of a narrator on the other. Although a certain degree of professional distance between these two is desirable, both are always going to affect each other, since neither are neutral or without biases.[256] Clandinin and Connelly actually argue that the researcher is supposed to "fall in love" with the phenomenon they are exploring (→ phenomenological approach). In order to have a balance, however, they need to make sure they are not identified with the narrator's perspective on the phenomenon and able to distinguish their own biases as well as the bigger picture of the phenomenon. For example, a personal rather than strictly professional relationship between the interviewer and interviewee is actually more supportive of creating authentic accounts of the interview.[257] Clandinin and Connelly came up with five ways that help the researcher achieve a healthy balance between "falling in love" with the phenomenon and "observing coolly". First of all, the researcher needs to become aware of their personal approach to and reasons for picking the phenomenon at hand. Secondly they must clearly formulate their intentions and goals of the research. These formulations can be used in the process of accumulating data, in order to make sure that they stay on topic. Third of all, whenever the interviewer changes the medium or method of extracting data, they need to be investigative as well as transparent about that, too. The forth step is the equally transparent examination of the relationships between the researcher and interviewees or studied types of media. Last of all, the usefulness of every piece of information for the specific formulation of the phenomenon needs to be questioned and evaluated.[258] The approach of "falling in love" with a topic also requires at best a genuine interest in the topic, empathy for the people and dynamics expressed in the phenomenon and a general openness which allows the interviewee to feel safe enough to share vulnerable and controversial experiences as well as thoughts and feelings.[259] As the interviewer notes down and further uses the interviewee's

253 Lichrou, O'Leary, O'Malley, Patterson 2017, pg 170-171
254 Lichrou, O'Leary, O'Malley, Patterson 2017, pg 171-172
255 Lichrou, O'Leary, O'Malley, Patterson 2017, pg 169, Mahmoud & Tehseen 2020, pg 165-166
256 Mahmoud & Tehseen 2020, pg 165
257 Messmer 2005, pg 4-5
258 Messmer 2005, pg 3-4
259 Messmer 2005, pg 5

narrative, the interviewer is supposed to use the interviewee's phrases and expressions rather than changing them into their own or into a more scientific style. Furthermore, the interviewer usually allows the interviewee to inspect the notes and the extracted information of the interview and to approve both authenticity as well as consent for using the information.[260]

The Narrative Interview

The structure of the *narrative interview* is idealised and usually experiences some compromises and less defined steps when applied.[261] Before the interview even begins, the researcher has to prepare questions that are going to be most important to the phenomenon on hand. In the second step, the initiation phase, the interviewer welcomes the interviewee and introduces the topic and procedure. When referring to the topic and aim of the interview it is especially important, that the interviewer does not use language or descriptions that manipulate or inhibit the interviewee. The phase of the main narration follows as the interviewer listens actively and allows the interviewer to explain their point of view freely and without interruption. In the next step, the questioning phase, the interviewer uses their prepared questions and asks them, using the formulations the interviewee used in the previous phase. The interviewer again listens actively and does not question any points made by the interviewee. In a final concluding talk that can but need not be recorded the interviewer gets to question and ask the interviewee why some of the answers were given in order to understand the context of the answers.[262]

Critical Narrative Analysis = Narrative Analysis + Critical Discourse Analysis

The most popular tools for analysing narratives and discourses are called *narrative analysis* and *critical discourse analysis*. While the *narrative analysis* focusses on the aspects of the narrative that speak to people's perception of reality, the *critical discourse analysis* examines the way that narratives are told by going into the social conventions and other dynamics involved. In order to combine these two tools and show the micro (people's personal perception) as well as macro world (social conventions), the *critical narrative Analysis* (CNA) was developed by Fairclough in 1989. He suggested to analyse the text itself, its discourse as well as the general socio-historical conditions that the text and discourse are embedded in.[263] In the first part a *narrative analysis* is executed by applying a so-called labovian technique for thematic progression[264] which analyses the narrative in six steps. In an <u>abstract</u> the whole narrative is summarised in order to give the reader an overview of what topics to expect in the narrative and the <u>orientation</u> describes its main characters and actors like protagonists and antagonists, locations, time references etc. The actions within the narrative are briefly stated by the <u>complication</u>. In an <u>evaluation</u> the feelings and sensible aspects of the narrative are laid out and explain the relevance of working with this narrative in the first place. The narrative results which are resolutions of the complication mentioned before are described in the <u>consequence</u>, while the <u>coda</u> summarises the narrative, main themes, lessons learned and outlooks.

After the execution of this *narrative analysis* the second part of the CNA is the *critical discourse analysis*. This part consists of three steps. The first step is called <u>description</u>. In this step the discourse is described by a quantitative and qualitative text analysis. The quantitative text

---

260 Mahmoud & Tehseen 2020, pg 165
261 Lichrou, O'Leary, O'Malley, Patterson 2017, pg 170
262 Lichrou, O'Leary, O'Malley, Patterson 2017, pg 170-171
263 Ogamba 2020, pg 541
264 Ogamba 2020, pg 543

analysis is done in the shape of a bar chart which visualises the amount and kind of the most frequently used linguistic features (body language, facial expressions, non-phonetic sounds as well as incomplete sentences, repetitions, filler words etc.) in the excerpt of the written or spoken discourse.[265] The quality of the discourse is then discussed and laid out in text form. The second step is called <u>interpretation</u>. The study chosen as an example used the acronym SPEAKING for this by the sociolinguist Hymes: S – setting and scene, P – participants, E – ends (outcomes), A – act sequence (order of speech elements), K – key (hints at tone, manner and spirit of speech), I – instrumentalities (media of communication like oral or film and aspects of speech like dialects and accents), N – social norms, G – genre (like gossip or eulogy etc.). A social analysis to portray the socio-cultural background of the narrative represents the third step in the CNA, called <u>explanation</u>. The last step is the written conclusion which connects the results from the *narrative analysis* and *critical discourse analysis* and therefore analyses the whole phenomenon of the topics and agents the narrative is concerning.[266]

Qualitative and Quantitative Content Analysis

Another set of methods used for describing the *genius loci* is the *quantitative content analysis* which was developed in the 1920ies and 30ies[267] in order to methodically analyse any kind of communication, texts and messages so that any conclusions drawn from the data and its context are replicable and scientifically valid. In this manner the method allows conclusions about the "sender of the message, the message itself and the impact it generates".[268] At the beginning only *quantitative content analysis* existed which examines the frequency in which certain pre-determined targets are mentioned and described.[269] In the 1960ies this approach became fully established in many disciplines such as linguistics, psychology, sociology, history and arts. At that time, however, a movement was starting to gain momentum. The exclusively quantitative approach to research was criticised to be overly simplifying as well as superficial in all disciplines and a qualitative content analysis was developed in order to extract narratives, context and meaning of the statements made[270].

All in all there are two types of content: the manifest and the latent content. Obviously visible or readable data that is on the surface or is literally described in any kind of communication is considered manifest content.[271] Analysing latent content on the other hand requires much more interpretation since it is much less obviously visible in texts or observations. In order to do this researchers can explore latent patterns of aspects within a text or work on discovering latent objectives in which researchers come up with their own interpretations of meanings hidden in the text.[272] When it comes to working with manifest content both qualitative and quantitative approaches can be applied but offer different results. While the quantitative approach creates numerical data that can be representative on their own or compared in statistics, the qualitative approach examines the overall structures and concepts of a text or other medium in order to grasp its content or form.[273] The same is true for working with latent content although some argue that due

---

265 Ogamba 2020, pg 544
266 Ogamba 2020, pg 545
267 Mayring 2000
268 Mihailescu 2019, pg 1
269 Kleinheksel, Rockich Winston, Tawfik & Wyatt 2020, pg 2
270 Mayring 2000
271 Kleinheksel, Rockich Winston, Tawfik & Wyatt 2020, pg 3
272 Kleinheksel, Rockich Winston, Tawfik & Wyatt 2020, pg 5
273 Kleinheksel, Rockich Winston, Tawfik & Wyatt 2020, pg 4

to its latency, only qualitative approaches can do it justice.[274] At the beginning of every analysis the researcher must first of all decide what their aim for the study is (generate numerical or descriptive data) and second of all where they think that the content they look for is located in the text (manifest of latent content of the source) and then pick or develop the appropriate method.[275]

In a recent thesis about the *genius loci* of the German city Lüneburg the *qualitative content analysis* as for the first time described by the psychologist Philipp Mayring in 1983 was used to analyse the data produced in partially structured *narrative interviews*. According to the model of Lieblich et al. this approach is a categorical-content approach, analysing the text by subdividing[276] its manifest and latent content into categories. Although this method is not a quantitative one, it is intended to maintain the following upsides of the quantitative method. First of all the qualitative method provides clear differentiations between the sources of the inferences the researcher makes like for example from statements of the narrator, the socio-cultural background or the situation the text was written in or the interview was conducted in. Furthermore the qualitative method also still provides strict rules for how the content is subdivided into analytical units. These analytical units are organized by categories that are formulated and revised through several feedback loops. Last of all the method is created to achieve the highest possible reliability and validity so that it is intersubjectively comprehensible. Aside from the strict coding rules for creating the content units within the categories, only trained members of the respective project were trusted with the task.

The categories are developed in two ways: inductively and deductively. In the first step inductive categories are formulated based on what the theoretical research suggests the data could reveal[277]. In this manner the researcher's attention is guided towards relevant aspects of the research material as it is examined with the help of the inductive categories.[278] Subsequently the data is used to deduce a new set of categories (deductive categories) that reflect the actual research material. The following images show the steps and feedback loops that exist to ensure the reliability and viability of the method.[279]
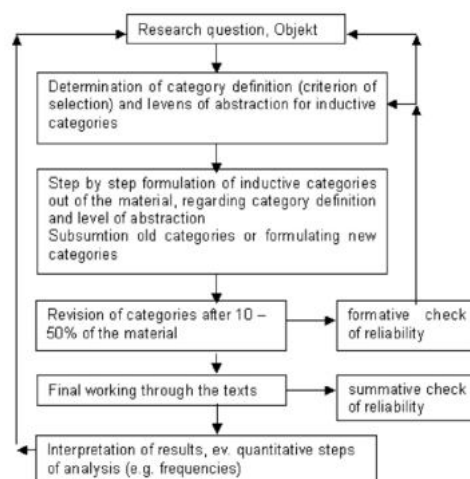

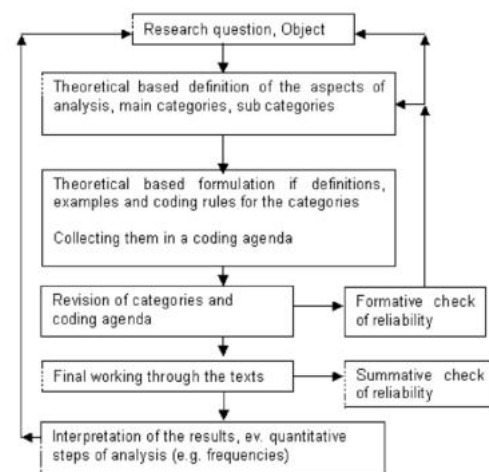*Image 14: step model for inductive categories (as in Mayring 2000)*

Image 15: step model for deductive categories (as in Mayring 2000)

---

274 Kleinheksel, Rockich Winston, Tawfik & Wyatt 2020, pg 5
275 Kleinheksel, Rockich Winston, Tawfik & Wyatt 2020, pg 12
276 Arndt 2019, pg 73-75
277 Mayring 2000
278 Kleinheksel, Rockich Winston, Tawfik & Wyatt 2020, pg 8
279 Mayring 2000

Both *quantitative* and *qualitative content analyses* rely on a coding system for working with their data. In both steps of the inductive and deductive categories, codes are used, changed and revised throughout the entire process. The codes of the final deductive categories concisely label and describe every content unit with a title, definition, examples or attributes as well as coding rules.[280]

Category	Definition	Examples	Coding Rules
C1: high self confidence	High subjective conviction to have successfully coped with the situational demands, which means - to be clear about the demands and their coping possibilities,	"Of course there had been some little problems, but we solved them all, either I myself or the student gave in, depends who made a mistake. Everyone can make mistakes." (17, 23)	All three aspects of thew definition have to point to "high" self confidence no aspect only "middle" Otherwise C2: middle self confidence

Image 16: example for the coding system (as in Mayring 2000)

In the 2019 thesis about the *genius loci* of Lüneburg, Germany, Elke Arndt made sure to set her research up by giving a brief historical and structural overview of the city and checking for any prior works on the *genius loci* or related topics for Lüneburg.[281] She argues that any research concerning the *genius loci* has to be done qualitatively, since it is not a matter of representative numerical facts as quantitative methods would be good for, but a matter of representation of qualitative aspects that make the *genius loci*.[282] Because she was not able to achieve a representative sample of interviewees within the confines of her thesis or find any theoretical fore-knowledge and data, she used *theoretical sampling* to assemble her sample. In this method the six interviewees were picked with the highest possible contrast in their demographic data. This selective sampling through theoretical categories increases the likelihood of a heterogeneous and variant representation of the area of investigation.[283]

Arndt's formulations of her research issue indicate that her thesis explores both Paasi's understanding of *people's place identity of place* as well as the *place identity of place*:
- "How is the spatial identity constituted in Lüneburg in the sense of personal identities?"
- "How is the spatial identity constituted in Lüneburg in the sense of place identities?"
- "How do place identity and the personal identities of the Lüneburg's residents relate?"

With her research she claims no representative results but simply wants to detect patterns and derive common narratives from the varied interviewee's answers.[284]

Her style of interview is a partially structured interview with a prepared guideline.[285] This preparation represents the raw, inductive categories that are later built on in the qualitative content analysis. Arndt developed the general guideline according to the SPSS-principle. This principle required her to first gather (S-"sammeln") all topic-related questions and test (P-"prüfen") them for suitability by sorting (S-"sortieren") and reducing (S-"subsumieren") them over and over again until a structure of general categories emerged that were as concise and precise as possible.[286] In order to

---

280 Kleinheksel, Rockich Winston, Tawfik & Wyatt 2020, pg 7; Mayring 2000;
281 Arndt 2019, pg 52-59
282 Arndt 2019, pg 59-60
283 Arndt 2019, pg 60-61, 63-64
284 Arndt 2019, pg 61-62
285 Arndt 2019, pg 62-63
286 Arndt 2019, pg 65-71

be able to add quantitative data, Arndt also prepared a short questionnaire about the place-related demographic and biographic data like the period of time they have live in Lüneburg, the place they live now or have lived before, their highest diplomas and current occupations.[287]

The guideline and interview style allowed the interviewee to answer her more open questions freely while the partial structure makes sure that all important topics get covered. During the verbal and personal interview Arndt adapted her questions to the interviewee's style of talking and left all answers without judgement or comment.[288] The interviews were voice-recorded and the interviewees were allowed to pick the place for the interview in order for them to feel most comfortable.[289]

For the evaluation and analysis Arndt used the *qualitative content analysis* as determined by Mayring and colleagues and described above.[290] After analysing the portrayal of the *genius loci* in the interviews by category (category-content approach)[291], Arndt continued to analyse each individual interviewee's relationship to the city of Lüneburg with a more holistic-content approach[292]. She rounds off her analysis by comparing her findings with prior studies about Lüneburg and her research issues.[293]

---

287 Arndt 2019, pg 71-72
288 Arndt 2019, pg 62-63
289 Arndt 2019, pg 71
290 Arndt 2019, pg 73-75
291 Arndt 2019, pg 82-106
292 Arndt 2019, pg 106-117
293 Arndt 2019, pg 117-125

2.2.2 Architectural / Urban Theory

The field of architectural theory offers three main approaches for describing and or assessing the *genius loci* or a comparable term. What all three methods have in common is the phenomenological approach to their theories and proposed methods. Because architectural theory is quite philosophical and in some parts directly quotes or echoes ideas from phenomenological philosophy, it is important to dive a little deeper into that topic.

2.2.2.1   Phenomenology

The phenomenological approach is not a clearly defined scientific viewpoint[294] but more of a movement[295] or "dynamic philosophy" according to the phenomenologist Herbert Spiegelberg.[296] The movement, which began in the early 20th century, examines the way people subjectively experience and perceive their life and world. Because the general environment and specific places are so fundamental to a person's experience, they are an essential topic in phenomenology.[297] For that reason the disciplines like architecture and architectural theory apply this philosophical movement most often[298] since it started to permeate from philosophy into other disciplines[299]. The general ideas in phenomenology are:

1. to return the attention of research back to the actual phenomenona of life instead of abstract thinking and conceptions[300] (Husserl: "a return to the things themselves"[301]),
2. to observe the phenomenona in a naive, open and kind way without any prior conceptualisations, intentions or expectations[302] (Heidegger: "a way of seeing"[303]) and
3. to ascertain the essence of things in that manner[304] (Merleau-Ponty: "essence of perception"[305]).

The timing and content of the phenomenological movement shows how rooted it is in the general development of the western sciences as they started to rediscover an interest in subjectivity and more holistic approaches to problems. Different phenomenological researchers, however, have a slightly different understanding as to how this approach can or ought to be applied properly. The theorist David Seamon summarised the three most significant points of conflict concerning working with the phenomenological approach. First of all, it is not agreed whether phenomenologists only ought to follow the interpretative methods of prior phenomenologists (i.e. Husserl, Heidegger, Merleau-Ponty etc.) as part of the philosophical tradition or apply the basic method of observing naively and openly in order to explore phenomena in a "pure" manner[306] and thus continuing to discover more phenomenona. On the one hand, those who prefer keeping to the texts and previous ideas are in danger of either never being able to observe anything new or of letting the prescribed

---

294 Shirazi 2012, pg 11
295 Shirazi 2012, pg 13
296 Shirazi 2012, pg 11
297 Hauge 2007, pg 4
298 Li 2018, pg 4
299 Shirazi 2012, pg 13
300 Norbert-Schulz 1980, pg 8
301 Shirazi 2012, pg 11
302 Shirazi 2012, pg 12
303 Shirazi 2012, pg 11
304 Shirazi 2012, pg 12
305 Shirazi 2012, pg 11
306 Seamon 2019a, pg 38

understanding influence their observational skills. On the other hand, those who want to observe without bias or texts are in danger of not applying any proper scientific methods and producing no data that is scientifically valuable or useful.[307]

The second critical question in phenomenology is whether phenomenological findings are either "discovered" (which would mean that the observed phenomenon objectively existed before) or if those findings are "constructed" by the human intellect (which means that the phenomenon did not exist before and only came into being through the unique process of the individual people who perceived and interpreted it). Those who favour keeping to the texts argue the latter to be true. They judge discoveries that are made without considering philosophical texts as "self-deception", since they were not arrived at by method but possibly chance. Although this argument is hard to disprove, Seamon as well as many others claim that these "moments of insight" do happen. Van Manen calls those moments "meaning insights", experiences of clarity that occur when a thing that one has been actively wondering about suddenly becomes meaningful.[308] One could also describe it as moments in one's research when observed data clicks into place and forms a proper picture, meaningfully depicting the phenomenon that has been studied phenomenologically.

The third critical point Seamon describes is the understanding of the way phenomenology is supposed to be applied. While most researchers agree that phenomenology studies human experiences of the daily life, it is not unanimous what purpose the tools of phenomenology are fit for. It is disputed whether phenomenology should stick to being a tool for making and describing observations or if it can or should be used to create new concepts and theories about the things it describes.[309]

Within the discipline of architecture there are two main points of view, founded by Martin Heidegger on the one side and Maurice Merleau-Ponty on the other[310] who both took the more theoretical understanding of phenomenology from its founder, Husserl, and grounded it in more practical thinking.[311] From the two, Heidegger's understanding is still more conservative than Merleau-Ponty's as he ontologically focusses his work on the world people perceive and live in. He produces new definitions for *places*, *spaces*, *objects* as well as the *being-in-the-world* and *dwelling* (settling down somewhere). Merleau-Ponty, on the other hand focusses on the body or subject that does the perceiving and living in the world. His definitions concern "mobility, perception, body and sensible dimension of human experience".[312]

The German philosopher and teacher Martin Heidegger (1889[313]-1976) was an existentialist as well as a phenomenological ontologist. This means that he worked on questions of *being* and *existence* with a phenomenological approach[314]. According to Heidegger, *places* are *spaces* where a character emerges which means that they have a *genius loci* or *spirit of place*. In order for a space to gain a character and become a place, it gathers or is given meaning. In the same way Heidegger defined objects and said that "a thing gathers world", which means that it concretises the general information of the pure matter which people can perceive and thereby turns it into a specific

307 Seamon 2019a, pg 38-39
308 Seamon 2019a, pg 39
309 Seamon 2019a, pg 40
310 Shirazi 2012, pg 12
311 Shirazi 2012, pg 13
312 Shirazi 2012, pg 12-13
313 Kalechi Iwuagwu 2017, pg 3
314 Kalechi Iwuagwu 2017, pg 6

thing.[315] He explained his concept of *being-in-the-world* with the example of a bridge that sits in a landscape and leads from one side of the river to the other. The bridge is the thing or object and the landscape is the undefined space that existed before the bridge. The bridge gathers the information of the stream, its two riverbanks and the surrounding unique landscape into a place since the purpose and properties of the bridge give each element and therefore the entire, newly created place meaning.[316] One concept of his, that is especially important in connection with architecture is the concept of *dwelling*, since Heidegger thinks that this *dwelling* is the very purpose of architecture. When people are able to dwell instead of just exist somewhere, their surroundings are meaningful places that afford them ways of orientation and identification. In this manner, architecture does not only offer the very basic means of shelter[317] but it can also "densify" an existential space into a meaningful place and manifest the (potential) properties of its *genius loci*.[318]

Heidegger said that people interpret items in two steps. In the first step people can perceive the singular characteristics of an item, which are like the surface layer of information of the item. In the second step people start perceiving and constructing conceptions of the item as one unit with many more layers of information. When it comes to Heidegger's "method" of anal*y*sing any *being-in-the-world*, he developed a *forefold*. These are the elements in the world that an item can "gather" in order to manifest itself with its characteristics: *earth*, *sky*, *divinities* and *mortals*.[319] He further formulated a *fore-structure*: *fore-having*, *fore-sight* and *fore-conception*. This specifies that the researcher always comes with a personal background (fore-having), a point of view (fore-sight) and priorly formed understanding of whatever he/she studies (fore-conception). For this reason Heidegger emphasises the importance of researchers being reflective and critical about their history, point of view and understandings, since they will inevitably influence what they are capable to observe and derive from the observed, no matter how openly they try to approach it.[320]

2.2.2.2   Christian Norberg-Schulz

Christian Norberg-Schulz was a Norwegian architectural theorist who carried the phenomenological approach into architecture in the 1960ies by translating Martin Heidegger's conceptions of *place* and *being* into an architectural language.[321] Christian Norberg-Schulz's method for describing the *genius loci* is a qualitative and phenomenological method that he explains and applies in his book *genius loci – towards a phenomenology of architecture*. The presentation of this method follows the first three steps of the book: 1) the place in general, 2) the natural place and 3) the man-made place.

Basic Understandings for this Method

Norberg-Schulz's perception of *space* and *place* is in alignment with the current scientific interpretations discussed by this thesis. He argues that *spaces* contain all components of places in a disconnected arrangement[322], while *places* are made up of both tangible and intangible aspects[323]. To

315 Norberg-Schulz 1980, pg 5
316 Kozljanič in Heimrath & Mallien 2009, pg 27
317 Norberg-Schulz 1980, pg 5
318 Doroftei 2016, pg 1
319 Ramzy 2015, pg 44
320 Dowling, Horrigan-Kelly & Millar 2016, pg 4
321 Li 2018, pg 3
322 Norberg-Schulz 1980, pg 11
323 Norberg-Schulz 1980, pg 6

him these meaningful places are not just a social or cultural construct or a set of singular characteristics, but a lived experience – a phenomenon that can be observed, proving his phenomenological point of view.[324]

Along with the Roman understanding, Norberg-Schulz claims that every place and in fact every independent entity has a *genius* that functions like a character and character giving guardian spirit to the entity. He phrased it as the *genius* being "the embodiment of a person's or place's truth" which makes the *genius* an entity's fixed natural state that pulls on every action, thought or feeling of the respective entity to develop according to its disposition. Norberg-Schulz does not specify, however, whether a *genius* is its own consciousness like the Greek or Roman spirits or just a force that, like magnetism, pushes and pulls on other forces.[325]

The reason that Norberg-Schulz translated phenomenology into architecture was because Heidegger's conceptions of the people-place relationship inspired him. Norberg-Schulz notes that architecture needs to fulfil more than just practical means but also provide symbolic functions that work as an *existential foothold* for people. To him these symbols are pieces of architecture that illustrate a meaningfulness of life situations they are connected with or representative of.[326] All cultures have a version of a "system of orientation" that structures their environment into meaningful places. This allows people of those societies to orient themselves in a space and identify with it in some way. These spatial structures can be physical like different habitats or routes (→ affords orientation), but they do not have to be and can also be formed by name areas or associated divinities (→ affords identification). When these associations are weak, people tend to feel "lost" and have a hard time physically and spiritually orientating themselves within that environment.[327] The modern world has mostly focussed on the practical or physical orientation in places and neglected the aspects places need to afford people some kind of spiritual orientation, meaning identification. For Norberg-Schulz the basis for identifying with anything is "befriending" it. "Befriending" means accepting the elements that make a certain place or thing be the way it is or in other words, "make peace" with the *genius* of the thing one identifies with. If this "peace" cannot be found, people simply do not identify with the respective place, person, item etc. but with others. This not only clarifies why meaningful architecture is essential to people personally, but also why planning it is important for creating a nurturing, healthy and strong societies.[328] Norberg-Schulz equals Heidegger's concept of *dwelling* with his own expression of *existential foothold*. Just like a place that people can *dwell* in, a place that offers people an *existential foothold* will offer meaningful aspects that help people to orientate and identify themselves in and with the place (place becomes part of people's identity). Architecture can and should play an active role in that. When a meaningful place or a *genius loci* / *spirit of place* is the result of the previously mentioned process, then emphasising or at least working with the *genius loci* or *spirit of place* will automatically create a place for *dwelling* and with an *existential foothold* for people. Although more scientific methods are very useful for the practical aspects of a place, they are not enough for creating the spiritual component of meaningfulness, that is naturally desired by people.[329]

---

324 Doroftei 2016, pg 63
325 Popovic 2016, pg 10
326 Norberg-Schulz 1980, pg 5
327 Norberg-Schulz 1980, pg 19
328 Norberg-Schulz 1980, pg 21-22
329 Norberg-Schulz 1980, pg 5

Method for the Natural Place

Norberg-Schulz distinguishes between natural and man-made places. According to him, the understanding of the phenomenon of natural places or nature in general has five modes: 1) things, 2) cosmic order, 3) character, 4) light and last of all 5) time. Trying to understand *things* or natural elements that we can see and physically interact with, is the most basic and primal of them all. As to the definition of these *things* Norberg-Schulz uses the description of Heidegger who said that a concrete *thing* came into existence because had "gathered" properties of the world surrounding it and therefore gained meaning that defined its being. He describes such *things* to be for example: mountains, vegetation, wilderness, sky, earth and water etc. According to him some combinations of these things are ideal or "sacred", like for example rocks, vegetation and water since they resemble the image of the paradisal garden.[330] In the second mode of understanding natural places, people derive an abstract system from the singular conceptions of this in order to understand how these *things* work together – a *cosmic order*. As an example he mentioned the ancient Nordic countries or Egyptians who had a certain understanding of how the world looked like and how for example the earth, the sun, specific stars and gods were positioned.[331] Abstracting a *character* from the observable *things* within a *cosmic order* is the next mode of understanding. Here he referenced the Greek who associated certain gods that have specific characteristics with places of similar properties. In this sense, character means the same as *genius loci* or *spirit of place*.[332] The fourth and fifth dimension of understanding natural places are strongly linked since *light* changes massively throughout *time*. Norberg-Schulz understands the *light* both literally and metaphorically. On the one hand it is the daylight, coming from the sun or the light coming from a man-made source and on the other hand it is also the metaphorical *light* of the world's societies in the shape of education, art and divinity. Both interpretations of *light* are massively influenced by *time.* Natural light changes throughout the days, months and years and so does the influence of the metaphorical light throughout the ages. While *time* is a constant influence, *things* and *characters* are of an earthly nature and the *cosmic order* as well as *light* are heavenly or spiritual concepts (come from the sky).[333]

For the structure of natural places Norberg-Schulz distinguishes between the extension and interaction of the basic elements of earth or sky within the natural places. Fed from the earth, the largest scale of natural places is the landscape that consists of places which are meaningful and that are, therefore, themselves meaningful. On the one hand one can measure the surface area of a landscape and determine how extensive the landscape is. On the other hand one can examine its relief which has a general character and specific spatial properties. The specific spatial properties can be analytically divided into a relief which has a certain structure (nodes, paths and domains), scale (micro – too small for humans, macro – to big for humans, medium – human scale, fit for dwelling) and surface materials (i.e. sand, rock etc.), further into vegetation as well as water. Together, the physical extension of the natural landscape as well as the relief, vegetation and water create the landscape. Different types of places in specific kinds of landscapes have different names like a plain or valley.[334] The extension of the sky into places is less tangible, but still has specific characteristics that influence the place and thereby the people who can perceive a sky to feel "low"

---

330 Norberg-Schulz 1980, pg 24-27
331 Norberg-Schulz 1980, pg 28
332 Norberg-Schulz 1980, pg 29, 31
333 Norberg-Schulz 1980, pg 31-32
334 Norberg-Schulz 1980, pg 32-37

or "high", for example. The two ways through which the sky can have an effect on a place are its properties (light, colour, clouds/weather) and the way those properties seem from the ground. The same properties can have very different effects on places and people and the same place can be a very different experience with a different weather. He goes on to claim that there are some landscapes that typically have a certain effect of sky to them: infinite skies over deserts in Northern Africa, more "low" or "flat" skies over Northern Europe etc. as well as a more or less prominent sky in some places.[335]

Image 17: structure of natural places according to Norberg-Schulz

Next Norbert-Schulz turns towards the spirit of natural places. Although there are some landscapes where the influences of earth and sky seem very balanced, there are also those where the sky or earth dominate. Some places can have a dominant sky because this is of major importance to their cosmic order or because climate and weather cause it. The classification of those landscapes where the earthly influences are dominant bases on the landscape's archetypal *things* and *scale*. Here he distinguishes between *romantic landscapes*, *cosmic landscapes, classic landscape* and *complex landscapes*. *Romantic landscapes* are natural in the romantic sense of being very little interfered with by humans, untamed and wild. Furthermore they are rich in detail and changing according to natural rhythms and conditions which also causes the influence of the sky to play a minor role. He summarises this landscape as an "indefinite multitude of different places". His prime example for such a landscape is the Nordic forest inhabited by the Nordic human, since aside from the already described characteristics of the *romantic landscape* these landscapes also have a quite romantic understanding of the world, interwoven with myths and legends, and a mindset of living as a subset of nature, having to adapt to it instead of the other way around.[336] The *cosmic landscape* is almost the opposite of the *romantic landscape*: bare, minimal, permanent and structured. According to Norberg-Schulz with these landscapes the sky is the most prominent of the two elements, since the earth has very little stimulus and no *existential foothold* for people, but offers a direct link to the cosmic and spiritual aspects of life. In order to illustrate this landscape, he picked the deserts in Northern Africa with (usually) very constant but also extreme climate and weather conditions,

335 Norberg-Schulz 1980, pg 39-40
336 Norberg-Schulz 1980, pg 42

animals that adapted to those conditions and dwelling potential only where an oasis creates the earthly elements needed. The *classical landscape* marks the middle ground between the two priorly described landscapes. Neither earth nor sky are dominant and instead they equally influence a clearly readable composed landscape that has a "meaningful order of distinct, individual places". All exists in a human scale and there are no micro- nor macrostructures.[337] Spiritually people neither believe in absolute gods (as in his example for *cosmic landscapes*) nor natural gods (as in his example for *romantic landscapes*). Instead they merge their understanding of their human nature with the idea of divine powers, forming anthropomorphic gods. The landscape is perceived as a "partner" that needs to be cared for and allows social interactions.[338] Last of all, the *complex landscape* is a mixture of all types. Since the previous three landscapes are archetypes, they barely ever exist in this pure way, but instead are expressed in combination with one another to varying degrees.[339]

Method for the Man-Made Place

The basis of any settlement or dwelling is the presence of meaningfulness in that place. Only that will make people want to build man-made places in certain ways.[340] Since people are a subset of nature it does not need a completely new set of tools to understand the phenomenon of a man-made landscape, but a mere translation of the five elements of understanding natural landscapes and places: *things*, *cosmic order*, *character*, *light* and *time*. According to Norberg-Schulz this process has always been achieved by people through visualising, complementing and symbolising aspects of the natural landscape.[341] Through the process of *visualisation* people express their conception of the natural world (*things*, *cosmic order*, *character*, *light* and *time*) and where or how they understand their *existential foothold* or basis for *dwelling* within this natural world. Accordingly, their style of building will reflect the literal or metaphorical shapes of nature. In the process of *complementation* people observe where nature is missing aspects that is needed for *dwelling* and they add it. While *visualisations* are literal shapes and depictions of their understanding of self and nature, the process of *symbolisation* goes a little further and transfers abstracted thoughts, feeling and experiences into for example an item or any other medium. In this way the meaning that is symbolised can be shared more flexibly, can be made visible for the first time and is no longer fixed to whatever it was originally attached to.[342] According to Norberg-Schulz, the *cosmic order* is mostly visualised in the way spaces are structured and the *things* within are organised. *Things* are often applied in a symbolic manner to support these visualisations.[343] In order to illustrate the interplay of visualisation and symbolisation, Norberg-Schulz gives many examples. In Ancient Egypt, for example, the pyramids were symbolic man-made mountains that were situated in between the fertile oasis of the Nile and the desert. While the mountains represented the natural connection between earth (people) and sky (sun-god Ra) the position of the mountain stood for the connection of life and death. This visualised the structure of the land (the Nile being a fertile axis from North to South and the rest being barren lands) and it also constituted the Pharaohs who are buried in the Pyramids to be the god's children – showing both conceptions of the natural world as

---

337 Norberg-Schulz 1980, pg 45
338 Norberg-Schulz 1980, pg 46
339 Norberg-Schulz 1980, pg 47
340 Norberg-Schulz 1980, pg 56
341 Norberg-Schulz 1980, pg 50-51
342 Norberg-Schulz 1980, pg 17
343 Norberg-Schulz 1980, pg 53

things as well as the *cosmic order* as the Egyptians understood them.[344] Especially the natural element of *characters* needs a specific "language of symbolic forms and styles" in order to be expressed in architecture, since they are themselves not tangible. His examples for this are the system of anthropomorphic gods in ancient Greece and the Christian understanding of the world in the middle ages. In the middle ages the most intangible natural element of *light* has been introduced to architecture in a big way, using it as a literal and most of all symbolic aspect in their buildings, art and understanding of *cosmic order*.[345] Last of all, *time* is more of a separate dimension to building than a buildable aspect of it. It can sometimes, though, be symbolised by paths (passing of time) and squares (axis mundi).[346]

The structure of a man-made place or landscape is, just like the natural landscape, primarily influenced by the impact of the sky and the earth. In this context one is supposed to question in what way a building "stands or rises", what the silhouette looks like and how the settlement relates to its surroundings. The second biggest influence are the boundaries of a city that can be enclosed or open in many ways and to various extents. After exploring which typical architectural expressions within the different kind of enclosed and open spaces there are, Norberg-Schulz derived three main aspects to these types of boundaries from the Gestalt principles[347] (organisation of the mind is similar to or even modelled after the physical world[348]) into the architectural terms: *domain*, *centre* and *path*. A *centre* is a place that culturally and architecturally gathers movement in one point, like for example city squares, markets or malls and which has a clear distinction between an inside or outside. A path on the other hand is a longitudinal opening in such an enclosed place, like any street or visual axis. And last of all, a domain is an area that has a proper outer boundary (could be anything from actual walls to building material, language of the people etc.) and encompasses a combination of more or less enclosed places. These archetypal boundaries are also reflected in most traditional city structures that are are either centralised, longitudinal or clustered. Norberg-Schulz briefly also mentions other archetypal shapes that could be categorised as centres, paths and domains: rotunda and the regular polygons (sphere, cylinder, square, cube, pyramid).[349]
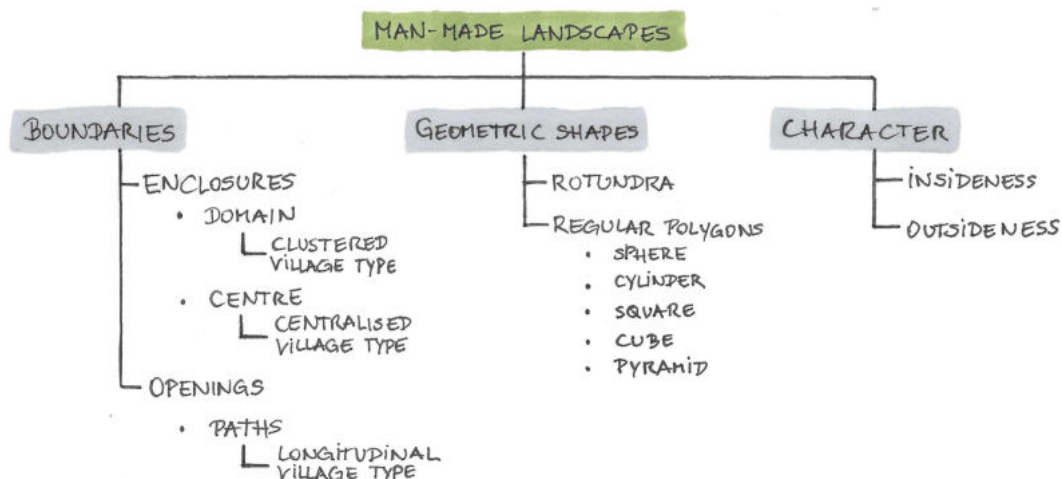

Image 18: structure of man-made places according to Norberg-Schulz

---

344 Norberg-Schulz 1980, pg 52
345 Norberg-Schulz 1980, pg 53-54
346 Norberg-Schulz 1980, pg 56
347 Norberg-Schulz 1980, pg 58-59 & 61
348 Heras-Escribano, Lobo & Travieso 2018, pg 3
349 Norberg-Schulz 1980, pg 58-59 & 61

When it comes to the *spirit of place* Norberg-Schulz again simply translates the natural types of landscapes into architecture: *romantic architecture*, *cosmic architecture, classic architecture* and *complex architecture*. Just like the landscape, the *romantic architecture* is detailed, varied and strongly atmospheric, offering a sense of mystery and intimacy. The focus on the natural rather than geometrical design language leads to "formal complexity" and many contradictions in the architecture.[350] He presents Medieval towns in Central Europe to be the prime example for this kind of architecture, looking more wild and romantic.[351] The *cosmic architecture* is dominated by uniformity and a distinct, regular as well as geometrical structure. According to Norberg-Schulz it has little atmosphere and "remains aloof", being non-dynamic and distanced to people.[352] He names Islamic Architecture as an example which has many geometrical and labyrinth-like elements to it with a strong abstracted representation of their cosmic order.[353] A mixture between *romantic* and *cosmic architecture* is *classic architecture*. The references to the sky (*cosmic architecture*) or the earth (*romantic architecture*) are equally strong, balances and everything gets more humanised in scale and quality. The prime example is again Greece which has been discussed several times in this thesis.[354] Last of all, the *complex architecture* is the architecture we find in most places that has elements or areas where the three types of architecture, as described above, are expressed to various degrees and in various combinations. One example for this is the Gothic cathedral which is part of a romantic Medieval town and has a strong, cosmic structure.[355]

Place Analysis

Norberg-Schulz applies his principles in four steps. First he describes the common and most general image that the place emanates. Secondly he examines the structures and their development over time of the place as well as thirdly its character with its properties within the historical context. Last of all Norberg-Schulz extracts and describes the *genius loci*.[356] For these steps he uses the concepts developed before, but gives no distinct methical instructions.

2.2.2.3   Christopher Alexander

Throughout his life the architect Christopher Alexander has developed several theories and methods about urban design and the way places acquire and communicate meaning.[357] This already indicates how, for Alexander, *places* are *spaces* that people attached meanings to. The fact that he describes that places and people take active as well as passive roles in the meaning-attributing process also shows that Alexander views both entities as equal forces in the people-place relationship.

Basic Understanding for this Method

The most well-known of his works were the three books *the Oregon experiment* (1975), *a pattern language* (1977) and *the timeless way of building* (1979) in which Alexander and his

---

350 Norberg-Schulz 1980, pg 69
351 Norberg-Schulz 1980, pg 70
352 Norberg-Schulz 1980, pg 71
353 Norberg-Schulz 1980, pg 72
354 Norberg-Schulz 1980, pg 73-74
355 Norberg-Schulz 1980, pg 76-78
356 Norberg-Schulz 1980, pg 76-78
357 Jiang, Rofé, Salingaros & Mehaffy 2018, pg 1

colleagues criticised the modern architecture and proposed a new way of thinking and planning.[358] The core of their criticism was that the modern world view understands material and matter separate from as well as superior to what value it has to human sensitivity. As a natural result of this mindset, modernism and postmodernism have made the understanding of "good" quality in architecture a question of opinion or taste only and failed to develop any kind of standards for "good" or "bad" architecture that is adapted to human sensitivities.[359] In order to evaluate the quality of architecture for people, Alexander worked on developing assessment tools that describe the characteristics and the physical as well as perceptional dynamics of places in *the timeless way of building*. According to him these properties and dynamics give each place a "central quality which is the root criterion of life and spirit in a man, a town, a building, or a wilderness. This quality is objective and precise, but it cannot be named".[360] According to Alexander this quality which exists within all individuals enables them to recognize it in other people as well as their inanimate environment.[361] In this sense this unnamable quality is a clear equivalent to the *genius loci*: a force/quality/spirit which consists of a general atmosphere as well as a specific substance and discernable space-defining elements.[362] Even though Alexander also attributes this quality certain spherical and non-tangible properties, he views it, unlike Norberg-Schulz's definition, to be "objective and precise" and therefore scientifically measurable. In Norberg-Schulz's conception of the *genius loci,* the method offered more vague, mythical and exclusively qualitative assessment tools.

In connection to the architectural critique of Alexander and colleagues, they claim that when a person identifies this unnameable quality with a place, the person's own unnamable quality can be amplified and when people on the other hand is able to recognize this quality in themselves, they are able to introduce it into other place. According to them the awareness and conscious implication of the nameless quality is the guarantee for healthy and balanced individuals as well as environments.[363] For this reason the unnameable quality (as the equivalent to the *genius loci*) also institutes the natural beauty in traditional architecture.[364]

In the first attempt of re-implementing the unnamable quality into modern or post-modern architecture, Alexander developed ideas in *the timeless way of building* which involve the democratic participation of locals with their traditions and design language as well as the participation of the general society that region is part of. Since Alexander and his colleagues argue that the dominant position of traditional design languages is missing in modern architecture, they created the book *a pattern language* to replace what has been lost. The *pattern languages* contained 253 patterns that address typical environmental problems and their basic ideas of a solution that empirically proved well over the course of history. Each coded pattern offered information about compatible or related patterns, context, evidence as well as a set of actions that makes sure the desired "quality without a name" can be created with that pattern. His third book comprises the instructions and the example of applying the patterns and *the timeless way of building* in 1975.[365] Although his works were created in the context of architecture, other disciplines were able to apply

---

358 Dawes & Ostwald 2017, pg 2
359 Jiang 2019, pg 3
360 Dawes & Ostwald 2017, pg 2
361 Dawes & Ostwald 2017, pg 3
362 Norberg-Schulz 1980, pg 6
363 Dawes & Ostwald 2017, pg 3
364 Dawes & Ostwald 2017, pg 2
365 Dawes & Ostwald 2017, pg 3

his sophisticated method of formulating *pattern languages*[366], like for example software engineering, communications, management theory and many others.[367]

Alexander's scientific approach changed over time. His first works, which are the ones mentioned above, were based on rationalism only, as he dissected problems into parts whose study eventually lead to a solution of the original, bigger problem. In his later works, however, his approach was more holistic, viewing the whole phenomenon of a problem and he allowed himself to experiment more in the field of process design.[368] In this sense Alexander started to refuse his own previous "theories of beauty", which according to him did not sufficiently solve this problem and used it as the basis for his "third theory" of beauty[369], which is the one that will be examined for this thesis.

Alexander's "Third Theory" of Beauty, Wholeness and Centres

Christopher Alexander developed his "third theory" in a four-volume book called *the nature of order* over the course of 27 years, from 1975-2002[370] in which he continued exploring the general phenomenon of life or aliveness in his previously described unnamable quality. Instead of patterns and *pattern languages* Alexander developed a concept of wholeness and centres.[371] Along with this change in mindset, Alexander's understanding of *space* also shifted away from the conceptions of Newton and Leibniz into his own and so-called *Alexandrine organic world picture*.[372]

Let us begin with the unnamable quality of life within all animate and inanimate entities that resembles the *genius loci*. In the first book *the phenomenon of life* Alexander claims that this life is created by the coherence or wholeness of a structure.[373] To him wholeness or a whole entity is a coherent structure in space that plays out in different scales and manifests in patterns of perceptional and physical aspects. For this reason such a structure with wholeness is not fully but in parts tangible and visible.[374] As a result the life of places is an attribute of space, not just happening in the space.[375] Alexander's second premise is that the amount of life one can perceive in a structure is gradual and dependant on the extent of wholeness of the structure.[376] Thirdly he believes that this life can be sensed in every entity, as much as people can perceive this "sense of life" in themselves.[377] Thus life is what gives every matter or in fact space some degree and variety of "self" or personality.[378] Furthermore, he claims that the degree of its presence and absence can be described by objective criteria and experimental methods. To understand his theory of wholeness and centres one has to understand the mechanisms by which wholeness creates life.[379] Instead of thinking that the wholeness of an entity (place, person, item etc.) is made of parts that are clearly distinguishable and definable, as he would have done before his change of mindset, he now argues

---

366 Fortino 2008, pg 1
367 Jiang, Rofé, Salingaros & Mehaffy 2018, pg 1
368 Naserabadi & Yousefizadeh 2017, pg 759
369 Dawes & Ostwald 2017, pg 3
370 Jiang 2019, pg 2
371 Baumgartner & Sickinger 2014, pg 436
372 Jiang 2019, pg 3
373 Bauer & Baumgartner 2010, pg 2
374 Jiang 2019, pg 3
375 Alexander 2002, pg 238
376 Bauer & Baumgartner 2010, pg 2-3
377 Bauer & Baumgartner 2010, pg 3
378 Jiang 2019, pg 3
379 Bauer & Baumgartner 2010, pg 3

that every entity has its wholeness first and only then creates its parts. These parts are no longer clearly definable aspects of the entity, but so-called centres that represent a specific source "of living power and the essence of phenomena".[380] Alexander describes how the centres and experienced wholeness work, reducing it to four simple points:

1. Centres themselves have life.
2. Centres help one another: the existence and life of one centre can intensify the life of another.
3. Centres are made of centres.[381] When several centres are either strong or supportive to a stronger, higher-order centre, they create a field effect (sense of coherence of components).[382]
4. A structure gets its life according to the density and intensity of centres which have been formed in it.[383]

Within this understanding Alexander defines that whole structures can be called living structures and that structures without wholeness are dead or non-living structures. To Alexander this also means that the more wholeness or coherence a structure has, the more people find it beautiful and vice versa incoherent structures are eventually perceived unattractive. Therefore, beauty and aliveness become synonyms and can be found in the wholeness of a structure of centres.[384] These attributes do not necessarily mark "good" or "better" architecture, but they represent an architecture that is in-keeping with and supportive of the human nature which creates a long-lasting sense of comfort in people. For this reason "alive" and "whole" architecture can often be considered more desirable or beautiful than architecture that is not.[385] The aliveness or life in the place or architecture (later *architectural life*) is the interpretation of the *genius loci* that the following method is based on.

From his four-volume book *the nature of order* one can extract two major steps for a holistic design process. First of all he describes 15 properties from observation which, according to him, repeatedly appear in everything that can be perceived as whole, beautiful and alive.[386] These 15 properties do not work separately, but they overlap, influence and determine each other, creating a more or less pronounced structural depth, depending on their intensity.[387] Furthermore, the whole structures which he considers *fields of centres* are not made out of the 15 properties. The properties are theoretical concepts that structures can express to various degrees and ways[388] – each property explaining mechanisms by which centres and thereby the whole can be enhanced[389]. Understanding these theoretical constructs supports the holistic comprehension of the dynamics of "fields of centres"[390] and how places can become coherent, beautiful and alive[391]. To Alexander the number of 15 properties is not fixed and there might be more. However, the order that he put the properties in does reflect their impact and importance to the system of wholeness and centres.[392] The formulation

380 Baumgartner & Sickinger 2014, pg 436
381 Bauer & Baumgartner 2010, pg 3
382 Alexander 2002, pg 149
383 Bauer & Baumgartner 2010, pg 3
384 Jiang 2019, pg 3
385 Salingaros 2016, pg 25
386 Seamon 2019b, pg 2
387 Alexander 2002, pg 237
388 Alexander 2002, pg 238
389 Alexander 2002, pg 241
390 Alexander 2002, pg 238
391 Alexander 2002, pg 241
392 Alexander 2002, pg 242

of the properties is rooted in the hypothesis that all macroscopic matter is organized complexly and can be explored just as systematically as elementary particles can be on a microscopic scale. In this sense they derive from physics and biology – disciplines, whose structures have been studied excessively in the past.[393]

In the second step to his holistic design process Alexander describes ten actions that are supposed to enhance the coherence in any structure.

1. Making use of step-by-step adaptation.
2. Using each step to enhance the whole.
3. Always making centres.
4. Allowing steps to unfold in the most fitting order.
5. Creating uniqueness everywhere.
6. Working to understand the needs of clients and users.
7. Evoking and being guided by a deep feeling of the whole.
8. Finding coherent geometric order.
9. Establishing a form language that rises from and shapes the thing being made.
10. Always striving for simplicity by which the thing becomes more coherent and pure.[394]

These ten steps will not be elaborated, but simply represent his understanding of a holistic and human-focussed approach to any creation and design.

The 15 Properties of Wholeness

1. Levels of Scale: The first thing that Alexander observed was that all structures with coherence, beauty and life have alternating levels of scales which are made of differently sized centres and connected by varied scaling relationships and hierarchies.[395] Only with a range of scales, centres can become "alive", because then they enhance each other and create structural depth.[396] A centre can be strengthened by either encompassing smaller centres that are strong themselves or by being a supportive smaller part of a bigger strong centre.[397] What scale can be considered harmonious is first of all determined by how the sizes of

Image 19: centres with different levels of scale

centres appear to human perception. For this reason, the centres cannot be too different or similar in size, since a change in size that is too small can be missed easily and a change that is too much can appear disruptive. Furthermore there are certain mathematical rules like for example the *golden ratio* that generally make the combination of certain sizes more pleasing to people.[398]

2. Strong Centres: Although the centres are the basic components within the concept of wholeness, Alexander still added strong centres to the list of properties, because those have an especially meaningful impact on the whole, instead of just being a part of it.[399] The strong centres are generated by smaller centres that manage to create an above average field effect that boosts one centre to become strong and distinctive.[400] For this reason a strong centre is not just anything that is positioned in the middle

Image 20: one strong centre & field effect

393 Salingaros 2016, pg 23-24
394 Seamon 2019b, pg 2
395 Alexander 2002, pg 145
396 Alexander 2002, pg 146
397 Alexander 2002, pg 139
398 Salingaros in ArchDaily.com 2015

of something else. Instead, the entire structure of the associated surrounding centres is designed in such a way that the eye is drawn to the middle centre immediately.[401]

3. Boundaries: Also very early in his research, Alexander realised that boundaries almost always played an important supportive role to the creation and intensity of centres.[402] These boundaries are made of strong centres that are arranged in a way to shape the edging or border.[403] Boundaries can also create centres by encompassing a space and focussing the attention into its inner space.[404] On the other hand the boundary can become a connecting factor between the inside and the outside it creates. In order to be considered a recognizable boundary, however, they must stand out enough against their inside and outside

Image 21: boundaries made out of strong centres

spaces in character and be at least of equal proportions as the centre.[405] Moreover these boundaries exist in one-, two and three-dimensional spaces and can contain boundaries within their own boundaries, which shows how much more complex this rule is than what it might seem at first.[406] The mathematician and theorist Nikos Salingaros adds that in comparison to strong centres which are "defined centres", boundaries are "implied centres" as they imply a centre.[407]

4. Alternative Repetition: Repetition is another tool that supports and intensifies centres very well. However, in order for a repetition to appear satisfying for human perception[408] it has to firstly repeat centres instead of trivial elements of the design[409] and secondly repeat them in a discernable structure that creates alternative centres. The repetition of columns, for example, also creates a repetition of the secondary, alternative repetition in the shape of the spaces in between the columns.[410]

Image 22: alternating fields of centres

5. Positive Space: Alexander defines a positive space as every space that has no meaningless areas but only strong or respectively supportive centres. In this manner the presence of positive space or one could say the absence of negative space (meaningless areas) is important for the wholeness of places.[411] Since strong centres are always especially connected to their immediately surrounding centres and fields of centres, spaces with few connections like this can be considered negative spaces.[412] Salingaros explains that Alexander's definition of positive space is based on Gestalt psychology which argues that our comfort or discomfort in places is guided by various mathematical and psychological

Image 23: fields of centres in a positive space

---

399 Alexander 2002, pg 151
400 Baumgartner & Sickinger 2014, pg 437
401 Alexander 2002, pg 153-154
402 Alexander 2002, pg 158
403 Alexander 2002, pg 161
404 Alexander 2002, pg 158
405 Alexander 2002, pg 159
406 Alexander 2002, pg 161-162
407 Salingaros in ArchDaily.com 2015
408 Salingaros in ArchDaily.com 2015
409 Alexander 2002, pg 165-166 & 169
410 Alexander 2002, pg 170-171

reasons and that therefore objects that stick out too much (negative spaces) / feel too disconnected from the other features or feel threatening and uncomfortable.[413]

6. Good Shapes: The definition of good shapes took Alexander especially long. He concludes that a good shape consists of interrelated centres, that make the shape strong in its own right instead of just as a feature of other centres.[414] In this manner good shapes are made of boundaries that define strong centres within and outside those boundaries, creating the strong or "good" shape.[415] He adds that most of the time these good shapes are created through the combination of

Image 24: a good shape

elementary shapes. For example, most iconic natural or floral patterns which might be suspected to be less regular are basically made up of geometric shapes like rhombs, triangles, squares etc. He enumerates seven features that make good shapes:

1. High degree of internal symmetries.
2. Bilateral symmetry (almost always).
3. A well-marked centre (not necessarily at the geometric middle).
4. The spaces it creates next to it are also positive (positive space).
5. It is very strongly distinct from what surrounds it.
6. It is relatively compact (i.e. not very different in overall outline from something between 1:1 and 1:2 – exceptions ma go as high as 1:4, but almost never higher).
7. It has closure, a feeling of being closed and complete.[416]

7. Local Symmetries: In his research about strong centres Alexander realised that in order for these centres to be strong there often were local symmetries at play.[417] These local symmetries usually enhance centres by being organized around them, focussing the observer's attention on the centre.[418] Overall symmetry on the other hand does not contribute to strong centres or great wholeness, just like regular repetition was less effective in strengthening the whole in comparison to alternative repetition. Especially in architecture total symmetry can have a rather

Image 25: three local symmetries

naive and / or brutal look without strong centres or a flair of wholeness.[419] In a series of experiments Alexander conducted with the *Harvard center for cognitive science*[420] he used diverse types of cognitive processing to test which patterns of black and white boxes on strips the test subjects perceived to be coherent. As a result it seemed that the results were very similar, no matter which type of cognitive processing was used or what person was asked, which suggested that the congruence of these patterns was "an objective matter of cognitive processing". After some years of studying these results Alexander found that the degree of perceived coherence is linked to the

411 Alexander 2002, pg 173 & 176
412 Alexander 2002, pg 239
413 Salingaros in ArchDaily.com 2015
414 Alexander 2002, pg 179
415 Alexander 2002, pg 240
416 Alexander 2002, pg 181-183
417 Alexander 2002, pg 186
418 Alexander 2002, pg 193-194
419 Alexander 2002, pg 186
420 Alexander 2002, pg 188

amount of local symmetries within the strip of black and white boxes.[421] He describes every local symmetry as the "glue" in between segments of a whole that strengthens it especially well the more segments that are locally symmetric overlap each other.[422]

8. Deep Interlock and Ambiguity: To strengthen the whole it is helpful to have several interlocking centres that connect one area of centres with another area of centres. In this step one creates ambiguous, "in between" centres that belong to both previously described fields of centres.[423] In architecture one example is a gallery or arcade on the

Image 26: interlocking fields of centres

outside of a building. The building is an area of centres and so is the arcade as well as the outside of the building. The arcade is the ambiguous space that shares centres with the building as well as the surroundings, interlocking the two.[424] Clean, abrupt lines, for instance, cannot connect and only separate the spaces.[425]

9. Contrast: Contrast in general but especially high contrast is important to differentiate one thing from another and to make the two distinct. This contrast which inserts live into things does not just manifest in contrasting colours but every kind of opposite or opposing things like dark-light, active-passive, rough-smooth and empty-full.[426] Unlike one could think, the contrast between two things does not have a separating but

Image 27: two contrasting fields of centres

unifying effect on the centres in a whole as the distinctive centres get to complement each other as well as the whole.[427] This is the case because every contrast directs the observer's attention towards fields of centres or strong centres that then become more prominent and receive life through their distinction and added focus. Alexander adds that contrast is actually fundamental in this way to "give birth to anything", meaning to institute any character or identity to something.[428] One example from the prior study of identities that supports this is the way an identity needs to separate and distinguish (→ contrast) itself from others in order to be strong.

10. Gradients: A *gradient* is created by a series of centres of different sizes whose change in quality happens step by step – gradually.[429] A whole can be strengthened by *gradients* when its centres react to gradually changing conditions and qualities in life, instead of staying separate and consistent throughout environmental changes. The architecture of a building can for example have gradually different window sizes or ceiling heights depending on the position of the building in relation to the daylight.[430] If a *gradient* of centres is strong enough, it can create a field effect and become a higher-order, ever bigger centre itself.[431]

Image 28: a gradient of differently sized centres

---

421 Alexander 2002, pg 190
422 Alexander 2002, pg 191
423 Alexander 2002, pg 195
424 Alexander 2002, pg 197
425 Salingaros in ArchDaily.com 2015
426 Alexander 2002, pg 200
427 Alexander 2002, pg 202
428 Alexander 2002, pg 203
429 Alexander 2002, pg 240
430 Alexander 2002, pg 205
431 Alexander 2002, pg 206

11. Roughness: Alexander's roughness does not describe a texture but rather an imperfect and irregular characteristic[432] which adds to the character or life of a structure. It does so by being either consciously designed according to or unconsciously designed due to the unique conditions of the thing or area. The details that are fashioned by the impacting circumstantial situation create changes in patterns, textures or colours etc. and these "deep structural causes" are what make this roughness a supportive factor to wholeness and centres.[433]

Image 29: field of centres with texture

12. Echoes: Echoes are again properties that strengthen the whole and its centres by introducing structural depth. Unlike the repetition of a complete element or centre, an echo repeats a certain "family resemblance" of those elements or centres.[434] This resemblance is achieved by the arrangement of different elements or centres in certain angles or geometrical shapes. So, instead of repeating the exact elements or centres, the echo is a repetition of their angular arrangement.[435] Salingaros adds that there are two versions of echoes. While the same scaled shapes are echoed with a distanc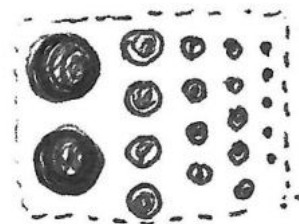e between them in "translational symmetry", "scaling symmetry" describes shapes of different scales that are echoed.[436]

Image 30: different fields of centres echo same shape

13. The Void: According to Alexander's research every centre is in need of a void or empty space. In order for the detail to shine and to be recognizable there needs to be an empty space to the centres of those details. Otherwise the centres with all their information (i.e. visual) cancel each other out, which cannot lead to a structure that has wholeness.[437] Salingaros describes the void as the last fractal in a pattern or structure that is not filled out with detail, although it could be. Its boundaries focus the attention into its open middle point.[438]

Image 31: surrounding field of centres with void

14. Simplicity and Inner Calm: Simplicity can of course come from simple and reduced shapes. The simplicity, that Alexander is describing however, is simply created by the absence of any meaningless or added features that do not contribute to the whole. The simplicity in nature seems effortless, which makes it something that is quite hard to artificially produce.[439] Salingaros explains that a system or structure seems simple to people because its structure is "perfect" for its purpose and without any distractions or clutter. A simple structure in Alexander's sense has inner peace because it wants for nothing more and contains nothing in excess[440] One can achieve this

Image 32: simple arrangement of centres

---

432 Alexander 2002, pg 210
433 Alexander 2002, pg 211
434 Alexander 2002, pg 218
435 Alexander 2002, pg 219
436 Salingaros in ArchDaily.com 2015
437 Alexander 2002, pg 225
438 Salingaros in ArchDaily.com 2015
439 Alexander 2002, pg 226-228
440 Salingaros in ArchDaily.com 2015

simplicity by trying to reduce the centres in a structure without loosing its life, beauty and coherence.[441]

15. Non-separateness: According to Alexander this is the most important of all 15 properties. It describes a non-separateness or connectedness to the world instead of just the previously described connectedness of its parts and centres.[442] Without loosing its unique features, the centres of the whole structure are also interconnected with and sometimes "indistinguishable from its surroundings".[443] In all creation this is most important as a mindset: one builds not assert oneself or the product over nature or what already exists, but in order to create a coherent whole, which requires designs that are less self-sufficient.[444] To Salingaros only structures with an existing coherence can attain this property.[445]

Image 33: neighbouring fields of centres are connected

THE INTERACTIONS OF THE FIFTEEN PROPERTIES

If property A depends on property B or we need property B for a complete understanding of property A then an asterisk appears in cell AB

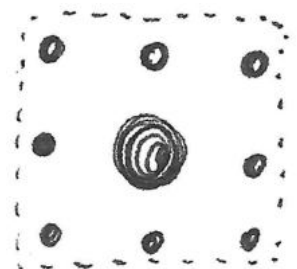| PROPERTY A \ PROPERTY B	LEVELS OF SCALE	STRONG CENTERS	BOUNDARIES	ALTERNATING REPETITION	POSITIVE SPACE	GOOD SHAPE	LOCAL SYMMETRIES	DEEP INTERLOCK AND AMBIGUITY	CONTRAST	GRADIENTS	ROUGHNESS	ECHOES	THE VOID	SIMPLICITY AND INNER CALM	NOT SEPARATENESS
LEVELS OF SCALE		•	•			•			•						
STRONG CENTERS				•			•		•	•				•	•
BOUNDARIES		•		•			•	•	•	•					
ALTERNATING REPETITION		•			•	•		•	•						•
POSITIVE SPACE	•	•	•			•	•		•		•		•		
GOOD SHAPE	•	•			•	•		•		•		•		•	
LOCAL SYMMETRIES	•					•			•				•		
DEEP INTERLOCK AND AMBIGUITY				•	•				•		•	•			•
CONTRAST				•		•		•		•			•		•
GRADIENTS	•	•					•		•		•	•			•
ROUGHNESS		•			•	•				•				•	•
ECHOES	•					•	•			•	•				•
THE VOID	•		•				•		•					•	
SIMPLICITY AND INNER CALM					•	•						•	•		•
NOT SEPARATENESS			•		•			•		•	•			•	•

Image 34: overview of correlations between properties (as in Alexander 2002, pg 238)

---

441 Alexander 2002, pg 241
442 Alexander 2002, pg 230
443 Alexander 2002, pg 231
444 Alexander 2002, pg 233-234
445 Salingaros in ArchDaily.com 2015

2.2.2.4   Nikos A. Salingaros

The Australian mathematician and polymath Nikos A. Salingaros developed several works on urban design theory, architectural theory, complexity theory and design philosophy and often collaborated with his colleague Christopher Alexander.[446] Alexander's previously described book *the nature of order*, for example, was co-edited by Salingaros[447] which motivated Salingaros to continue working on architectural theory. Salingaros then officially turned his attention to architecture in 1995, published many papers and books in various languages, received financial support through grant of the *Alfred P. Sloan foundation*[448] and has recently won both the *2019 Stockholm culture award for architecture* as well as the *2018 clem labine traditional building award*.[449] Just like Alexander, Salingaros believes that every place has objectively measurable characteristics that are not limited to its superficial aesthetics and that give a place life or personality. And just like with Alexander's tools which concern the description of this innate life-quality of places, Salingaros' tools can be used to describe the *genius loci*.

His most important works are the triad of *anti-architecture and deconstruction* (2004), *principles of urban structure* (2005) and *a theory of architecture* (2006).[450] In these works he shares Alexander's critical perspective towards modern architecture and conventional architectural practices that are more shaped by star architects that either give clients what they as artist star-architects want to create or what they as practical crowd-pleasers find the client wants, instead of orienting their design towards basic biological and physiological human needs.[451] According to Salama this triad of works manages to cover scientific, artistic and professional elements of architecture in his theory and incorporate both their scientific facts as well as human sensitivities, unlike many theories of the last century.[452] Equally as unique is the fact that he also managed to integrate two opposing approaches for creating knowledge in architecture. On the one hand his theories lean on past knowledge and studies of the past experiences in order to anticipate future challenges. On the other hand he also conducted research that seeks to produce completely new concepts and principles for architecture.[453] The result today is a verifiable theory due to its mathematical and scientific foundation.[454]

While *anti-architecture and deconstruction* presents his critical examination of the modern and post-modern architecture as well as mindset[455], the *principles of urban structure* establishes a new understanding of the phenomenona of urban structures by integrating his previously described criticisms into
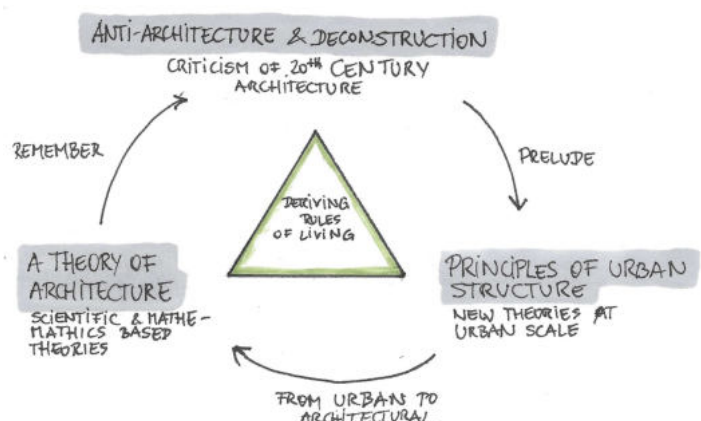

Image 35: Salingaros' work (as in Salama 2007, pg 124)

---

446 Salama 2007, pg 120
447 Salama 2007, pg 121
448 Salama 2007, pg 121
449 Salingaros in meetingoftheminds.org 2019
450 Salama 2007, pg 123
451 Salama 2007, pg 119-120
452 Salama 2007, pg 124
453 Salama 2007, pg 123
454 Salama 2007, pg 124

philosophical reflections.[456] In *a theory of architecture*, prefaced by *his royal highness the prince of Wales*, Salingaros fuses all of the prior conceptions and reflections into several theories that compliment each other.[457] He presents laws describing structural order, scaling dynamics and hierarchical cooperation in architecture, a model how life and complexity can be measured in places or structures as well as an adaptive design method that builds on Alexander's *pattern language*.

The Three Laws of Structural Order and Their Twelve Consequences

These three laws, just like Alexander's 15 properties, are structural dynamics and relationships that were studied in the same way that laws for physical or biological matter were discovered in other sciences. Disregarding whether something is a tectonic structure (larger scale) or surface design (smaller scale), both scales are perceived equally by human perception and therefore incorporated into Salingaros's laws of structural order.[458] The following three laws were developed in the attempt to complement the 15 properties and not in order to substitute them.

Law 1 "Order on the smallest scale is established by paired contrasting elements, existing in a balanced visual tension."[459]: Two elements or clusters of centres have perceivable tension as soon as they touch each other or interact with one another on the one hand and have some level and kind of contrast on the other.[460] The absolute size of the small-scaled structure is relative to what small detail a human could still perceive from their current perspective. When people for example observe their close and immediate surroundings in such activities as walking, sitting and working, the perceivable small-scale is relatively small. When people look into the distance, however, the small-scale structure that they can perceive has a much bigger absolute size. The most basic consequences of the first law are:

1. Centres or fields of centres on a small scale must be shaped so that they can couple through many properties with others and form bigger, more complex fields of energy.[461]
2. In order to do 1. the centres or fields of centres have to be quite close to one another like they are for example in interlocking shapes.
3. In order to do 1. and 2. the centres or fields of centres have to come in contrasting pairs.[462]
4. The contrast of 3. is always achieved by contrasting areas of detail with void areas.[463]

Image 36: contrasting & alternating fields of centres and voids, creating symmetry

Law 2: "Large-scale order occurs when every element relates to every other element at a distance in a way that reduces entropy (=randomness, disorder).": Unlike the order on a small scale, the two entities that interact through structure on a large scale do not touch, but are far away

---

455 Salama 2007, pg 125
456 Salama 2007, pg 126
457 Salama 2007, pg 128
458 Salingaros 2016, pg 24
459 Salingaros 2016, pg 28
460 Salingaros 2016, pg 32
461 Salingaros 2016, pg 28
462 Salingaros 2016, pg 29
463 Salingaros 2016, pg 30

from one another.[464] In the same way molecules rearrange themselves into higher-order structures in order to reduce entropy, large-scale order is created through geometrical connections (no touching) of smaller entities.[465] The reason that creating order instead of disorder is desirable for humans is that people can compute information much faster that is systemically arranged within a higher order of connections and symmetries, rather than disordered information.[466] The degree of the order or disorder is inversely proportionate to the degree of structural order, which means that a high degree of disorder or entropy will always create a low degree of structural order and vice versa. The most basic consequences of the first law are:

1. Ordering centres or fields of centres on a large scale results in a high number of local symmetries, but not necessarily over-all symmetry (like on a small scale).[467]
2. Ordering centres or fields of centres on a large scale also results in common grids and patterns in which smaller fields of centres are arranged.
3. Areas can be connected by physical forces or by visually similar design principles.
4. Trying to keep a large scale structure "pure" and free from discrepancies and deviations in its parts (small scale elements) is harmful fore the quality of the large-scale structure.[468]

Image 37: fields of centres in local symmetries

Law 3: "The small scale is connected to the large scale through a linked hierarchy of intermediate scales with a scaling ratio approximately equal to e ≈ 2.7.": In this law Salingaros was able to implement his skills as a mathematician and he developed a "natural" scaling ratio of two elements that are, like Alexander described, not too close or too distant, so that the scaling hierarchy is the most pleasing to the human eye.[469] Salingaros derived this ratio from scaling phenomena observed in biological structures and their growth like many other researchers who arrived at very similar scaling ratios.[470]

1. Fields of centres are juxtaposed in the next scale in size to create a "hierarchy of wide boundaries within boundaries".
2. Scales need to be linked through using similar design principles.
3. Neighbouring fields of centres with a scaling hierarchy like in 1. can create a gradient in scales.
4. Buildings (or other new constructions) must be included into the scaling hierarchy.[471]

Image 38: hierarchical linking of law 1 and 2
(as in Salingaros 2016, pg 36)

---

464 Salingaros 2016, pg 32
465 Salingaros 2016, pg 31
466 Salingaros 2016, pg 32-33
467 Salingaros 2016, pg 33
468 Salingaros 2016, pg 34
469 Salingaros 2016, pg 35
470 Salingaros 2016, pg 37
471 Salingaros 2016, pg 38

The Thermodynamic Analogy

Salingaros developed an architectural model that was inspired by thermodynamics in which he translated such terms as *symmetry* and *coherence* into something like "thermodynamic potentials". In this manner he manages to make their evaluation quantitative which integrates these otherwise only qualitatively used terms into one model.[472] One important term he borrowed from thermodynamics is *entropy*. Architectural entropy and thermodynamic entropy are both bulk functions but architectural entropy is distinct from its physical precursor by meaning "the average measure of visual and structural disorder over the entire form". In order to describe this entropy more easily in his calculations, Salingaros uses *H* (harmony) which stands for the presence of structural order through symmetries etc. and therefore is the opposite of entropy. He made this choice because the presence of something (here: harmony) is always easier to measure than the absence of something (here: entropy). The next important deduction from thermodynamics is *T* (temperature) which can measure point functions like the qualities of objects or places.[473]

The most important aspect of his simple mathematical model for this thesis is the quantitative description of the *architectural life* that a building or place express.[474] Although Salingaros proposes a quantitative approach, he also claims that *architectural life* can be perceived emotionally and intuitively. The way that life is perceived in architecture is comparable to the way humans can empathically imagine the character of other living organisms.[475] Alternatively, one could also call the *architectural life* the *degree of organized complexity*. As observed in nature, most if not all biological forms are organized in exactly that way, thus inspiring Salingaros to translate that into the world of architectural forms.[476] In the quantitative approach *architectural life* is coded with the letter L and can be calculated by multiplying the values of *T* (temperature of architecture) and *H* (harmony).

$$L = T \; x \; H^{[477]}$$

In order to be able to multiply these values, one has to understand what *T* and *H* encompass and how to measure their values in structures. The architectural temperature *T* describes the small-scale structures as specified in his first law of structural order. In this sense the value of *T* is higher the more visual stimulus a structure offers. These stimuli can come from colours, differentiations, details and shapes.[478] Salingaros determined that there are different addends that can contribute to *T* to different degrees. Although he added that his descriptions of components to architectural temperature are not the only ones possible, he determined five such factors referring to geometric substructure (T_{1-3}) as well as colour (T_{4-5}) and that each of the five elements can be rated values from 0 (very little or none), 1 (some) to 2 (considerable). The value of the temperature results from:

$$T = T_1 + T_2 + T_3 + T_4 + T_5$$

T_1 = *intensity of perceivable detail*[479]: The intensity of the detail in textures is determined by how clearly the details stand out against their background. Precision in the fabrication or sharpness of edges cannot be considered texture. At a distance of an arm's length the limit of people's perception of textures in materials is limited to about 1 mm. Texture that is further away from people than one

---

472 Salingaros 2016, pg 149-150
473 Salingaros 2016, pg 150
474 Salingaros 2016, pg 123
475 Salingaros 2016, pg 136
476 Salingaros 2016, pg 141
477 Salingaros 2016, pg 123
478 Salingaros 2016, pg 124
479 Salingaros 2016, pg 126

arm's length can be less differentiated, but still look like it has the same degree of detail as another area at arm's length[480] as described in the structural law 1.

$T_2 = density\ of\ differentiations$[481]: In order to measure this density, a picture is taken and its intensity of greyscale contrast studied. In this manner the differentiations of colours are discounted, since the colour is looked at in T_{4-5} and only the relief and contrasting colour patterns are evident.[482]

$T_3 = curvature\ of\ lines\ and\ forms$[483]: The value of T_3 first of all describes how small or big a radius of a curve or line is as well as how many curves there are. The curvature of a curve can be approached by counting how many small segments of straight lines can result in that curve. Generally speaking, the temperature increases as the amount and radius of curves increases.[484]

$T_4 = intensity\ of\ colour\ hue$[485]: The chromatic depth of a colour determines how much temperature it has. Even if there are many colours, if they are dull and desaturated, their temperature is lower than an area with only one but highly saturated colour.[486]

$T5 = contrast\ among\ colours$[487]: The temperature of a place is higher the more contrast one can find between different colours, including white and black.[488]

The following table describes how according to Salingaros T_{1-5} ought to be rated.[489]

	Value = 0	Value = 1	Value = 2
T_1	Smooth or textured monochromatic surfaces	Coarser or less sharply-defined detail	Well-defined detail
T_2	Plain surfaces	Some, medium differentiations	Highly density sharp differentiations
T_3	Straight lines and rectangular forms	Curved forms in intermediate scales in between detail and overall size	High degree of curvature, many curves
T_4	Desaturated colours, few colours	Some colour over all	Intense though not necessarily bright colour
T_5	Uniform or no colour	Some contrast	Great variety and vivid contrast

Table 12: description of temperature, put together from Salingaros 2016, pg 127-128

The harmony (H) in architecture is put together in the same way as T. It has five components, that, added together make H and can be rated from 0 (very little or none), 1 (some) to 2 (considerable). The harmony of a place is determined by its directly perceivable surfaces, elevations and forms. Unlike it is architectural tradition, Salingaros decided to discount looking at the layout plan of a place since this is not the perspective a real life viewer has as they experience the space. The value of the harmony results from:

$$H = H_1 + H_2 + H_3 + H_4 + H_5$$

$H_1 = reflectional\ symmetries\ on\ all\ scales$[490]: Aside from the total number of symmetries, the orientation of their axes matter as well, the vertical one giving the most harmony. Diagonal symmetries, for example, go against what nature taught us to be balanced and stable. When surfaces

---

480 Salingaros 2016, pg 127
481 Salingaros 2016, pg 126
482 Salingaros 2016, pg 127
483 Salingaros 2016, pg 126
484 Salingaros 2016, pg 127
485 Salingaros 2016, pg 126
486 Salingaros 2016, pg 128
487 Salingaros 2016, pg 126
488 Salingaros 2016, pg 128
489 Salingaros 2016, pg 127-128
490 Salingaros 2016, pg 131

offer no detail, the symmetries or the absence of the symmetries of the objects edges are considered.[491]

H_2 = *translational and rotational symmetries on all scales*[492]: The translational symmetry is the regular repetition of an element in one or two straight directions while the rotational symmetry describes a linear, regular repetition. The harmony is higher, the more elements are deliberately repeated in regular patterns.[493]

H_3 = *degree to which distinct forms have similar shapes*[494]: The overlapping as well as disconnected repetition of shapes within different objects, scales and forms increases the architectural harmony.[495]

H_4 = *degree to which forms are connected geometrically one to another*[496]: A geometrical connection can be presented by lines or items that touch, intermediate areas that connect other areas, borders and many more. When it comes to buildings, for example, their main connection is to the ground or earth, which need to be emphasised by connecting elements.[497]

H_5 = *degree to which colours harmonize*[498]: Although Salingaros claims that there are statistical correlations of "harmonious" and "not harmonious" colour effects, he does not elaborate on this matter.[499]

The following table describes how according to Salingaros H_{1-5} ought to be rated.[500]

	Value = 0	Value = 1	Value = 2
H_1	Lack of reflectional symmetry on different scales	vertical symmetry on a single scale, diagonal symmetries	many vertical symmetries on distinct scales, plain surfaces with parallel edges
H_2	Elements repeated randomly	Elements repeated more or less regularly	Elements repeated in a regular pattern along one or two directions
H_3	Different or disconnected shapes	Medium amount of repetitions or degree of similarity	High amount of repetitions or degree of similarity
H_4	No to weak connections	Some connections are present, some connections are less pronounced or less well connected	Strongly visible and fully joined connections
H_5	Unbalanced, clashing, garish combination of colours	Slightly unbalanced or slashing colour effect	Single or no colours, unified colour effect

Table 13: description of harmony (lack of entropy), put together from Salingaros 2016, pg 132-133

Furthermore one can calculate the perceivable *complexity of a space* (*C*) by multiplying the value of *T* with the difference of the constant 10 minus *H*. The 10 minus *H* represents the degree of entropy or disorder of a structure.

$$C = T \ x \ (10\text{-}H)^{501}$$

The value of *C* can vary from 0 (dull), medium (exciting) to very high (incoherent or "messy"). Architectural complexity is achieved by many, strong and contrasting colours, many differentiations on small scales, many curves, randomness, asymmetry and disconnectedness.[502] In

---

491 Salingaros 2016, pg 132
492 Salingaros 2016, pg 131
493 Salingaros 2016, pg 132
494 Salingaros 2016, pg 131
495 Salingaros 2016, pg 132
496 Salingaros 2016, pg 131
497 Salingaros 2016, pg 132
498 Salingaros 2016, pg 131
499 Salingaros 2016, pg 133
500 Salingaros 2016, pg 132-133
501 Salingaros 2016, pg 123
502 Salingaros 2016, pg 140

this manner one could also call *C* the *degree of disorganized complexity*, standing in opposition to life which as mentioned before can be described with the *degree of organized complexity*. If driven to the extreme, the excitement or incoherentness of a structure can induce anxiety, disorientation and discomfort in people.[503]

The mathematical relationship of *L* and *C* limits *T* as we combine the following equations:

$$C = T\,(10 - H),\ 0 \leq C < 100$$
$$\&$$
$$L = T\,x\,H,\ 0 \leq L < 100$$

T can maximal be 10 if all T_{1-5} are estimated at the value of 2. As argued before, too much complexity decreases the amount of life in a building or place or in other terms *L* of a building is limited by the value of *C*. This determines that *L = 100-C*. In order to describe the interdependence of Life and Complexity this equation has to be solves for *T*:

$$L + C = 10T\ ^{504}$$

Salingaros admits that although his thermodynamic analogy offers much more clarity and method, there are still some variables that cannot be fixed or described by the analogy. First of all some buildings express such a mixture of unclear aspects of *T* and *H* that it becomes hard to discern, what rating to give. Furthermore, since structures change over time, their colours fade or elements break, change or disappear etc., it becomes a matter of discussion which state of the structure to consider – its potential, original or current state or a state of a certain time period. As well as the building, the perspective of the observers might change as well. Here Salingaros has argued before that he chose his categories according to elements that studies showed people of different times and cultures mostly agree on. The perspective of a person that changes as they go through a place or building matters equally. He thinks, however, that photos of the most important places within a building, for example, suffice in the information they can offer. The only or most important aspect is simply that either the on-site perspective as well as the perspective in pictures is from a human point of view instead of areal pictures and floor plans.[505]

Pattern Languages + Form Languages = Adaptive Design

Salingaros' concept of adaptive design arose out of working with Christopher Alexander's pattern language.[506] Salingaros adds however, that architectural design which is adaptive to human sensibilities requires two languages: a *pattern language* and a *form language*. The *pattern language*, as introduced before by Alexander, is concerned with the interactions between people and their environments. The patterns put words to long-term observations of people's natural tendencies, preferences and behaviours when it comes to this interaction between them and environment. In this manner the patterns are a compilation of design-solutions for all sorts of situational challenges as they can be posed by geography and climate or societies and local traditions. The architects can then chose whatever universal patterns could be chosen as guidance for solving their own unique design-tasks.[507] In contrast to *pattern languages, form languages* describe the clearly visible geometrics of the physical space and its objects. For this reason styles and trends manifest in *form languages*,

---

503 Salingaros 2016, pg 141
504 Salingaros 2016, pg 147
505 Salingaros 2016, pg 144
506 Salingaros 2016, pg 159
507 Salingaros 2016, pg 272-273

while *pattern languages* are timeless rules of natural preferences that are determined by the physiological composition of the human's perceptional senses. Since patterns also express themselves in form like for example design lines and symmetries, many architects miss the differentiation, mixing *pattern languages* with *form languages*. The result is the general lack of clarity when it comes to design rules and styles.[508] Just like *pattern languages* are a compilation of tried-and-true design-solutions, each *form language* is a compilation of shapes and materials that produce a style which is expressive of its time, locality or ideology.[509]

An adaptive design method aims to create structures which appeal or adapt to human sensibilities. This means that structures planned by this method elicit natural, physiological reactions of ease and general sense of safety in people.[510] In order to create an adaptive design, the design needs to combine a *pattern language* and a *form language* in a way they complement each other. This means that first of all both *pattern* and *form language* need to adapt to the natural dimensions and movements of the human experience. Since architects confuse the two languages, there are some architectural styles, especially those that are modern and post-modern, that do not encompass adaptive patterns or forms.[511] As soon as any styles or form languages get established that are not adaptive, it becomes seemingly impossible to make that style suitable for the human condition.[512]

The development of a method for describing the *genius loci* is connected with the issue of differentiating between the two languages, so that the method can systematically recognize and describe them.

---

508 Salingaros 2016, pg 273
509 Salingaros 2016, pg 274
510 Salingaros 2016, pg 275-276
511 Salingaros 2016, pg 276
512 Salingaros 2016, pg 299

2.2.3 Pseudoscience / Esotericism

In order to offer a complete overview of the methods that exist, one needs to consider the more pseudoscientific approaches as well, especially since there is fewer scientific than esoteric literature.[513] The main works that are worth examining are today's geomantic perceptions of a *genius loci* as well as *feng shui* and *vaastu shastra*. The concepts of *feng shui* and *vaastu shastra* are ancient Asian (the former originally Chinese[514] and the latter Indian[515]), metaphysical design philosophies that aim at creating the most effective and harmonious relationship between places and people.[516] Because both concepts are complex and extensive, only *feng shui* which has a wider, pan-cultural and growing popularity in North-America and Europe as well as of course Asia will be presented in more detail. This thesis will however not go into the almost 7000 year old history of *feng shui*[517], but instead evaluate the way it fits into the topic of *genius loci*, and lay out the main valuable elements it could contribute to its evaluation and description.

As the perception of people and environments changed in the Western societies in several previously described anthropological developments (globalisation, digitalisation etc.) and scientific *turns* (spatial turn, language turn, environmental turn etc.) during the 20th century, common people and scientists became more open minded concerning philosophical approaches of understanding and working with the people-place relationship.[518] This manifested in more holistic, multi-disciplinary and sometimes controversial approaches and ideas, as also described above. *Feng shui*, also called the *art of placement* or *sacred art of positioning[519]*, is one of the more controversial ideas whose constant growth in popularity in the Western world is slowly causing an academic interest in the scientific evaluation of these ancient teachings[520].

The Structure of Feng Shui

To begin with, it is important to stress that *feng shui* is a pseudoscience resembling a complexity science and an Asian philosophical approach to the people-place relationship.[521] Historically *feng shui* contains one of the ancient, eastern versions of the *genius loci*. In the eastern believes, life energy flows through every place and affects the people that inhabit those places according to how well those places afford the energy to flow. In this manner, there is no spirit or personified divinity/daimon that gives the place its characteristics, functions and potentials. Instead, this effect is caused by the positive *(chi/qi)* or negative *(sha)* energy which is determined by the current properties of that place. Just like wind *(feng)* and water *(shui)* cannot be held onto with one's hands, this energy is said to flow through everything, everyone and all the time.[522]

Maineti developed a simple table to summarize the way that *feng shui* functions and develops its rules of making choices for designing in a harmonious way.

---

513 Arndt 2019, pg 43
514 Bonaiuto, Bilotta & Stolfa 2010, pg 27
515 Sinha 1998, pg 27
516 Bonaito, Bilotta & Stolfa 2010, pg 24; Hudson 2013, pg 26; Sinha 1998, pg 27
517 Bonaito, Bilotta & Stolfa 2010, pg 27
518 Bonaito, Bilotta & Stolfa 2010, pg 29
519 Hudson 2013, pg 26
520 Bonaito, Bilotta & Stolfa 2010, pg 29
521 Mainenti 2018, pg 14-15
522 Bonaito, Bilotta & Stolfa 2010, pg 26-27; Hudson 2013, pg 30

Stage 1	Content	Content	Content
	observation of astronomical (heavenly) phenomena	observation of human behaviour	observation of natural (earthly) phenomena
Stage 2	correlate and classify data using calendar systems		correlate and classify data using predictive systems (5 elements)
Stage 3	quantitative celestial systematisation		qualitative terrestrial symbolisation
Result	feng shui prescription		

Table 14: model for decision evolution in feng shui by Mainenti 2018, pg 15

This table shows us that *feng shui* is based on empirical, even if not scientifically acquired data concerning astronomical phenomena, human behaviours as well as natural phenomena.[523] *Feng shui* understands the dynamics in people-place relationships as very deterministic and considers the perceiving person as more passive and at the mercy of its environment.[524] In this way the astronomical observations constitute the data in the Chinese calendrical systems, while observations about human behaviour add the context, that determines when, for whom and in what way the astronomical observations are interpreted as meaningful, good or negative. The mathematical, complex, quantitative but pseudoscientific evaluation of these calenders formulate predictions for auspicious or "unlucky" timing and arrangements for any life choices like any building endeavours.[525] In contrast to *feng shui* sciences are not as deterministic and consider the human influence on the environment as just as strong. Furthermore, there are no scientific studies that found actual correlations between the movements of celestial bodies and affordances and potentials in places or for people.[526] This branch of *feng shui* will therefore be disregarded in this thesis.

On the other side *feng shui* prescriptions for design also consider a qualitative system of symbols in the physical world. These are created by observing the natural forms, patterns and shapes in nature as well as human behaviour.[527] The contents of this branch of *feng shui* can therefore be compared with the works of environmental psychology.

Feng Shui and Environmental Psychology

Both approaches aim at understanding the universal operating principles of people-environment relationships and at developing rules or guidelines for creating a harmonious, functioning and positive relationship between environments and people.[528] Moreover, *feng shui* was created to offer trans-disciplinary and holistic methods that explore complete and complex phenomena or research questions, just like EP.[529]

Bonaiuto and colleagues determined two main common aspects of the people-environment relationship that both approaches work on/with equally: restorativeness and control. Point 2.2.1 of this thesis has already been shown that EP concerns itself with understanding in what ways environments affect people negatively or positively. Those many researches especially show that there seems to be a correlation between increasing health or healing and the incorporation of literal and symbolic natural elements into designs through for example architecture and interior design. In the same way *feng shui* has many guidelines that propose placements and physical elements to

---

523 Mainenti 2018, pg 15
524 Bonaiuto, Bilotta & Stolfa 2010, pg 29-30
525 Mainenti 2018, pg 15
526 Bonaiuto, Bilotta & Stolfa 2010, pg 29-30
527 Mainenti 2018, pg 15
528 Hudson 2013, pg 26-27
529 Bonaiuto, Bilotta & Stolfa 2010, pg 29

either incorporate actual natural elements like water fountains and plants or representatives of them.[530] The other aspect, control, is about the way and the degree to which people can influence their exposure to the environment as well as the elements and characteristics of the environment itself. Research in EP showed that the lack or presence of perceived control majorly influences the degree to which they feel safe, anxious, displeased or satisfied in their environment.[531] In *feng shui* the lack of control is also associated with stress and both the arrangement as well as the materials are determined in a way that is supposed to make people feel safe, calm, pleased and satisfied.[532]

Han and Sinha argue that the empirical data (although its not a large amount yet) suggests that locations chosen or arranged by *feng shui* fulfil most criteria of the cognitive models of landscape assessment like for example the *prospect-refuge theory* by Appleton in 1975 (visual access to the place, options for shelter and protection), *information processing theory* by Kaplan and Kaplan in 1989 (fascination in nature → stress reducing, ways to explore due to complexity and mystery in landscape, good legibility and visual access, coherent structure/design of the place) and the *image and environment model* by Lynch in 1960[533] (good orientation in urban landscape due to imageability and legibility).[534]

There are, however, significant differences between the two approaches. One major difference is, as mentioned before, the degree to which they are deterministic, since EP mainly understands the dynamics between people and the environment as reciprocal.[535] The other and biggest difference is the degree to which both approaches work with scientific methods and produce scientifically sound results as well as how popular their methods are. Despite the fact that *feng shui* is clearly pseudoscientific or esoteric, its methods are widely known and applied. Methods produced by the scientific field of EP on the other hand are not. The reasons for this can only be speculated about. Bonaiuto and colleagues argue that

1. *feng shui* offers a mysterious and therefore intriguing tradition that EP cannot,
2. *feng shui* practices have been made easily available and understandable for the public unlike methods of EP that are often only known in academic circles and communicated in a more complicated language and
3. *feng shui* practices are more easily applicable for everyone than methods of EP.

Although the effectiveness of some singular arrangement rules and other design choices in *feng shui* can be supported by psychological research, a significant lack of scientific background for those rules is evident.[536]

Potentially Useful Tools from Feng Shui or Chinese Philosophy

The different schools of *feng shui* offer many other tools to work with places and create a positive people-place relationship. There are for example a large amount of arrangement rules that propose commanding (positive) positions of items in relation to entrances etc.[537] Other tools determine where which elements work well in relation to the main eight cardinal points or in relation to different areas representing aspects of life in a grid pattern.[538] Furthermore there are four

---

530 Bonaiuto, Bilotta & Stolfa 2010, pg 30
531 Bonaiuto, Bilotta & Stolfa 2010, pg 30-31
532 Bonaiuto, Bilotta & Stolfa 2010, pg 31
533 Han & Sinha 1996, pg 3
534 Han & Sinha 1996, pg 4
535 Bonaiuto, Bilotta & Stolfa 2010, pg 29-30
536 Bonaiuto, Bilotta & Stolfa 2010, pg 31
537 Hudson 2013, pg 31
538 Hudson 2013, pg 28

animal symbols, determining a positive arrangement of a landscape around a dwelling or building of any kind.[539] As described in the comparison of *feng shui* and EP, many of those rules may lead to arrangements and designs that can be considered healthy and supportive to human psychology and practical functions of the place by EP standards. But since there are no exhaustive studies of this, these other methods will be disregarded in this thesis.

There are, however, a few interesting concepts that *feng shui* uses in order to describe and work with the properties of places. Unlike the just mentioned specific *feng shui* rules for placement that look at the spacial arrangement of objects, the following concepts focus on describing the qualities of those objects, separate from their placement. In the table 14 (shows the process of making design decisions in *feng shui*) these concepts can be placed in the area of "observation of natural (earthly) phenomena". The concepts that *feng shui* uses for describing these qualities of objects predate the design method and are rooted in Chinese and later Japanese philosophy.

The image 39 shows the layers of how ancient Chinese philosophy understands general spaces and specific places.[540] The following ideas have been echoed in the way the Japanese philosopher Nishida explained his understanding of *place*. At the beginning there is the nothingness which contains everything in the form of potentials. The perfect balance of all matter is made of yin and yang,[541] two forces that the entire universe is said to be made of. When one reviews the associated meanings of yin and yang from a typically western perspective, the two seem like "exclusive opposites". Something is either yin or yang.[542]

Image 39: structure of space and place in Asian philosophy

Yin		Yang
night	↔	day
dark	↔	light
wet	↔	dry
cold	↔	warm
passive	↔	assertive
contracting	↔	expanding
downward	↔	upwards
introverted / inward	↔	extroverted / outward
calm	↔	movement
death	↔	life
undefined	↔	focussed
flexible	↔	controlled

Table 15: gathered descriptions of yin / yang (Hudson 2013, pg 29, Fang 2012, pg 31, Guex-Joris 1999, pg 23)

539 Hudson 2013, pg 32
540 Basin, Guex-Joris, Sandoz & Tasnady 1999, pg 72 & 48
541 Basin, Guex-Joris, Sandoz & Tasnady 1999, pg 72
542 Fang 2012, pg 26

In contrast to this, Asian views understand yin and yang as "interdependent opposites",[543] which means that something is both yin and yang. While yin and yang are always both present, the decrease of one causes the increase in the other. A simple example for this dynamic paradox was described by the Chinese philosopher Yu-Lan Fung:

"When the cold goes, the warmth comes, and when the warmth comes, the cold goes…
When the sun has reached its meridian, it declines, and when the moon has become full,
it wanes". – Yu-Lan Fung (Fang 2012, pg 34)

In the example of temperature, the cold represents yin and the warmth represents yang. Without the presence and experience of these two forces (cold-warm or yin-yang), the whole phenomenon of temperature would not exist. The example of temperature also offers an easy example for how one can visualize the presence of yin and yang on a spectrum by using the scales of temperature like Celsius as a reference for the spectrum and the current temperature as the current balance of yin (cold) and yang (warm). This dynamic and paradoxical understanding infers that every entity is always "both/and" and not "either/or" of those two forces[544]. If necessary or useful one could try to determine which force is stronger or more dominant in a certain context. Then the entity itself stays "both/and" but an "either/or"-statement about the whole entity or some of its parts can be made.

In Chinese philosophy neither yin nor yang are associated to be either good or bad. Instead yin and yang are used to describe the spectrum of phenomena and can be supportive, destructive and anything in between, depending in the context these forces exist in and interact with other entities.[545] In physical space yin and yang are expressed through the five elements, which are presented next with the following characteristics:

Yin		Yang
curved	↔	geometric
rounded	↔	angular
undefined	↔	defined
soft	↔	harsh

Table 16: associated design principles (Hudson 2013, pg 29, Fang 2012, pg 31, Guex-Joris 1999, pg 144)

The image 39 (on pg 77) shows that the conceptual layer where the energetic influences of yin and yang manifest in physical space for the first time is made of the five elements.[546] Therefore they are the most basic energetic expressions that can be observed in every physical element and earthly experience.[547] This clarifies that Chinese philosophy conceptualizes *space* as the nothingness which has potential forces of yin and yang and place as a concrete locality where the five energies express the five possible yin and yang relations.[548]

---

543 Fang 2012, pg 26
544 Fang 2012, pg 34
545 Hudson 2013, pg 29
546 Basin, Guex-Joris, Sandoz & Tasnady 1999, pg 47
547 Wen 2013, pg 4422-4423
548 Basin, Guex-Joris, Sandoz & Tasnady 1999, pg 48

yin and yang are 1:1	–	earth
mostly yin	"big yin"	water
mostly yang	"big yang"	fire
more yin than yang	"small yin"	metal
more yang than yin	"small yang"	wood

Table 17: deduction of the five elements from yin and yang (Guex-Joris 1999, pg 48)

"Wu xing", the Chinese name for the five elements does not actually translate to "elements" and more accurately means "the five walks of life".[549] Because the elements are considered to be the most basic expressions of energy in the physical world, they were integrated into symbols[550] that describe five phases which they observed in any development and creation process in life[551]. While wood represents anything associated with the beginnings and first growth, fire expresses the goal-oriented pinnacle of this growth. The element of metal expresses the completion of any processes and the restoration of order and clarity. Finally water represents the internalisation of this experience as well as the connection to the beginning of the cycle. In contrast to these four elements, the element of earth is associated with stability or stagnation of any creation power within the processes.[552] The following tables give an overview of the symbolism per element.

	orientation	life	daytime	sun	season	step in process	mindset
wood	outward	birth, childhood, puberty	morning	sunrise	spring	beginnings, growth, new ideas	optimism, idealism
fire	upward	young adult	late morning	day	summer	transformation, creating results	passion, determination
earth	none	adulthood	noon	noon	late summer / all year	calmness, rootedness, stability	realism, reliability
metal	inward	middle age	afternoon	sunset	autumn	completion, ordering	clarity, planning
water	down-ward	old age	evening	none	winter	deep internal flow	communication, connection with self & others

Table 18: symbolisms of the five elements (gathered from Weidner 2004, 67-72 & 145-152, Guex-Joris 1999, pg 48-53)

Like with yin and yang, all elements are interdependent and, depending on their associative qualities, strengthen or weaken each other. To make a few examples, fires are fed by the provision of wood as burnable material and water is essential for the growth of wood (plants). On the other hand, water extinguishes fire and fire can melt metals etc. To create a certain relationship of the elements (and therefore yin and yang) the intensity of one element in a design can be controlled (see: destructive cycle) or enhanced (see: productive cycle) by adding the respective elements shown in the image below.[553]
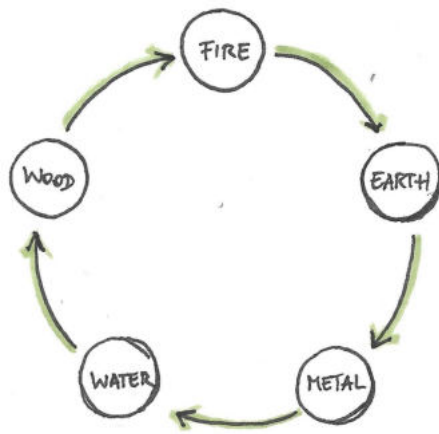
---

549 Basin, Guex-Joris, Sandoz & Tasnady 1999, pg 47
550 Wen 2013, pg 4422-4423
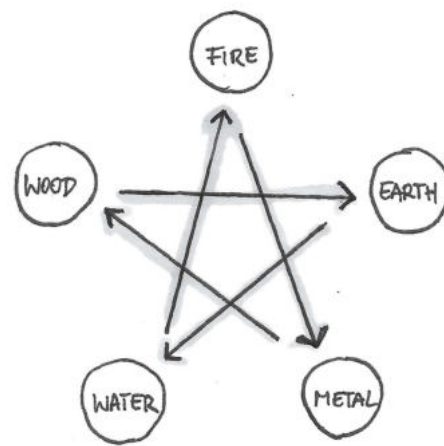551 Basin, Guex-Joris, Sandoz & Tasnady 1999, pg 47
552 Weidner 2004, pg 67-72
553 Hudson 2013, pg 28-29

Image 40: productive cycle of elements according to Hudson 2013, pg 29

Image 41: destructive cycle of elements according to Hudson 2013, pg 29

Just like yin and yang, the elements are never good or bad, but simply describe the quality of an object or experience that the experiencing person subjectively interprets as supportive or inhibiting to their life situation or endeavour. In the design process one therefore needs to consider the intensity of yin and yang the place already offers as well as the degree that the intended design requires. The bedroom, for example, is most often considered a place of calm, relaxation and sleeping. For this reason the design would require more yin than yang while sports centres would be hindered by too much yin, for example. The following table shows how the elements express the natural forces of yin and yang in the physical world:

	associations	orientation	shapes	colours	materials
wood	beginnings, growth, optimism	outward	high, upright i.e. rectangle	greens, blues	natural materials: plants, woods, rattan etc.
fire	transformation, determination, intensity	upward	tapered pointed i.e. triangle	reds, oranges	animal-products: leather, wool, fur, horn, bones etc. also: plastic
earth	realism, rootedness, stability	downward	square, flat, horizontal i.e. square	yellows, browns	mineral materials: clay, brick, stone, ceramics etc,
metal	Completion, planning, order, clarity	none	circular, oval, round, sphere i.e. circle	whites, greys, all metallics	metals: gold, silver, copper etc.
water	deep flow, connection / communication with self & others	inward	curve, undefined, wavy	dark blues, black	glass, mirrors, water

Table 19: gathered descriptions of design principles to five elements (Too 1999, pg 64-65; Weidner 2004, pg 145-152)

2.3   Analysis and Comparison

The meaning of the term *genius loci* has undergone many changes. In order to fully understand how the previously described ideas and methods relate to one another, the basic interpretations of the *genius loci* as well as the backgrounds in front of which these interpretations arose need to be compared and analysed.

2.3.1   Summary: Historical / Cultural Background (Conceptions of Spatial Entities, Genius and Identity)

The way the *genius loci* is defined or reinvented is always determined by the world view of each civilisation or society. The relevant aspects of these world views pertaining the *genius loci* are made of:

1. ideas about how spatial entities are defined and organised and
2. an understanding of how a self, identity or spirit (spark of life / consciousness) is defined.

For this reason these two aspects will be compared and analysed first. This offers the context in which the later discussed methods emerged, were further developed, criticised or dismissed. An overview of this can be found in annexe A, pg 170, in the shape of a concise table.

Although most scientific and pseudoscientific approaches to the *genius loci* agree that space is a general spatial entity which holds theoretical potentials while places are individual spaces that have been given meaning to, the different ideas have many aspects and details that they disagree on.

Well before ancient Greece and ancient Rome in central Europe, huge parts of Asia already had developed civilisations with their own metaphysical conceptions about how space, matter and life work. The ancient Chinese and also later the Japanese philosophy, this thesis focussed on, holistically intertwined notions of spaces and matter as well as life or a self in a metaphysical and spiritual concept. In comparison to all other presented approaches it is the only one doing so. The philosophy considers general space to be *nothingness,* or as Nishida later called it *basho*, that holds all potentials in the shape of interdependent opposite energies (yin and yang). In understanding the potentials as energetic instead of theoretical and abstract, this conception differs majorly from the others once again. The difference of being an energetic/atmospheric approach continues and the philosophy determines *place* to be concrete *space* in which the potential energies express to different extents in inanimate matter as well as animate living creatures like humans. Nishida concretised the process of the potential space turning into specific places in his philosophical texts. According to him a concrete place is formed as soon as a conscious creature like an animal or a human meets and interacts with non-conscious matter like things, nature, buildings etc. This idea can be compared with the way modern sciences describe the formation of a concrete place to be initialised by people attaching meaning (emotionally and cognitively interacting) with general spaces. The *genius* that this philosophy implies is the energy that is expressed through physical matter and an atmosphere.

In ancient Greece and later ancient Rome the world view was structured by natural forces which people saw themselves subordinate to. According to Aristotle, whose texts are considerably well documented and well-known from that time, these forces cause every thing and person to have a self which then has properties. Depending on how these properties change, the identity changes

too or stays the same. In his way of describing an identity in connection to a self with properties, Aristotle's conceptions are very close to the modern understanding of identity, although, of course Aristotle used none of those terms. In ancient texts there was no differentiation between space, place or landscape. Instead Aristotle distinguished between immovable unchangeable places that act like boundaries to the previously described changeable and movable matter (people and stuff) that has a self. Although people understood themselves as clearly subordinate to the natural and divine forces when it comes to power, they still saw themselves as a product of the same system. For this reason each of those superior powers, which were personified by gods and semi-gods, had a self that also had characteristics that were just like human's. Because landscapes or single places were considered to have a self too, it is self-evident that deities were used for spatial references and designs in order to create socially acceptable and functioning places.

In the later Roman Empire and the Middle Ages the religion of Christianity shifted the world view from a poly- to a monotheistic world view. Furthermore, the one God was now considered well superior and majorly different from humans in every way, representing everything that is good and just while Satan on the other hand embodied everything evil and wrong. This dualism was also projected into people's perception of what a self is. They considered a self to either be the personification of God or Satan or sometimes as godly or satanic thoughts, feelings and actions. Places, landscapes and regions were categorised in the same way – created by god but expressive of either these originally good or newly tainted evil influences. Because central Europe was a rural agricultural culture, the bigger landscapes were also structured by such practical aspects as shared norms and rules as well as cultural and natural differences. For the same reasons people's *homelands* were determined by the literal pieces of land that they worked and / or lived on.

With the scientific development of Humanism, the term of *identity* started to be adopted directly for the first time. Unlike the contemporary idea that an identity is tied to a self which has properties, researchers focussed on the question of when something can be considered identical to something else. Through this movement, the *genius* was allocated a metaphorical meaning only. While the metaphor of a *genius* stood for natural and inborn talents as well as intellectual capacities in people, it represented natural properties and potentials in physical space. While places and landscapes were still determined much like before, the term *landscape* was now used more often in relation to paintings that depicted natural or rural landscapes. During the years of and after the Reformation in Europe, referring to a *genius* was discouraged from. People felt that, one would disrespect God if one worshipped the god-given *genius* in things, people or places, rather than God directly.

Spatial and identity-related concepts were only able to change as the world view shifted again in the era of Enlightenment. The religious outlook was replaced by a scientific approach to explain how life and physical space and matter work. The spatial terms as well as *identity* were scientifically dissected and re-evaluated. This was also the time when the contemporary ideas were established that spaces are general and places specific, for example geometrically measurable spatial entities. In this time famous polymaths like Newton and Leibniz argued whether there is any absolute (unchangeable and immovable) or only relative spaces (qualities exclusively determined on influencing factors). As a result of the over all purely rational mindset since the Enlightenment, any kind of metaphysical or metaphorical *genius* was considered illogical and unnecessary. Instead

the topic of identities and the determination, when entities can be considered identical or not was pursued.

Since the emergence of the rational scientific way of thinking, the foundations of our world view in the western world have not changed yet. However, new developments that shape our environment in a very literal way have cause several movements that slightly shifted, added or expanded the previously described rational point of view. The first of these developments was the industrialisation in the 19th century. The development of a rural into an industrial economy brought people into rapidly growing cities more than ever before. A growing amount of factories and machinery characterised the crowded urban quarters whose structures were not equipped to deal with these influences yet. As a counter movement, the natural, rural landscapes were idealised and romanticised. The natural aspects within places were given a divine or almost divine meaning now. In contrast to the "dirty city", nature was sacred. This is also where people started to use the term *genius* again – as the divine or close to divine metaphor for the essential atmosphere of something or someone. In this manner the industrialisation also marks the point where the dichotomy of the man-made versus the natural was strengthened. Because the industrialisation removed the immediate connection between people's homes or work in connection to a set of land, *homeland* now became an associative connection that people especially had with natural regions and landscapes and also sometimes cities.

The nationalist ideology that grew and peaked in the first half of the 20th century took the romanticised ideas of *Heimat* and nature and tied them to an ideal of national and ethnic communities. The newly founded movements around nature and *Heimat* protection soon separated – the former focussing on the ecological landscapes and the latter on the national and ethnic aspects of people. Although many people today use *Heimat* in innocent ways of nostalgically remembering the general areas they grew up in, its connection to nationalistic thinking was never successfully detached since then.

In the 1950ies the contemporary use of the term of *identity* was founded by the psychologist Erikson who described the way people experience identity crises, alluding to an identity being a self with a character, goals etc. This new scientific focus on the individual person and their perception was also expressed in the idea of social constructionism, which claims that everything is socially constructed and therefore subjective and not objective. Since the beginning of the 19th century the *narrative* or *linguistic turn* had already introduced the understanding that people use language not to describe an objective but a subjective and individual reality. Therefore social constructionism elaborated on those ideas and claimed that both the definition of physical as well as psychological aspects of life were always based on individual are collectively shared assumptions and perceptions.

The 1970ies marked the beginning of the next big structural changes to its society. One main scientific point of view that found its way into many space-related scientific fields was phenomenology, an approach which demands the researcher to openly observe a phenomenon in its entirety without any reductions or presumptions. The *landscape turn* manifested priorly explained conceptions of people's relationship to their environment in a new definition of *landscapes*, being "an area, as perceived by people, whose character is the result of the action and interaction of natural and / or human factors". Postmodernism reinterpreted places as both objectively spatially as well as subjectively socially constructed and the *spatial turn* moved spatial references into the foreground when studying scientific issues instead of just focussing on the historical aspects. The

environmental turn also manifested the idea more strongly than before, that people's well-being and the functionality of certain processes is highly dependent on the qualities of people's environments. The term *identity* was given more layers and also received spatial dimensions: the *place identity*, *regional identity* etc. Since the term *genius* for places was mostly abandoned since the Romanticism, the 1970ies mark the first time that a possible scientific equivalent was used. The works of Norberg-Schulz on the *genius loci* or *spirit of place* were a clear exception and received negative feedback from scientific researchers accordingly.

Because the social structures continued to be shaken up by the emergence of a globalised and digitalised world that faces a climate change, researchers soon started to shift their focus from studying individual identities to collective identities which they analysed in group or role identity issues. Just like due to the industrialisation, the physical structures of people's lives had until now changed significantly, too. Cities and villages used the same or similar mass-produced materials almost all over the world and processes started to look the same everywhere. People worked in offices, in no connection to where they lived and therefore felt more and more detached from their environments. According to the architect Alexander and the mathematician Salingaros the modern and postmodern architectural styles were furthermore not built in accordance but against human sensibilities. As a reaction to all developments since the industrialisation, those two researchers therefore developed a concept that connects a certain idea of a *genius* in places with the human perception of the physical and aesthetic structures of places (or any other things for that matter). The world view, this is based on, even received its own name the *Alexandrine organic world picture*. More similar to the ancient Asian idea of the qi / chi energy, Alexander claims that there is a perceivable life-quality in everything animate and inanimate. The intensity of that "life" is found within the structure of a piece or place and the way the component pieces of that structure are interconnected and influence each other.

Although this can only be speculated at, the author of this thesis anticipates an increasing shift of the current world view in the western, but presumably entire world in the curse of the next hundred years. The fast paced changes in the global social, economic, ecological and political landscape have lead to some significant changes in the mindsets that were proposed by singular theories, methods or philosophical movements. One can therefore assume that, over time, the consensual thoughts of all of these new ideas will find their ways into the mainstream perceptions, which in turn shape the over all world view. The author of this thesis proposes the idea that the current trends of authenticity and sustainability for example, which were founded on the common ideas of the just described developments and changes in the world, can be interpreted as harbingers to this shift in conceptualising spatial entities and a self, identity or consciousness.

2.3.2 Use of the Term Genius Loci in All Main Approaches and Methods

The presentation of the methods presented in 2.2 has shown that they are rooted in different world views and therefore have different understandings of the *genius loci*. In order to create an overview and a comparison of the above described methods, their points of view concerning the *genius loci* will be sorted into categories proposed by the Geomancer Hans-Jörg Müller and will then be compared. Only by understanding the conception of the method, their content can be used to formulate a proposal for a new method of describing the *genius loci* for designers.
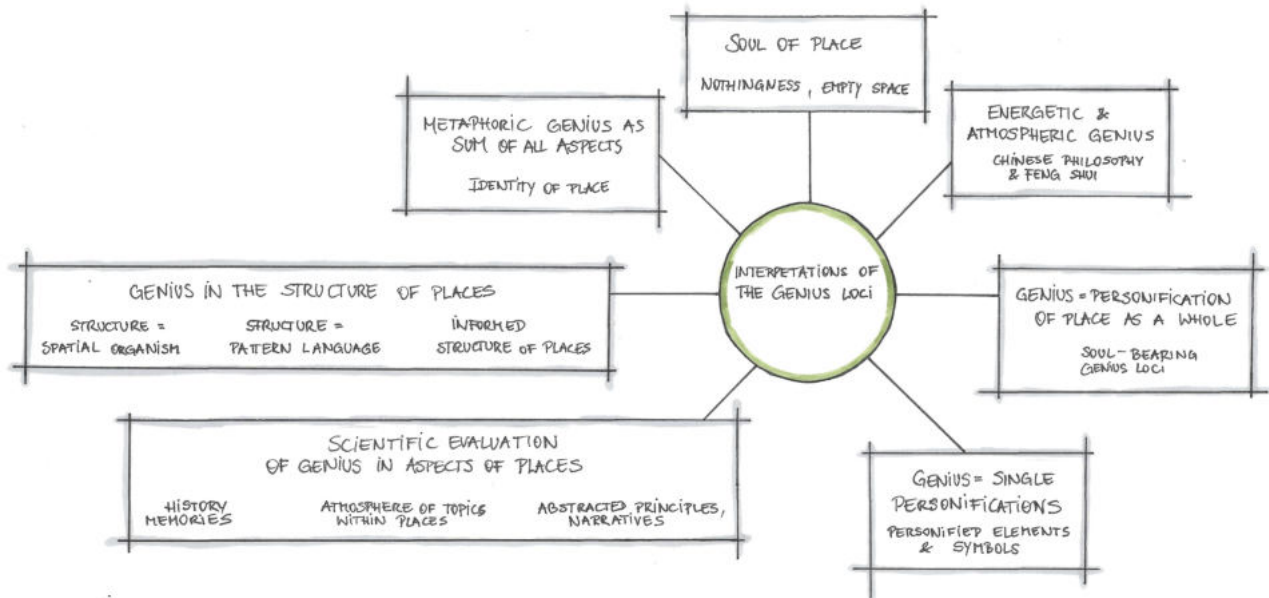

Image 42: visualised overview of all conception of the genius loci (according to Müller in Heimrath & Mallien 2009, pg 127-132)

Soul of place: The most abstract and basic idea of a *genius loci* is the anima loci, a soul of a place. This concept is described in the Ancient Greek (see Aristotle) as well as in Chinese and later also Japanese philosophy (see Nishida). It does not come with its own methods for describing the *genius loci*, but serves as the foundation of the conception of places and spaces today and therefore all understandings of the *genius loci*. The soul of a place is the empty but potential-bearing space which stays spatially as well as temporally completely undefined. Only as life happens within this space, a place or *genius loci* can emerge.[554]

Energetic & atmospheric genius: The first less abstract point of view is atmospheric or energetic. This point of view of the *genius loci* is expressed by the ancient Chinese and Japanese philosophy[555] which intertwines its above mentioned conceptions of space as well as the in 2.2.3 (Pseudoscience / Esotericism) described spiritual ideas. They are intertwined because the spiritual understanding represents the structure to their ideas of spaces and places. The main spiritual idea is the conception of life-energy (chi / qi) which permeates everything all the time. This energy constitutes the first layer of space as it is said to be held as the potential forces of yin and yang within the nothingness, or as Nishida called it the "basho". The second spatial layer is created by the formation of specific places due to the interaction of conscious creatures like humans and non-conscious objects like the physical environment. This formation of places allows the life-energy to

---

554 Müller in Heimrath & Mallien 2009, pg 127
555 Müller in Heimrath & Mallien 2009, pg 128-129

express itself in physical space which gives a place (*loci*) its unique atmosphere (*genius*). The specific character or *genius* is determined by the arrangement and quality of all physical features, which in return can be a positive or negative influence on people's well-being and endeavours. One method that works with this conception of the *genius loci* is *feng shui*. Since people's well-being and personal success or growth depends majorly on the physical arrangement and material qualities, the design method of *feng shui* becomes desirable within this philosophy because it can make predictions how people ought to align their endeavours with the flow of life-energy in the environment.

Genius = personification of a place as a whole: The next group of interpretations are personified versions. In comparison to the historical, eastern conception of a *genius loci* stands the historical western point of view of the *genius loci*. Instead of an energy, the *genius* represents a soul-bearing entity like a persona which expresses a changeable character and general atmosphere in physical space.[556] The types of personas that were attached to places changed over time. While the Ancient Greek and Romans viewed them as guardian spirits, deities and demons which could be helpful as well as dangerous, the Christian believe started to differentiate strictly between places that were associated with local saints or local demons. Each demon or saint was equipped with a set of characteristics and especially the ancient conceptions considered their divinities as expressive of the spectrum of human capacities by showing both positive or praised as well as negative and feared traits. In all these cases the human was at the mercy of these natural and divine forces.

One of the presented methods that is part of this category is the method of Christian Norberg-Schulz. He interprets the *genius* as a guardian spirit as well but does not specify if he means a personified or metaphorical spirit. He further describes the *genius* to embody a person's or a place's truth or natural state. In the example of a *genius loci*, a place's truth, this means a set of in-born characteristics which affect every natural or man-made process. This method shares the mythical roots of people's lives being primarily determined by the natural forces of for example a *genius loci* with its ancient European and interestingly also eastern predecessors. This is also the point that brought Norberg-Schulz the most criticism, since later and scientific versions of the *genius loci* determine people and the environment to be equally influential in the people-place-relationship.

Genius loci = single personifications and symbols in places: The next point of view that Müller presents is the *genius loci* as symbols and personifications. This *genius loci* is an artificially developed persona or symbol which is unconsciously or consciously as well as directly or abstractly expressed in places in order to charge the place with certain meanings and emotions. In this case the *genius* is the symbol or the persona and not referring to a place at a larger scale.[557] In this sense all historic as well as Norberg-Schulz's conceptions of the *genius loci* also use this interpretation of *genius loci* as well. Statues or shapes that express divinities or certain energies are symbols or personifications that add meanings to places like temples, churches or homes etc. Whether this place already had meanings attached to it that aligned with the newly added symbol or personification is not specified by this point of view. According to these principles, an example for this could also be a building of a corporation which uses its logo in its architectural design or uses a

---

556 Müller in Heimrath & Mallien 2009, pg 126-127
557 Müller in Heimrath & Mallien 2009, pg 129-130

symbol that the society associates with health and nature in order to emphasise its friendly and organic products.

Scientific evaluation of the genius in certain aspects of places: This general approach contains three points of view of and methods of working with the *genius loci*.

From the point of view of historians the *genius loci* equals the <u>memory of a place</u>. These memories are manifested in the space as actors and events left marks and traces either in the structure of the place or in its items and materials.[558] Looking at the chronology of a phenomenon or field of study has been the preferred approach in most sciences when studying certain topics. Since the *spatial turn*, however, the development of the locality in which the issue took place has become equally as important as the historical aspects of the issue itself. The place is now considered the context and integral meeting-place in which creatures and matter interact. Fields of study that work with the *genius loci* from this point of view are cultural and natural heritage protection institutions.

Another point of view of this category is the following. According to Müller and the findings of this thesis, the point of view of the *genius loci* that is used the most often in science considers the *genius loci* as a <u>spheric realm or atmosphere</u>. This *genius loci* is always abstract but also determined by some subjective and always topic-related measures, other than the previous point of view.[559] After the *genius loci* was considered a solely socially created metaphor, then an unusable idea and later a romanticised super-elevation of art, nature and natural talents, sciences today look at describing the genius of certain topics or aspects that people can perceive in places. All presented health- and function-related methods belong to this interpretation of a *genius loci*. These methods are mainly based on psychological/cognitive and phenomenological models which means that they focus strongly on the way the human perception and the environment interrelate and interact. The main difference between those two models is the fact that psychological/cognitive models view physical and aesthetic properties to be subjective functions in the human perception, while the phenomenological model says that every person also has a unique, individual experience and perception, but that there are common themes, preferences and patterns observable. Just like with the older ecological, aesthetic and psychophysical models, they view people and places to influence each other reciprocally and understand the *genius* to be mostly abstract. The specific methods basically differ in the topic they chose to evaluate and study. The health-related methods focus on how physical and aesthetic stimuli influence people's well-being. This *genius* is a character shaped by the degree of healthy and unhealthy aspects for people. The function-related methods on the other hand examine how physical and aesthetic properties and characteristics afford, support, prevent or hinder people from engaging with the environment. This *genius loci* is mostly determined by something like an affordance-character.

The last approach within this category is the *genius loci* as an <u>abstract principle</u> in places. According to Müller this *genius* is a kind of topic, theme or narrative that a place is expressing to people on a day by day basis.[560] These themes and narrations of the place were explored by *narrative analysis* and *content analysis* methods. Like the historical social constructivist view, the people-place relationship is based in phenomenological thinking, is reciprocal and people are said to subjectively perceive, create and express their reality.

---

558 Müller in Heimrath & Mallien 2009, pg 130-131
559 Müller in Heimrath & Mallien 2009, pg 128
560 Müller in Heimrath & Mallien 2009, pg 130

Genius in the structure of the place: The next category of interpretations of the *genius loci* focusses on the structure of places. The first point of view in this category is the *genius loci* as a spatial organism. In this conception the *genius loci* is created by groupings of interrelated cultural or natural areas like city quarters and landscapes.[561] These landscapes or singular places are studied in all sciences and their *genius loci* considered in city planning and natural and cultural protection. Methods derived from this point of view are the *visual landscape assessment methods*. They are based on the physical, aesthetic and psychophysical models since they focus on the physical and tangible aspects of the *genius loci*. They determine the character of a place in objective manners and the *genius loci* is always considered a theoretical abstraction of properties and characteristics. The ecological / physical model and the aesthetic model both only differ in their focus on either the aesthetics or ecological / physical world, while the psychophysical model focusses on objective mathematical relations between physical as well as aesthetic aspects and human reactions to them. Unlike the mythical conceptions of the *genius loci* these scientific approaches determine that people and places influence each other reciprocally.

Another point of view of the *genius loci* that belongs to this category considers the *genius* to be a set of abstract patterns of practical as well as aesthetic solutions that are bound to local cultures and natural resources.[562] The *genius* in this approach is the so-called *unnamable quality* which Christopher Alexander describes as a not nameable, but objectively and scientifically measurable force or spirit which gives all creatures and matter their own atmospheric expression of life. This description is interestingly parallel to the ancient Chinese and Japanese ideas of chi/qi that permeates everything and whose expression in people and matter gives them their characteristics and life. Unlike these ancient ideas, however, Alexander agrees with his scientific colleagues that people and places influence each other reciprocally instead of being at the mercy of this life-giving power. According to Alexander the *nameable quality* was traditionally expressed in local patterns of design solutions for typical environmental or cultural challenges, which he researched with a phenomenological approach. A pattern is an abstracted and empirically proven idea that describes how people locally preferred to solve typical environmental problems like design challenges. A locally typical set of patterns or a building with a set of patterns then constitutes a *pattern language*. Nikos Salingaros's addition to this topic clarifies the definition of patterns by differentiating between *pattern languages* that only describe geometric and structural solutions from *form languages* which express styles and trends. In order to add to a *genius* of a place, Alexander claims that it would help to use locally specific pattern languages in architecture again. Although this theory has been well received within the areas of architectural theory and city planning, it is seldom applied.

Seeing the *genius loci* as an informed space is a new point of view that is also part of this category. According to this point of view a space can be considered "informed" because it is capable of storing learned information about what of its configurations worked well/badly in its structure by adapting to changes in time by trial and error.[563] One set of methods that can be comparable to this idea and viewed as a translation into architecture are again the works of Alexander and Salingaros which have been public since 2002 and continue to be developed today. They built on their previous ideas of an *unnamable quality* as well as *pattern languages*. The *genius* is still described as an innate life-quality which is perceivable in all animate and inanimate entities and is now called *architectural life*. Because Alexander did not consider his concept of *pattern*

---

561 Müller in Heimrath & Mallien 2009, pg 129
562 Müller in Heimrath & Mallien 2009, pg 128
563 Müller in Heimrath & Mallien 2009, pg 131

languages as comprehensive enough, he developed the so-called *Alexandrine organic world view*. According to this, each object, person or place is made of a structure of perceivable centres that interact with one another and its surrounding centres. The intensity of *architectural life* or the *genius loci* depends on how coherent the whole entity is due to the interrelationships of all the centres. Alexander and Salingaros both developed properties and laws that describe a structure of built environments which stores such information. This stored information can for example communicate which aspects in architecture people consensually consider to be more amiable and tailored to human sensibilities on the one hand or to abstract idealised *form languages* on the other. Like their previous works, their idea of the *genius loci* again echoes energetic and spheric conceptions. They also, like before, agree with the scientific consensus that people and places equally influence each other. They add, however, that although humans can alter their environment and are not only at its mercy, human preferences are not exclusively a matter of taste but also determined by their inborn human capacities of perceiving and interacting with the world.

Metaphoric genius as sum of all aspects: The last category is made up of a point of view according to which the *genius loci* is be viewed as the complete identity of places. This point of view gathers all possible information on a place, subsumes its findings and formulates an identity which is expressive of the sum of all aspects of that place.[564] This is the one category that has not produced any comprehensive and holistic methods yet. As Anssi Paasi stated, all existing methods or theories about the people-place relationship either focus on the *people's place identity* or the *place identity of a place*, never both at the same time. A method that wants to describe the full identity of the place, however, would have to describe both. As of today, a researcher who wants to apply this point of view would therefore have to attempt to encapsulate a huge amount of information in their research and simultaneously use as many scientific methods and approaches as possible.

The scientifically, already existing methods that the researcher would need to combine are within the points of view of the *genius loci* as:

- memories of a place,
- a spheric realm or atmosphere (abstract *genius*, psychological/ cognitive and phenomenological models, topic-related like health and function),
- an abstract principle (themes and people's narratives about places), or
- a spacial organism (visual landscape assessment methods).

As already demonstrated, these methods are stand-alone and not constructed to be connected easily. When it comes to the *place identity of a place* the conception of the *genius loci* as a spatial organism or memory of place do not offer any direct or holistic methods, but at least many singular methods that attempt to assess places from many perspectives.

---

564 Müller in Heimrath & Mallien 2009, pg 131-132

2.3.3 Summary of the Analysis of Known Conceptions and Methods
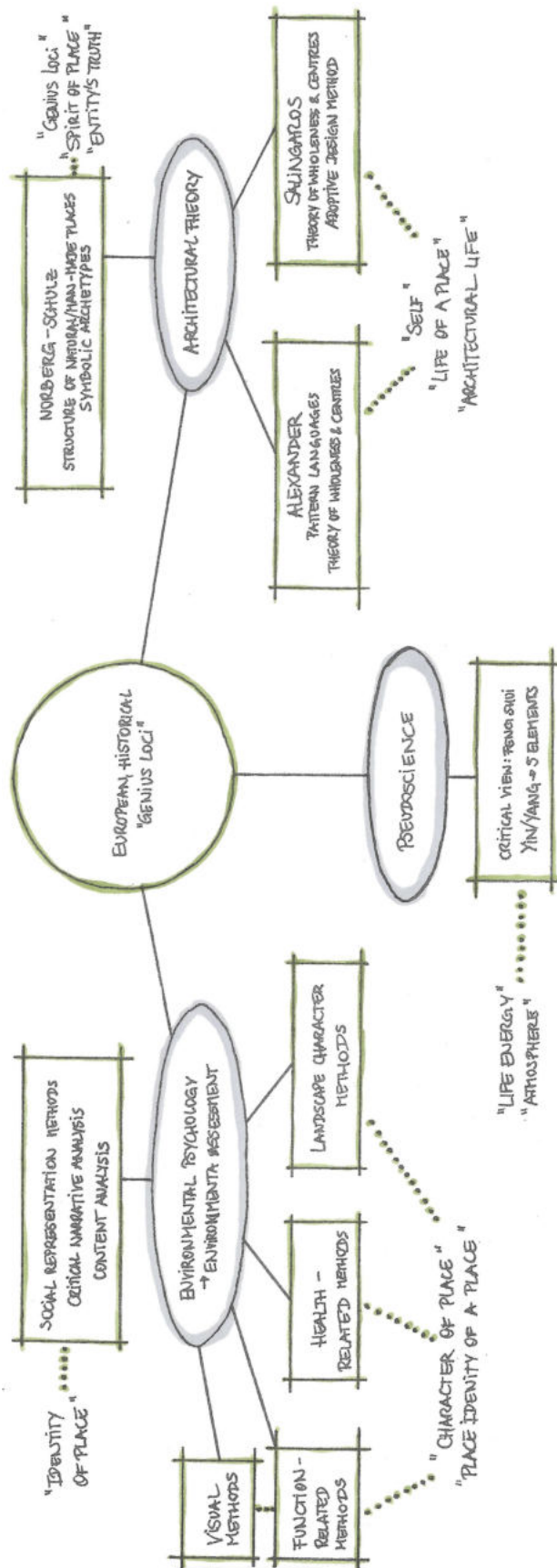

Image 43: visualised overview of all researched methods and their interpretation of "genius loci"

Name for Genius Loci	Interpretation of Genius Loci	Methods
Identity of place	The identity is determined by the sum off all place-related identifications.	Narrative interview critical narrative analysis qualitative and quantitative content analysis
Character of place, **Place Identity of Place**	The topic-specific *genius* or identity is determined by topic-specific character traits of a place.	Visual landscape assessment methods function-related landscape assessment methods health-related landscape assessment methods landscape character methods
Genius loci, **Spirit of place,** **entity's truth**	The place is one personified (archetypal) soul-bearing entity with character traits.	Norberg-Schulz's method
Self, **Life of a place,** **Architectural life**	The self of the place is determined by the properties / characteristics of its structure.	Alexander's theory of wholeness and centres Salingaros' additions to Alexander's theory of wholeness and centres Salingaros' thermodynamic analogy
Life energy, **Atmosphere**	The self of the place is mostly determined by the way the energy expresses and flows through the place.	Aspects of feng shui (Chinese and later Japanese philosophy)

Table 20: summary of which methods use which names and concepts for describing the genius loci

2.4 Developing a Method of Describing the Genius Loci for Designers

The third research question is called *"Which methods are suitable for designers? Or if there are none, what could a method look like that could be suitable for designers?"*. As the previous research has already demonstrated, there are no established or esteemed methods to describe the *genius loci* for designers at the current moment. Instead there are many ancient and contemporary as well as scientific and pseudoscientific or mystical approaches which prove to be mostly incompatible. For that reason a new method needs to be extracted from all previously described known methods in order to answer the third research question. Due to the limitations of this master's thesis, the author cannot test all presented methods for their usability for designers in the field first and then develop a new method on the basis of that practical and realistic data. Instead, the author will keep to using the theoretical data only to develop and discuss a personal suggestion or proposal for a new method.

2.4.1 What Designers Need in a Method of Describing the Genius Loci

Before beginning the development of the method, it needs to be established what designers actually require for describing the *genius loci* in their line of work. This thesis deliberately develops a method for designers <u>in general</u> without specifying what type of designers they are (architects, landscape architects, city planners, interior designers or garden planners etc.). This approach has been chosen because any designer, no matter how big or small their project and no matter what kind of designs they are providing, is faced with physical references and spatial context as it is perceived by people – the *genius loci*. Because the *genius loci* and its atmosphere or character is the one aspect that many scientific disciplines touch upon and that especially all designing disciplines need to include into their work in one way or another, the method has to be multi-disciplinary.

In order for a method to be usable for many different disciplines, its structure and formulations must be simple, concise and not too complex or complicated. By keeping it simple and not too specific, the method has a higher chance of working on different scales as well. Just like Salingaros differentiated between *pattern languages* and *form languages*, this method needs to provide certain patterns of how to problem solve and approach a *genius loci* for every designer, while the designers can then choose their own way of working with the described *genius loci* and its specific form.

2.4.2 The Purposes and Limits of This Method

The method presented in the following chapter, is a holistic and generalist approach that supports designers in understanding the main identifications of and with a place and its immediate surroundings on the one hand as well as its general atmosphere and the atmosphere of the surrounding places on the other hand. It does not offer any analyses on specific topics like soil, climate, demographics or architectural styles. For that goal other tools need to be consulted. This choice had to be made because the author of this thesis is convinced that one tool can only achieve one of the two following things: a) work holistically on a phenomenon but without any or with less specific data or b) work with specific data but without being able to cover the whole phenomenon holistically. The author further believes that if a researcher wants to work on a phenomenon both

holistically and specifically, several tools have to be combined in larger-scale studies or design processes – one method cannot do both.

The main reason why the method is generalist and holistic instead of specific is simply because the *genius loci* is per definition exactly this: generalist and holistic. A method or even a set of methods that work primarily or exclusively with gathering topic-specific data (like soil, climate, demographics or architectural styles) would therefore be impractical. These claims are backed by the research of this thesis. It has shown that although scientists consent that an identity is the sum of all its characteristics and influencing factors, they find it majorly challenging to define what specific characteristics and influencing factors a method or theory should encompass. And for that reason there are no esteemed methods to do this so far. The same is the case for the *genius loci* as a soul-bearing entity – there are no scientific methods for this specific topic so that this thesis had to expand its research to methods on related terms.

The second reason for creating a generalist and holistic method lies in the fact that the core of the new method is the human perception and its approach phenomenological. The specific soil type, for example, does not matter for the *genius loci*, because the only aspects of the soil that the average person can perceive with their human senses is that it is for example hard and dry or moist and sticky. In this sense this method only examines which aspects and properties of all scientifically and objectively measurable topics as well as dynamics of these aspects people can perceive. This method can therefore first of all be used in order to understand into what perceivable dynamics, characteristics and identifications the new design is inserted. Second of all, it helps to estimate what perceivable dynamics, characteristics and identifications the new designs itself brings to the place and third of all it enables the designer to anticipate what new perceivable dynamics, characteristics and identifications the combination of the new and existing elements in the environment might result in.

On the other hand, the method cannot be used in order to assess or evaluate whether any of these existing or new perceivable dynamics, characteristics and identifications can be considered desirable to people and perceived as "good" or "bad", "healthy" or "unhealthy" etc. This evaluation can be assessed by other tools, but is ultimately up to everyone individually. Designers will therefore always work within the field of tension between what their clients want and like on the one hand and what natural and man-made potentials the place offers on the other hand.

2.4.3 Underlying Conception of Spaces, Places and Landscapes

Like every method that describes the *genius loci* or an equivalent term, the new method needs to be backed by certain conceptions about localities. First of all the general scientific consensus will be adopted that a *space* is a theoretical spatial term that holds all potentials while a *place* is a concrete spatial term which uses some of the potentials, has characteristics, properties and has been given some kind of meaning by people. Second of all these places are both determined by their physical features and boundaries as well as socially through people's individual and collective perception. In this sense no mystical but only scientifically developed conceptions are taken up.

2.4.4 Underlying Conception of the Genius and Resulting Genius Loci

This thesis determines the definition of the *genius loci* along the lines of the definitions of *space* and *place*. Therefore a *genius* has two aspects. First of all each place has a self that people project into it. Just like spaces are defined as theoretical and potential-holding concepts that become relevant as soon as meaning gets attached to them, the projected self of a place is theoretical and

holds all possible potentials that can become relevant to anyone and anything (items, animals, people etc.) who and that interacts with the potentials and attaches meanings to them or has people or animals attach meanings to them.

The second aspect of a *genius loci* is the identity that a place assumes as soon as people attach specific meanings to it. These meanings are created by people as they begin to identify themselves in relation to the new environment and begin to identify the new elements in relation to other already identified elements. In other words, the identification process generates the meanings that people attach to places. The sum of a place's now meaningful details, characteristics and therefore used potentials form its identity.

The differentiation between a *genius loci* as a self as well as an identity of a place is not only derived from the definitions of spaces and places but also justified by what the methods of this thesis and science reveal about the general human perception. First of all it is noticeable that despite their cultural disconnect the ancient and historical Asian as well as European conceptions of the *genius loci* agreed that a place has some kind of a self. Furthermore many other methods claimed that people perceive places to have a self (i.e. Norberg-Schulz, Alexander and Salingaros). Second of all it is empirically proven that people have an instinctual desire to find and project their likeness into their environment. This phenomenon is called *anthropomorphism* and originally describes a process in which humans (Greek: anthropos) project (Greek: morphe = shape / form) life into non-human or inanimate entities and use human-like descriptions of their properties, intentions, preferences etc. The term is less about witnessing actual human-like life in an inanimate entity, but more about the fact that the human perception tends to interpret observable characteristics in a human-like way. Popular examples for this phenomenon are personified and personality-having divinities (see ancient Greece and Rome)[565], seeing a face in the front of a car[566] or interpreting human-like intentions into the behaviour of an animal[567]. In the same manner human-like characteristics might be equally interpreted by people's perception into a place's observable characteristics. Just like Norberg-Schulz argued, because this phenomenon exists, it does not matter if one thinks an item has a literally conscious or simply a projected self. Despite a missing conclusive explanation[568], the existence of this phenomenon is evident and therefore needs to be incorporated into the conception of a *genius loci*.

In contrast to the *genius loci* as a projected self of a place stands the *genius loci* as the observation-based and empirically deducible identity of a place. As this thesis laid out, science consents that identities are complex, changing and relative to many factors (like place, time and individual person). In the on-going identification process according to Graumann, people constantly interpret what they see and identify things in certain ways, are being identified by others in certain ways and identify themselves with certain things and in certain ways. Thus people form ever changing identities that are authentic for every current situation for each animate and inanimate entity. While some of those identities are made personally and are unique to that individual, others are made collectively as a consensus. In this sense an identity always functions like a snapshot in time of how people are identified with the place (*people's place identity*) and what people identify with and in the place (*place identity of place*) – just like the human geographers Relph and Paasi differentiated.
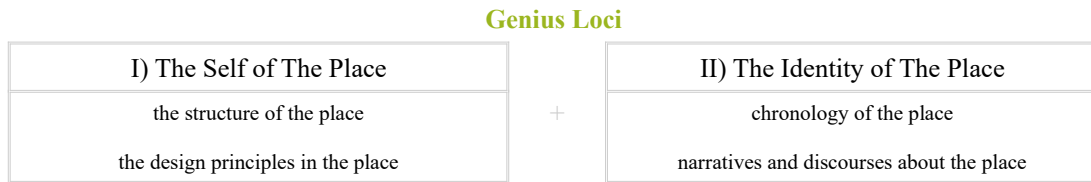
---

565 Cacioppo, Epley & Waytz 2007, pg 865
566 Aggarwal & Mcgill 2007, pg 3
567 Cacioppo, Epley & Waytz 2007, pg 865
568 Cacioppo, Epley & Waytz 2007, pg 864

2.4.5 New Method of Describing and Evaluating the Genius Loci for Designers

Because of the differentiations of the *genius loci*, the method consists of two parts that analyse the following aspects:

Genius Loci

I) The Self of The Place		II) The Identity of The Place
the structure of the place	+	chronology of the place
the design principles in the place		narratives and discourses about the place

Part I – The Self of the Place:

The first part of the method of describing the *genius loci* for designers considers the *genius* as an abstract self that humans project into a place. It is looked at first because it is the more generalised aspect of the two parts. This part of the method will visualise the general structure of the place and how its component parts are interconnected and interact with one another. Furthermore this part of the method will offer a descriptive language system to describe both the structure and general atmosphere and character of the place. Those two steps of part I are allowed to be applied simultaneously or in no particular order.

Let us begin with the general structure of a place. In order to analyse this, the method adopts the *Alexandrine organic world picture*. This conception of Christopher Alexander claims that people perceive the world in centres that express life. In a simpler way, one could see these centres as clustered points of interest that draw people's attention to them. The more dense, intense and interconnected these centres work, the more clearly they constitute whole entities like items, a loose cluster of items or in fact a coherent place in which each item seems to enhance the wholeness of the place. When the designers begin to analyse the *genius loci* as a self, they first have to step into the place and become observers or study photos and layout plans of the place. Then they create labelled sketches that visualise, where and how intensely the centres are perceived or in what manner they interact in that place. The resulting drawing will be made of points, lines or shapes and possibly labels that indicate the centres (points), clusters of centres (lines or shapes) and any further information (labels) of them. Alexander's 15 properties are not the most useful in describing the drawing for the sake of describing the *genius loci*. This is because the 15 properties were formulated to judge whether a place or architecture is "good" or "bad" and "suits" or "does not suit" the human nature. The *genius loci*, however, is not supposed to judge but only describe. For that description the next tool is developed.

After visualising the structure of the centres as basic points of interest to human perception, the other step of this part of the method uses a coded descriptive language in order to methodically put words to both the structure as well as the characteristics of the place. Because the self of a place is merely the projection of people's concept of human personality and character, the author consulted the existing tools for describing this human character and characteristics with the intent to translate them into a spatial context.

The research of people's natural or inborn character was conducted with vigour in psychology especially in the 20th century and expressed in many personality systems and theories.

In order to describe people's temperaments or personalities, they often used archetypes that were rooted in culturally established symbols. Although the thesis did not analyse personality systems yet, one set of such culturally established symbols was already explored: the five elements in the Chinese and later Japanese philosophy. Those symbols, as part of *feng shui*, are set up in a logical even if not scientifically valid system which creates a methodical language. This enables people to put words to any universal dynamics or expressions of life through evaluating the main perceivable design principles. Using symbols is only ever workable if they are meaningful to the people using them. The set of symbols that this thesis presented, for example, are rooted in Asian philosophy and are therefore unfamiliar and illogical to many European or western designers. For that reason European and western designers it would be helpful to find another set of symbols that are similarly rooted in their culture. Those symbols could then be applied as archetypes in order to grasp the over-all "temper" or "expression of personality" of a place, just like the five elements in the Chinese and later Japanese philosophy do.

As the research about identities has already shown, in the 20th century the focus was on individual identities. With this came an increasing number of studies about people's personalities and different conception developed about whether people's personalities are hereditary and determined by nature (essentialists) or learned and environmentally determined (constructivists) or to which degree both are the case. Most methods which claim that it is mostly or completely determined by nature are called temperament theories and use noticeably similar symbols for their archetypes and personality profiles. The symbols themselves predate the scientific research field of psychology, are about 5000 years old and not limited to the European area.[569] Originating in Ancient Egypt (3100-30 BC), later Mesopotamia[570] and the *old testament* (in the *Book of Ezekiel* – 593-571 BC)[571], the symbols with their meanings can be traced back next to Empedocles, Hippocrates, Plato, Aristotle and Galen in ancient Greek and the later Roman Empire.[572]

While Empedocles (495-425 BC) described the four human temperaments with the elements of air, water, fire and earth, Hippocrates (460-377 BC) and later Plato (424-347 BC)[573] as well as Aristotle (384-322 BC)[574] connected physical properties (body fluids, temperature and moisture) and seasonal periods to those personalities and personal states of being called "humours": cheerful, blood and spring (air); enthusiastic, yellow bile and summer (fire); sombre, black bile and autumn (earth); and calm, phlegm and winter (water). According to them, a body with an imbalance of these humours was unhealthy or more likely to attract certain ailments[575] and certain combinations made people more likely to be either physically or intellectually strong[576]. In the Roman Empire Claudius Galen from Pergamum (131-200 AD)[577] developed nine personality types based on the four temperaments and their degree of dominance or weakness. The main four temperaments were now referred to as sanguine (air), phlegmatic (water), choleric (fire) and melancholic (earth)[578]. The following table shows the most recognizable views on the four temperaments in Ancient Times.

---

569 Nodoushan 2011, pg 34
570 Okal 2012, pg 56
571 Nodoushan 2011, pg 35
572 Okal 2012, pg 57
573 Okal 2012, pg 57
574 Okal 2012, pg 58
575 Okal 2012, pg 57, Nodoushan 2011, pg 35
576 Okal 2012, pg 58
577 Okal 2012, pg 58
578 Nodoushan 2011, pg 35

	Temperaments			
Ezekiel (590 BC)	lion	eagle	man	ox
Empedocles (450 BC)	air	water	fire	earth
Hippocrates (370 BC)	blood	phlegm	yellow bile	black bile
Hippocrates (370 BC) four qualities	hot and moist	cold and moist	hot and dry	cold and dry
Plato (340 BC)	artistic	sensible	intuitive	reasoning
Aristotle (325 BC) continuation to social order	artistic and art-making	common-sense and care-taking	intuitive sensibility and morality	reasoning and logical investigator
Aristotle (325 BC) four sources of happiness	sensual pleasure	acquiring assets	moral virtue	logical investigation
Galen (190 AD) four temperaments / four humours	sanguine	phlegmatic	choleric	melancholic

Table 21: temperaments in Ancient Times according to Nodoushan 2011, pg 36

Although none of the specific systems are scientifically provable (body fluids etc.), the symbols and associations used in those systems were, as mentioned before, used in the 20th century in various schools of personality research.[579] The following table shows a brief overview of how the same archetypes were called in different researches or theories.

	Temperaments			
	air	water	fire	earth
Eric Adickes (1905) four world view	innovative	sceptical	doctrinaire	traditional
Eduard Spranger (1914) four value attitudes	artistic	theoretic	religious	economic
Ernst Kretschmer (1920)	manic	over-sensitive	insensitive	depressive
Eric Fromm (1947)	exploitative	receptive	marketing	hoarding
Myers (1958) later: 16 personalities	perceiving probing	thinking tough-minded	feeling friendly	judging scheduling
Keirsey (1998) 16 personalities	sensing-perceiving	intuitive-thinking	intuitive-feeling	sensing-judging
Montgomery (2002)	spontaneous and playful	ingenious and theoretical	Intuitive and fervent	sensible and judicious

Table 22: temperaments in 20th century personality research according to Nodoushan 2011, pg 37

Two contributions shall be added to this, because they use the same terms as Galen, but in a slightly different way. The behaviourist Pavlov for example tested the way dogs responded to different stimuli that announced the beginning and end of feeding time and documented their tendencies concerning arousal and inhibition. He took Galen's differentiations of temperature (cold, hot) and moisture (moist, dry) and translated them into the amount of arousal and the ability for inhibition.[580]

	Good inhibition	poor inhibition
Lots of arousal	sanguine	choleric
Not much arousal	phlegmatic	melancholic

Table 23: temperaments by Pavlov's behaviour research according to Nodoushan 2011, pg 38

---

579 Nodoushan 2011, pg 34
580 Nodoushan 2011, pg 38

Eysenck (1947) also used the same terms as Galen, but he was the first to determine people's personality along two dimensions rather than the four types directly. The dimensions are a) extrovertedness ↔ introvertedness and b) stability ↔ instability (or rational ↔ emotional). His method focussed on the stability of a character for the first time.[581]
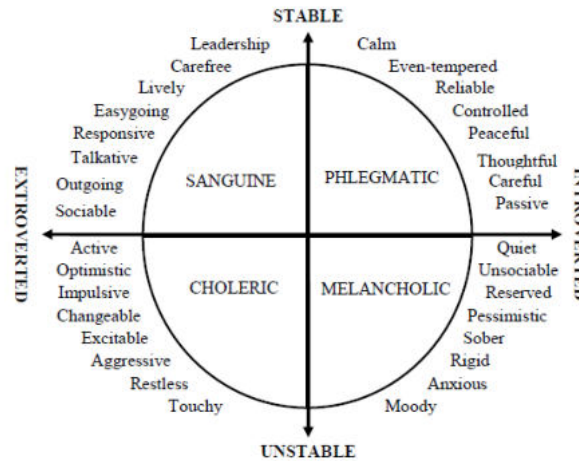

Image 44: the four temperaments as dimensions (as in Nodoushan 2011, pg 38)

There are also other personality systems that do not use these archetypes, the most scientifically esteemed is called the Five Factor Model. However, the character traits (openness, conscientiousness, extraversion, agreeableness, neuroticism) of this model were derived from specificities of the human character and not universally applicable. According to a research about personality concepts, the respective author created a table that integrates the Five Factor Model with all the above mentioned models into one table to show their relatedness, which despite the differences, shows a certain relatability of the general models with the human-specific model.[582]

	humour	temperament	neuro-transmitter	character traits
air	sanguine	novelty seeking	dopamine	Social attachment: playful, social, care free, talkative, pleasure-seeking
water	phlegmatic	persistent	Glutamate, serotonin	Partial reinforcement: inward, thoughtful, reasonable, calm, caring, tolerant
fire	choleric	reward dependence	Nor epinephrine, serotonin	Behavioural activation: egocentric, extraverted, excitable, impulsive, restless, ambitious, likely to take charge
earth	melancholic	Harm avoidance	Gama amino Butyric Acid	Behavioural inhibition: serious, introverted, cautious, suspicious

Table 24: relatedness of methods according to Kavirayani 2020, pg 18

After studying the personality or temperament theories, it is time to reinterpret them in a spatial context. For the research of this thesis one method was found that already translates the above described archetypes for the general human character into design principles. The American author and entrepreneur Carol Tuttle developed a personality concept after having privately studied both the Asian philosophies of life-energy as well as western texts about metaphysics and human personality concepts. Although her personality concept is a theory with no specific scientific evaluation so far, the *energy types* (≙ archetypes) that Tuttle uses in her model are congruent with the historical, metaphysical elements or types that have been presented above. An brief overview of

---

581 Nodoushan 2011, pg 38
582 Kavirayani 2020, pg 184

Tuttle's description of the *energy types* for describing the *genius* of people as well as her design principles for the personal style can be found in annexe B and C, pg 174 and 175 of this thesis.

Just like the five elements or "walks of life" in the Chinese and later Japanese philosophy, the archetypes might look like categories of places, but they are not. Instead they are merely the methodical structure of a descriptive language that can be applied to describe the *genius* of anything or anyone. According to the holistic approach of both this ancient philosophy as well as the character of the *genius loci*, the archetypes are used in a both/and- instead of an either/or-approach. An entity is not sorted into either one or another archetype like a category, but each entity expresses all archetypes and at the same time. Even contradictory descriptive words can be expressed by one entity (place, item etc.) at the same time. While the whole entity always expresses several archetypes, its design principles can be described via the archetypes.

Notably, in her model Tuttle replaced all clearly negative adjectives and descriptions like "depressed" or "hyper-active" with more neutral words. This choice seems to go along the lines of the ancient Asian philosophy as described before. The author of this thesis agrees with this mindset and argues that the perception of whether something is positive or negative, constructive or destructive or desirable or worth avoiding is subjective and should not already be part of the primary description of something. After describing something in general, each person can decide for themselves how they feel about it and what they want to do with the information. For this reason all descriptive words in table 25 were formulated without any clear negative judgements. Furthermore the author used the names Tuttle gave the *energy types*. The numbers 1-4 four are not judgemental and the order of them is, just like the five Asian elements chosen according to the natural phases of most processes in life: the beginning of projects with many ideas and possibilities (air → type 1), asking questions, researching and planning ahead (water → type 2), making determined choices and creating results (fire → type 3) and concluding, reflecting and further improving or perfecting the result (earth → type 4). Another aspect that Tuttle's concept offered is the description of the quality of colours according to what the colour-theory calls hues (pure colour) that appear clean and bold, tints (hue + white) that appear bright and light, tones (hue+ grey) that appear soft and cool as well as shades (hue + black) that appear rich and warm.
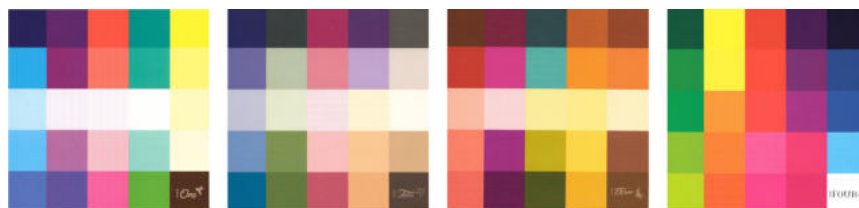

Image 45: tints (type 1), tones (type 2), shades (type 3) and hues (type 4) (as scanned from the cards of the official Style Kit 2015)

When applying this part of the method the designers observe the place either in person or through pictures just like they did for the visualisation of the structure of the place. In order to describe the place's design principles, the designer references table 25. In this table the author has fused the historical archetypes, Tuttle's *energy types*[583] and according design principles[584] as well as the design principles (colour, shapes etc.) that the *visual landscape assessment methods* and the *landscape character assessment* models used, into one descriptive system of archetypes. The first part of the table reminds the designer of what each archetype expresses. The second part is an overview of how which part of the spectrum per design principle is described by which archetype. This part is therefore the most immediately important for the designers when they analyse a place.

---

583 Tuttle 2015, pg 71 & 99 & 126 & 157
584 Style Kit 2015

General Expression	**1 (Air / Sanguine)**	**2 (Water / Phlegmatic)**	**3 (Fire / Choleric)**	**4 (Earth / Melancholic)**
General Movement	direction = yang • outward, open quality = yin • light, playful	direction = yin • flow inward quality = yin • soft, relaxed	direction = yang • push forward quality = yang • substantial, edgy	direction = yin • still, reflective quality = yang • bold, structured
Intensity of Movement	• high, busy	• low → medium	• medium → high	• low → almost none
Associative Words	• animated, playful, youthful • airy, bright, light, crisp, fresh • casual, informal, easy-going, asymmetrical, disconnected, random, unconstrained, flexible, adaptable • energetic, fun-loving, lively, vibrant • imaginative, surprising, unexpected, perky • refreshing, renewing, positive uplifting outlook	• blended, muted, subtle, restraint • detailed, delicate, intricate • relaxed, retiring, soothing, inviting, comforting, calm, quite • flowing, fluid, connected, connecting • gentle, soft • mysterious, romantic	• active, adventurous, daring, energetic, exciting, passion-evoking • angled, asymmetrical, sharp, fiery, edgy • physical, practical, no frills or fuss • purposeful, action-motivating • rough, textured, rugged, rustic, uneven • substantial, intense, loud • swift, dynamic, fast-paced • earthy	• stark, authoritarian • all or nothing: opulent or minimal • bold, notable, striking • classic, formal, well-structured • clean, exact, refined • contrasting, clear, defined, distinctive • sleek, smooth • still, tranquil, serene, reflective
Orientation / General Affordances	• being very social • having freedom and fun • experiencing newness	• relaxing • connecting with people, history, self • comforting, soothing self	• creating results • achieving goals • getting physically active	• reflecting (more cognitively than emotionally) • making clear statements

Design Principles	**1 (Air / Sanguine)**	**2 (Water / Phlegmatic)**	**3 (Fire / Choleric)**	**4 (Earth / Melancholic)**
Shapes / Design Lines *ask: What lines and shapes stand out at first glance?*	• circles, parts of a circle • stars, points of a star (= very narrow angles) • heart, parts of a heart • curls • any animated shape • a random combination of shapes	• s-curves • flowing connected lines • tear-drops • rounded rectangles • long ovals	• all angular shapes • dynamic angles and lines	• parallel lines • perfect rectangles, squares, ovals with parallel sides • super clean lines • symmetric lines • right angles
Patterns *ask: In what patterns are the lines and shapes arranged?*	scale: • small placement: • randomly • disconnected • upward moving patterns	scale: • medium → small (factor of about 2.7) placement: • connected • blended	scale: • medium → big placement: • angular, asymmetrical	scale: • big or none placement: • regular • symmetrical • bold statement or none
Objects *ask: What is the scale and the arrangement of the objects?*	scale/amount: • light, smaller elements placement: • flexible • random	scale/amount: • medium, proportionate (factor of 2.7) elements placement: • relaxed • harmonious	scale/amount: • substantial, bulky elements placement: • dynamic • angular	scale/amount: • bold or few elements (all or nothing) placement: • deliberate • symmetrical
Textures *ask: What quality and scale do the textures on objects and surfaces have?*	quality: • crisp • slightly nubby scale: • small	quality: • plush • soft scale: • small → medium	quality: • coarse • rugged scale: • medium → big	quality: • sleek • smooth scale: • fine → none
Colours *ask: What type of colours do you see? How do the colours relate to one another?*	type of colour: • tint = hue + white • seem "light and popping" • bright colours • random colour combination degree of contrast: • medium → high contrast metals: • high sheen gold / silver	type of colour: • tone = hue + grey • seem "cool and soft" • desaturated colours degree of contrast: • low contrast metals: • aged, greyed silver, pewter, brushed silver	type of colour: • shade = hue + black • seem "rich and warm" • multiplied colours degree of contrast: • medium contrast metals: • bronze, copper, brass, gold	type of colour: • hue = pure colour • seem "clear and clean" • pure colours degree of contrast: • very high or no contrast metals: • shiny reflecting silver

Table 25: the four archetypes (original tool of describing the genius loci for designers)

By using this coded descriptive language one designers can plan and communicate exactly

- which over all effects the design principles are supposed to have,
- in which aspects of the place they are supposed to be expressed, and
- to which degree they are supposed to be expressed.

One can for example decide to pronounce or reduce the over all impact of one archetype in a place. By adding or taking away aspects that express certain archetypes the place can for example appear more lightened up (type 1), softened (type 2), intensified (type 3) or structured (type 4).

If many designers know which sets of characteristics and feelings are associated with which archetype, they will quickly be able to grasp the feeling or atmosphere of a place from a short summary without having to know or study how which element looks and functions. This is even the case for different types of designers with their field of expertise. The descriptive language system of the four archetypes will make it easier and more precise to describe a current situation or future intention in the design process. While the archetypes would describe the general quality of the existing site or the intended feel for the new design, the architect, landscape architect and interior designer would each deduce their own set of building styles, materials, finishes etc. that accommodate what the types describe. For a primarily type 2 design with a secondary type 4 influence, the landscape architect might for example add many actual water features (type 2) but in artificial and square basins (type 4). The interior designer would pick a rounded couch with very plush fabric (type 2) but with a black and white pattern (type 4) and the architect chose a grey concrete facade with many windows in it (type 2 and 4). In this manner the first tool of the method helps making the indispensable communication of the over all vision and intention clearer and more precise.

Because the four archetypes were created to describe any kind of *genius*, their application does not have to be limited to the place that is supposed to receive a new design, but could also be used for analysing the immediately surrounding areas, superordinate areas (cities or landscapes) or relevant people. A good understanding and communication of those *genii* enables the designers to deliberately connect and disconnect these places or actors through design. While entities seem connected when their different aspects with design principles express similar archetypes, entities seem disconnected when the opposite is the case. What entities (elements, areas or people) are supposed to be connected or disconnected through design is up to the designer and their client. A design task could for example require the designer to make a new additional design in-keeping with the rest of the plot or the surrounding quarter. The designer could, however, also be asked to create a design that is in a contrast to the current *genius loci* and more in-keeping with the *genius* of the client or a new usage.

One obvious challenge of this part of the method is that it introduces a technique (the holistic both/and approach and a new coding language for descriptions) that is not at all established so far. Even though the locally and historically relevant archetypes might make the establishing process easier and although the system itself is not complicated, this new technique will require an initial explanation and justification. As soon as the concept has been understood, it is very simple and effective to make sure that the over all feeling of the place is deliberately and consciously affected by the designer and not neglected. Because this part of the method can only grasp the general feeling and atmosphere of the place, however, any further studies concerning more specific aspects of the *genius loci* require the application of the next part of the method.

Part II – The Identity of the Place:

The second part of the method examines the *genius loci* as an identity of a place and researches the place- and time-specific meanings and identifications people have attached to the place. This part of the method requires the designers to do literary and field research that includes input from the outside. Over all, this part of the method gathers information about the historically factual heritage as well as people's subjectively remembered identifications with the place as a whole or certain elements. It does therefore also not differentiate between *people's place identity* and *place identity of a place* and is intended in inform the designer about both aspects.

First of all the designers put together a brief chronology of the place's history from all necessary / appropriate sources from people's personal records, official archives etc. Especially with projects that have a big environmental or cultural impact, it is best to also include information about the bigger historical context, although this does not have to be done in much detail. With an increasing environmental and cultural impact, it becomes more important to use different types of resources and consider different points of view. In order to strip the chronology of irrelevant formulations or any evaluations of the facts, it is assembled by gathering the most relevant time references and explaining them only in short keywords.

With many private and especially more contemporary private properties the only archival information might be blueprints and development plans as well as possible studies or inquiries that were made since developing the site. In order to understand further past and present developments, the private owners can be asked. When it comes to public or old areas and especially bigger ones like estates, villages, cities or landscapes, archives might offer more information. In general the most immediate sources are administrative offices, archives, geo portals as for example gaia-mv[585] for Mecklenburg-Western Pomerania or google earth apps. For using any other, more specific sources like papers, magazines, books, TV pieces and many more, the designers can also ask the authorities and residents for any relevant sources they are aware of.

Second of all the designers conduct *narrative interviews* with the appropriate amount of affected people like for example the clients or residents and so on. The choice of the type and amount of interviewees ought to consciously be chosen according to the impact of the project. Most designs on private property have distinct clients and depending on the size of the plot have a more limited impact on the surroundings. In this case interviewing only the owners of the plot and or the clients is enough. For bigger and more public areas like parks, streets and city quarters for example a bigger sample of deliberately diverse interviewees must be chosen. If due to limited resources, smaller samples of people need to be chosen, the selective sample needs to show the highest variety of demographics as possible (→ theoretical sample).

The *narrative interview* is executed along a prepared guideline. This guideline outlines the steps and rules of such an interview for the designer or interviewer. After introducing the topic to the interviewee and asking them to present their point of view, the designer or interviewer listens actively and without interrupting. In the questioning phase the guideline offers mostly open-end question to evaluate the more specific way the interviewee perceives the place and eventual attachments or detachments. Both the main narration and the questioning phase can therefore generate information about both the way people are attached to the place as well as the characteristics that people attach to the place. The content of the questions is based on a subsumed

---

585 GAIA-MV geoportal professional 2020

list of all the characteristics of the previously presented visual assessment methods, studies as well as health-related methods, since these values seem to be the consensually most important characteristics to people's perception. The more detailed steps of creating this subsumed list can be found in annexe D, pg 177. Depending on the interviewee and the design project at hand the interviewer needs to always adapt the formulation of the questions or decide to leave some out that were sufficiently answered in the main narration. In order to do that fast each question is proceeded by the main piece of content that the question is supposed to explore.

Guideline for Narrative Interview	
Initiation phase	Questions: • What would you say is the essence or spirit of this place? • What is worth telling about this place to you?
Main narration	Interviewee talks freely, without interruption or questions & interviewee listens actively. The conversation is either recorded or the interviewee takes notes.
Questioning phase	Questions: 1. Coherence of the place: How coherent, unified or disconnected and pieced together does the place feel for you? 2. Origin of the elements: How native, local or international and foreign do the elements seem? 3. Orientation within the place: How well can you orientate yourself in the place and how well do others seem to be able to orient themselves in the place? 4. Accessibility / Usability: How accessible and how useful do you experience the place as a whole and its elements? 5. Complexity: How complex and divers in detail does the place or its elements seem to you and others? 6. Comfort / Safety: How comfortable and safe do you and others feel in the place? 7. Interest / Uniqueness: What do you feel makes this place special, unique or separates it from other places? 8. Visual presence: Is this place a visual point of interest to you and your community or are there visual points of interest within the place? 9. People-place relationship: What is your relationship with this place and how do you feel people are connected / identified with this place? 10. Mystery / Intrigue: How interesting does this place seem and how much does it make you want to explore it? 11. Boundaries / Open spaces: How open or enclosed do you feel this place is? Do you perceive any strong boundaries, barriers or open, empty spaces? 12. Affordances: What activities do you feel this place affords people? How flexible, multi-purpose / inflexible / one-purpose is the place in offering those options for action and interaction? 13. Intentionality of design: To which extent do you perceive an intentional design or plan in the place? 14. State of the place: How intact, healthy and functioning do you feel the place is? 15. Context: How strongly and in which ways can you feel the historical, natural and cultural context in this place? 16. Connection to the outside world: How visible, audible, smellable etc. is the surrounding environment for you? 17. Stewardship: How do you feel about the people that make and made all the choices for what happens to this places?
Concluding Talk	This part is optional and can add an off-the-record segment in which the interviewer gets to question and ask the interviewee why some of the answers were given in order to understand the context of the answers. Then they part or move on to other joint matters in the design process.

Table 26: guideline for the narrative interview (original tool of describing the genius loci for designers)

After gathering all necessary information and creating a sufficient chronology and sufficient interview material, the narratives and discourses are then analysed with a reduced version of the *critical narrative analysis* as shown in table 27. This analysis is done after reviewing all interview and research material and the analysis applied to their total number, not to every single one. Even though the complex experiences of people are reduced to one narrative with its discourse, the analysis still names whatever opposing or contradicting views it contains, but without differentiating any further. Because the interviewer is not asked to retell the history of the place according to their memory, the interview can but does no have to add many events to the chronology. Thus the abstract, complication and resulting consequence of the narrative are often fed more from the chronology rather than from the interview. The interview then offers a lot of information about the actors (orientation) and sensations (evaluation) that are considered important. While the coda briefly summarises the main themes, lessons and outlooks of the narrative, the abstract is a more comprehensive summary, putting together the chronological actions, important

actors, complications, evaluations and consequences. Depending on the task, such a comprehensive summary might not be necessary and can be left out, unlike the coda which is always short and relevant.

The discourse is described next by noting down the main characteristics of the interview and interviewee's performance.

Guideline for Critical Narrative Analysis	
Narrative	
Abstract	Summary of the whole narrative in order to give the reader an overview of what topics to expect. This step is usually not used for most smaller design projects and replaced by the brief summary of the coda.
Orientation	Description of the main characters and actors like protagonists and antagonists, locations, time references etc.
Complication	Brief enumeration of actions described in the narrative.
Consequence	Resolutions of the Complication.
Evaluation	Descriptions of feelings and sensible aspects concerning the complication and resolution.
Coda	Summary of the main themes, lessons learned, outlooks etc.
Discourse	
Interpretation	S – setting and scene of interview(s) P – participants of interview(s) E – ends of interview(s) (agreements, further contact etc.) A – characteristic act sequence of interview(s) or characteristic order of speech elements K – the interviewee's key, tone, manner, spirit of speech speech I – instrumentalities of interview(s) (via phone call, in person etc.) N – social norms that are hinted at/explained by the interviewee G – genre (official narrative interview, casual conversation etc.)
Explanation	Relate discourse analysis to notes to the historical chain of events

Table 27: guideline for the reduced critical narrative analysis (original tool of describing the genius loci for designers)

The sensitivity that is offered by exploring the identity of the place as the second part of the *genius loci*, is directly intended for all affected people of the respective design. The traces in the place of historically factual heritage as well as people's subjectively remembered identifications with the place as a whole or certain elements are meaningful. As argued before in this thesis, people yearn for a certain meaningfulness of their environment that affords them orientation and contributes to their self-identity in a preferably positive way. Affecting this type of environment will therefore, if people are aware of it or not, have a considerable impact on their self-image and / or general feeling of comfort or pleasure in the place. Knowing about the most meaningful past events, well-known public figures or socially established narratives that are often expressed in the places structure and architecture, gives the designers important elements to consider in the design process.

Summary of the Method

In this manner the method explores the symbolisms that people generally project into places and their characteristics by visualising and describing the structure and characteristics on the one hand and summarising the factual historical chain of events as well as the subjectively remembered and lived identifications with the place.

I) The Self of The Place	II) The Identity of The Place
visualise: structure of all perceivable elements tools: understanding of centres and wholeness, drawing supplies describe: characteristics of all perceivable elements tool: the four archetypes (table 25)	enumerate: historical chain of events tools: all necessary and appropriate research sources analyse: subjective narratives and discourses about the place tools: guideline for narrative interview (table 26), reduced critical narrative analysis (table 27)

Because the first part of the method (self of the place) is based on the most basic, time- and place-unspecific mechanics of human perception, the visualisations and descriptions allow the designer to estimate what general associations, functions and projected character traits people are likely to perceive in the place. In this manner this tool helps the designers to understand the immediately perceivable context that all people are likely to experience, no matter how much they are attached to, identified with as well as ignorant or apprehensive about the place. The more precisely and detail designers can describe this context, the more effectively they can work with the potentials for usage and design that are attached to the respective immediately perceivable context.

The second part of the method (identity of the place) is rooted in people's place- and time-specific identifications about the place. A sensitivity of this identity helps the designer to affect the relationship of the place and those people who are already identified with the place as well as those whose relationship to the place is strong enough so that they identify specific things with the place. A person that is positively identified with a place or has positive identifications of the place will care more to make sure that either items in connection to their own identity or items with a strongly positive meaning are well-kept, functioning or changed for the better.

Because these holistic and generalist tools for describing the *genius loci* offer an understanding of the context, they should work as the backdrop or foundation to every design process. This is because consciously considering the *genius loci* and the *genii* that are affected by the design process, increases the likelihood of people accepting, caring for and further developing the final design.

2.5   Applying the New Method of Describing the Genius Loci for Designers

The new method has been created in order to be applied to a concrete planning project as well as concrete clients by designers. Because a sufficiently suitable method of describing the *genius loci* for designers was not found fast or early in the process of this thesis, the author decided to apply the method in a manner that does not produce representative data but that focusses on comprehensively showing the general operating principles of the method as well as its newly developed parts. The methodical steps that analyse the identity of a place contain methods that have been tried and tested in science for a long time and are therefore well established. For this reason this part of the method needs fewer examples in order to be sufficiently explained. Because the steps that describe the self of a place, on the other hand, are not established yet and were in parts only developed in this thesis, they require more examples to demonstrate their functions and values.

Due to the fact that the author of this thesis did not live in Neubrandenburg during her thesis and because the Covid-19 pandemic did not allow much travelling, the analyses were done from a distance. Interviews were conducted via phone calls (except for the first example place) and the visual assessments were done via photographs that colleagues kindly provided. As the table below shows, four example places will demonstrate the operating principles of the entire method by analysing the *genius loci* as both the self as well as the identity of the place. Last of all further nine example places will elaborate and substantiate the facets of the first part of the method that describes the *genius loci* as the self of the place.

	Places	Drawing of centres	Filled-in Table of Archetypes	Short chronology	Interview + Critical Narrative Analysis
1.	Market Square	x	x	x	x
2.	Plot on corner of Pfaffenstraße & Behmenstraße	x	x	x	x
3.	Kulturpark (north)	x	x	x	x
4.	Reitbahn Quarter at lake	x	x	x	x
5.	Market Square Centre	x	x	-	-
6.	City Wall and Gates	x	x	-	-
7.	Kulturpark (South)	x	x	-	-
8.	Playground "Am Stier"	x	x	-	-
9.	Villas Around City Centre	x	x	-	-
10.	Katharinen Quarter	x	x	-	-
11.	Brewery Quarter	x	x	-	-
12.	Bird Quarter	x	x	-	-
13.	Oststadt (East City)	x	x	-	-

Table 28: overview of all examples of the application

2.5.1 Example 1 – Market Square

1st Step (Self of the Place): Images

The first step of the method always requires the designers to preferably step into the place themselves or at least study images that sufficiently capture the place. Optionally images of the same place can be taken at different times of the day or the designer can ask for different images throughout the year. The following images show the market square in Neubrandenburg in autumn 2020 during a cloudy day.

Image 46: the west (left) and north (middle & right) sides of the market square (images by Kittner 2020)

Image 47: the east (middle) and the south (right) side of the market square (images by Kittner 2020)

It can also be useful to add satellite images that display the layout of the place in order to better understand the functions and dynamics that take place there. It has to be kept in mind, though, that this is not the perspective from which people usually perceive the place.

Image 48: satellite image of the market square and surroundings (with old hotel instead of the new Marien Carrée (image by Google Earth Pro 2020)

2nd Step (Self of the Place): Drawings of the Centres

In the second step the designers draw the centres or fields of centres in a considerably quick and loose sketch. Because the drawings are always made from a human perspective, they do not reflect much detail but simply the most visually or functionally prominent aspects. Those visually prominent aspects are made of centres that create lines (boundaries) that again form shapes that are filled with and surrounded by more centres (lines → shapes) as well as void areas. The resulting drawing therefore also often expresses the general lines and shapes that can be noted down in the next step where the designers describe the place via the archetypes. The x in the satellite image marks the spot from where the other images were taken.

Image 49: drawing: west (left) and north (middle & right) sides of the market square

Image 50: drawing: east (middle) and the south (right) side of the market square

Image 51: drawing: satellite image of the market square and surroundings (with old hotel instead of the new Marien Carrée

3rd Step (Self of the Place): Description via the Archetypes

In this step the observations of step one and two as well as the table that describes all four archetypes are taken into consideration. The designers then approach one design principle after the other (shapes/design lines, patterns, objects, textures, colours) and note down which elements are expressive of which archetypes, to which intensity they are expressed and which archetypal description words fit each element.

Design Principles via the Archetypes	
(1 = Air/Sanguine; 2 = Water/Phlegmatic; 3 = Fire/Choleric; 4 = Earth/Melancholic)	
Shapes / Design Lines: *(What lines and shapes stand out at first glance?)*	• **Type 4**: At first glance one can see many straight and parallel lines as well as right angles. • **Type 3**: There are also some non-right angles in rooflines of surrounding buildings.
Patterns: *(Into what patterns are the lines and shapes arranged?)*	scale: • **Type 3**: The visible patterns that are created by the lines and shapes are medium (human scale) to big (bigger than human scale). These patterns can be found in the shapes of the pavers, the windows on the facades or the exposed aggregate concrete sheets on the HKB (house of culture and education) facade. They are however not huge or extremely oversized as type 4 scale-relationships would be.
	placement: • **Type 4**: Most of the previously described shapes are arranged in a regular way that is often right-angled, has parallel lines and is mostly symmetrical.
Objects: *(What is the perceivable scale and the arrangement of the visible objects?)*	scale/amount: • **Type 4**: Most striking is the fact that there are over all very few elements on square. • **Type 3**: The few elements that are there, like the planting pots, lighting structures as well as the rocks for separating square from the Stargarder Straße, are substantial in size, but again not huge. • **Type 2**: Only the benches and seating areas of stores and cafés as well as the water fountains are medium (human) sized.
	placement: • **Type 4**: All objects on the square are symmetrically and deliberately placed and fixed in their spot. • **Type 1**: There is the exception of a few movable and flexible planting containers.
Textures: *(What does the surface quality and scale of the textures on the objects and surfaces look like? → The perceived, not the absolute quality!)*	quality: • **Type 4**: The surface of the pavement looks very smooth and clean (≙ devoid of much visual movement) and so do the facade materials of the Market Square Centre and the Marien Carrée. • **Type 3**: The exposed aggregate concrete on the facade of the HKB is so coarse that it still looks rough from a little distance. This is because the single stones in the aggregate are visually well defined. The substantial pieces of the facades in the Stargarder Straße that break the sleek pattern create a certain depth for the over all texture of them. • **Type 2**: The plaster on the facades of the buildings in the Stargarder Straße look soft but not perfectly smooth. Furthermore the water in fountains is liquid and usually flowing out without extreme or abrupt push (abrupt push = type 3). The window facades on the shopping malls and the HKB also have a softer character since they gently reflect its surroundings instead of being perfect mirrors or perfectly see-through (perfect mirrors or perfectly see-through = type 4).
	scale: • **Type 2**: Although the texture on the HKB looks rough (type 3), the single stones that it is made of look rather medium → small on HKB • **Type 4**: The scale of the textures on the pavement, Market Square Centre and Marien Carrée are all fine → none. • **Type 3**: Although the plaster on the facades in the Stargarder Straße has very little texture itself, the over all facade is built in a way that substantial pieces of it create a certain depth. The over all texture that is created through this is medium → big in scale.
Colours: *(What type of colours do you see (bright, muted, rich, bold)? How do the colours relate to one another?):*	type of colour: • **Type 2**: The place has many grey tones or other colours that were greyed over time. • **Type 2**: The HKB and the shopping buildings have desaturated beige and brown tones. • **Type 3**: Warm beige and brown shades are in the facades of the buildings in the Stargarder Straße. • **Types 4 & 1**: There are very few hues/tints in illuminated advertising elements dotted throughout.
	degree of contrast: • **Type 3** (→ Type 2): Over all there are some but few strong contrasting colours in the place which makes the over all contrast = medium (→ low).
	metals: • **Type 2**: Metals are present in the lighting, facades and mostly are grey tones or non-shining silver.

Summary:

This place expresses a mix of archetypes. All architectural lines that one can see on first glance are very straight and angular, most of thime in a type 4 but sometimes also a type 3 way. When counting which element is the strongest in the place, however, it is type 2. This is because almost all features that have very architectonic shapes, have either type 2 textures, scales or colours. Despite the presence of type 3, the over all visual intensity or movement in the square is relatively low, because the two lower movements of type 2 and type 4 are strongly expressed. One can also phrase this thusly: the effects of the strong structure (type 4) and angles (type 3) are softened by the type 2 qualities and the visual movement lowered accordingly.

Type 2 (6→ 7 times)
Type 4 (5 times) & Type 3 (5 times)
Type 1 (2 times)

Table 29: archetypal analysis of the market square

These three steps conclude the analysis of the *genius loci* as the self of the place. One example of how a certain design choice shifts the characteristics of the self of the place is the Marien Carrée which replaced the old Radisson Blu hotel. This hotel had very Type 4 design lines, just like the HKB and some type 4 colour elements, but no playful (type 1), rounded (type 2) or angular (type 3) shapes. Also like the HKB it had an exposed aggregate concrete on the facade (type 3 texture and type 2 scale) and a very desaturated as well as grey tones (type 2). This meant that even more type 2 and 4 was present in the place before. Because all the type 3 colours and the few type 3 shapes in the roofline of the Marien Carrée were missing in the calculation, the over all visual movement of the square was considerably heightened by the new construction.

Image 52: Radisson Blu hotel at market square in Neubrandenburg (image by Kohler 2009)

4th Step (Identity of the Place): Short Chronology

To analyse the *genius loci* as the identity of the place, a short chronology is assembled first. This chronology offers an overview and a reference to the individual stories and facts that people might produce in the subsequent interviews. The designers can also use this information to prepare in what way they have to adopt the questions for the specific place or what further inquiries can be made.

Brief Chronology	
4th January 1248	• The town was founded and set up in the lowlands of the river "Tollense".[586] • The grid-like structure of the city centre was built which is a perfect representative for medieval cities.[587]
1298	• Altar in St. Mary Church (today Concert Church) was consecrated.
during WW2	• 80% of city centre destroyed[588]
1948	• Formation of the GDR that Neubrandenburg is part of

---

586 Maubach 1997, pg 5
587 Stadtverwaltung Neubrandenburg 1996, pg 4
588 Stadtverwaltung Neubrandenburg 1996, pg 3

1945-52	• Surrounding residential buildings were only built by private people during "Solidaritätsarbeit" (residents also worked in agriculture and salvaged useable rubble from the ruins next to their normal jobs); due to its destruction it was in need of a special rebuilding program "Sonderwohnungsbauprogramm" like it was only also granted for Leibzig or Magdeburg; many people were involved in process, not all competent and those in charge were overthrown with work and choices[589]
1952	• Begin of rebuilding the city after WW2; the destoyed town hall at the market square was not rebuilt[590] • process was slow; grid stayed, but new buildings did not echo or imitate old character, but created a new one ("higher", "mass-charakter" was not artistically lacking, but a monetary/resource lack was authentically expressed in it)[591]
1960ies	• All administrative buildings moved out of city centre → plots in north east of square opened up for other uses. Original place for buildings around square considered: cinema, library, hotel-expansion, shopping mall, theatre. GDR administration reduced the budget of this project, because used the money for heavy industry and established a green open area "in waiting" instead. Shopping mall and hotel were not built for a long time after the plans were approved. Place was only defined by bold ornamental pavement design[592]
1965	• Opening of "house of culture and education" ("Haus der Kultur und Bildung" - HKB)[593]; consist of tower, multi-purpose hall and library.[594] • Tower (Kulturfinger) was supposed to be taller and more noticeable than old city symbols like the St. Mary Church to show the "victoriousness of the socialism"[595] • Church had long lost its appeal to the people as well as the characteristics of the pre-war Neubrandenburg.
1968	• Plans for a second tower at square were dropped → plans for a central square were developed[596] • tower next to HKB received also criticism for its lack in good facade design[597]
1998	• Begin building market square centre[598]
2001	• Finished rebuilding the St. Mary Church as a concert hall[599]
2009	• Refinishing market square & underground car park.
2016	• "Hotel Vier Tore" hotel was torn down.
2019	• Opening of Marien Carrée.[600]

Table 30: chronology of the market square in Neubrandenburg

5ʰ Step (Identity of the Place): Narrative Interview

In the second step of examining the *genius loci* as the identity of the place, interviews are conducted. Depending on what the designers, their clients or their superiors demand, the conversation can either be recorded and later transcribed or simply noted down by the designer. During the interviews of all examples of this thesis the author took notes in German, the language the interviews were conducted in, and then transformed those notes into full English sentences so that their content is more comprehensible for the reader. The written-out version was later approved by the interviewees. The names of the interviewees were furthermore anonymised to protect their privacy. Each example of the interviews shows different kinds of interviewees that a designer could encounter: one young, married couple without children; a single parent with two daughters; a tourist who only visited the place three times; a child etc.

The size of the sample as well as the kind of people that are chosen for the sample depend on the character and the size of the design project. For a hypothetical re-design or for hypothetical additional designs to the market square, many residents of different social and demographic groups would have to be asked. If an additional design is strongly directed at tourists for example, the

---

589 Handorf & Kirchner 2018, pg 58
590 Stadtverwaltung Neubrandenburg 1996, pg 4
591 Handorf & Kirchner 2018, pg 59
592 Handorf & Kirchner 2018, pg 62-63
593 Stadtverwaltung Neubrandenburg 1996, pg 4
594 Handorf & Kirchner 2018, pg 63
595 Kaule 2019, pg 50
596 Handorf & Kirchner 2018, pg 63
597 Handorf & Kirchner 2018, pg 63
598 Wikipedia Marktplatz Neubrandenburg 2020
599 Website Stadt Neubrandenburg 2020a

600 Wikipedia Marktplatz Neubrandenburg 2020

sample could also include many people who visited the place who do not live there. In this example of the Market Square such a tourist has been chosen. The tourist, 57 years old, comes from right outside the eastern periphery of Hamburg in Schleswig-Holstein. He visited Neubrandenburg several times and knows the Market Square in the following three states:

- with the Radisson Blu Hotel before it was torn down,
- with the open construction site of the torn-down hotel, and
- with the newly built Marien Carrée.

Written Record of the Interview
(29th October 2020, 4:20 – 5:43 pm)

Part 1 – free presentation
- *What would you say is the essence or spirit of this place? & What is worth telling about this place to you?*

Old meets new, medieval grid of the streets, contemporary concrete buildings, some slick and light surfaces.

Part 2 – Questions

1. *Coherence of the place:* How coherent, unified or disconnected and pieced together does the place feel for you?

It's not really coherent and more like a puzzle – many parts that were built one by one. Each piece doesn't really have much connection to the others. (*What are those pieces?*) The water fountain, the tower which definitely stands out and the more contemporary buildings that don't really stand out.

2. *Origin of the elements:* How native, local or international and foreign do the elements seem?

I can't really say because all elements seem like they have been places there at different moments in time. But there are barely any natural elements. In the neighbouring street there are rows and alleys of trees but in the square there is barely anything natural. (*Do you feel like that is fitting for a city square?*) No, not really, a little more green would be nice. The HKB and the tower feel like their architecture has the typical look of the reconstruction of cities after the second world war in Germany. I'm not quite sure any more, but I felt that when the hotel was still there, the square had distinct pavement and now I remember it more looking like one surface of bigger concrete slabs.

3. *Orientation within the place:* How well can you orientate yourself in the place and how well do others seem to be able to orient themselves in the place?

From wherever you are in the square there are never any visual obstructions, because there is nothing on the square that could be in the way. So in that sense the orientation is top. But as a city square or market square the place misses some of the feature that I as a tourist would expect like a somehow highlighted centre of the square with a water well, statue or something like that. This isn't bad, but it's just not what you would expect. I mean to say that walking through the city I would no necessarily thought that this is the city square apart from the fact that it is obviously in the middle of the inner city.

4. *Accessibility / Usability:* How accessible and how useful do you experience the place as a whole and its elements?

The square was always accessible by car, walking or riding the bike. There are bike stands, a lot of parking options and many entrances to the square or from the square for people to take. When it comes to the usability, I never experienced a market day, so I don't know how well that works. (*And how accessible does the rest of the city feel, coming from the market square?*) It's all very accessible and you can quickly go to all interesting places. Except that you cannot visually find a connection to any really old buildings like the church or administrative buildings like an old city hall, which one would also expect in a city centre. But you can see all those things if you are aware that you can go up the tower and enjoy a viewing platform that shows you almost perfect 360° of the city. That's a great place.

5. *Complexity:* How complex and divers in detail does the place or its elements seem to you and others?

It's simple and complex, because there are so many different architectural styles like the tower that looks like a simple Lego-built, the HKB of the GDR, the more pale facades in the street that comes from the train station and the more contemporary facades of the shopping buildings as well as different areas on the square like some seating from cafés, steps, the fountains. And all the outbound street look different again. So it's a little confusing. But on the square itself there is very little detail.

6. *Comfort / Safety:* How comfortable and safe do you and others feel in the place?

At the beginning, so when I visited for the first time, I did not feel well in that place. I don't remember any inviting seating back then and because the old hotel facade was bare and the place in front pretty empty. Plus, there was still traffic in front of the hotel that impeded on the square. Now it is much better because the gastronomy offers seating and more colours and movement. There are big lamps to illuminate and kind of separate the square from the streets and pathways that pass it. The new Marien Carrée is also much nicer than the hotel and the car traffic is complete gone from the place. I also really appreciated the small amenities they added like the bronze miniature of the city centre and some signage that points you to the sights around, which I really missed before. At the time of the hotel the square felt pretty cold. Today the facades are still mostly light and pale but the additional shops that bring wood elements and just more colour make it already feel way more lively and more inviting. But I think some additional nice greenery would make me feel like I want to stay on the square more and not just pass through.

7. *Interest / Uniqueness:* What do you feel makes this place special, unique or separates it from other places?

What's special about this place is that it doesn't offer you all the standard things like a city hall, bell tower or other hints at the origin

of the city. The theme is more like: contemporary meets recent history. The HKB and the tower seem to play the part that the old cultural buildings I mentioned before would often do. The second special aspect to me is the absence of red or other warm colours, like many old town centres I know have. The square is more like a piazza that is paved throughout with light coloured marble or other stone and has a lot of open space in the middle. However this place paved the square with concrete which on the one hand is cheaper looking and on the other hand means that there is a lot of grey. So the place looks a little like it took on the principles of a piazza rather than medieval market squares. And in the past the hotel was a very generic building that has now luckily been replaced with something slightly more interesting.

8. *Visual presence: Is this place a visual point of interest to you and your community or are there visual points of interest within the place?*

The one visual point of interest has to be the tower, because the scale difference between it and its surroundings are just so big. The rest of the square isn't bad but doesn't exactly stand out in comparison or in its own right.

9. *People-place relationship: What is your relationship with this place and how do you feel people are connected / identified with this place?*

Because I never experienced the square in action, I don't have a strong relationship to it. I never visited the Christmas market, regular markets or concerts in the HKB etc. What I identify with the place is the change due to the demolition of the hotel and the built of the new Carrée. Most importantly I remember the time that I visited the place last when I discovered the viewing platform in the tower. That is a great place to see the entire city from.

10. *Mystery / Intrigue: How interesting does this place seem and how much does it make you want to explore it?*

For me as a tourist it's interesting to look at the city for free from the tower platform above. And I would also be interested in visiting some kind of event in the HKB. I'm curious for the building and the cultural event. Personally I am not into shopping and the stores are mostly generic/not special to Neubrandenburg, so I would skip that although the place has ample opportunities. I would rather sit in the corner café for a while and relax or socialise with my fellows.

11. *Boundaries / Open spaces: How open or enclosed do you feel this place is? Do you perceive any strong boundaries, barriers or open, empty spaces?*

It feels very open and the facades are like the boundaries that surround or define the square. Over all the square is pretty big. Without any markets or other booths I feel rather lost on that big empty surface. And there is another thing that I have observed in many public urban places in Germany: little seating options or other options for lingering and dwelling there for a while.

12. *Affordances: What activities do you feel this place affords people? How flexible, multi-purpose / inflexible / one-purpose is the place in offering those options for action and interaction?*

There are gastronomy of fast foods stores, bistros or cafés. There are of course all the shopping options and sometimes the shopping on the market. But these things usually happen at the edges of the square, not so much in it. And you can play with the water fountains which is especially great for families with young kids. (*And how flexible do these uses seem?*) The stores, fountains etc., they are all pretty fixed. Everything temporary that you can put on top of the square would probably count as flexible, I guess.

13. *Intentionality of design: To which extent do you perceive an intentional design or plan in the place?*

One can tell that the additional items (like lamps) or buildings (like the Carrée) were all in all well thought out and an absolute improvement to the prior design. But other than that the place has clearly had an evolution and developed bit by bit and not in one go. And another design choice that you can feel in the place is that they did not recreate the historic design language of the place but deliberately added a new one in the GDR.

14. *State of the place: How intact, healthy and functioning do you feel the place is?*

During my first visit I felt that some amenities were missing and the hotel was looking sad and run-down. But today the place feels clean, fresh and tidy. The one type of thing that might still be missing are more organic or natural elements that make the place feel more vital and alive.

15. *Context: How strongly and in which ways can you feel the historical, natural and cultural context in this place?*

It is really hard to find a connection to anything before the world wars. But the more recent past of the GDR and its ideologies is very palpable when it comes to building residential and representative areas. The new buildings are nice but more generic in their design. They seem to have international styles.

16. *Connection to the outside world: How visible, audible, smellable etc. is the surrounding environment for you?*

You have the axes of the streets that connect the square to the outside a little. From those points you can see to the new city hall, two gates and the train station. You can hear the church bells but you don't see not much of the churches and you can hear little traffic. Sure, there is one busier street passing but it is not loud or disruptive. But interestingly, on a day without events, there are no people really staying on the square. It's like the shopping mall and the new Marien Carrée as well as the side streets with the shops suck away the people and bit by bit release small portions back onto the square. But it's not like the square is empty all the time. People do walk there, they just don't linger.

17. *Stewardship: How do you feel about the people that make and made all the choices for what happens to this places?*

After the world wars the buildings were clearly primarily built based on the ideologies and political ideas rather than the most basic needs of people. Well, I mean ultimately the HKB and the hotel were made for people, but maybe the placement of those buildings at a city market square is not the most desirable. And today most building choices are ultimately dominated by investors, so it makes

sense that the square received as much commercial space as possible. But I don't know the particulars as to who made those recent choices. But in both cases (GDR and today) the premise of the builds cannot have been to have people spent time and enjoy staying on the square.

Concluding Talk: –

Table 31: written records of interview about the market square in Neubrandenburg

6th Step (Identity of the Place): Critical Narrative Analysis

This interview in combination with the chronology is then analysed by the *critical narrative analysis* using the guideline that was prepared in the previous chapter. While the complication and consequence are mostly fed by information from the chronology, the statements in the evaluation are taken from to total amount of interviews that were made. In this case they all come from one single interview. The coda then summarises the main input the developments of the chronology on the one hand and the statements of the interview concerning the 17 properties that were explored in the questions and further input concerning the evaluation of complication and consequence on the other hand.

Narrative	
Abstract	• Replaced by coda.
Orientation *(actors: who?, where?, what?, when? etc.)*	• <u>Places</u>: HKB, tower, buildings Stargarder Straße, Marien Carrée, Market Square Centre, open paved area, parking lots underneath square, old Neubrandenburg before WW2 • <u>People</u>: visitors in general, GDR administrations during the rebuild after WW2, local politicians during 2000ies who built the market square centre and later the Marien Carrée, investors who built Marien Carrée • <u>Objects</u>: benches on square, seating in cafés and other gastronomy, water fountains, lights, bike stands • <u>Time periods</u>: before WW2, during GDR, since reunification of Germany
Complica-tion *(events in time)*	• Full destruction of buildings around square including the city hall in WW2. • Founding of GDR. • Change of political and economical situation after the end of GDR and reunification of Germany.
Consequence *(resolution of events in time)*	• First uncoordinated rebuild in solidarity work during GDR. • From 1952 onwards supported and planned reconstruction of square (HKB, tower and hotel as well as surrounding residential builds). • Build of long-planned shopping mall, additional underground parking and new pavement on square • Demolition of hotel and build of Marien Carrée.
Evaluation *(thoughts and feelings about complication & consequence)*	• It's a pity that the city was destroyed so much but also that the rebuild in the GDR left no historic remnants or memories of the pre-war Neubrandenburg other than the grid-like streets. • The rebuild seemed to be more according to the political ideology and economy/industry than people's needs for being and staying in a square. • The recent design changes but especially the added uses (i.e. café seating) and amenities (i.e. city model, lamps) made the place friendlier and more interesting. • It's a pity that the new buildings look more international and generic, the place has potential for more.
Coda *(summary)*	• There are no or few connections to the pre-war Neubrandenburg. • Buildings around market square are mixed styles, some distinctly from GDR and others generic and international styles. • The Kulturfinger visually stands out, other buildings do not. • All buildings are light but rather grey or desaturated in colour. • The recent design changes were an improvement to the perceived friendliness and usability for visitors. • The open square is mostly empty and cold and does not invite lingering/dwelling → for example greenery or more organic design principles for dwelling on the square are missed.
Discourse	
Interpre-tation	S – setting and scene: on couch of interviewer P – participants: interviewee = tourist from eastern periphery of Hamburg, Germany; interviewer = author of this thesis E – ends: interviewee approved of the written out version of the interview. A – relevant act sequence: – K – the interviewee's key, tone, manner, spirit of speech speech: open manners, very concentrated, sometimes speech in keywords, recollected place from memory I – instrumentalities: face to face, interviewer took hand written notes N – social norms: – G – genre: conversational interview, the participants kept to the prepared structure of questions but intercepted with exchanging information outside of that.

Explanation	Because the tourist is not from any former GDR-areas, he is not identified and only superficially interested in the specific history of the market square in Neubrandenburg. He did not have any strong attachments to either the HKB, tower or demolished hotel and looked at them from a purely aesthetic point of view. Although he criticised the motives and policies with which these buildings were built, he did not disapprove of them categorically and was rather interested in engaging with the HKB and enthusiastic about using the viewing platform of the tower. In the same way he criticised the motives and dynamics of the GDR-builds, he found fault with the way that the contemporary buildings seemed to be equally modelled after economic ideas. A condemnation or super-elevation of either of those eras did therefore not occur. Although he still noted a lack of greenery and more organic design principles for a truly comfortable and interesting feel in the place, he recognized the more open, piazza-like character.

Table 32: critical narrative analysis for the market square in Neubrandenburg

Closing Remarks

This example has shown that the findings of the *genius loci* as the self of a place can very easily correlate with certain specific identifications people describe in the interviews. In this example the change of the over all character of the place which was created by demolishing the old hotel and building the new commercial building, was described in very similar ways by both the archetypes as well as by the observations of the tourist.

When it comes to the statements that the interviewee makes concerning the perception of the 17 properties in the place as well as their evaluation of the complications and consequences of the narrative, a representative sample of interviewees would allow the designer to check which perceptions and evaluations seem to emerge as patterns and therefore be relevant for describing the genius loci as the identity of the place.

2.5.2 Example 2 – Plot on Corner of Pfaffenstraße & Behmenstraße

The next example is a corner plot in the south-west in the city centre that houses both private as well as public buildings. On the Pfaffenstraße home owners and lodgers live in old half-timbered buildings and there is a public half-timbered theatre ("Schauspielhaus") that has a backyard. Opposite these half-timbered buildings prefabricated buildings, built in the GDR after the war, house more private citizens. Next to the backyard of the Schauspielhaus, the private buildings have garden plots. From the Behmenstraße the back yard of the Schauspielhaus as well as the garden of the old royal stables ("Marstall") and the entrance of a rehearsal building ("Probebühne" = rehearsal stage) are accessible. The building of the Marstall is situated on the corner of Behmenstraße and the 4th Ringstraße at the city wall while the Probebühne sits right along the 4th Ringstraße.

1st & 2nd Steps (Self of the Place): Images and Drawings

Image 53: Pfaffenstraße (images by Ladwig 2020)

Image 54: drawings: Pfaffenstraße

Image 55: Behmenstraße (image by Ladwig 2020)

Image 56: drawing: Behmenstraße

Image 57: view from one of the private houses into the back yard (image by Heidegger 2020)

Image 58: back yard panorama part 1 (image by Ladwig 2020)

Image 59: back yard panorama part 2 (image by Ladwig 2020)

Image 60: back yard panorama part 3 (image by Ladwig 2020)

Image 61: satellite image of the city block (image by Google Earth Pro 2020)

Image 62: drawing: satellite image of the city block

Image 63: drawing: view from one of the private houses into the back yard

Image 64: drawing: back yard panorama 1

Image 65: drawing: back yard panorama 2

Image 66: drawing: back yard panorama 3

3rd Step (Self of the Place): Description via the Archetypes

Design Principles via the Archetypes	
(1- Air/Sanguine; 2-Water/Phlegmatic; 3-Fire/Choleric; 4-Earth/Melancholic)	
Shapes / Design Lines: *(What lines and shapes stand out at first glance?)*	• **Type 4**: many straight, parallel lines in buildings • **Type 3**: often changing rectangular or angular shapes in buildings • **Type 2**: soft lines of nature in back gardens
Patterns: *(Into what patterns are the lines and shapes arranged?)*	scale: • **Type 3**: medium → big in both streets • **Type 2**: medium → small in the yard
	placement: • **Type 4**: regular, fully symmetrical in buildings from GDR and straight but not perfectly symmetrical in all contemporary buildings • **Type 3**: angular and changing, asymmetric in half-timbered buildings • **Type 2**: leaves, twigs and flowers in private garden grow not randomly (= scattered throughout = type 1) but with only loose or unrestricted (→ relaxed) patterns.
Objects: *(What is the perceivable scale and the arrangement of the visible*	scale/amount: • **Type 3**: a good amount of substantial cars and some steps or ramps to building entrances in streets • **Type 2**: some bikes and bike stands and small roadside greenery in streets • **Type 2**: Many of the plants in the private gardens or back yards
	placement: • **Type 3**: dynamic, angular, irregular placement of cars, bikes etc. in streets

objects?)	• **Type 2**: greenery in private garden is placed not randomly (= scattered throughout = type 1) but has been planted and kept in a loose and unrestrictive (→ relaxed) manner.
Textures: *(What does the surface quality and scale of the textures on the objects and surfaces look like? → The perceived, not the absolute quality!)*	quality: • **Type 3**: rugged / coarse exposed aggregate concrete on GDR-buildings • **Type 4**: fine plaster on contemporary buildings and some half-timbered buildings • **Type 3**: rugged finish on materials of Schauspielhaus and the walk ways • **Type 2**: over-all softness in most greenery
	scale: • **Type 2**: medium → small in street pavement and GDR-buildings • **Type 1 & 2**: small → medium scale in garden areas
Colours: *(What type of colours do you see (bright, muted, rich, bold)? How do the colours relate to one another?):*	type of colour: • **Type 2**: most of the time desaturated beige and brown tones in GDR-buildings, some tones on plaster of old and contemporary buildings • **Type 2**: greys in streets and pathways • **Type 3**: rich warm shades in some contemporary and some half-timbered houses, also in GDR-facades in the right light • **Type 4**: saturated hues on facade of one half-timbered building • **Type 2 & 3**: the green as well as autumn-coloured foliage of the plants expresses the two types depending on the surrounding lights and the season of the plants
	degree of contrast: • **Type 3:** medium contrast in contemporary, half-timbered houses and GDR-buildings • **Type 2:** low contrast in gardens • **Type 4**: high contrast in only one half-timbered building
Summary:	
The place is clearly most expressive of type 2 movements. In every category the block has either design lines, but especially characteristics of the objects that express this archetype. This over all softness is complemented by some type 3 scaling relationships of objects and their texture and colours. The buildings from the GDR might stand in a stark contrast from the rest with most of their qualities, but even they, apart from their strong type 4 design lines, still are expressive of a lot of soft type 2 colours and some type 3 texture. Even the contemporary buildings connect with place except for their design lines and lack of detail. Type 2 (13 times) Type 3 (10 times) Type 4 (5 times) Type 1 (0 times)	

Table 33: archetypal analysis of the plot: Pfaffenstraße & Behmenstraße

4ᵗʰ Step (Identity of the Place): Short Chronology

1770	• Duke of Strelitz made Neubrandenburg his summer residence and built a building for comedy
1787	• Inauguration of half-timbered building
only in 1870/71	• Used as a military hospital
until 1894	• Used as a theatre
1894	• Sold and used as an institute for mobility
1945	• Used as a military hospital
1948	• Formation of the GDR that Neubrandenburg is part of
1948-1990	• usages: vulcanising workshop, assembly shop for motorbikes, community hall, assembly workshop for fashion[601]
1990-1994	• Reconstruction and modernisation of Schauspielhaus and return to original use after having had alternate uses for 100 years[602]

Table 34: chronology of the plot: Pfaffenstraße & Behmenstraße

5ʰ Step (Identity of the Place): Narrative Interview

The interview was conducted with a resident of the black and white half-timbered house in the Pfaffenstraße. She, 36 years old, has been living in Neubrandenburg during her childhood for

---

601 Official plaque on Schauspielhaus exterior wall w.y.
602 Stadtverwaltung Neubrandenburg 1996, pg 4

eleven years and lives there again since another four years. She originally comes from Thuringia, but also lived in many other parts in the east of Germany.

Written Record of the Interview
(26th October 2020, 6:48 – 8:36 pm)

Part 1 – Free Presentation

○ *What would you say is the essence or spirit of this place? & What is worth telling about this place to you?*

The private gardens and the free areas behind the Schauspielhaus are very calm and you feel like you are in your own world. There are few people from the outside visiting or passing by, only those who are "part of this place". Although the place is in the city centre, the area behind the buildings feels quite spacious and open. It has something kind of wild and unbothered/uncultivated about it and is more quaint and rustic than one would think. The private garden, garden of the Marstall and the open square behind the Schauspielhaus as well as the relationships of the people living in this area allow for many things and areas to be explored. The Pfaffenstraße and Behmenstraße are also not much frequented except for the residents. I often sit at my steps of my entrance to the street to enjoy the last sunlight of the day.

Part 2 – Questions

1. *Coherence of the place: How coherent, unified or disconnected and pieced together does the place feel for you?*

Although the place has many different parts to it, I feel like those pieces work really well together and make it harmonious. Somehow everything works together. (*What are those differences?*) For example the Schauspielhaus attracts rather fancy clients. But there also are compost heaps in the back yard and one neighbour has a bucket for his workers to urinate into by his containers not too far from that. And there are many of such fun stories. For example, more than one time some visitors and artists that work in the Schauspielhaus, Marstall and Probebühne found our bunnies who had escaped from our garden and they were really nice about it and played with them. And the building styles are also very different. We have the old half-timbered buildings, the very contemporary buildings and of course on the other side of the Pfaffenstraße the prefabricated buildings from GDR-times. But somehow all of this works together. (*Why do you think is that?*) I guess that it works because of the relationships of the people who are active there. Everyone kind of knows each other and most are really kind. Once my neighbour allowed me to use their garden for a birthday party of my daughter, for example.

2. *Origin of the elements: How native, local or international and foreign do the elements seem?*

I feel all the elements belong in this place. I guess the prefabricated buildings would still feel strange or out of place for me if I hadn't spent so much time in them while meeting neighbours etc. But because I have an emotional connection now, they seem fine. But they have a very different feel to the area behind the house. One woman who lives in the prefabricated building opposite me for example spends a lot of time smoking while looking out of the window after work and commenting on some events on the street. This feels kind of strange to me, but she is mostly nice, so it's not a problem. But the area behind the house is where I feel the most home and comfortable. And I like all the different things in the yard. It is fun to climb on the roof of the sheds, look at the historical buildings and connect to people like neighbours, workers or random visitors.

3. *Orientation within the place: How well can you orientate yourself in the place and how well do others seem to be able to orient themselves in the place?*

Orientation in the place is easy. Okay, it actually is a little intricate. The Marstall and the Probebühne with their separate entrances are not easily discernable. But the big square behind the Schauspielhaus is so open that there you can orient yourself well. And the Pfaffenstraße and Behmenstraße are straight-forward and empty enough to also afford easy orientation.

4. *Accessibility / Usability: How accessible and how useful do you experience the place as a whole and its elements?*

My own garden is accessible from a narrow path from the Pfaffenstraße, but also from the back through the neighbour's garden. And other than that, it's in the city centre, so it's very central.

5. *Complexity: How complex and divers in detail does the place or its elements seem to you and others?*

I think it's quite complex with many details. There are the containers you can climb on, the sheds, many secret pathways like the side entrance to my garden from the Pfaffenstraße and one path into our garden from the neighbour's garden. Obviously the garden of the Marstall is nice and flowering as well as the garden of one of my neighbours. And the yard behind the Schauspielhaus is often busy with people or events. Especially from the Probebühne you can often hear people work and practice.

6. *Comfort / Safety: How comfortable and safe do you and others feel in the place?*

I feel very comfortable. I just moved from the roof apartment of this house to the bigger middle apartment and we intend to live here for a long time. Especially in the back garden and the places and people surrounding me make me feel very at home.

7. *Interest / Uniqueness: What do you feel makes this place special, unique or separates it from other places?*

The people make the place special. The place seems to attract a certain kind of people. Everyone is free to do things their way. Despite the fact that the Schauspielhaus, Marstall and Probebühne are official and somehow representative buildings, people are not super strict or stiff and everyone can still do what they want. I really like how in this area one can really feel the traces that people leave. In comparison to the also big squares in other parts of the city centre, this place does not attract as many people, but because of this the doings of the few people that are there are more palpable. (*What are the people like that are attracted by this place?*) They are kind of a bit reclusive, peculiar and very generous. Not everyone is equally likeable but they all have distinctive characters. My landlady for example is the widow of the former pastor of the St. Mary Church. She is fit, rides the

bike a lot and enjoys nudism at the lake (in designated areas). So did her husband. She is very practical and economical but still quite generous with others. She seems to have a green thumb, does a lot of cultivation in her garden and has a dry sense of humour. She sometimes seems quite unsure of herself around some topics, though, that her husband used to take care of.

8. *Visual presence: Is this place a visual point of interest to you and your community or are there visual points of interest within the place?*

There are two huge lime trees in the square behind the Schauspielhaus. They are beautiful. And I think the buildings and the openness are very nice, too.

9. *People-place relationship: What is your relationship with this place and how do you feel people are connected / identified with this place?*

I feel strongly connected to the whole area in the back. I guess that is because it resembles my childhood because of its more rural character and the palpable eccentricity of the people. It's just such an open-minded and allowing atmosphere. There is mutual respect and some interest in each others lives without feeling too exposed or judged. (*What do you think this is like for other people in Neubrandenburg?*) Other people don't really know this place much. The yard behind the Schauspielhaus has a barrier for cars and the Probebühne isn't even signposted. And the garden of the Marstall is only open at open house day. So over all it is quite a selective set of users or people who are connected to the place at all.

10. *Mystery / Intrigue: How interesting does this place seem and how much does it make you want to explore it?*

There are many things, people and events to explore and when you know the place, they are quite accessible and well enjoyable. The place especially invites me or my children to explore because it is so quiet and undisturbed by the public.

11. *Boundaries / Open spaces: How open or enclosed do you feel this place is? Do you perceive any strong boundaries, barriers or open, empty spaces?*

It is very open in the middle (the square behind the Schauspielhaus). (*Are there any more or less strong boundaries?*) Yes, it has strong boundaries that are the buildings and a less strong boundary that is the barrier for cars to the Behmenstraße. But this last boundary is not strong at all and the place looks very open to that street. It just makes passers-by wonder if they are allowed to enter or not.

12. *Affordances: What activities do you feel this place affords people? How flexible, multi-purpose / inflexible / one-purpose is the place in offering those options for action and interaction?*

We have a lot of musicians, actors and dancers who practise there. There are concerts and various other events. I feel that it is quite multi-purpose. Especially because the place is just so big. Our neighbour is also always working in his garden a lot with heavy machinery and he keeps building materials from time to time.

13. *Intentionality of design: To which extent do you perceive an intentional design or plan in the place?*

The place is made of so many different parts that were never planned to be in one place together that I don't feel an over all design. Also, like I said, everyone is doing their own thing and no-one cares that much. We had one case where someone tore down a garden wall that we believe was protected and we complained. But normally people move stuff around and build stuff without consulting public intelligence or asking one another. But the way that people use the place, the residential buildings and the public building and how those users are connected nowadays kind of makes so much sense that is kind of created an over all design. Sort of.

14. *State of the place: How intact, healthy and functioning do you feel the place is?*

The place's nature seems very healthy and the functionality is all there, but it is not the most intact. (*What are those elements?*) The sheds in my garden for example are very broken down and there was a lot of rubble before we moved in.

15. *Context: How strongly and in which ways can you feel the historical, natural and cultural context in this place?*

I think the place has a strong connection to its past and history. Obviously the architecture is quite expressive for the eras it was built in. The Schauspielhaus is very old just like the old buildings where I live and the one of my neighbours. He for example still has an original cellar with a barrel vault ceiling. The prefabricated buildings from GDR-times are of course a crass contrast from my side of the street to the other. Just like with the very contemporary buildings. This contrast is strongly noticeable, even after the years I lived here.

16. *Connection to the outside world: How visible, audible, smellable etc. is the surrounding environment for you?*

The city isn't strongly audible from the square. Depending on the wind one can hear the ring street (Friedrich-Engels-Ring). But visually I still feel the city around me. I can see the St. Mary Church and the Stargarder Gate for example.

17. *Stewardship: How do you feel about the people that make and made all the choices for what happens to this places?*

I am a little upset with the people that took care of the garden before us and lived in my flat. They left it in a horrible state with so much rubble and garbage. But I feel a little connected to them so I can't be very angry. And other than that I feel very grateful that the old buildings I live in, the Schauspielhaus and the Probebühne still exist. Or as in the case of the Schauspielhaus I am grateful that they restored it so well and gave it back its original function. With all the views I have from my windows and the areas that I can use too (neighbour's garden, steps on the street etc.), I feel like I have quite a lot of added living space that I don't have to pay for and that is just there without me having to do anything for it.

Table 35: written records of interview about the plot: Pfaffenstraße & Behmenstraße

6th Step (Identity of the Place): Critical Narrative Analysis

Narrative	
Abstract	• Replaced by coda.
Orientation *(actors: who?, where?, what?, when? etc.)*	• <u>Places</u>: Schauspielhaus, Marstall, Marstall garden, Probebühne, Interviewee's garden, neighbouring gardens, housing on opposite side of Schauspielhaus from GDR-times, medieval half-timbered private houses, contemporary builds on Behmenstraße. • <u>People</u>: landlady, neighbours, artists, employees of public buildings, guests of public buildings, residents of GDR-building, prior tenants of interviewee's apartment and garden, own children and bunnies • <u>Objects</u>: Lime-trees in back yard of Schauspielhaus, neighbour's containers, compost heaps, • <u>Time-periods / references</u>: Middle Ages, 18th century, GDR-times, today.
Complica-tion *(events in time)*	• 1770: Built as a royal theatre • at times of war: used as a military hospital • after WW2: formation of GDR • 1990 reunification of Germany
Consequence *(resolution of events in time)*	• in GDR: many uses other than theatre or related topics • after reunification of Germany: reconstruction and reinstated as a theatre
Evaluation *(thoughts and feelings about complication & consequence)*	• grateful that theatrical use was reinstated • grateful that the place is used and appreciated enough to be vital but not so frequented that it would loose its country-side like charm. • GDR-buildings are accepted because of the social connections and would otherwise feel foreign to the place.
Coda *(summary)*	• The different areas in the block look considerably different and those differences stay overt throughout time. • Human connection can make differently stylised buildings / areas feel cohesive or harmonious. • The place is intriguing because there are so many things and a manageable amount of people (visitors, residents and workers). • Most people have kind and relaxed mindsets concerning each other and the place – no strict rules or obligations. • The place feels equally open as well as visually separate (shielded) from the city bustle.
Discourse	
Interpreta-tion	S – setting and scene: interviewer and interviewee were separate in their homes P – participants: interviewee = single mother of two girls, lived in Neubrandenburg for 11 (childhood) + 4 (today) years; interviewer = author of this thesis E – ends: interviewee is refurbishing flat and wants to live there for years to come A – relevant act sequence: – K – the interviewee's key, tone, manner, spirit of speech speech: open, excited, talkative. I – instrumentalities: via a phone call, interviewer took hand written notes N – social norms: – G – genre: conversational interview
Explanation	The interviewee, who was born and most of the time lived in the former GDR areas connects more to the rural atmosphere than the prefabricated buildings that the GDR is famous for. Although she picks up on the many differences in the design of the buildings, her focus lies strongly on human connections and kind interactions. Because she perceives these two to be strong in the pace, the emotional connections seem strong enough for her to mend any disconnects in the design principles.

Table 36: critical narrative analysis of the interview about the plot: Pfaffenstraße & Behmenstraße

Closing Remarks

In contrast to the prior example, this example offered a very socially oriented interviewee who perceived design elements but focussed more on the social dynamics happening within them. Despite the fact that she did not focus on the design elements as much, her observations are still aligned with what the description via the archetypes was able to formulate: a mostly relaxed place with many, but not too random details (type 2) and some more substance and depth in materials and texture as well as historical and social layers (type 3).

2.5.3 Example 3 – Kulturpark (North)

In order to show a public place that is has even more natural elements than the previous two examples, a spot in the northern entrance to the Kulturpark was chosen. The plot is right in the south of the ring street of Neubrandenburg (Friedrich-Engels-Ring) and close to a hotel, an ice cream parlour and open lawn as well as more intricate areas with planting as well as other decorative items.

1ˢᵗ & 2ⁿᵈ Steps (Self of the Place): Images and Drawings

Image 67: north end of Kulturpark, 360° panorama part 1 (image by Ladwig 2020)

Image 68: north end of Kulturpark, 360° panorama part 2 (image by Ladwig 2020)

Image 69: drawing: north end of Kulturpark, panorama 1

Image 70: drawing: north end of Kulturpark, panorama 2

Image 71: satellite image of Kulturpark (image by Google Earth Pro 2020)

Image 72: drawing: satellite image (x in top right corner marks the spot of the analysis)

3rd Step (Self of the Place): Description via the Archetypes

Design Principles via the Archetypes	
(1- Air/Sanguine; 2-Water/Phlegmatic; 3-Fire/Choleric; 4-Earth/Melancholic)	
Shapes / Design Lines: *(What lines and shapes stand out at first glance?)*	• **Type 2**: a lot of s-curves and flowing lines, many undefined shapes • **Type 3**: some angles in the surrounding buildings • **Type 4**: a few parallel lines in the hotel building
Patterns: *(Into what patterns are the lines and shapes arranged?)*	scale: • **Type 2**: medium → small in all leaves and branches of the plants • **Type 3**: medium → big in the surrounding buildings.
	placement: • **Type 2**: the shapes of the plants blend into one another or connect to the visual of "one tree" or "one line / group of trees" or "one area of lawn" • **Type 4**: all parallel lines of the hotel are regular and the building looks symmetric, the villa is also symmetrical (but no as dominated by parallel lines) • **Type 3**: the other buildings like the ice cream parlour and the villa are dominated by angles
Objects: *(What is the perceivable scale and the arrangement of the visible objects?)*	scale/amount: • **Type 2**: most visible objects are trees with a medium size, even the villa and ice cream parlour are rather proportionate (similar size to the trees) • **Type 3**: the hotel is a substantial object, but not mega huge (type 4)
	placement: • **Type 2**: the trees stand in loose groups, solitary trees never stand fully alone but always in the surrounding area of tree groups, buildings are strung along the entrance road to the park
Textures: *(What does the surface quality and scale of the textures on the objects and surfaces look like?)*	quality: • **Type 2**: the foliage on most plants creates rather soft and blended textures
	scale: • **Type 2**: small (most foliage, grass etc.) → medium (most branches and the buildings) sizes
Colours: *(What type of colours do you see (bright, muted, rich, bold)? How do the colours relate to one another?):*	type of colour: • **Type 2 & 3**: the green as well as autumn-coloured foliage of the plants expresses the two types depending on the surrounding lights and the season of the plants • **Type 4**: the grass in all of those areas where it is perfectly kept and uniformly green
	degree of contrast: • **Type 2**: contrast between plants and buildings is low as there are many gradients of similar colours in the park and the colours of the buildings (this could sometimes shift as certain plants stand out for a certain time of the year, the over all contrast would still not be high, though)
Summary:	
Type 2 is by far the most prominently expressed archetype. It is noticeable that this type is not just over all the one most expressed but also expressed continuously throughout all design principles. Because of the low contrast and the similar scales most of the surrounding buildings do not stand out except for the hotel which stands in the highest contrast to the rest of the park due to its scale and its symmetrical, structured look (type 4). Type 2 (9 times) Type 3 (5 times) Type 4 (3 times) Type 1 (0 times)	

Table 37: archetypal analysis of the Kulturpark (north)

4th Step (Identity of the Place): Short Chronology

Middle Ages	• "Werderbruch": moor which protected people in Neubrandenburg from anyone malevolent in the south
19th century	• First plantings[603]
1890	• Building of a boat port in north of Tollense lake[604]
1904	• Building of a promenade way and further cultivation of the area[605]

---

603 Website Touristeninfo Neubrandenburg 2020
604 Stadtverwaltung Neubrandenburg 1996, pg 9
605 Website Touristeninfo Neubrandenburg 2020

1913-1915	• Building of Villa[606]
during WW1	• Kulturpark (by boat port in north of lake) is used for growing crops and vegetables
1969	• Building of Kulturpark (until 1972)[607] ○ towns people contributed to building and maintaining[608]
unknown	• Building of "Haus des Bauern"
1997	• Conversion of "Haus des Bauern" → Park Hotel[609]
today	• Hosts many festivals

Table 38: chronology of the Kulturpark (north)

5ʰ Step (Identity of the Place): Narrative Interview

For this place a ten-year old girl was interviewed. She was allowed to pick a place within the Kulturpark that she knew she could talk about the best. The girl lives in Neubrandenburg's city centre since four years and has previously lived in many other areas in the east of Germany.

Written Record of the Interview
(31ˢᵗ October 2020, 5:06-5:58 pm)

Part 1 – Free Presentation
  ○ *What would you say is the essence or spirit of this place? & What is worth telling about this place to you?*
I think the park would be a nature spirit because of all the trees and nature in the park. It would be nice and open and very old. That's why it would also be wise. And it would accept and welcome all living beings. (*And what characterises the place?*) It's always quite colourful because of the leaves. Even in winter there is still colour. And the people who are in the park also lift the mood of the place. There are a lot of children who for example inline skate. And there are also old people who go for walks and enjoy the nature. It's a very free place where you can do a lot of things.

Part 2 – Questions
  1. *Coherence of the place: How coherent, unified or disconnected and pieced together does the place feel for you?*
It all belongs together. My favourite place is under one weeping tree where I can climb, hide and think. From there I can see everything and it looks like one thing. Even with the graffiti and the carvings on the tree bark and some of the garbage some teenagers leave behind.

  2. *Origin of the elements: How native, local or international and foreign do the elements seem?*
Because the park is so close to the lake it makes sense to have such a nature area. There are some buildings that are annoying and destroy the picture a little, but not too much. (*And what other elements can you remember?*) Mhh, cars. It's a good thing that there are no cars allowed in the park except for one street. Because now you can use all the streets freely and the streets are also very well positioned. There are also some boulders along the roads that are popular and look as if they belong.

  3. *Orientation within the place: How well can you orientate yourself in the place and how well do others seem to be able to orient themselves in the place?*
The park has many corners and areas so you can't see everything at one glance. And it is very big, so you have to explore a little. I don't know what it's like for others, but I am so familiar with every bush and path that I can orientate myself very well in the park. (*Why do you think that is?*) I build caves and tepees everywhere and climbed on trees. So I connect every area with a lot of small memories. (*And other people?*) I can't remember that anyone ever got lost, so I guess they can orientate themselves well enough, too.

  4. *Accessibility / Usability: How accessible and how useful do you experience the place as a whole and its elements?*
It is so close to the ring street that you can get there very fast from wherever you live. Most of the time we drive there by bike or even walk. It's not far from home. (*And how usable do you find the place?*) Very! There are many activities that you can do even on the empty lawn. You can run and play and climb on trees. And because there are no cars, you can do that without having to pay attention to the cars. And there is so much space that you always find a corner to play in or to walk.

  5. *Complexity: How complex and divers in detail does the place or its elements seem to you and others?*
I think there are a lot of details to look at everywhere. When I look towards the lawn, so when I look away from the street there are many trees and bushes and the chestnut tree always drops so many chestnuts in the autumn. When I look towards the Lessing-Gymnasium there is first a little creek and then a path and often many people. And then, when I look towards the ring street, there is the hotel and the ice cream parlour that always hosts many families. And the big boulder, I mentioned is also always full with small kids climbing and playing on it. Parents and young kids often come to my favourite tree, too. And then

---

606 Website Stadt Neubrandenburg 2020b
607 Stadtverwaltung Neubrandenburg 1996, pg 9
608 Wolf 1998, pg 58
609 Parkhotel Neubrandenburg GmbH w.y.

there are of course all the trees and bushes. Even in winter or when there are no people, there is always something to look at.

6. *Comfort / Safety: How comfortable and safe do you and others feel in the place?*

Very comfortable. It's a retreat for me when I get annoyed at home. And I connect the park with the Jahreszeitenwiese in Leibzig, where I have many wonderful childhood memories from. At the park I feel free and unbothered. And other people who I see there look happy and relaxed, too.

7. *Interest / Uniqueness: What do you feel makes this place special, unique or separates it from other places?*

Many areas of the park are right next to the lake. And then there are the buildings like the Lessing-Gymnasium, the ice cream parlour, the petting zoo and the little creek. And I think the park has a really diverse bushes, they are all extremely different.

8. *Visual presence: Is this place a visual point of interest to you and your community or are there visual points of interest within the place?*

I think the park is important to everyone, because people can get away from the city for a little bit. (*And the points of interest, negative or positive?*) What I don't like, but what you see very quickly is the hotel, like I said and the ring street and the loud cars. And what I like on the other hand is one huge sun dial because it is so big and it can tell the time. Then there is also the statue of the three singing kids by the ice cream parlour. (*Are there any natural aspects that are visual points of interest?*) Oh yes! There is the one chestnut tree that is very big and gnarled and old. I think if the park was a spirit this tree would be its home.

9. *People-place relationship: What is your relationship with this place and how do you feel people are connected / identified with this place?*

It's very strong. Whenever I want to go out, but I don't know where to, I just go to the park. I always liked to climb and in the city this park is the best place to go for that. And that's where I often forget about time. (*And what do you identify with the place, what do you connect with the place?*) My childhood because of the Jahreszeitenwiese and freedom and fun. I am usually not the kitschy type but the park always reminds me of an elf kingdom in which many natural spirits live. (*And what do you think others connect with the park?*) Leisure time, play, fun, ice cream, goats, summer, walking, childhood and fresh air.

10. *Mystery / Intrigue: How interesting does this place seem and how much does it make you want to explore it?*

I think it's very interesting. For me, at least. Even though I know the place really well, it is still interesting. When I go to one area I know immediately where I want to go next. (*What things do you think are interesting for who?*) So for kids it the fact that they can get some variety, fresh air and they can let go and play and move as they like. And parents can spend time with their kids and get a distraction from their stress and daily life. And older people can remember their childhood. And for those who live in an old people's home and who feel a little bored and lonely there, they can get fresh air and people around them. And they like to go for their walks.

11. *Boundaries / Open spaces: How open or enclosed do you feel this place is? Do you perceive any strong boundaries, barriers or open, empty spaces?*

There are so many open areas and so many options. So I think it is very open. Some big trees sometimes are like barriers to other areas in the park. But they are not much of an obstacle.

12. *Affordances: What activities do you feel this place affords people? How flexible, multi-purpose / inflexible / one-purpose is the place in offering those options for action and interaction?*

Eating ice cream, moving around however you like. Because its next to the lake you can also swim. You can feed animals. (*And how flexible is the park in the way you can use it?*) The ice cream parlour isn't flexible. You can only get ice cream. But everywhere in the park, you are free to use it however you like. So there it is flexible, I guess.

13. *Intentionality of design: To which extent do you perceive an intentional design or plan in the place?*

I don't feel like it was planned. Nothing is monitored so strictly or controlled all the time. Everything can grow in natural ways. And the pathways also feel like they were not all planned. Some paths are only beaten paths, for example.

14. *State of the place: How intact, healthy and functioning do you feel the place is?*

The trees all look very healthy. They are great for climbing. There are some rotten branches of course, but that's normal in nature. (*And how intact or broken do the things in the park feel?*) They are all fine. (*And the cleanness?*) It's not perfectly clean, because it's nature. Oh, you mean garbage? In some areas, where there are more people like the ice cream parlour there is a lot of garbage and under my tree too, because of the teenagers who stay there often. But most parts of the park are very clean.

15. *Context: How strongly and in which ways can you feel the historical, natural and cultural context in this place?*

You can tell that the trees and bushes are old. One can think that they have always been there. I think the park is well connected to the inner city. The wall, the gates and the ramparts fit very well to the green in the park. And the boulders in the park remind me a little of the Middle Ages, because they built many buildings with that. But it only reminds me a little of that, not much.

16. *Connection to the outside world: How visible, audible, smellable etc. is the surrounding environment for you?*

You cannot hear the city really, the ring street is in the way and drowns out all the city sounds. But in many other areas of the park you can neither hear the city nor the street because you are so far away from it and have so many trees in between.

17. *Stewardship: How do you feel about the people that make and made all the choices for what happens to this places?*

The fact that the hotel is there is not so great. The ice cream parlour is nice but a little too close to the big street. The pathways

were done well and I really like that they built a petting zoo. But I don't like that now they only have goats there. Before there were also donkeys, a pig and birds. Oh and I completely forgot the playground "Am Stier"! We were there often, too. But more often we were at my favourite place by the tree. But at the playground my sister, my cousin and I also always had a lot of fun and laughed a lot or planned how to take revenge on my sister. I loved the dragon with the slide which they added recently. We often went down that slide together. Over all the playground turned out great and the mosaic decorations are just beautiful!

Concluding Talk: I have made some of my happiest memories in Neubrandenburg in this park. Many of my happiest memories are also from Leibzig, but covering ourselves with leaves, jumping up and laughing together by the petting zoo for example is a memory that I really love. And when I had more time to play with dad for example, we tried to throw boomerangs and catch them again, which we never managed. But it was all so much fun. But we have a lot of fun today, too. And the park is really important to make that happen.

Table 39: interview about the Kulturpark (north)

6th Step (Identity of the Place): Critical Narrative Analysis

Narrative	
Abstract	• Replaced by coda
Orientation *(actors: who?, where?, what?, when? etc.)*	• Places: under and on trees or decorative boulders, ring street of the city, on the pathways, ice cream parlour, hotel, Villa, Lessing-Gymnasium, petting zoo, playground "Am Stier", lake, the Jahreszeitenwiese in Leibzig • People: Visitors to the park (kids, parents, seniors), the interviewees' family members, the goats in the petting zoo (not people but living creatures) • Objects: trees, boulders, the little creek, sun dial, statue of the three singing kids • Time periods: present day, the interviewee's childhood before Neubrandenburg
Complica-tion	• Only built after the world wars • unknown events / choices at petting zoo
Consequence	• – • removal of many types of animals from petting zoo → now there are only goats
Evaluation *(thoughts and feelings about complication & consequence)*	• There are not as much immediately visible or distinct remnants of the place's history. • The petting zoo is less exciting than before.
Coda *(summary)*	• The park is a retreat for many generations and offers a lot of different activities. • Although the park has objects and plants that make it feel established and old, there are no strong references to any time periods. • The park feels mostly safe, clean and healthy. • The park allows people to move around freely and plants to grow with a natural habitus. • The park is a fitting buffer between the completely natural-looking lake and the man-made city centre.
Discourse	
Interpreta-tion	S – setting and scene: interviewer and interviewee were separate in their homes P – participants: child, ten years old, lives in Neubrandenburg since four years E – ends: – A – relevant act sequence: she required more interposed questions and the interviewer explained the questions longer and in easier words K – the interviewee's key, tone, manner, spirit of speech speech: the interviewee was open, a little timid at the beginning but grew increasingly confident, especially talking about childhood memories and the playground brought a lot of animation to her voice. I – instrumentalities: the interview was conducted via a telephone call N – social norms: – G – genre: conversational interview
Explanation	Although the focus of the girl was on her preferences like climbing, playing as well as consorting with family members, she did also had the empathy and imagination to explain the preferences of other target groups in the park.

Table 40: critical narrative analysis of the interview about the Kulturpark (north)

Closing Remarks

This interview shows how the perspective of a child can shift the focus of things that can be perceived in a place. Further interviews for this place could show that this child-like perspective still produces very relevant and useful answers for describing the 17 properties of the place.

2.5.4 Example 4 – Reitbahn Quarter by the Reitbahn Lake

The fourth example presents an entire city quarter in Neubrandenburg. The Reitbahn Quarter is situated in the north of the Bird quarter which in return is right north of the train station.

1st & 2nd Steps (Self of the Place): Images and Drawings

Image 73: Reitbahn Quarter, panorama part 1 (image by Ladwig 2020)

Image 74: Reitbahn Quarter, panorama part 2 (image by Ladwig 2020)

Image 75: Reitbahn Quarter, panorama part 3 (image by Ladwig 2020)

Image 76: satellite image (image from Google Earth 2020)

Image 77: drawing: satellite image

Image 78: drawing: Reitbahn Quarter, panorama part 1

Image 79: drawing: Reitbahn Quarter, panorama part 2

Image 80: drawing: Reitbahn Quarter, panorama part 3

3rd Step (Self of the Place): Description via the Archetypes

Design Principles via the Archetypes	
(1- Air/Sanguine; 2-Water/Phlegmatic; 3-Fire/Choleric; 4-Earth/Melancholic)	
Shapes / Design Lines: *(What lines and shapes stand out at first glance?)*	• **Type 4**: many straight parallel lines, clean edges • **Type 2**: s-curves and sweeping lines
Patterns: *(Into what patterns are the lines and shapes arranged?)*	scale: • **Type 4**: big patterns on the facades of the houses and on the concrete slab streets • **Type 2**: medium → small on all greenery and foliage
	placement: • **Type 4**: the shapes on the facades are very symmetrical, regular as well as repetitive • **Type 2**: the patterns of the greenery are irregular, but have organically flow rather than angles; the mural has many curves, too • **Type 1**: many lines of the murals are swooping upward or have animated shapes of people and animals
objects: *(What is the perceivable scale*	scale/amount: • **Type 4**: the many prefabricated buildings stand big and bold

and the arrangement of the visible objects?)	placement: • **Type 4**: the buildings and streets seem to be arranged in regular patterns, the trees on the main streets stand in perfect rows • **Type 2**: all green areas towards the lake-side are arranged in deliberate but not structured patterns • **Type 3**: some groups of buildings in the quarter are arranged in angular, asymmetric patterns, trees are distributed in irregular, angular ways on and next to the parking lots.
textures: *(What does the surface quality and scale of the textures on the objects and surfaces look like? → The perceived, not the absolute quality!)*	quality: • **Type 3**: rugged / coarse exposed aggregate concrete on GDR-buildings • **Type 4**: sleek and smooth on the plaster of prefabricated buildings • **Type 2**: the foliage on most plants creates rather soft and blended textures scale: • **Type 2**: small (most foliage, grass etc.) → medium (most branches and the buildings) sizes • **Type 4**: fine → none in the plaster of prefabricated buildings
colours: *(What type of colours do you see (bright, muted, rich, bold)? How do the colours relate to one another?):*	type of colour: • **Type 4**: clean hues on the murals on the buildings as well as the white of the plaster • **Type 2**: soft greys and browns and other desaturated colours on the rest of the facades degree of contrast: • **Type 1**: medium → high contrast in murals • **Type 3 → 2**: medium → low contrast in the building (other than the murals), greenery and streets
Summary: Over all the visual movement of this quarter is not very high due to the strong presence of type 2 and type 4 design principles. Because the murals on the buildings express type 1 movements, they clearly stand out in colour, contrast and design lines. Another contrast in design lines is between the green areas around the Reitbahn lake and the streets and buildings of the quarter. type 4 (8 times) type 2 (7 times) type 3 (3 times) type 1 (2 times)	

Table 41: archetypal analysis of the Reitbahn Quarter

4th Step (Identity of the Place): Short Chronology

19th century	• Neubrandenburg was a centre for horse racing next to Güstrow and Doberan.
1829	• Horse race track and a race path where the later Reitbahn Quarter was (until 1864).
1983	• Building of Reitbahn Quarter (name from old racetracks and path) in prefabricated construction (Plattenbau)[610]
1993	• Quarter was accepted for a city development program "Wohnumfeldverbesserung"
2000-2008	• Receiving means and projects from institutions like EU URBAN II NORD.
since 2002	• Part of projects that update and dismantle the quarter from unnecessary structures due to decreasing population in city
2006	• Accepted for another support program (Bund-Länder-Programm) "Die Soziale Stadt"[611]

Table 42: chronology of the Reitbahn Quarter

5h Step (Identity of the Place): Narrative Interview

For this interview a young, married couple, 32 and 31 years old, was interviewed. They originally come from the northern Ruhr area and moved to Neubrandenburg because the wife studied at the *University of Applied Science* in Neubrandenburg for four and a half years. They only lived in the Reitbahn Quarter during the wife's study and their subsequent professional engagements. The contribution to the conversation of the wife are marked with a *W* and the ones of the husband are marked with an *H*.

---

610 Stadtverwaltung Neubrandenburg 1996, pg 5
611 Quartiersmanagement Neubrandenburg w.y

Written Record of the Interview
(27th October 2020, 9:05-10:12 pm)

Part 1 – Free Presentation

○ *What would you say is the essence or spirit of this place? & What is worth telling about this place to you?*

H: international, not very noble, lake right next to it, high-rise buildings

W: We lived in Neubrandenburg for 4 ½ years and exclusively in the Reitbahn Quarter. It didn't feel very central and was not a very busy quarter. The highlight was always the Reitbahn lake and I miss it now (that I don't live there any more). It was always nice to walk at the lake. You could do waterski or at least watch others do that. I always tried to start swimming early in the year and do that as often as possible. I somehow never felt observed or hassled in the quarter or at the lake despite the many people who live there. Oh, and I learned that every high-rise building only has a lift when it has 7 storeys in Neubrandenburg's older buildings. Having the housing association *Neuwoba* was also great because they always helped and provided good services. Mh, what else? All the buildings look the same and the designs are quite simple. There is a lot of concrete… the apartments are very affordable and they still offer a tub and a balcony in most cases.

Part 2 – Questions

1. *Coherence of the place:* How coherent, unified or disconnected and pieced together does the place feel for you?

H: The prefabricated buildings are all uniform looking. Sometimes there are some added colours that make it more interesting, but other than that it all looks very similar.

W: Yes, especially in comparison to the city centre it is all very uniform. The buildings are also quite close together in relation to how high they are. So I sometimes felt it was a little confined.

2. *Origin of the elements:* How native, local or international and foreign do the elements seem?

W: The concrete in the prefabricated buildings makes it feel more cold and very square. There is nothing round in the buildings and barely anything in the streets. But, I think it fits in that quarter. But I also don't know the place in any other way.

H: And it was created this way because it was built as one area in the GDR. The style of the prefabricated buildings in only intercepted by some supermarkets etc. Oh, and the lake breaks that up massively, too, although it's also a man-made quarry pond, not natural. But over all its all seems to flow together.

3. *Orientation within the place:* How well can you orientate yourself in the place and how well do others seem to be able to orient themselves in the place?

W: Medium well, I think. It took me some time to get used to that area and because the buildings are so tall, you can never see far. And there are so many little paths in between the houses. The quarter has many nooks and crannies that confuse you more than help you orient yourself.

H: And the fact that most buildings look so similar and that there are so many of them doesn't help either. There are very few unique objects or buildings that help you orientate yourself. After living there for a few years I could still find new courtyards when I just turned a different corner than usual.

W: And the house numbers, for example, were all distributed quite weirdly: the 22 was not at all close to the 23 and so on. We haven't understood the logic of this until today. And many buildings also have front and back entrances, where the back entrances have numbers but no doorbells and names, but you can't clearly tell that it is just the back entrance.

4. *Accessibility / Usability:* How accessible and how useful do you experience the place as a whole and its elements?

H: The infrastructure for food supplies is definitely very good. There are small discounters but also bigger stores. Later a store with uniquely Arab foods came, too. I don't think the quarter is too far from the rest of the city, either. It is connected through the Bird Quarter and then also via the big Demminer Street which leads directly to the city centre. Sometimes it is not so easy to find your way through the Reitbahn Quarter with the car, though, because there are some surprise one-way-streets.

W: But I did notice that many people who lived in the city or close to the centre didn't like to come to the Reitbahn Quarter that much. On the one hand the reputation of the quarter is not so great and on the other hand those friends who all had to walk, felt it was too long of a way.

H: But that's also because they are students and used to having everything right next to them

W: But over all my husband Is right that every important amenity was in the Reitbahn Quarter like apothecary, post, doctors etc. or close enough to it. And you can reach every place in the city, or at least all important places by bike. No cars needed.

5. *Complexity:* How complex and divers in detail does the place or its elements seem to you and others?

W: There is not so much to see in the quarter except for the pretty drawings on the beach block buildings. I think the place can do with more of those drawings. But other than that it is visually very reduced.

H: One could call it low in stimulus. There are just buildings and sometimes maybe pretty balconies but most of the time I only saw these blocks of buildings as one and the details on balconies were not in the foreground.

W: That's true, but I did like how the housing association awards prizes to those with the nicest balconies. So they are supporting the effort of the residents in making the block nicer.

6. *Comfort / Safety:* How comfortable and safe do you and others feel in the place?

W: I felt good living there most of the time. At the end one thing that annoyed me was the many pooping and breeding pigeons. But it was cute when one pigeon couple had a nest and babies on our balcony and the nature conservation office protected them after we moved out. And another thing was that the apartments are not very sound-proof, so we heard quite a few fights, parties etc. on a regular basis. In front of REWE (discounter) there was often a group of men who were drinking. But I was never harassed or threatened by them or anything. So I felt safe on the streets as well. But it was usually quite cold and bare looking between most buildings, so that was not the nicest.

H: I felt good there, too.

7. *Interest / Uniqueness:* *What do you feel makes this place special, unique or separates it from other places?*

H: The fact that there are so many prefabricated buildings is quite special for the Reitbahn Quarter. I mean, there are other quarters with many of them like the Oststadt (east city) or Datzeberg, but those buildings and quarters look different.

W: Of course the lake makes it special as well. It offers so much swimming, sport, recreation, walking etc. Although I never understood why, I sometimes felt that the lake also didn't have the best reputation. Well and another special thing is the affordability of the apartments. Just in comparison to the neighbouring Bird Quarter it is a huge difference in rent costs. And I don't see why the Bird Quarter justifies that big of a prize difference.

8. *Visual presence:* *Is this place a visual point of interest to you and your community or are there visual points of interest within the place?*

H: Just the paintings on the beach block, I think. Because the lake would be one, too, but it isn't as immediately visible at all.

9. *People-place relationship:* *What is your relationship with this place and how do you feel people are connected / identified with this place?*

H: The Reitbahn Quarter was the first thing we got to know about Neubrandenburg and the only place we lived in Neubrandenburg. For us that place was home soon after moving in.

W: It was a good and strong relationship. The lake, the accessibility by bike – I really liked it.

10. *Mystery / Intrigue:* *How interesting does this place seem and how much does it make you want to explore it?*

H: Not really. (laughs) It does at least not look like a very interesting place or a place that would draw you in to explore it.

W: Agreed. But despite that, we found so many things and so many courtyards and corners to explore over time. Especially as Corona (Covid-19) motivated me to take more walks through the quarter. We really enjoyed finding nice paths through allotment garden areas behind the lake among others, for example.

11. *Boundaries / Open spaces:* *How open or enclosed do you feel this place is? Do you perceive any strong boundaries, barriers or open, empty spaces?*

H: The quarter has strong boundaries in the high-rise buildings. Although I never felt it was too bad, the quarter has the tendency of feeling a little constricted. But we lived near the Demminer Street and therefore closer to the edge of the quarter. The buildings feel more like massive huge walls the further you are in the middle of the quarter and very strongly in some courtyards. And because the quarter has so many nooks and crannies, the impact of the buildings as walls is even stronger, too. But towards the Demminer Street and the Reitbahn Lake it opens up quite a bit.

12. *Affordances:* *What activities do you feel this place affords people? How flexible, multi-purpose / inflexible / one-purpose is the place in offering those options for action and interaction?*

H: It's not very flexible in use. The buildings are obviously fixed and many outdoor areas have very fixed equipment as well. And other than that, you can do a lot of grocery shopping. There are some fast-food places.

W: Swimming, walking, waterski. Especially the rounds around the not too big lake invite dog walkers, joggers etc.

13. *Intentionality of design:* *To which extent do you perceive an intentional design or plan in the place?*

W: You can very much see an intended design. There is an obvious organisation of the buildings, the open spaces in between, parking, playgrounds etc.

H: It's not pompous but it's all well thought of and structured. There are many parking spots for example. Even if they are not all in front of the houses, there are ample ones close enough to every building. So unlike in many other cities or parts of the city, you always have a spot.

14. *State of the place:* *How intact, healthy and functioning do you feel the place is?*

W: Between the buildings there are some bushes or grass – it was very loud when they mowed it – but there is no real nature. The lake in contrast to this looks more natural than its quarry lake origins might suggest and it feels health and intact.

H: Yes, it feels very: lake vs buildings in this respect. The only more diverse "nature" can maybe found in planters on balconies. And the lake has much nature around it where we saw many animals, too. The water ski facility on the lake of course breaks the illusion of pure nature. But there are corners that don't feel as much like a man-made pond.

(*And the buildings – how broken/intact are they?*)

H: From the outside the buildings are well-kept, I think.

W: But on the inside many apartments feel quite dated, although they are not very old, and a little worn-out.

H: Right next the Arab Grocery shop there is one area that seems to belong to no one and that is incredibly run-down. But for the money that you pay to live there, the Quarter looks clean and intact enough by all means.

15. *Context:* *How strongly and in which ways can you feel the historical, natural and cultural context in this place?*

W: You don't really feel a long of a history in that quarter. Only the horse-related names of the quarter, the lake and the streets as well as the horse statue in front of the REWE discounter indicate a horse race related past.

H: But of course the time of the GDR is very palpable, since the whole quarter was built in that time and with the respective mindsets when it comes to living and building (many affordable apartments, most look the same, prefabricated buildings, etc.). Oh, and there are some old train tracks and a play locomotive that show old train-lines. At the beginning I also felt weird about the intense presence of the two only housing associations *Neuwoba* and *Neuwoges*. With what I knew about the GDR administration, the centralised and state planned organisation of the economy and the structure of people's private lives, they felt like they had too strong of a monopole. But I got used to the two names being on almost every rented building in the city, plus they did a good job over all, so there was no reason to complain.

16. *Context: How strongly and in which ways can you feel the historical, natural and cultural context in this place?*

W: Because of the tall buildings you hear and especially see very little of the rest of the city. Even we, who lived closer to the Demminer Street barely ever heard it. But you could hear birds twitter and of course the pigeons.

17. *Stewardship: How do you feel about the people that make and made all the choices for what happens to this places?*

H: I do think it's a bit of a shame that they haven't come up with more creative design ideas for the buildings like they did for the beach block. With all the grey and the few colourful balconies the place could really do with more colours and creative elements. When it comes to the infrastructure I don't have anything to complain about. It's all there and arranged in a well done manner.

W: The service of the *Neuwoba*, which we had was amazing. The garbage bins were all very close to the buildings and although there sometimes was no recycled bio garbage container, you had all the recycle options you needed including glass and clothing boxes etc. Furthermore the stairwell cleaning was done by them as well and subtracted from the very affordable ancillary costs. They also gave people in those buildings the chance to apply for those jobs first, so they often employed residents that felt connected to the place. And when something was the matter, the Neuwoba was very fast to send someone over. There were also such amenities like a reading bench by the lake – a bench filled with books that you could take from and add to. Unfortunately that bench was scorched a little but they rebuilt it. Although I don't know who was responsible for that project. And sometimes you felt like you were in the shadow of the close and from the lake visible Datzeberg when it came to projects or state care. On the Datzeberg everyone was poorer, it was harder, the buildings were higher and it needed more help than the Reitbahn Quarter.

H: Through my work I got to know about a few initiatives like the quarter work (Quartiersarbeit) as they called it. There they started projects for the Reitbahn Quarter, the Ihlenfelder Vorstadt and some other part of the city I don't remember. But I'm not quite sure what exactly they did.

Concluding Talk: W: There was also the alley at the old train tracks between the Reitbahn Quarter and the Bird quarter which was always quite beautiful and a natural path. And the two roundabouts also introduced new and more rounded shapes as well as open areas into the quarter. Over all there seemed to be very little cultural offerings for us. There was a lot for families, kids and teenagers, though. And in the quarter I always felt quite anonymous. People didn't have that much contact with one another, even within one prefabricated building. One didn't really know who lived next to one another. But maybe that is because we were no family and not involved in family-activities. And I found out that there is one mosque near the Arab shop and that this is the only one in Neubrandenburg, which is a shame too. People tended to be relatively arrogant towards the Reitbahn Quarter sometimes. Like it was too dirty, grey and poor or something.

H: In two separate incidents two of our neighbours made a comment as we moved out, both asking the same kind of things: "Ah, did you find something better, then?"

Table 43: interview about the Reitbahn Quarter

6th Step (Identity of the Place): Critical Narrative Analysis

Narrative	
Abstract	• Replaced by coda
Orientation *(actors: who?, where?, what?, when? etc.)*	• Places: the lake, the Arab grocery shop, other city quarters (Datzeberg, Ihlenfelder Vorstadt, city centre, Oststadt), the fast food places, the post office, apothecary, shops and discounters, Demminer Street, a mosque (single room), parking lots • People / living creatures: Fellow residents, two prominent housing associations, GDR administration, state and other organisations today, pigeons • Objects: trees and roadside greenery, greenery around lake • Time periods: GDR, today
Complica-tion *(events in time)*	• building of a city quarter in the 70ies in the GDR • participation in many supporting and refurbishing programs
Consequence *(resolution of events in time)*	• quarter exclusively built according the GDR-ideology • surface and interior refinishing of the structures • some programs farther events and community activities
Evaluation *(thoughts and feelings about complication & consequence)*	• The centralised administration of the buildings by the only two associations works really well as they provide good service for the buildings and the community. • All flats are very simple but have all necessary amenities as well as a bath tub and a balcony • Many flats are still run-down or built with low-quality materials • Some programs involve the residents in bringing colour and life into the quarter • Most programs for the community are primarily designed for families, not young people without children
Coda *(summary)*	• The conformity of the buildings decreases perceived orientation, visual interest or comfort. • The size and the proximity of the buildings create intense boundaries that can feel restrictive and claustrophobic • The quarter is well equipped with services and amenities as well as well connected to the rest of the city, especially the city centre. • The quarter has a distinct character that is very expressive of building in the GDR

	• The quarter and its inhabitants seem to have a negative reputation that can only in parts be confirmed.
Discourse	
Interpreta-tion	S – setting and scene: interviewer and interviewees were separate in their homes P – participants: interviewees = husband and wife from the Ruhr area of Germany who exclusively lived in the Reitbahn Quarter for 4 ½ years, interviewer = author of this thesis E – ends: – A – relevant act sequence: – K – the interviewee's key, tone, manner, spirit of speech speech: the interviewees had a positive but critical mindset towards all topics of discussion and took answering the questions quite seriously I – instrumentalities: via telephone N – social norms: – G – genre: conversational interview
Explanation	Despite the couple's prior unfamiliarity with the customs of eastern parts in Germany and despite their critical eye, they painted quite a positive picture of the quarter in general and their personal experiences in that quarter.

Table 44: critical narrative analysis of the interview about the Reitbahn Quarter

Closing Remarks

Due to the fact that this couple moved into the quarter from another part of Germany and was therefore not strongly identified or attached to the items and characteristics of the place, they could be quite critical while painting an over all very positive image of the place.

The observations of the description via the archetypes was again echoed very well in the statements of the interview as it was the case in the other examples.

2.5.5 Short Examples for the Genius Loci as the Self of the Place

The previous four examples have already shown that the archetypal analysis of the visual impact correlates with the descriptions that the interviewees gave. In this chapter a few more short examples show, how fast the archetypal analysis can give a designer a quick impression of a place's character without any intense research.

The newly developed method is not only applicable to outdoor but also to indoor places. The first short example therefore shows the market square centre which is one of the more recent buildings next to the market square in Neubrandenburg that was explored in the first example of this thesis.

Market Square Mall

Image 81: view down the corridor in the Market Square Centre (image by Kittner 2020)

Image 82: drawing: view down the corridor in the Market Square Centre

Image 83: view down the a partly circular corridor in the Market Square Centre (image by Kittner 2020)

Image 84: drawing: view down the a partly circular corridor in the Market Square Centre

In comparison to the market square, the market square centre expresses fewer archetypes – type 4 and 1 are clearly dominant. The corridors on the one hand are clearly expressive of type 4 (a noticeable visual structure and cleanness which means lack of clutter) with a few type 3 colours and type 2 metals. The shops stand in a clear contrast to that. They are expressive of the type 1 visual busyness (= a lot of visual movement, each item tries to stand out) and randomness (= visual aspects seem disconnected because they share no design principles). Furthermore the stores offer many options of socialising and buying new products (type 1).

City Wall and Gates

Image 85: Friedländer Gate, Stargarder Gate and an interior part of the city wall

Image 86: drawing: Friedländer Gate, Stargarder Gate and an interior part of the city wall

Image 87: New Gate and Treptower Gate

Image 88: drawing: New Gate and Treptower Gate

Here type 2 and type 3 come to mind immediately. Warm colours, a medium contrast substantial structures, many non-right angles and the recurring break in symmetry (type 3) on the one hand are complemented with soft grey cobble paving, many intricate but subtle detail in the facades, rounded shapes as well as softness in the surrounding greenery. The green of the surrounding nature also expresses either type 2 or 3, depending on the light and season. Only the "Wiekhäuser" (black and white houses in the wall) as well as the faces of the gates have some higher contrast details and some symmetries that create a more stately appearance (type 4). Although each gate has different design lines, all the other design principles connect them to each other as well as the wall. Their added details and higher contrast makes them stand out even more and in connection with their scale demand people's respect.

Kulturpark (South)

Image 89: Oberbach Bridge towards Tollensesee (image by Kittner 2020)

Image 90: drawing: Oberbach Bridge towards Tollensesee

Image 91: Oberbach Bridge towards Oberbach (image by Kittner 2020)

Image 92: drawing: Oberbach Bridge towards Oberbach

In this southern part of the Kulturpark, type 2 in the shape of s-curves, sweeping connected lines and some grey concrete is very prominent. Just like it was in the northern part of the park, the scale and placement of the patterns and objects as well as the textures of all the trees and bushes express type 2 movement. The water of the lake does the same. Unlike it was in the northern part of the park, these images also show a lot of type 4 aspects. The pathways for example are more defined because their light colour creates a stronger contrast against the grass than the grey concrete did. Moreover, considerable stretches of the waterline are straight and artificially fortified. The clear white colour of the bridge, the bridge's size and parallel and exact placement of the cross pieces in the railing are also expressive of type 4. In all areas where the grass looks perfectly kept and uniformly green, this aspect of the greenery also expresses type 4.

Playground in Kulturpark "Am Stier"

Image 93: playground "Am Stier", panorama part 1 (image by Ladwig 2020)

Image 94: drawing: playground "Am Stier", panorama part 1

Image 95: playground "Am Stier", panorama part 2 (image by Ladwig 2020)

Image 96: drawing: playground "Am Stier", panorama part 2

Aside from the previously described type 2 surroundings of the Kulturpark, the playground offers many animated objects to play with (type 1). Especially animated are the concrete bull and dragon statues (dragon not in the images) that double as climbing frames and in the case of the dragon as a slide. The colourful mosaic decorations add randomly placed blotches of colours to the benches (type 1) and texture and depth on the statues (type 3).

Villas Around the City Centre

Image 97: ring street with adjacent row of villas and entrance to Jahn Quarter

Image 98: drawing: ring street with adjacent row of villas and entrance to Jahn Quarter

The swooping lines of the street and lamps as well as the natural trees of the ring ramparts (type 2) are contrasted with dominant type 3 / secondary type 4 houses. These houses show much structure, but have more movement and detail to the facade than type 4 as well as many non-right angles and asymmetric layouts of the houses (type 3). When it comes to the colours (type 1 and 3 – depending on the light), the quarter expresses a lot of movement even though most colours are rather light.

Katharinen Quarter

Image 99: Katharinen Quarter by the Volkshochschule (image by Ladwig 2020)

Image 100: drawing: Katharinen Quarter by the Volkshochschule

The buildings are characterised by simple and regular repeating shapes (type 4). When comparing the old substance (left and right images) with the new substance (middle image), it becomes clear, why the former are perceived as much softer and more intricate. First of all the scale of the modern building is bigger. Second of all, the repeated, regular shapes are exact and perfect. And third of all, the facades offer very little added detail or texture (all type 4). The straight lines in the old buildings on the other hand seem more crooked and imperfect (type 2). Further detail and subtle breaks of the regular design add more type 2 movements to the otherwise equally as type 4 concept of building as the modern structure. The colours in these pictures are over all more saturated and richer shades of red bricks (type 3), which adds some warmth and depth to the impression.

Brewery Quarter

Image 101: Brewery Quarter, panorama part 1 (image by Ladwig 2020)

Image 102: drawing: Brewery Quarter, panorama part 1

Image 103: Brewery Quarter, panorama part 2 (image by Ladwig 2020)

Image 104: drawing: Brewery Quarter, panorama part 2

Although the moderately sized houses (type 2 scale) with their steep roofs (type 3) are all situated along the street and resemble each other, each house is slightly different, sometimes in colour and texture and sometimes even in its orientation to the street. Each plot also has considerably different gardens. The many details are however connected by the family resemblances of the design lines as well as the scale of the houses and plots and thus seem connected (all type 2). The parallel lines of the concrete slabs that the street is made of express type 4 but due to the gradient of greys in the street and the walkways and the lack of other strong type 4 design lines, they are not very striking. Aside from the grey in the street and walkways, many buildings have either white (type 4) and grey (type 2) render or brick exteriors (type 3) with different amounts of greenery or concrete in their front yard (type 2).

Bird Quarter

Image 105: crossroad in Bird Quarter, panorama part 1

Image 106: crossroad in Bird Quarter, panorama part 2

Image 107: drawing: crossroad in Bird Quarter, panorama part 1

Image 108: drawing: crossroad in Bird Quarter, panorama part 2

This place is more colourful, both in its literal colours as well as the distribution of the archetypes. The colours range from greys (type 2) to red bricks or roofs (type 3) and light yellow (type 1). The many colours of the items in the streets as well as on and around the buildings have a medium to high contrast (type 1). The houses are arranged in regular patterns and offer many parallel lines (type 4). The considerably open crossroad area has blue/grey streets with a medium → small texture to it (type 2) and offers many items for certain activities like parking, clothing disposal, advertisements, crossing the street etc. Because these items do not share design principles, they appear disconnected from one another and present a more "random" picture (type 1).

East City

Image 109: Oststadt, panorama part 1 (image by Kittner)

Image 110: Oststadt, panorama part 2 (image by Kittner)

Image 111: drawing: Oststadt, panorama part 1

Image 112: drawing: Oststadt, panorama part 2

Just like in the Reitbahn Quarter, the houses show a high amount of symmetry, parallel lines and a low amount of details (type 4). They also create incredibly high jumps in scales from the ground to the buildings (type 4). Unlike the Reitbahn Quarter, however, many of the bigger complexes have an angle (type 3) in their otherwise regular layout (type 4). Although the trees in the street slightly soften (type 2) the buildings, their row-like arrangement (type 4) and their naturally smaller size (type 2), the type 4 qualities stay dominant. Only some buildings break the pattern of the otherwise mostly white and grey colours (type 4) and add warm browns and reds (type 3).

3.   Conclusion

The exploration of the phenomenon *genius loci* lead the author to conduct a lot of research, clarify terminology and historical backgrounds as well as many specific methods and approaches to describing the *genius loci* or related terms. Because no methods were found that enable designers to sufficiently describe the *genius loci* in its entirety, the author chose to develop a new method herself. She analysed and compared existing points of view, determined her own standpoints and developed a new method, using many different parts of previously examined methods as well as further research. In order to demonstrate the operating principles of the new method and in order to further explain its single tools, it was then applied to example places in Neubrandenburg, Germany.

3.1   The Research

The research about the relevant terminology and methods that are related to the *genius loci* focussed on answering the first two research questions of the thesis. On the one hand the research of the terminology offered many answers to the definitions of a *genius loci* and their development. The research about the methods on the other hand illuminated which methods examine which elements in order to evaluate the which aspects of the *genius loci* or its equivalents. By relating these two steps of research in the analysis and comparison, the historic and contemporary phenomenon of the *genius loci* was successfully presented and discussed.

The study of the terminology of spatial terms and different kinds of identities lead the research for possible existing methods of describing the *genius loci* for designers into three main directions. The first direction was the research of methods in the multi-disciplinary field of environmental psychology. Because the method that the author later developed was supposed to be scientifically developed, this part of the research also informed her about the scientific approaches that such a model or method can adopt when describing people-place relationships. Although sciences do not use the term *genius loci*, environmental psychology offered many similar and some equivalent terms as well as methods to evaluate them. The methods that could be found use many different but also many ever recurring criteria (depending on their scientific approach) in order to quantitatively and sometimes qualitatively describe or assess a place's quality. While some focus on the quality of landscapes (visual assessment methods), other describe the physical characteristics (landscape character assessment), the impact of characteristics of places on the human well-being (health-related landscape assessment methods) or the affordances of places for people (function-related landscape assessment methods). Methods from social sciences added the approach of studying people's narratives and discourses about places to the research.

The second field of research in this thesis was architectural and urban theory. Inspiration to search for methods in this field came from two early made observations. First of all, this field offered the well known and ultimately only method that was specifically created to describe the *genius loci* for designers (by the Norwegian architect Christian Norberg-Schulz). And second of all, architectural theory offered theoretical evaluations of the profession of architecture and related practices that per definition work with the *genius loci* in the most immediate way – by influencing it through its designs. The methods that could be found in this field of research emphasised the value and importance of a phenomenological approach when studying the *genius loci* or equivalents, since all were based on a practical and subjectively observation-based mindset. Norberg-Schulz took the

important steps of translating phenomenology into architectural theory and developing mindsets concerning the way people attach meanings to their surroundings that would only years later get scientifically established. His method itself, however, was still quite unwieldy, imprecise and characterised by older and ultimately limiting conceptions like separately analysing natural from man-made areas. The method of centres and wholeness by the American architect Christopher Alexander built on the research that Norberg-Schulz initiated. With the *Alexandrine organic world picture* Alexander consciously or unconsciously introduced a concept that merges scientific knowledge about human perception (centres = points of attention) with the more holistic but also pseudoscientific conceptions of life-energy that flows through all animate and inanimate entities. In Alexander's phenomenological spirit this life-energy is no literal force as it is in Asian philosophy but the perceived wholeness of animate or inanimate entities that results from an interplay of all perceivable centres. The methods of Alexander and his colleague, the Greek-Australian polymath Nikos Salingaros, assess the quality of designs by determining the intensity of this perceived *architectural life* in objects and designs, since they equal this intensity with "good" and "suitable for human well-being" architecture. Another concept, the two developed is the differentiation between *pattern languages* that describe the abstract patterns of solving design challenges in accordance to human sensibilities as well as *form languages* that refer to design choices that are determined by trends and cultural developments.

Further research showed that one popular method of describing people's perceptions of design principles (*feng shui*) required the author to include the third research field for this thesis – pseudosciences / esotericism. *Feng shui*, an increasingly popular pseudoscience from Asia offers a complex set of rules for assessing and manipulating the energy (as described in Asian philosophy) in places. Besides the fact that this method is not scientifically developed, it proved to have some component parts that are based on the perception of people and describe how these perceptions can be communicated in a consistent and methodical system of symbolic language that has no equal in any other (scientific) methods.

The two phases of researching the terminology first and the methods thereafter took much longer than the author anticipated. The author observed two reasons for this. First of all there were no methods that were quick and easy to find which specifically described the *genius loci*, let alone described it specifically for designers. The second reason is due to the fact that the author was determined to describe the *genius loci* as a whole phenomenon in her method and not just parts of it. In order to create a sufficiently comprehensive pool of research as a basis for a new method, more information needed to be acquired over a longer period of time.

Although the author believes to have created a method that describes the whole phenomenon of a *genius loci* for designers, she is aware that her method is not the result of a comprehensive study of all known approaches to the *genius loci* world wide and throughout time. It would therefore be very useful to continue the research and study more known methods in order to extract the most popular patterns that people use in those methods that attempt to grasp a *genius loci* or *spirit of place*.

3.2   The New Method

Because no methods of describing the *genius loci* for designers were found, the third research question of this thesis asked the author to formulate a proposal for a method that could be

suited for designers. In order to provide more time for developing a method and subsequently applying it, the author decided to make suppositions of what designers would require in a method based on her common sense, personal experience and prior research only.

The method was then created to make the whole spectrum of the way humans perceive places describable. One part of the method therefore focusses on describing what general associations people seem to have with different design principles. The second part of the method allows the designer to explore time- and place-related, more specific identifications people have with and about the place. Thus the perception of anyone can be reflected in the method, no matter how much or little and how positively or negatively they are identified with the place.

When assembling the method, the different world views made a mere combination of the original tools of the respective methods impossible. However, similarly working small parts of those methods as well as further developments of other existing tools could eventually be included into one cohesive method. For the first part of the method the holistic, perception-based approach of the *Alexandrine organic world picture* was adopted. In order to describe the drawn created by using this world picture, a non-judgemental and descriptive system, similar to the also holistic Asian five elements, but with a symbolic relevance in the European or western world, needed to be found. The author found several established European metaphysical tools that use a similar set of symbols and symbolic language. However, they described the general human instead of the general spatial character. With those methods as well as a new tool that combines these archetypes with design principles, a comprehensive table with four European archetypes could be constructed that offers a systematic description of the perception of basic spatial characteristics.

The second part of the method was much faster assembled. Because the specific identification processes of people in relation to places has received plenty of scientific research, the already existing tradition of deducing the main identifications from people's narratives was continued in the new method. For gathering people's narratives, the structure of the established tool of a *narrative interview* was used and the content of the questions was put together by the author from the subsumed amount of characteristics and properties that the various methods in environmental psychology had already evaluated to be the most relevant when studying people's perceptions of places. The tool for analysing the gathered narratives and discourses, the *critical narrative analysis,* also already existed and only needed to be slightly adopted in order to be more manageable for designers.

In creating the method, the author found it especially challenging to find ways in which the different approaches to the *genius loci* could possibly be combined. Each method seemed to be inseparably tied to the world view it was created from. Furthermore the author was hesitant about possibly misconstruing the original methods by taking them apart or using them in a different way. However, the author found that only by taking the methods apart into their component parts, detaching the specific definitions of world views and the resulting *genius loci* from them and by only looking at the similarities in the mechanisms of how each tool worked, the important connections could be made. After these connections were made, the author consulted the previously ignored context of the relevant parts again which could then much more easily be worked into a cohesive method.

While the second part of the method is mostly made of well established scientific tools, the first part of the method could only be created by staying open-minded and engaging with non-

scientific ideas in a scientific manner. This open-mindedness in combination with the maintenance of a scientific methodology was an important act of balance in order to create a multi-disciplinary and holistic method. Since many ideas that were formed alongside the scientific methods proved limiting or counterproductive for creating such a method, the author had to deliberately detach herself from those world views (dichotomies of man and nature, subject and object etc.) while staying true to the scientific methods.

Thus a method was constructed which re-connects several, previously strong dichotomies. First of all the method unifies eastern philosophical ideas with western scientific concepts about perception. Second of all, the method breaks with the tradition of considering and measuring natural and man-made elements separately, since the perception of either elements functions according to the same laws, no matter what is perceived. Furthermore the method also uses both objective as well as subjective data to describe the place. While the evaluation of single visual design-principles and the list of historical events are clearly objectively measurable items, all generally associated or time- and place-specifically attached meanings are subjective. And last of all, the method strikes a balance between essentialist ideas which state that all human perception happens according to basic natural laws and the social constructivism which argues that all perceptions are a socially determined and established consensus. The method achieves this by using tools that resulted from both mindsets. While the joint associations that people consensually seem to have with certain design principles in the archetypes were based on essentialist ideas, the more or less strong consensus that people deliver in their narratives and discourses stems from social constructionism. It would of course be very interesting and useful to find out where and to what degree which natural associations and social consensuses were formed, but this knowledge is not relevant for using the newly developed method.

3.3   The Application

The author always planned to test an either existing or a newly formulated method in a practical context. The author also always intended to choose all example places from Neubrandenburg, Germany. Firstly this is due to the fact that the city offers many quarters and areas that have a distinct and unique look. Secondly, for the sake of applying the method, the author has the ideal relationship with Neubrandenburg: she is not identified with the specific history of the city herself but she has created a strong and favourable bond with the current situation of Neubrandenburg through the five years she studied there. In other words, she is in a position in which she can express love and open curiosity for the places without being identified with the particular meanings that the residents might communicate to her. These conditions happen to be exactly what Clandinin and Connelly demand from researchers who study narratives as well as what phenomenologist researchers exude when they study a phenomenon.

For quite some time before the new method was completed, the author intended to conduct a comprehensive application of the method to places within one city quarter and to subsequently analyse the produced representative data. The quarter chosen for this was the Katharinen Quarter. Here the author received information as well as a guided tour from Marie Mamerow from the monument protection authority of Neubrandenburg and Harry Hahne who works in the historical adult education centre in that quarter. The moment the newly developed method was finished, however, it became obvious that such a complete or representative application of the method was impossible to conduct for time reasons.

It took the author some effort to deliberate what other practical applications would be possible and to evaluate what type of applications would add to the thesis the most and do the new method as well as the examples justice.

In order to further explain and substantiate the way the method functions as well as the type of results it can provide, the method was then chosen to be applied in two ways. First of all, four generally well known places in Neubrandenburg were chosen which offered informative interviewees. Although these interviewees were found, each of the four examples only offers one interview, which is in no way representative of the places that they have been chosen for. They are place-holders that are supposed to present what such an interview could look like and how designers would work with it. Each example was analysed in six steps:

1. several photographs that show the place and a satellite image,
2. drawings of centres and fields of centres (according to the *Alexandrine organic world picture*) for each photograph and satellite image
3. a table with the description of the design principles via the four archetypes,
4. a short chronology of the place,
5. a translated and written account of a *narrative interview*, and
6. a reduced *critical narrative analysis* analysing the narrative and discourse of the interview

The second part of the application gives nine short examples that further test, demonstrate and explain the way the design principles of many differently looking places throughout Neubrandenburg can be described through the archetypes and what type of insight can be gained through that. This was chosen because the first three steps that describe the *genius loci* as the self of the place uses tools that are not yet established in designing practices and have in parts only been arranged in this thesis.

Because of her personal attachment to Neubrandenburg, it was a great satisfaction to the author to show the different facets of the city that she explored throughout her studies. For the same reason the author would have liked to and now invites others to apply the method to every main city quarter in order to tell the whole story of how today's *genius loci* or character of Neubrandenburg developed. The executed examples already hint at many correlations between certain eras, events and ideologies on the one hand and certain choices for the design principles on the other. The author is convinced that further research and studies of this would offer valuable insight and a great understanding of the city's character. Moreover the findings of the application also make it interesting to study to which degree the insights from the first part of the method (steps 1-3) correlate with the personal statements and backgrounds of the interviewees in the second part (steps 4-6).

Another idea which is no longer part of this thesis but would be the logical next step, is to further test the method's suitability and usability for designers. In order to do that, the finished proposal of the new method could be summarised in a short manual and sent to a variety of design firms, preferably from all over the western world. A survey could then be made where the firms quantitatively and qualitatively evaluate the ease with which they feel the method can be added into their routine, the ease with which the designers can understand and apply the method and the value of the insight that the method seems to afford them.

3.4 Reflection and Outlook

So far design is often considered to be completely subjective and its understanding mostly reserved to those who studied it. Thus the rules of design and the perception of design stay more of an enigma that cannot be expressed in rational words at all or a topic that is reserved for an elite group and too difficult to explain to the average person – a situation which the author thinks is a great loss, because in a way we are all designers. Our choices, no matter how deliberate, educated or not, affect our surroundings which in turn affect us. One could therefore argue that in a way this thesis worked on understanding the phenomenon of the *genius loci* as well as on developing a method for describing it that is suitable for everyone. The conditions that the author of this thesis determined for the method (structure and formulations need to be simple, concise and not too complex or complicated) show quite quickly, how this method is also fit to be used by anyone who was not trained in the designing professions. It does not require you to indulge in any complex philosophies, understand arts or psychology and it does not need you to use any complicated or expensive tools. All you need is time to apply it and some practice to become efficient in using it.

From what the author of this thesis can gather in her research, the new method can be useful to designers in many ways. When this method or another further development of it is accepted by the mainstream, design processes could possibly become more democratic and / or conscious, rather than often being elitist and / or arbitrary. Although the method can theoretically be included into most design processes easily by adding it as an extra step into the planning phase that evaluates the current state of the place, it is not at all a given that businesses would be interested in doing so. First of all, when those businesses want to work with the method, a certain shift in their mindset is required. Furthermore, despite the upsides of the method, describing the *genius loci* in a six-step method is still additional work that does not yet receive any extra compensation per law. Moreover, their designs might also become more vulnerable to critique and pushback from more empowered clients. This change in the distribution of roles and power might not be welcomed by everyone.

On the other hand, developments since the industrialisation have set certain movements in motion (globalisation and digitalisation etc.) that continue to question and revolutionise the way people experience and deal with their environment in many ways. After the awareness arose that the environment affects people's well-being as much as people's attitudes affect the environment, the question was raised, what it is that people need for good living or working conditions – inside and outside. Until today these questions stay relevant and have produced the first waves of theories and studies. Main reactions to these developments are the increasing needs of people to be able to

- orient themselves within identifiably different places,
- positively identify themselves with places and items within places, and
- experience a sense of local belonging more strongly again.

These needs have already manifested in various trends which are expressed in every industry today, like for example architecture, product-marketing or travelling industries. What these trends all demand are more green designs / products which prioritise an authentic character or atmosphere and which have a conscious relationship with their context and history. This demand can be complemented by a method, like the one developed in this thesis, which can make the perception of design principles and specific identifications of any kind of *genius* but especially the *genius loci* more comprehensible for both private and professional individuals. Provided this method can be accepted by the mainstream, it will support the business and world of design in general to manoeuvre the unique challenges of this demand with more clarity and determination.

4.   Glossary

affordance	Originally an "action possibility". Perceiving affordances is perceiving the meaning of the environment in relation to the capacities, limits and preferences of the subject interacting with it. Thus certain physical, aesthetic and biological properties of environments enable or disable people from interacting with it in certain activities.
anthropomorphism	Is the process in which humans project life into non-human or inanimate entities and use human-like descriptions for describing their properties, intentions, preferences etc.
architectural life	A force/quality/spirit which consists of a general atmosphere as well as a specific substance and discernable space-defining elements that every existing thing possesses. It can be perceived emotionally and intuitively. It is also called the degree of organized complexity. (equivalent to: unnamable quality)
attention restoration theory	It considers the way stimuli of environments affect people's mental and emotional capacities of being alert and attentive. Kaplan and Kaplan (1989) discovered that several factors (being-away, fascination, extent and compatibility) play into the primitively natural as well as individual preferences in spaces.
biophilia	Is a theory which claims that humans seem to find environments that incorporate or echo natural objects, materials and shapes more attractive or desirable.
biotope structure analysis	A visual landscape assessment method. Classifies ecological biotopes into such categories as grasslands, deciduous forests, water areas etc. and determines four planning categories: core areas, connectivity zones, buffer zones and green developmental areas.
collective identity	A set (in groups or roles) of people who identify / are identified with the same characteristics.
community attachment	Some equal this term with sense of place or place attachment. It means the degree and quality of a person's attachment to a place or community.
design objective method	A visual landscape assessment method. Professionally trained assessors evaluate both landscape patterns made of certain elements as well as the visual scenery that can be made of a fore- and background, particular domains (areas) and side-scenes. While the singular elements of landscape patterns are examined for their shape, scale, colour and texture, the aspects of every scenery is evaluated by assessing the accessibility, visibility and expressiveness.
discourse	Describes the manner of delivery in which a narrative is communicated.
dwelling	When provided, people find their surroundings to be meaningful and to afford them ways of orientation and identification. According to Heidegger it is the purpose of architecture. (equivalent to: existential foothold)
environmental psychology	Is an umbrella term that encompasses all scientific endeavours to explore and evaluate the relationship between spatial entities and people as well as their own or joint identities.
environmental turn	Introduction of the idea into science that people's well-being and the functionality of certain processes is highly dependent on the qualities of people's environments.
existential foothold	When provided, people find their surroundings to be meaningful and to afford them ways of orientation and identification. According to Norbert-Schulz it is the purpose of architecture. (equivalent to: dwelling)
feng shui	Is an ancient Asian, originally Chinese, metaphysical design philosophy that aims at creating the most effective and harmonious relationship between places and people.
five elements	Ancient Asian conception of describing qualities in places and how they affect the way the life energies flows. Derived from the five ways the yin and yang energies can express in places. Are also called the five walks of life.
form language	A set combination of shapes, materials, techniques and qualities etc. that expresses styles and trends.

four temperaments, elements or humours	Archetypes of the general human character, most often used in personality research: the four elements (air, water, fire and earth) or humours (sanguine, phlegmatic, choleric or melancholic).
genius loci	Is a historical, Europe-based term. Has several definitions that all describe a more or less literal soul-bearing entity that can be found in places and has perceivable characteristics. (equivalent to spirit of place)
Heimat	Used in German-speaking areas. Describes an area of land (scale can vary) that people intensively identify with and consider their home.
identification	Is the process of attaching specific meanings to animate and inanimate entities. People can identify themselves with something/one, be identified with something/one or identify something/one with something/one else.
information processing theory	A visual landscape assessment method by Kaplan and Kaplan (1989). It outlines a matrix for human preferences in cognitively computing environments by using the four variables: coherence (order and a connectedness), complexity (diversity of detail), legibility (readable pattern for orientation) as well as mystery (interest evoking, hidden, intriguing elements).
insideness & outsideness	Describes the intensity of the attachment of the relationship of people and their environment: inside (high identification with place), outside (low identification with place).
landscape	Made out of a set of places that are connected. Both natural or man-made places.
language turn	Introduced the idea into the world of scientific research that language is not a way to objectively describe reality but the way that people subjectively perceive their world and create and express their own perspective of reality. (equivalent to linguistic or narrative turn)
linguistic or narrative turn	Introduced the idea into the world of scientific research that language is not a way to objectively describe reality but the way that people subjectively perceive their world and create and express their own perspective of reality. (equivalent to language turn)
method of landscape ecology principles	A visual landscape assessment method. A cartographic method, which in contrast to the sensitive landscape method focusses on the natural features, areas and networks of them.
multi-disciplinary level assessment	A visual landscape assessment method. Combination of methods in a big matrix which has aesthetic and ecological categories that trained personnel use to evaluate specific types of areas by rating them from 1 (low quality) to 10 (high quality).
narrative	The content of people's accounts of their own perceptions and experiences over the course of their lifetime.
niche construction theory	Addresses the impact and interaction of cultural and biological aspects of affordances.
pattern language	Is a compilation of design-solutions for situational challenges as they can be posed by geography and climate or societies and local traditions. They are timeless rules of what solutions people naturally prefer, determined by the physiological composition of the human's perceptional senses.
people's place identity	Category of methods in environmental psychology that examines the degree and quality of the relationship, attachment or identification people have with a specific place.
perception-based aesthetic assessment method	A visual landscape assessment method. The criteria of beauty, diversity, harmony, order and safety are graded by each assessor from 1 (weak or negative) up to 3 (strong or positive) and the different scores show the overall, subjectively perceived quality of the place.
personal or individual identity	A set of animate and inanimate as well as theoretical and practical items, concepts and other entities that a person identifies with.
phenomenology	A scientific and philosophical approach that examines patterns in how people subjectively experience and perceive their life and world.

place / community commitment	The willingness of people to become active participants in shaping their local places.
place attachment	Describes the relationship, attachment or identification of people with places. Either equal to sense of place or the superordinate term of it.
place awareness	Describes the way people are aware of their environments.
place dependence	Describes the way that people's potentials for action are attached to places.
place familiarity	Describes the way people are familiar with their environments.
place identity	Describes the way the environment fits into people's self-identities.
place identity of a place	Describes the character of the place, perceived and communicated through narratives and discourses of professional and private individuals as well as collectives.
place identity theory	First theory that concerned itself with the relationship between people and their, in contrast to other theories, general environment.
place	A term for specific spatial entities that have been given specific meaning to.
postmodernism	Movement and era in mid- to late 20th century. Had an anti-essentialst point of view and studied why essentialist views resonated so well with many and what the variables within identity categories were in a public discourse rather than through mere observation and deduction.
qualitative content analysis	A method that examines the overall structures and concepts of a text or other medium in order to grasp its content or form.
qualitative methods	Methods that describe subjective and not quantifiable, only descriptive quality of something or someone.
quantitative content analysis	A method that examines the frequency in which certain pre-determined targets are mentioned and described from any kind of communication, texts and messages.
quantitative methods	Methods that work with and create quantifiable, measurable data.
role identities	Groups of people who play particular roles in specific life situations which raise the expectations of them exerting certain actions, behaviours or functions.
sense of place	Is either the same as place attachment or the subjective perception that can be applied consciously or subconsciously in order to orient oneself within spaces, act within them as well as react to them.
sensitive landscape method	A visual landscape assessment method by Kevin Lynch. Was especially developed for man-made, urban landscapes and is executed by trained personnel who map the main features of these spaces, like landmarks and significant buildings and only a few types of natural features like grasslands, rivers etc.
social comparison theory	Similar to social identity theory, but also claims that people are inclined to have a more optimistic or positive perception of the groups that they identify with and more a negative and unfavourable perception of those they like to distinguish themselves from. This is subconsciously or consciously done in order to heighten the own personal self-esteem.
social constructionism	An anti-essentialist movement in the early 20th century. Advocates the idea that every identity, be it individual or collective, is an ever changing social construct, a reality made of shared assumptions and perceptions.
social identity theory	Discusses how individuals define their concept of self by developing a sense of belonging to and distinction from certain social identities to various degrees.
space	A term for general spatial entities that have not yet been given specific meaning to.
spatial turn	A movement in the 1970ies and 1980ies. Introduced the ideas that places influence all social matters and are determining factor as well as the manifestation of the way people attach meanings to things, places and themselves. Studies about topics therefore need to consider the spatial context, not just the temporal context.

spirit of place	Is a historical, Europe-based term. Has several definitions that all describe a more or less literal soul-bearing entity that can be found in places and has perceivable characteristics. (equivalent to genius loci)
stress recovery theory	Based on the psycho-evolutionary theory which argues that visual stimuli of food, protection, safety and water induce a positive affected reaction in people, because they are indicative of a safe and abundant environment which allows a more relaxed state of being. Ulrich used the following criteria: complexity, structural features (order, disorder etc.), focal points, spaciousness, surface textures, potential dangers and water.
topophilia	The emotional attachment and relationship between people and spatial entities.
type identities	Label people who are expected to have the same properties based on their interests, strengths etc. as some other people.
unnamable quality	A force/quality/spirit which consists of a general atmosphere as well as a specific substance and discernable space-defining elements that every existing thing possesses. It can be perceived emotionally and intuitively. It is also called the degree of organized complexity. (equivalent to: architectural life)
visual landscape assessment	Methods that only use physical/ecological, aesthetic as well as the psychophysical and physiological models in order to assess the quality of landscapes.
yin and yang	The two forces that the entire universe is said to be made of, according to Chinese and later Japanese philosophy.

5.   List of Tables

6.   Images Directory

#	Name	Page	Source
1.	the five main models of environmental assessment in relation to the objectivist and subjectivist approaches	30	own image
2.	visualisation of the information processing theory by Kaplan and Kaplan	31	own image
3.	extract of a map created by the sensitive landscape method (as in Jankevica 2012, pg 115)	32	Jankevica, M. (2012) Camparative Analysis of Methodologies for Landscape Ecological Aesthetics in Urban Planning. *Mokslas – Lietuvos ateitis*. Volume 4 No 2. Pg 115. DOI: 10.3846/mla.2012.23.
4.	extract of a map created by the biotope structure analysis (as in Jankevica 2012, pg 115)	33	Jankevica, M. (2012) Camparative Analysis of Methodologies for Landscape Ecological Aesthetics in Urban Planning. *Mokslas – Lietuvos ateitis*. Volume 4 No 2. Pg 115. DOI: 10.3846/mla.2012.23.
5.	extract of a map created by the method of landscape ecology principles (as in Jankevica 2012, pg 116)	33	Jankevica, M. (2012) Camparative Analysis of Methodologies for Landscape Ecological Aesthetics in Urban Planning. *Mokslas – Lietuvos ateitis*. Volume 4 No 2. Pg 116. DOI: 10.3846/mla.2012.23.
6.	visualisation of exemplary application of multi-disciplinary level assessment (as in Jankevica 2012, pg 118)	34	Jankevica, M. (2012) Camparative Analysis of Methodologies for Landscape Ecological Aesthetics in Urban Planning. *Mokslas – Lietuvos ateitis*. Volume 4 No 2. Pg 118. DOI: 10.3846/mla.2012.23.
7.	indicators for the evaluation of the Russian city Irkutsk (as in Kozlov & Kozlova 2018, pg 2)	35	Kozlov, V. & Kozlova, L. (2018) Ten quality criteria of the public spaces in a large city. In: Vladimirovich (ed) *2018 International Scientific Conference "Investment, Construction, Real Estate: New Technologies and Special-Purpose Development Priorities" (ICRE 2018)*. Irkutsk, Russia. Pg 2. Retrieved from: https://www.researchgate.net/publication/328284605_Ten_quality_criteria_of_the_public_spaces_in_a_large_city. [20.10.2020]. DOI: 10.1051/matecconf/201821204012.
8.	LCA (as in The Countryside Agency & Scottish Natural Heritage 2002, pg 13)	37	Swanwick (ed.) (2002) *Landscape Character Assessment Guidance For England and Scotland*. The Countryside Agency & Scottish Natural Heritage. Pg 13.
9.	LCA (as in Natural England 2014, pg 15)	37	Tudor, C. (ed.) (2014) *An Approach to Landscape Character Assessment*. British Government gov.uk. Natural England. Pg 15.
10.	relevant elements of LCA (as in The Countryside Agency & Scottish Natural Heritage 2002, pg 2)	37	Swanwick (ed.) (2002) *Landscape Character Assessment Guidance For England and Scotland*. The Countryside Agency & Scottish Natural Heritage. Pg 2.
11.	relevant elements of LCA (as in Natural England 2014, pg 9)	37	Tudor, C. (ed.) (2014) *An Approach to Landscape Character Assessment*. British Government gov.uk. Natural England. Pg 9.
12.	visualisation of the intensity of framing and classifying an affordance	41	own image

13.	analytical dimensions according to Lieblich and colleagues	42	own image
14.	step model for inductive categories (as in Mayring 2000)	46	Mayring, P. (2000) *Qualitative Content Analysis*. Forum: Qualitative Social Research. olume 1, No 2. [Online] Retrieved from: https://www.qualitative-research.net/index.php/fqs/article/view/1089/2386 [20.10.2020].
15.	step model for deductive categories (as in Mayring 2000)	46	Mayring, P. (2000) *Qualitative Content Analysis*. Forum: Qualitative Social Research. olume 1, No 2. [Online] Retrieved from: https://www.qualitative-research.net/index.php/fqs/article/view/1089/2386 [20.10.2020].
16.	example for the coding system (as in Mayring 2000)	47	Mayring, P. (2000) *Qualitative Content Analysis*. Forum: Qualitative Social Research. olume 1, No 2. [Online] Retrieved from: https://www.qualitative-research.net/index.php/fqs/article/view/1089/2386 [20.10.2020].
17.	structure of natural places according to Norberg-Schulz	54	own image
18.	structure of man-made places according to Norberg-Schulz	56	own image
19.	centres with different levels of scale	61	own image
20.	one strong centre & field effect	61	own image
21.	boundaries made out of strong centres	62	own image
22.	alternating fields of centres	62	own image
23.	fields of centres in a positive space	62	own image
24.	a good shape	63	own image
25.	three local symmetries	63	own image
26.	interlocking fields of centres	64	own image
27.	two contrasting fields of centres	64	own image
28.	a gradient of differently sized centres	64	own image
29.	field of centres with texture	65	own image
30.	different fields of centres echo same shape	65	own image
31.	surrounding field of centres with void	65	own image
32.	simple arrangement of centres	65	own image
33.	neighbouring fields of centres are connected	66	own image
34.	overview of correlations between properties (as in Alexander 2002, pg 238)	66	Alexander, C. (2002) *The Nature of Order*. Berkeley, USA. The Center for Environmental Structure. Pg 238.
35.	Salingaros' work (Salama 2007, pg 124)	67	Salama, A. M. (2007) Nikos A. Salingaros: A New Vetruvius for 21st century Architecture and Urbanisation? *International Journal of Architectural Research*. Volume 1, No 2. Pg 124. DOI: 10.26687/archnet-ijar.v1i2.23.
36.	contrasting & alternating fields of centres and voids, creating symmetry	68	own image
37.	fields of centres in local symmetries	69	own image

38.	hierarchical linking of law 1 and 2 (as in Salingaros 2016, pg 36)	69	Salingaros, N. A. (2016) *A Theory of Architecture*. 3rd Edition. Kathmandu, Nepal. Vajra Books. Pg 36.
39.	structure of space and place in Asian philosophy	78	own image
40.	productive cycle of elements according to Hudson 2013, pg 29	81	own image
41.	destructive cycle of elements according to Hudson 2013, pg 29	81	own image
42.	visualised overview of all conception of the genius loci (*according to* Müller in Heimrath & Mallien 2009, pg 127-132)	86	own image
43.	visualised overview of all researched methods and their interpretation of "genius loci"	91	own image
44.	the four temperaments as dimensions (as in Nodoushan 2011, pg 38)	99	Nodoushan M. A. S. (2011) Temperament as an indicator of language achievement. *International Journal of Language Studies*. Volume 5 No 4. Pg 38.
45.	tints (type 1), tones (type 2), shades (type 3) and hues (type 4) (as scanned from the cards of the official Style Kit 2015)	100	Dressing Your Truth (2015) *Style Kit*. Purchasable from: https://shop.liveyourtruth.com/pages/stylekit [20.10.2020].
46.	the west (left) and north (middle & right) sides of the market square (images by Kittner 2020)	108	Kittner, M. (2020) *Photograph*.
47.	the east (middle) and the south (right) side of the market square (images by Kittner 2020)	108	Kittner, M. (2020) *Photograph*.
48.	satellite image of the market square and surroundings (with old hotel instead of the new Marien Carrée (image by Google Earth Pro 2020)	109	Google Earth Pro (2020) *Screenshot*.
49.	drawing: west (left) and north (middle & right) sides of the market square	109	own image
50.	drawing: east (middle) and the south (right) side of the market square	110	own image
51.	drawing: satellite image of the market square and surroundings (with old hotel instead of the new Marien Carrée	110	own image
52.	Radisson Blu hotel at market square in Neubrandenburg (image by Kohler 2009)	112	Kohler, T. (2009) Radisson SAS. [Online] Retrieved from: https://www.flickr.com/photos/mecklenburg/3731940403/ [20.10.2020]
53.	Pfaffenstraße (images by Ladwig 2020)	118	Ladwig, T. (2020) *Photograph*.
54.	drawings: Pfaffenstraße	118	own image
55.	Behmenstraße (image by Ladwig 2020)	118	Ladwig, T. (2020) *Photograph*.
56.	drawing: Behmenstraße	118	own image
57.	view from one of the private houses into the back yard (image by Heidegger 2020)	119	Heidegger, D. (2020) *Photograph*.
58.	back yard panorama part 1 (image by Ladwig 2020)	119	Ladwig, T. (2020) *Photograph*.
59.	back yard panorama part 2 (image by Ladwig 2020)	119	Ladwig, T. (2020) *Photograph*.
60.	back yard panorama part 3 (image by Ladwig 2020)	119	Ladwig, T. (2020) *Photograph*.
61.	satellite image of the city block (image by Google Earth Pro 2020)	120	Google Earth Pro (2020) *Screenshot*.

62.	drawing: satellite image of the city block	120	own image
63.	drawing: view from one of the private houses into the back yard	120	own image
64.	drawing: back yard panorama 1	120	own image
65.	drawing: back yard panorama 2	120	own image
66.	drawing: back yard panorama 3	120	own image
67.	north end of Kulturpark, 360° panorama part 1 (image by Ladwig 2020)	125	Ladwig, T. (2020) *Photograph.*
68.	north end of Kulturpark, 360° panorama part 2 (image by Ladwig 2020)	125	Ladwig, T. (2020) *Photograph.*
69.	drawing: north end of Kulturpark, panorama 1	125	own image
70.	drawing: north end of Kulturpark, panorama 2	125	own image
71.	satellite image of Kulturpark (image by Google Earth Pro 2020)	125	Google Earth Pro (2020) *Screenshot.*
72.	drawing: satellite image (x in top right corner marks the spot of the analysis)	125	own image
73.	Reitbahn Quarter, panorama part 1 (image by Ladwig 2020)	130	Ladwig, T. (2020) *Photograph.*
74.	Reitbahn Quarter, panorama part 2 (image by Ladwig 2020)	130	Ladwig, T. (2020) *Photograph.*
75.	Reitbahn Quarter, panorama part 3 (image by Ladwig 2020)	130	Ladwig, T. (2020) *Photograph.*
76.	satellite image (image from Google Earth 2020)	131	Google Earth Pro (2020) *Screenshot.*
77.	drawing: satellite image	131	own image
78.	drawing: Reitbahn Quarter, panorama part 1	131	own image
79.	drawing: Reitbahn Quarter, panorama part 2	131	own image
80.	drawing: Reitbahn Quarter, panorama part 3	131	own image
81.	view down the corridor in the Market Square Centre (image by Kittner 2020)	137	Kittner, M. (2020) *Photograph.*
82.	drawing: view down the corridor in the Market Square Centre	137	own image
83.	view down the a partly circular corridor in the Market Square Centre (image by Kittner 2020)	137	Kittner, M. (2020) *Photograph.*
84.	drawing: view down the a partly circular corridor in the Market Square Centre	137	own image
85.	Friedländer Gate, Stargarder Gate and an interior part of the city wall	138	own image
86.	drawing: Friedländer Gate, Stargarder Gate and an interior part of the city wall	138	own image
87.	New Gate and Treptower Gate	138	own image
88.	drawing: New Gate and Treptower Gate	138	own image
89.	Oberbach Bridge towards Tollensesee (image by Kittner 2020)	139	Kittner, M. (2020) *Photograph.*
90.	drawing: Oberbach Bridge towards Tollensesee	139	own image
91.	Oberbach Bridge towards Oberbach (image by Kittner 2020)	139	Kittner, M. (2020) *Photograph.*

92.	drawing: Oberbach Bridge towards Oberbach	139	own image
93.	playground "Am Stier", panorama part 1 (image by Ladwig 2020)	140	Ladwig, T. (2020) *Photograph.*
94.	drawing: playground "Am Stier", panorama part 1	140	own image
95.	playground "Am Stier", panorama part 2 (image by Ladwig 2020)	140	Ladwig, T. (2020) *Photograph.*
96.	drawing: playground "Am Stier", panorama part 2	140	own image
97.	ring street with adjacent row of villas and entrance to Jahn Quarter	141	own image
98.	drawing: ring street with adjacent row of villas and entrance to Jahn Quarter	141	own image
99.	Katharinen Quarter by the Volkshochschule (image by Ladwig 2020)	141	Ladwig, T. (2020) *Photograph.*
100.	drawing: Katharinen Quarter by the Volkshochschule	142	own image
101.	Brewery Quarter, panorama part 1 (image by Ladwig 2020)	142	Ladwig, T. (2020) *Photograph.*
102.	drawing: Brewery Quarter, panorama part 1	142	own image
103.	Brewery Quarter, panorama part 2 (image by Ladwig 2020)	142	Ladwig, T. (2020) *Photograph.*
104.	drawing: Brewery Quarter, panorama part 2	142	own image
105.	crossroad in Bird Quarter, panorama part 1	143	own image
106.	crossroad in Bird Quarter, panorama part 2	143	own image
107.	drawing: crossroad in Bird Quarter, panorama part 1	143	own image
108.	drawing: crossroad in Bird Quarter, panorama part 2	143	own image
109.	Oststadt, panorama part 1 (image by Kittner)	143	Kittner, M. (2020) *Photograph.*
110.	Oststadt, panorama part 2 (image by Kittner)	143	Kittner, M. (2020) *Photograph.*
111.	drawing: Oststadt, panorama part 1	143	own image
112.	drawing: Oststadt, panorama part 2	143	own image

7. Bibliography

Books, Chapters of Books, Leaflets

Citation	Reference
Alexander 2002	Alexander, C. (2002) *The Nature of Order*. Berkeley, USA. The Center for Environmental Structure.
Arndt 2019	Arndt, E. (2019) Der Genius Loci Lüneburgs. In: Pez, P. (ed.) *Lüneburger Geographische Schriften*. Band 7. Lüneburg. Institut für Stadt- und Kulturraumforschung, Leuphana Universität Lüneburg.
Australian Alps National Parks 1996	Lennon, J & Steve, M (eds.) (1996) *Cultural Landscape Management. Guidelines for identifying, assessing and managing cultural landscapes in the Australian Alps national parks*. Victoria, Australia. Cultural Heritage Working Group Australian Alps Liaison Committee.
Basin, Guex-Joris, Sandoz & Tasnady 1999	Basin, E. Guex-Joris, D. Sandoz, M. & Tasnady, M. (1999) *Die Schildkröte erreichte das Abendland. Fenshui in Alltag, Haus und Garten*. Xanten, Germany. OLV Organischer Landbau Verlag GmbH.
Baumgartner & Sickinger 2014	Baumgartner, P. & Sickinger, R. (eds.) (2014) *PURPLSOC. The Workshop 2014*. Krems, Austria. Danube University Krems.
Bischof in Heimrath & Mallien 2009	Bischof, M. (2009) Genius und Daimon. Die antiken Wurzeln der Idee vom "Geist des Ortes". In: Heimrath, J. & Mallien, L. (ed.) *Genius Loci. Der Geist von Orten und Landschaften in Geomantie*. Klein Jasedow. DrachenVerlag GmbH. Pg 33-47.
Bonnes & Carrus 2004	Bonnes, M. & Carrus, G. (2004) Environmental Psychology, Overview. In: Spielberger, C. D. (ed.) *Encyclopedia of Applied Psychology*. Volume 1. Academic Press. Pg 801-814.
Claßen in Gebhard & Kistemann 2016	Claßen, T. (2016) Landschaft. In: Gebhard, U. & Kistemann, T. (eds.) *Landschaft, Identität und Gesundheit. Zum Konzept der Therapeutischen Landschaften*. Wiesbaden. Springer Fachmedien. Pg 31-44.
Cordes 2010	Cordes, M. (2010) *Landschaft – Erinnern. Über das Gedächtnis im Erfinden von Orten*. Hamburg. Junius Verlag GmbH.
De Young 2013	De Young, R. (2013) Environmental psychology overview. In: Huffman, A. H. & Klein, S. (eds.) *Green Organisations: Driving Change with IO Psychology*. New York, USA. Routledge. Pg 17-33.
Deutscher Rat für Landespflege 2005	Deutscher Rat für Landespflege (2005) Landschaft und Heimat – ein Resümee. In: Deutscher Rat für Landespflege. *Schriftenreihe des Deutschen Rates für Landschaftspflege*. Trans. Gibson-Tegelhoff, F. Heft 77.
Döring & Thielmann 2008	Döring, J. & Thielmann, T. (2008) Einleitung: Was lesen wir im Raume? Der Spatial Turn und das geheime Wissen der Geographen. In: Döring, J. & Thielmann, T. (eds.) *Spatial Turn. Das Raumparadigma in den Kultur- und Sozialwissenschaften*. Bielefeld. Transcript Verlag. Pg 7-45.
ELCAI 2005	Wascher, D. M. (ed.) (2005) *European Landscape Character Areas. Typologies, Cartography and Indicators for the Assessment of Sustainable Landscape*. Oxford, UK. Information Press Oxford.
European Landscape Convention 2000	Council of Europe. (2000) *European Landscape Convention*. European Treaty Series No 176. Florence.
Gebhard & Kistemann 2016	Gebhard, U. & Kistemann, T. (2016) Therapeutische Landschaften: Gesundheit, Nachhaltigkeit, "gutes Leben". In: Gebhard, U. & Kistemann, T. (eds.) *Landschaft, Identität und Gesundheit. Zum Konzept der Therapeutischen Landschaften*. Wiesbaden. Springer Fachmedien. Pg 1-18.

Gifford & Scannell 2014	Gifford, R. & Scannell, L. (2014) The psychology of plae attachment. In: Gifford, R. (ed) *Environmental Pschology: Principles and Practice*. 5th edition, chapter 9. Victoria, Australia. Optimal Books. Pg 272-300.
Handorf & Kirchner 2018	Handorf, D. & Kirchner, J. (eds.) (2018) *Alles Platte? Architektur im Norden der DDR als Kulturerbe*. Berlin, Germany. Christoph Links Verlag GmbH.
Haußer in "Zeitschrift für Kultur- und Bildungswissenschaften" 2000	außer, K. (2000) Zur subjektiven Bedeutsamkeit und Bedeutung von Heimat als regionaler Identität. In: Blohm, M. Eckert, H. & Unglaub, E. (eds.) *Zeitschrift für Kultur- und Bildungswissenschaften*. Band 10. Flensburg, Germany. Pg 17-24.
HOAI 2013	Bundesministeriums der Justiz und für Verbraucherschutz sowie des Bundesamts für Justiz. (2013) *Verordnung über die Honorare für Architekten- und Ingenieurleistungen*.
Kaule 2019	Kaule, M. (2019) *Mecklenburg-Vorpommern 1949-1990*. Halle (Saale, Germany. Mitteldeutscher Verlag GmbH.
Kozljanič 2004a	Kozljanič, R. J. (2004) *Der Geist eines Ortes. Kulturgeschichte und Phänomenologie des Genius Loci*. Band 1. München. Albunea Verlag.
Kozljanič in Heimrath & Mallien 2009	Kozljanič, R. J. (2009) Der Geist des Ortes. Eine kleine philosophische Kulturgeschichte des Genius Loci. In: Heimrath, J. & Mallien, L. (ed.) *Genius Loci. Der Geist von Orten und Landschaften in Geomantie*. Klein Jasedow. DrachenVerlag GmbH. Pg 12-29.
Levinson 2003	Levinson, S. C. (2003) *Space in Language and Cognition. Explorations in Cognitive Diversity*. Cambridge. Cambridge University Press.
Lichrou, O'Leary, O'Malley, Patterson 2017	Lichrou, M. O'Leary, K. O'Malley, L. & Patterson, M. (2017) Place Branding and Place Narratives. In: Campelo, A. (ed.) Handbook on Place Branding and Place Marketing. Cheltenham, Uk & Northhampton, USA. Edward Elgar Publishing. Pg 160-177.
Mahmoud & Tehseen 2020	Mahmoud, A. B. & Tehseen, S. (2020) Narrative. In: Hack-Polay, D. (ed.) *Migration practice as creative practice – an interdisciplinary text exploring migration from business, economical and social perspectives*. Chapter 13. Proof Read. Unknown place. Emerald Publishing Limited. Pg 159-170). DOI: 10.1108/978-1-83867-765-720211018.
Maubach 1997	Maubach, P. (1997) *Neubrandenburg so wie es war*. Düsseldorf, Germany. Droste Verlag GmbH.
McKenzie & Tuck 2015	McKenzie, M. & Tuck, E. (2015) *Place in Research: Theory, Methodology, and Methods*. Proof Read. New York, NY. Routledge.
Messmer 2005	Messmer, R. (2005) Narrative Untersuchungen. In: Kuhlmann, D. & Balz, E. (eds.) Qualitative Forschungsansätze in der Sportpädagogik. Schorndorf. Hoffmann. Pg 31-52.
Mitzscherlich in "Zeitschrift für Kultur- und Bildungswissenschaften" 2000	Mitzscherlich, B. (2000) Die psychologische Bedeutung von Heimat und der psychologische Prozess von Beheimatung – Theoretische und empirische Perspektiven. In: Blohm, M. Eckert, H. & Unglaub, E. (eds.) *Zeitschrift für Kultur- und Bildungswissenschaften*. Band 10. Flensburg, Germany. Pg 5-16.
Müller in Heimrath & Mallien 2009	Müller, H.-J. (2009) Der Genius Loci und sein anthropologischer Bezug auf eine neue Praxis der Gestaltung von Identität. In: Heimrath, J. & Mallien, L. (ed.) *Genius Loci. Der Geist von Orten und Landschaften in Geomantie*. Klein Jasedow. DrachenVerlag GmbH. Pg 114-145.
Natural England 2014	Tudor, C. (ed.) (2014) *An Approach to Landscape Character Assessment*. British Government gov.uk. Natural England.
Norbert-Schulz 1980	Norberg-Schulz, C. (1980) *Genius Loci. Towards a phenomenology of architecture*. New York. Rizzoli.

Relph in National Museum of Australia 2008	Relph, E. (2008) A pragmatic sense of place. In: Vanclay, F. Higgins, M. & Blackshaw, A. (eds) *Making Sense of Place*. Canberra, Australia. National Museum of Australia Press. Pg 311-323.
Salingaros 2016	Salingaros, N. A. (2016) *A Theory of Architecture*. 3rd Edition. Kathmandu, Nepal. Vajra Books.
Seamon & Sowers 2008	Seamon, D. & Sowers, J. (2008) Place and Placelessness, Edward Relph. In: Hubbard, P. Kitchen, R. & Vallentine, G. (eds.) *Key Texts in Human Geography*. London. Sage. Pg 43-51. DOI: 10.4135/9781446213742.n5.
Stadtverwaltung Neubrandenburg 1996	Stadtverwaltung Neubrandenburg (1996) *Die Entwicklung der Stadtgebiete von Neubrandenburg*. Sonderinformation. Zahl Grafik.
The Countryside Agency & Scottish Natural Heritage 2002	Swanwick (ed.) (2002) *Landscape Character Assessment Guidance For England and Scotland*. The Countryside Agency & Scottish Natural Heritage.
Too 1999	Too, L. (1999) *Der Feng Shui Garten. Gärten Terrassen und Balkone in Harmonie mit der Natur gestalten*. Deutsche Ausgabe. München. Droemersche Verlagsanstalt th. Knaur Nachfahren.
Tuttle 2015	Tuttle, C. (2015) *Dressing Your Truth. Discover Your Type of Beauty.* 2nd Edition. Utah, USA. Live Your Truth Press.
Vanclay in National Museum of Australia	Vanclay, F. (2008) Place matters. In: Vanclay, F. Higgins, M. & Blackshaw, A. (eds) *Making Sende of Place*. Canberra, Australia. National Museum of Australia Press. Pg 3-11.
Völker in Gebhard & Kistemann 2016	Völker, S. (2016) Anthropologische Aspekte des Verhältnisses von Mensch und Natur(-landschaft). In: Gebhard, U. & Kistemann, T. (eds.) *Landschaft, Identität und Gesundheit. Zum Konzept der Therapeutischen Landschaften*. Wiesbaden. Springer Fachmedien. Pg 109-122.
Weidner 2004	Weidner, C. A. (2004) *Feng Shui gegen das Chaos auf dem Schreibtisch*. Reinbek by Hamburg, Germany. Rowohlt Taschenbuch Verlag.
Wolf 1998	Wolf, E. (1998) Neubrandenburg. Chronological History of the City. Neubrandenburg, Germany. Neubrandenburger Stadtarchiv Hausdruckerei.

Unpublished Academic Papers

Citation	Reference
Egenhofer, Gartrell, Jordan & Raubal 1998	Egenhofer, M. J. Gartrell, B. Jordan, T. & Raubal, M. (1998) *An Affordance-Based Model of Place in GIS*. Unpublished Paper. National Center for Geographic Information and Analysis and Department of Spatial Information Science and Engineering, University of Maine. Retrieved from: http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.37.9367 [20.10.2020].
Fearon 1999	Fearon, J. D. (1999) *What is identity (as we now use the word)?* Unpublished paper. Stanford, CA. Department of Political Science. Retrieved from: http://web.stanford.edu/group/fearon-research/cgi-bin/wordpress/wp-content/uploads/2013/10/What-is-Identity-as-we-now-use-the-word-.pdf [20.10.2020].
Gallois 2016	Gallois, A. (2016) *Identity over time*. Unpublished paper. Stanford, CA. Encyclopedia of philosophy. Retrieved from: https://plato.stanford.edu/entries/identity-time/ [20.10.2020].
Gothenburg Research Institute 2006	Corvellec, H. (2006) *Elements of Narrative Analysis*. Unpublished(?) Report. School of Business, Economics and Law, Gothenburg University. Retrieved from: https://www.researchgate.net/publication/5093063_Elements_of_Narrative_Analysis [20.10.2020].
Jiang 2019	Jiang B. (2019) *Alexander's Wholeness as the Scientific Foundation of Sustainable Urban Design and Planning*. Faculty of Engineering and Sustainable Development, University of

	Gävle, Sweden. Retrieved from: https://www.researchgate.net/publication/335924714_Alexander%27s_Wholeness_as_the_Scientific_Foundation_of_Sustainable_Urban_Design_and_Planning [20.10.2020].
Jiang, Rofé, Salingaros & Mehaffy 2018	Jiang, B. Rofé, Y. Salingaros, N. & Mehaffy, M. (2018) *Call for Papers: New Applications and Development of Christopher Alexander's The Nature of Order*. In: Urban Science Journal. Special issue. Retrieved from: https://www.researchgate.net/publication/326919948_CALL_FOR_PAPERS_New_Applications_and_Development_of_Christopher_Alexander%27s_The_Nature_of_Order [20.10.2020].
Li 2018	Li, J. (2018) *Learning from Genius Loci. A Phenomenological Approach To Formulate Architectural Succession*. TU Delft, Netherlands. Retrieved from: https://www.semanticscholar.org/paper/LEARNING-FROM-GENIUS-LOCI-a-phenomenological-to-Li/c259b895aea94f4014e049eadb5c58de1748f571 [20.10.2020].
Mainenti 2018	Mainenti, D. (2018) *Wind and water: Feng Shui as complexity science*. Palmer School of Library and Information Science, Long Island University, USA. Retrieved from: https://www.researchgate.net/publication/330554330_Wind_and_water_Feng_Shui_as_complexity_science [20.10.2020].
Mihailescu 2019	Mihailescu, M. (2019) *Content Analysis*. Centre of Interdisciplinary Methodologies, University of Warwick. Retrieved from: https://www.researchgate.net/publication/333756046_Content_analysis [20.10.2020].
Turner & Turner 2004	Turner, S. E. & Turner P. (2004) *Insideness And Outsideness: Characterizing The Experiences Of Real And Virtual Places*. Unpublished paper. School of Computing, Napier University. Retrieved from: https://ispr.info/presence-conferences/previous-conferences/presence-2004/ [20.10.2020].

Published Academic Papers, Journal Entries and Dissertations

Citation	Reference
Aggarwal & Mcgill 2007	Aggarwal, P & Mcgill, A. L. (2007) Is that Car Smiling at Me? Schema Congruity as a Basis for Evaluating Anthropomorphized Products. *Journal of Consumer Research*. Volume 34, No 4. DOI: 10.1086/518544.
Ambuyo, Amukowa & Okal 2012	Ambuyo, B. A. Amukowa, D. N. & Okal, B. (2012) The Functionality of Four Temperaments and Communication Theories towards the Realisation of Peaceful General Elections in Kenya. Journal of Sociological Research. Volume 3, No 2. Pg 55-66. DOI: 10.1086/518544.
Atik, Bayrak & Keleş 2018	Atik, D Bayrak, G & Keleş, E. (2018) Visual Landscape Quality Assessment in Historical Cultural Landscape Areas. *European Journal of Sustainable Development*. Volume 7 No 3. Pg 287-300. DOI 10.14207/ejsd.2018.v7n3p287-300.
Bernardo & Palma-Oliveira 2013	Bernardo, F. & Palma-Oliveira, J. (2013) Place identity, place attachment and the scale of place: The impact of place salience. *Psyecology*. Volume 4(2):167-179. DOI: 10.1080/21711976.2013.10773867.
Bonaiuto, Bilotta & Stolfa 2010	Bonaiuto, M. Bilotta, E. & Stolfa, A. (2010) Feng Shui and Environmental Psychology: A Critical Comparison. *Journal of Architectural and Planning Research*. Volume 27, No 1. Pg 23-34. Unknown DOI.
Cacioppo, Epley & Waytz 2007	Cacioppo, J. T. Epley, N. & Waytz, A. (2007) On Seeing Human: A Three-Factor Theory of Anthropomorphism. *Psychological Review*. Volume 114, No 4. Pg 864-886. DOI: 10.1037/0033-295X.114.4.864.
Cerulo 1997	Cerulo, K. (1997) Identity Construction: New Issues, New Directions. Annual Review of Sociology. Volume 23:385-409. Unknown DOI.
Dawes & Ostwald 2017	Dawes, M. J. & Ostwald, M. J. (2017) Christopher Alexander's A Pattern Language: analysing, mapping and classifying the critical response. *City, Territory and Architecture*.

	Volume 4, No 17. DOI: 10.1186/s40410-017-0073-1.
Doroftei 2016	Doroftei, I. (2016) Photography as a means of depicting genius loci?. *Territorial Identity And Development*. [Online] Volume 1, Number 1. DOI: http://dx.medra.org/10.23740/TID120164. [20.10.2020].
Dowling, Horrigan-Kelly & Millar 2016	Dowling, M. Horrigan-Kelly, M. & Millar, M. (2016) Understanding the Key Tenets of Heidegger's Philosophy for Interpretative Phenomenological Research. International Journal of Qualitative Methods. Volume 1, No 8. DOI: 10.1177/1609406916680634.
eTopoi Journal 2012	Förster, F. Großmann, R. Iwe, K. Kinkel, H. Larsen, A. Lungershausen, U. Matarese, C. Meurer, P. Nelle, O. Robin, V. & Teichmann, M. (2012) What is Landscape? Towards a Common Concept within an Interdisciplinar Research Environment. *Etopoi Journal for Ancient Studies*. Special Volume 3, pg 169-179.
Fang 2012	Fang, T. (2012) Yin Yang: A New Perspective on Culture. *Journal for Management and Organisation Review*. Volume 8, No 1. Pg 25-50. DOI: 10.1111/j.1740-8784.2011.00221.x
Farshadi 2017	Farshadi, A. (2017) *Exploring the potential of applying genius loci as a concept in landsape architecture*. Master's thesis. Estonian University of Life Sciences, Estonia. Retrieved from: https://dspace.emu.ee/xmlui/bitstream/handle/10492/3583/Atefeh_Farshadi_MA2017.pdf?sequence=1&isAllowed=y [20.10.2020].
Han & Sinha 1996	Han, K. & Sinha, A. (1996) An empiricila study of Feng-shui in landscape. *Environments: A Journal of Interdisciplinary Studies*. Volume 23, No 3. Pg 48-49.Unknown DOI.
Hanachi, Nezam, Nezhad & Ramezani 2019	Hanachi, P. Nezam, M. Nezhad, S F. & Ramezani, L (2019) Cultural Identit in Conservation of the Cultural Landscape values in Uraman Takht Village – Iran. *Heritage 2019*. Volume 3. DOI: 10.20944/preprints201901.0278.v1.
Hauge 2007	Hauge, Å. (2007) Identity and Place: A Critical Comparison of Three Identity Theories. *Architectural Science Review.* Volume 50 Number 1. DOI: 10.3763/asre.2007.5007.
Heras-Escribano & De Pinedo-García 2018	Heras-Escribano, M. & De Pinedo-García, M. (2018) Affordances and Landscapes: Overcoming the Nature-Culture Dichotomy through Niche Construction Theory. *Frontiers in Psychology*. DOI: 10.3389/fpsyg.2017.02294.
Heras-Escribano, Lobo & Travieso 2018	Heras-Escribano, M. Lobo, L. & Travieso, D. (2018) The History and Philosophy of Ecological Psychology. *Frontiers in Psychology*. DOI: 10.3389/fpsyg.2018.02228.
Hudson 2013	Hudson, K. (2013) *Holistic Dwelling: integrated biophilic design, environmental psychology, and feng shui*. Doctorate thesis. School of Architecture, Universit of Hawai'i, USA. Retrieved from: https://www.researchgate.net/publication/319624122_Holistic_Dwelling_integrating_biophilic_design_environmental_psychology_and_feng_shui [20.10.2020].
Jankevica 2012	Jankevica, M. (2012) Camparative Analysis of Methodologies for Landscape Ecological Aesthetics in Urban Planning. Mokslas – Lietuvos ateitis. Volume 4 No 2. Pg 113-119. DOI: 10.3846/mla.2012.23.
Kalechi Iwuagwu 2017	Kalechi Iwuagwu, E. (2017) Martin Heidegger and the Question of Being. *Journal of Integrative Humanism*. Volume 8, No 1. Pg 25-48. Unknown DOI.
Kamal & Najafi 2012	Kamal, M & Najafi, M. (2012) The concept of place attachment in environmental psychology. *Elixir International Journal Sustainable Architecture*. Volume 45 (2012) 7637-7641. pg 7637-7641. Retrieved from: https://www.elixirpublishers.com/articles/1350368123_45%20(2012)%207637-7641.pdf [20.10.2020].
Kavirayani 2020	Kavirayani, K. (2020) Historical perspectives on personality – The past and current concept: The search is not yet over. Archives of Medicine and Health Sciences. Volume 6, No 1. Pg 180-186. DOI: 10.4103/amhs.amhs_63_18.
Kleinheksel, Rockich Winston, Tawfik & Wyatt 2020	Kleinheksel, A. J. Rockich Winston, N. Tawfik, H. & Wyatt, T. R. (2020) Demystifying Content Analysis. *American Journal of Pharmaceutical Education*. Volume 84, No 1. Pg 127-137. DOI: 10.5688/ajpe7113.

Kyttä, Raymond & Stedman 2017	Kyttä, M. Raymond, C. M. & Stedman, R. (2017) Sense of Place, Fast and Slow: The Potential Contributions of Affordance Theory to Sense of Place. *Frontiers in Psychology*. Volume 8:1674. DOI: 10.3389/fpsyg.2017.01674.
Munárriz 2011	Munárriz, L. A. (2011) The Cultural Landscape Concept. *AIBR Revista de Antropología Iberoamericana*. [Online] Volume 6, Number 1. DOI: 10.11156/aibr.060104e.
Naserabadi & Yousefizadeh 2017	Naserabadi, M. D. & Yousefizadeh, Z. (2017) Understanding the Language of Residential Architecture Based in the Theories of "A Pattern Language" by Christopher Alexander. *Journal of History and Art Research*. Volume 6, No 1. Pg 756-762. DOI: 10.7596/taksad.v6i1.778.
Nodoushan 2011	Nodoushan M. A. S. (2011) Temperament as an indicator of language achievement. *International Journal of Language Studies*. Volume 5 No 4. Pg 33-52. Unknown DOI.
Ogamba 2020	Ogamba, C. (2020) Critical Narrative Analysis in Linguistics: Analysing a Homodiegetic Rape Narrative. *International Journal of Scientific and Research Publications (IJSRP)*. Volume 10 No 4. DOI: 10.29322/IJSRP.10.04.2020.p10063.
Peng, Strijke & Wu 2020	Peng, J. Strijker, D. & Wu, Q. (2020) Place Identity. How Far Have We Come in Exploring Its Meaning? *Frontiers in Psychology*. Volume 11:294. DOI: 10.3389/fpsyg.2020.00294.
Popovic 2016	Popovic (2016) *Beyond Genius Loci. An analysus of Architectural Design Strategies of Place*. Master's thesis. University of Waterloo, Canada. Retrieved from: https://uwspace.uwaterloo.ca/handle/10012/10267 [20.10.2020].
Ramzy 2015	Ramzy, N. S. (2015) The Genius Loci at the Great Temple of Abu Simbel. Hermeneutic Reading in the Architectural Language of Ancient Egyptian Temples of Ramses II in Nubia. *Journal of Ancient History and Archeology*. No 2.2. DOI: 10.14795/j.v2i2.106.
Roskamm 2012	Roskamm, N. (2012) Das Reden vom Raum. Zur Aktualität des Spatial Turn – Programmatik, Determinismus und "sozial konstruierter Raum". *Budrich Journals PERIPHERIE*. 32. Jahrgang, pg 171-189.
Salama 2007	Salama, A. M. (2007) Nikos A. Salingaros: A New Vetruvius for 21st century Architecture and Urbanisation? *International Journal of Architectural Research*. Volume 1, No 2. Pg 114-131. DOI: 10.26687/archnet-ijar.v1i2.23.
San Juan, Subiza-Pérez & Vozmediano 2017	San Juan, C. Subiza-Pérez, M. & Vozmediano, L. (2017) Restoration and the City: The Role of Public Urban Squares. *Frontiers in Psychology*. DOI: 10.3389/fpsyg.2017.02093.
Seamon 2019a	Seamon, D. (2019) Wither Phenomenology? Thirty Years of Environmental and Architectural Phenomenology. *Environmental & Architectural Phenomenology*. Volume 30, No 2. Pg 37-49. Unknown DOI.
Seamon 2019b	Seamon, D. (2019) Christopher Alexander's Theory of Wholeness as a Tetrad of Creative Activity: The Examples of A New Theory of Urban Design and The Nature of Order. *Urban Science*. Volume 3, No 46. DOI: 10.3390/urbansci3020046.
Shirazi 2012	Shirazi, M. R. (2012) On Phenomenological Discourse in Architecture. *Environmental & Architectural Phenomenology*. Volume 23, No 3. Pg 11-15. Unknown DOI.
Simpson 2001	Simpson, P. (2001) Aristotle's Idea of the Self. *The Journal of Value Inquiry*. Volume 35(3):309-324. DOI: 10.1023/A:1011865429033.
Sinha 1998	Sinha, A. (1998) Design of Settlements in the Vaastu Shastras. *Journal of Cultural Geography*. Volume 17, No 2. Pg 27-41. DOI: 10.1080/08873639809478319.
Stafford 2019	Stafford, L. (2019) Contested Interiority: Sense of Outsideness/Insideness Conveyed Through Everyda Interactions with University Campus Doors. *Interiority*. Volume 2 Number 1. pg 25-41. DOI: 10.7454/in.v2i1.47.
Uzzell 2007	Uzzell, D. L. (2007) Environmental Psychological Perspectives on Landscapes. *Landscape Research*. [Online] 1469-9710. DOI: 10.1080/01426399108706325. [20.10.2020].

Citation	Reference
van Heijgen 2013	van Heijgen, E. (2013) *Human Landscape Perception. Report on understanding human landscape perception and how to integrate and implement this in current policy strategies*. Master's thesis. Wageningen University, Netherlands. Retrieved from: https://www.highweald.org/downloads/publications/uk-landscape-research-reports/1057-human-landscape-perception-of-the-high-weald/file.html [20.10.2020].
Vanheule 2009	Vanheule, S. (2009) A Narrative Analysis of Helplessness in Depression. *Journal of the American Psychoanalytic Association*. DOI: 10.1177/0003065108325969.
Wen 2013	Wen, J. (2013) Natural Philosophy and Fengshui: A Phenomenological and Ontological Thinking for Sustainable Building. *Journal of Applied Sciences*. Volume 13, No 21. Pg 4420-4427. DOI: 10.3923/jas.2013.4420.2227.

Conference Proceedings

Citation	Reference
Akinsanya & Bach 2014	Akinsanya, A. & Bach, C. (2014) Narrative analysis: The Personal Experience Narrative approach. In: *ASEE 2014 Zone I Conference*, University of Bridgeport, CT, USA.
Badiani 2006	Badiani, B. (2006) An approach to the landscape analysis. In: Brebbia, C. A. Emmanouloudis, D. E. Martin-Duque, J. F. & Mander, U. (eds.) *Second International Conference On Evolution, Monitoring, Simulation, Management and Remediation of the Geological Environment And Landscape*. Rhodes, Greece. Pg 341-348. Retrieved from: https://www.researchgate.net/publication/271450823_An_approach_to_the_landscape_analysis. [20.10.2020]. DOI: 10.2495/GEO060341.
Bauer & Baumgartner 2010	Bauer, R. & Baumgartner, P. (2010) The Potential of Christopher Alexander's Theory and Practice of Wholeness: Clues for Developing an Educational Taxonomy. In: *EuroPLoP '10: Proceedings of the 15th European Conference on Pattern Languages of Programs*. Irsee, Germany. DOI: 10.1145/2328909.2328924.
Bow & Buys 2003	Bow, V. & Buys, E. (2003) Sense of community and place attachment: the natural environment plays a vital role in developing a sense of community. In: Buys, L. & Bradley, R. (eds.) *Social Change in the 21st Century Conference Referred Proceedings*. Centre for Social Change Research, School of Humanities and Human Services QUT, Australia. Pg 1-18. Retrieved from: https://eprints.qut.edu.au/115/ [20.10.2020].
Buckle 2005	Buckle, R. (2005) Managing Cultural Landscapes: A Case Study of Sterling, Alberta. In: 15th ICOMOS General Assembly and International Symposium: 'Monuments and sites in their setting - conserving cultural heritage in changing townscapes and landscapes', Xi'an, China. Retrieved from: http://openarchive.icomos.org/366/. [20.10.2020].
Burlamaqui & Dong 2014	Burlamaqui, L. & Dong, A. (2014) The use and misuse of the concept of affordances. In: *Proceedings of 6th International Conference on Design Computing and Cognition (DCC'14)*, London, UK. DOI: 10.13140/2.1.2722.6242.
Christmann 2006	Christmann, G. B. (2006) Stadtdiskurse und städtische Identität am Beispiel von Dresden: eine wissenssoziologische Diskursanalyse. In: Rehberg, K.-S. (ed) *Soziale Ungleichheit, kulturelle Unterschiede: Verhandlungen des 32. Kongresses der Deutschen Gesellschaft für Soziologie in München*. Frankfurt am Main. Campus Verlag. Pg 559-614.
Cross 2001	Cross, J. E. (2001) *What is Sense of Place?* Paper presented at 12th Headwaters Conference, Western State College, Colorado, USA. Retrieved from: https://mountainscholar.org/handle/10217/180311 [20.10.2020].
Darmawati & Sumadio 2020	Darmawati, D. R. & Sumadio, W. (2020) Citicen's sense of place of Menteng subdistrict. In: IOP Conference Series: Earth and Environmental Science. *2nd Life and Environmental Sciences Academics Forum 2018*. Faculty of Mathematics and Natural Sciences (FMIPA), University of Indonesia. Volume 481:012075. IOP Publishing Ltd. DOI: 10.1088/1755-1315/481/1/012075.

Elena, Fadel, Masoudi & Pagano 2019	Elena, M. V. Fadel, G. M. Masoudi, N. & Pagano, C. C. (2019) A Review of Affordances and Affordance-Based Design to Address Usability. In: *Proceedings of the 22nd International Conference on Engineering Design (ICED19),* Delft, The Netherlands. DOI:10.1017/dsi.2019.141.
Fortino 2008	Fortino, A. (2008) A Pattern Language for Information Management. In: *Management of Engineering & Technology, 2008. PICMET 2008*. Portland, USA. DOI: 10.1109/PICMET.2008.4599649.
Kozlov & Kozlova 2018	Kozlov, V. & Kozlova, L. (2018) Ten quality criteria of the public spaces in a large city. In: Vladimirovich (ed) *2018 International Scientific Conference "Investment, Construction, Real Estate: New Technologies and Special-Purpose Development Priorities" (ICRE 2018)*. Irkutsk, Russia. Retrieved from: https://www.researchgate.net/publication/ 328284605_Ten_quality_criteria_of_the_public_spaces_in_a_large_city. [20.10.2020]. DOI: 10.1051/matecconf/201821204012.
Ujang & Zakariya 2015	Ujang, N. & Zakariya, K. (2015) The Notion of Place, Place Meaning and Identity in Urban Regeneration. In: Procedia – Social and Behavioural Sciences (eds.). *2014 Asian Conference on Environment-Behaviour Studies.* Chung-Ang University, Seoul, South Korea. Pg 709-717. Retrieved from: https://www.researchgate.net/publication/ 276270858_The_Notion_of_Place_Place_Meaning_and_Identity_in_Urban_Regeneration [20.10.2020].
Vittori 2006	Vittori, A. & Vogler, A. (2006) *Genius Loci in the Space-Age*. Paper presented at 1st Infra-Free Life Symposium, Istanbul. Retrieved from: http://www.architectureandvision.com/av/ download/vision/061123_PP_GeniusLociintheSpace-Age.pdf [20.10.2020].

Webarticles and Online Encyclopedias

Citation	Reference
Bea w.y.	Bea, N. (w.y.) *The Logic of Basho.* [Online]. Retrieved from: https://thekyotoschoolofphilosophy.wordpress.com/the-logic-of-basho/) [20.10.2020].
Dictionary.com 2020 "philia"	Dictionary.com (2020) Philia. In Dictionary.com. Retrieved from: https://www.dictionary.com/browse/philia?s=t [20.10.2020].
Dictionary.com 2020 "topo"	Dictionary.com (2020) Topo. In Dictionary.com. Retrieved from: https://www.dictionary.com/browse/topo?s=t [20.10.2020].
GAIA-MV geoportal professional 2020	State Mecklenburg-Western Pomerania (2020) *GAIA-MV geoportal professional.* [Online] Retrieved from: https://www.geoportal-mv.de/gaia/gaia.php [20.10.2020].
Gee & Spencer 2009	Gee, K. & Spencer, C. (2009) *The roots and branches of environmental psychology*. [Online] Retrieved from: https://thepsychologist.bps.org.uk/volume-22/edition-2/roots-and-branches-environmental-psychology [20.10.2020].
Lothian w.y.	Lothian, A. (w.y.) *Landscape research typologies*. [Online] Retrieved from: https://scenicsolutions.world/typologies-of-landscape-research/#references [20.10.2020].
Mayring 2000	Mayring, P. (2000) *Qualitative Content Analysis*. Forum: Qualitative Social Research. olume 1, No 2. [Online] Retrieved from: https://www.qualitative-research.net/index.php/fqs/article/ view/1089/2386 [20.10.2020].
Mora 2019	Mora, P. (2019) *The Trends that Will Influence Architecture in 2019*. [Online]. Available from https://www.archdaily.com/910525/the-trends-that-will-influence-architecture-in-2019) [20.10.2020].
Oxford Lexico.com 2020	Oxford Lexico (2020) *Identity*. In: Lexico.com. Retrieved from: https://www.lexico.com/en/ definition/identity [20.10.2020].

Parkhotel Neubrandenburg GmbH w.y.	Parkhotel Neubrandenburg GmbH (w.y.) *Entspannt Tagen, Feiern und Übernachten im Grünen*. [Online] Retrieved from: https://www.parkhotel-nb.de [20.10.2020].
Quartiersmanagement Neubrandenburg w.y.	Quartiersmanagement Neubrandenburg (w.y.) *Reitbahnviertel*. [Online] Retrieved from: https://quartiersmanagement-neubrandenburg.de/quartiersportrait-reitbahnweg/ [20.10.2020].
Relph 2015	Relph, E. (2015) *Topophilia and Topophils*. [Online] Retrieved from: https://www.placeness.com/topophilia-and-topophils/ [20.10.2020].
Salingaros in ArchDaily.com 2015	Salingaros, N. A. (2015) *Unified Architectural Theory: Chapter 11*. ArchDaily. [Online] Retrieved from: https://www.archdaily.com/626429/unified-architectural-theory-chapter-11 [20.10.2020].
Salingaros in meetingoftheminds.org 2019	Salingaros, N. A. (2019) *The Future of Cities*. [Online] Retrieved from: https://meetingoftheminds.org/the-future-of-cities-30605 [20.10.2020].
Website Stadt Neubrandenburg 2020a	Stadt Neubrandenburg (2020) *Stadtgeschichte*. [Online] Retrieved from: https://www.neubrandenburg.de/Leben-Wohnen/Vier-Tore-Stadt/Stadtgeschichte [20.10.2020].
Website Stadt Neubrandenburg 2020b	Stadt Neubrandenburg (2020) *Denkmal des Monats*. [Online] Retrieved from: https://www.neubrandenburg.de/?object=tx,2751.6207.1 [20.10.2020].
Website Touristeninfo Neubrandenburg 2020	Touristeninfo Neubrandenburg (2020) *Kulturpark Neubrandenburg*. [Online] Retrieved from: https://www.neubrandenburg-touristinfo.de/natur/kulturpark [20.10.2020].
Wikipedia Marktplatz Neubrandenburg 2020	Wikipedia (2020) *Marktplatz Neubrandenburg*. [Online] Retrieved from: https://de.wikipedia.org/wiki/Marktplatz_(Neubrandenburg) [20.10.2020].

Others

Citation	Reference
Style Kit 2015	Dressing Your Truth (2015) *Style Kit*. Purchasable from: https://shop.liveyourtruth.com/pages/stylekit [20.10.2020].

Official plaque on Schauspielhaus exterior wall w.y.

8.   Annexe

8.1   Annexe A: Historical Developments that Determine the Definitions of the Genius & Genius Loci as well as Identity & Spatial Identity

(directed here from pg 82)

Time Period	Space, Place and Landscape	Genius (or equivalent terms)	Term for Genius Loci	Identity	Term for Spatial Identity
Ancient Chinese (Japanese) Philosophy	Nothingness contains all potentials (like space) place = concrete space in which forces and energy (astronomic, natural, human) work • made up of tangible objects and intangible / energetic expressions	Determined by the way the chi/ qi energy flows and by how yin and yang of are expressed through the five elements	**"Feng Shui"**	--	–

Ancient Greece & Ancient Rome	A world created and structured by natural forces that are personified in gods
	Aristotle (essentialist):
	• place = immovable / unchangeable boundary
	• objects = movable, changeable
	• everything can be objectively described with i.e. coordinates
		Self (see identity)	**"Daimon of Place" / "Genius Loci"**	Aristotle about self and substance:
				• every real thing or person has a self with properties that change over time
				  ○ Accidental changes do not affect the things' or person's identity (i.e. a house gets a new cladding, a person's hair turns grey)
				  ○ essential changes cause changes in the identity (i.e. the house burns down, a person dies)
					–

Roman Empire & Middle Ages	A world created and structured by god • Landscape = general gestalt of peoples and areas without reducing it to natural landscapes; area in which certain norms and rules were valid • Heimat = personal place of residence and/or work, a person's or collective's property or place of personal reference/belonging	Godly or satanic spark in humans, creatures and space	**"Local Demon" or "Local Saint"**	–	–
Modern Times & Humanism beginning 14th century – end of 16th century	A world created and structured by god • Landscape = paintings which depicted a more rural area of land • Heimat = personal place of residence and/or work, a person's or collective's property or place of personal reference/belonging	Metaphor for natural or inborn set of talents or intellectual capacities	**"Genius Loci"**	• being identical = something having a "quality of being identical" with something else	–
Modern Times & Reformation 16th and 17th century	A world created and structured by god • Heimat = personal place of residence and/or work, a person's or collective's property or place of personal reference/belonging	Metaphor for natural or inborn set of talents or intellectual capacities or none because it was considered sinful to worship god indirectly	**None, because it was considered sinful to worship god indirectly**	• being identical = something having a "quality of being identical" with something else	–

Time Period	Space, Place and Landscape	Genius (or equivalent terms)	Term for Genius Loci	Identity	Term for Spatial Identity
Modern Times & Enlightenment late 17th century – 18th century	• Space = theoretical, holds all potentials • Place = concrete, geometric • Heimat = personal place of residence and/ or work, a person's or collective's property or place of personal reference/belonging Isaac Newton • space had concrete characteristics that were autonomous from whatever it contained ○ absolute space = immovable and staying similar, no matter what external influences were at play ○ relative space = all those movable aspects of absolute spaces Leibniz • any absolute concepts of places or spaces were pointless metaphysics • spaces therefore were all relational, dependant and held no qualities by themselves • spaces as a networks of places and one thing always located in relation to another	– Non-existent, because it was considered illogical / fictional	**– Non-existent, because it was considered illogical / fictional**	• being identical = something having a "quality of being identical" with something else Leibniz • rule of identity of indiscernibles & rule of indiscernibility of identicals: ○ if one thing is identical with another, they have to share all their qualities	–
Romanticism & Industriali-sation 19th century	• Space = theoretical, holds all potentials • Place = concrete, geometric and emotional ○ made up of tangible and intangible aspects • Landscape = started to encompass both natural as well as the man-made areas of land for the first time • Heimat = internal, emotional and cognitive experience, describing regions, landscapes or cities people identified themselves with ○ no longer bound to work/homeland ○ romantic connotation of idyllic and rural landscapes for Heimat	divine / close to divine metaphor for the essential atmosphere of a place (romanticised essentialist nature)	**"Genius Loci"**	• being identical = something having a "quality of being identical" with something else	–
1900 – 1940ies	• Space = theoretical, holds all potentials • Place = concrete, geometric + subjectively attached meaning ○ made up of tangible and intangible aspects • Landscape = encompasses both natural as well as man-made areas of land • Heimat = romanticised ideal of a national or ethnic community ○ founded homeland protection and nature protection movements	–	–	• being identical = something having a "quality of being identical" with something else	–
1950ies and 1960ies	• Space = theoretical, holds all potentials • Place = general space + meaning ○ solely socially constructed (social constructionism in 60ies) • Heimat = detachment from nationality failed	–	–	Deduced from Erik Erichson in 50ies: • self with its character, goals, origin and so on Social Constructionism: • ever changing social construct, a reality made of shared assumptions and perceptions	–
1970ies and 1980ies (spatial, landscape turn)	• Space = theoretical, holds all potentials • Place = general space + meaning ○ made up of tangible and intangible aspects ○ both spatially as well as socially determined (postmodernism) • Landscape = an area, as perceived by people, whose character is the result of the action and interaction of natural and / or human factors	–	–	• self with its character, goals, origin and so on David Lewis • Intrinsic properties: ○ properties of an object that are rooted in or determined by the own identity	**regional identities,** **place identities,** **city character,** **landscape character** **…**

Time Period	Space, Place and Landscape	Genius (or equivalent terms)	Term for Genius Loci	Identity	Term for Spatial Identity
Continued: **1970ies and 1980ies (spatial, landscape turn)**	• when studying any topic: ○ spatial references are more or at least as important as historical references • Heimat = detachment from nationality failed			• extrinsic properties ○ always depend on an external factor like a person being in a relationship with their partner Roderick Chisholm • strictly identical: ○ when two things had all their properties in common • loosely identical: ○ when the two things in question were slightly different, but the same in most parts	
1970ies (in architectural theory)	• Space = theoretical, holds all potentials • Place = general space + meaning ○ made up of tangible and intangible aspects ○ both spatially as well as socially determined (postmodernism) • Landscape = an area, as perceived by people, whose character is the result of the action and interaction of natural and / or human factors • when studying any topic: ○ spatial references are more or at least as important as historical references	character or character giving guardian spirit, embodiment of an entity's truth, entity's natural state that pulls on every thought, feeling and action, life giving quality	**"Genius Loci" or "Spirit of Place"**	–	**regional identities,** **place identities,** **city character,** **landscape character** **…**
1980ies and 1990ies	• Space = theoretical, holds all potentials • Place = general space + meaning ○ made up of tangible and intangible aspects ○ both spatially as well as socially determined (postmodernism) • Landscape = an area, as perceived by people, whose character is the result of the action and interaction of natural and / or human factors • when studying any topic: ○ spatial references are more or at least as important as historical references • Heimat = detachment from nationality failed ○ term used: ▪ mostly by people to reference for places in connection with childhood memories and sentimentalities ▪ by some people to reference romanticised ideal of a national or ethnic community ▪ by sciences like nature conservationists and landscape managers for describing landscapes	–	–	Personal identity: • = personal moral code or compass, a set of moral principles, ends, or goals that a person uses as a normative framework and a guide to action (Taylor) • = a set of attributes, beliefs, desires, or principles of action that a person thinks distinguish her in socially relevant ways and that (a) the person takes a special pride in; (b) the person takes no special pride in, but which so orient her behaviour that she would be at a loss about how to act and what to do without them; and (c) the person feels she could not change even if she wanted to.(Fearon) • has sub-identities like place identity, gender identity etc. Collective Identity • role and group identities	**regional identities,** **place identities,** **city character,** **landscape character** **…**
2000-today	• Space = theoretical, holds all potentials • Place = general space + meaning ○ made up of tangible and intangible aspects ○ both spatially as well as socially determined (postmodernism)	–	–	As in 1980ies and 1990ies	Various terms (see above) ordered into:

Time Period	Space, Place and Landscape	Genius (or equivalent terms)	Term for Genius Loci	Identity	Term for Spatial Identity
Continued: **2000-today**	• Landscape = an area, as perceived by people, whose character is the result of the action and interaction of natural and / or human factors • when studying any topic: ○ spatial references are more / at least as important as historical references				**"people's place identity"** & **"place identity of a place"**

2000-today (architectur al theory)	• Space = theoretical, holds all potentials
	• Place = general space + meaning
	  ○ made up of tangible and intangible aspects
	  ○ both spatially as well as socially determined (postmodernism)
	• Landscape = an area, as perceived by people, whose character is the result of the action and interaction of natural and / or human factors
	• when studying any topic:
	  ○ spatial references are more or at least as important as historical references
		Innate life-quality is perceivable in all animate and inanimate entities,
		
		created by coherence / wholeness of an entity
			"Architectural Life"	–	–

8.2   Annexe B: Carol Tuttle's Energy Types for Describing the Genius of People

(directed here from pg 100)

TRAITS	TYPE 1	TYPE 2	TYPE 3	TYPE 4
Primary Movement	Upward, light, buoyant, random	Fluid, flowing, relaxed, subtle	Active, reactive, push-forward, swift	Constant, reflective, straightforward
Natural Gifts	Ideas: "I have a new idea and we can do it"	Details: "What details do we need to make a plan?"	Action: "Let's get to work and get it done"	Perfecting: "Here's how we can make it better"
Priority	Happiness	Comfort	Results	Respect
Extrovert/Introvert Movement	Light-hearted, extrovert energy	Easy-going, introvert energy	Determined, extrovert energy	Reflective, introvert energy
Described As	Fun-loving, bright, optimistic	Gentle, tender, sensitive	Persistent, passionate, driven	Efficient, analytical, thorough
Judged As	Flighty, hyperactive, unreliable	Shy, wimpy, overly-emotional	Pushy, demanding, intense	Critical, know-it-all, perfectionist
Appreciates	Spontaneity, flexibility, something to look forward to	Reassurance, time to relax, connection	Encouragement, room to move swiftly, adventure	Respect as authority, focus, structure
Frustrated When	Feeling stifled or heavy, life is too serious	Feeling unheard, dismissed or ignored, life is too intense	Lacking physical outlets, feeling thwarted	Feeling disrespected or embarrassed, lacking time to focus or reflect
Prone To	Taking on too much, dropping the ball	Fretting, worrying about the details	Pushing too hard, burning out	Overanalyzing, being overly critical and opinionated
Afraid of Being	Silly, immature, need to be more serious	Overlooked and needs to be more assertive	Too intense, need to soften themselves	Reclusive, private, needs to be more out-going/social
Body Language	Walks with a bounce in their step, talks with hands	Smooth graceful walk, softened voice	Walks with a heavy foot, more boisterous voice	Walks with poise and upright posture, speaks with exact pronunciation
Facial Features	Round or heart-shaped face, apple cheeks, bright eyes, youthful animated features	Oval face, blended cheek, almond eyes, blended softened features	Angular, inverted triangle face shape, eyes set on a V, chiseled, textured features	Oval or rectangular face shape, eyes set on a straight line, refined and sculpted features
Famous People	Meryl Streep, Ellen Degeneres, Will Smith	Jennifer Aniston, Princess Diana, Richard Gere	Oprah Winfrey, Jamie Lee Curtis, Robert Redford	Audrey Hepburn, Halle Berry, Steve Jobs

The document can be found [Online] *https://my.liveyourtruth.com/dyt/profiling-tool/* .

8.3 Annexe C: Carol Tuttle's Energy Types for Expressing People's Genius in a Personal Style

TYPE One

BRIGHT & ANIMATED
KEYWORDS: Upward · Light · Animated · Buoyant · Crisp · Fresh · Fun
SHAPES: Circles · Stars · Hearts · Curly Cues · Flowers · Any Animated Shape

The 5 Elements of Dressing Your Truth

DESIGN LINE
What shapes do I see? Circles, hearts, points of a star, and any animated shape in any part of the garment.

TEXTURE
How does it feel? Crisp, bumpy (but not chunky), with the lightest weave.

FABRICATION
How does it fall? Light to medium-weight fabrics. Fabrics that hold themselves up and look crisp and *feel light and fresh* on the body.

PATTERN
What shapes & contrast do I see? Animated shapes, random placement, scattered, disconnected, and light. Upward movement in any of the designs. Medium to high contrast in color combinations.

COLOR
Does the color pop? Tint: pure color plus white. The color should "pop" and look like light has been poured into it. Light bounces off a Tint. If there is any metallic effect in the color, it should reflect bright, shiny gold or luminescent white.

TIPS FOR IDENTIFYING TYPE 1 TINTS
· Crisp white is good; "winter white" is best
· Brown looks like dark chocolate
· Denim should have white undertones
· No black or gray

METALS
Bright, shiny gold

JEWELRY & ACCESSORIES
Follow the same movement of the 5 Elements.

ShopDYT.com
Visit the DYT online store to shop for apparel, accessories, makeup and more —all hand-picked for your Type of beauty!

DRESSING Your TRUTH

Scanned Card for Type 1 (Style Kit 2015)

TYPE Two

SUBTLE & SOFT
KEYWORDS: Fluid · Flowing · Relaxed · Blended · Soft · Subtle · Muted
SHAPES: Elongated S-curve · Teardrop · Softened Rectangle · Elongated Oval

The 5 Elements of Dressing Your Truth

DESIGN LINE
What shapes do I see? Elongated, flowing S-curves, softened rectangles, elongated ovals in any part of the garment.

TEXTURE
How does it feel? Plush, soft, comfortable, with the softest weave.

FABRICATION
How does it fall? Medium weight fabrics. Fabrics that are relaxed, draping, soft, and *feel comfortable* on the body.

PATTERN
What shapes & contrast do I see? Blended patterns that flow together into muted and subtle designs. Soft, flowing curves that blend and intertwine. Soft, diffused backgrounds. Low contrast in color combinations.

COLOR
Tone: pure color plus gray. No stark black or white. Charcoal (muted black) is good. White is softened with a gray/dusty quality. Brown looks like milk chocolate. Muted navy. Denim should have gray undertones.

TIPS FOR IDENTIFYING TYPE 2 TONES
"Does the color look muted and softened?" The color looks like gray has been blended into it. Tones absorb light. If there is any metallic effect in the color, it should reflect silver or pewter.

METALS: Grayed Silver, Brushed Silver, Pewter

JEWELRY & ACCESSORIES
Follow the same movement of the 5 Elements.

ShopDYT.com
Visit the DYT online store to shop for apparel, accessories, makeup and more —all hand-picked for your Type of beauty!

DRESSING Your TRUTH

Scanned Card for Type 2 (Style Kit 2015)

Scanned Card for Type 3 (Style Kit 2015)

Scanned Card for Type 4 (Style Kit 2015)

8.4   Annexe D: Creating the Subsumed List of Characteristics for the Narrative Interview

(directed here from pg 104)

Step 1: Gathering all characteristics of the previously presented studies and visual assessment methods as well as health-related methods

Visual Landscape Assessment Methods
- Information Processing Theory of Kaplan and Kaplan (1989)
  - **coherence (order and a connectedness)**
  - **complexity (diversity of detail)**
  - **legibility (readable pattern for orientation)**
  - **mystery (interest evoking, hidden, intriguing elements)**
- perception-based aesthetic assessment (gathered by Jankevica)
  - **beauty**
  - **diversity**
  - **harmony**
  - **order**
  - **safety**
- design objective method
  - landscape patterns
    - example: hills, marsh, village, etc.
  - elements of landscape patterns
    - **shape**
    - **scale**
    - **colour**
    - **texture**
  - visual scenery
    - foreground
    - background
    - side-scenes
    - particular domains (areas)
  - aspects of every scenery
    - **accessibility**
    - **visibility**
    - **expressiveness**
- multi-disciplinary Level Assessment (Jankevica)
  - types of landscape values
    - **Order, regularity**
    - **Quality of man-made elements**
    - **Visible human intention**
    - **Particularity**
    - **Use of outlandish species**
    - **Use of natural forms**
    - **Accordance with architecture**
    - **Biodiversity**
    - **Accordance with landscape type**
    - **Native species**
    - **Natural elements**
    - **Carelessness**
    - **Wildlife**
    - **Unaffected nature processes**
- study 2006: Lombardy landscapes

- ◦ mapping man-made and natural features
- ◦ assessing:
  - ▪ **shape (size, colour, contours)**
  - ▪ **meaning (readability, use, context, visual, value, state)**
  - ▪ **function (accessibility, usability, profitability)**
- study 2018: historical cultural landscape areas in Trukish city, rated 0-5:
  - ◦ **coherence**
  - ◦ **imageability**
  - ◦ **historicity**
  - ◦ **sense of place**
  - ◦ **visual impressiveness**
  - ◦ **stewardship**
  - ◦ **complexity**
  - ◦ **legibility**
  - ◦ **originality**
  - ◦ **accessibility**
  - ◦ **naturalness**
  - ◦ **security**
  - ◦ **inconsistencies**
  - ◦ **city (place) identity**
- study 2018: ten quality indicators for public spaces, example Irkutsk
  - ◦ **accessibility**
  - ◦ **multi-functionality**
  - ◦ **safety**
  - ◦ **legibility**
  - ◦ **sustainability**
  - ◦ **human scale**
  - ◦ **identity**
  - ◦ **interactivity**
  - ◦ **flexibility**
  - ◦ **scenario**

Health-Related Methods:
- Stress Recovery Theory (SRT)
  - ◦ **complexity**
  - ◦ **structural features (order, disorder etc.)**
  - ◦ **focal points**
  - ◦ **spaciousness**
  - ◦ **surface textures**
  - ◦ **potential dangers**
  - ◦ **water**
- Attention Restoration Theory (ART)
  - ◦ **being-away (seeing different environments than in daily everyday)**
  - ◦ **fascination (features that motivate people to explore the environment)**
  - ◦ **extent (environment can be viewed as an entity but also offers abundance of detail)**
  - ◦ **compatibility (features are compatible with general and specific needs and desires)**
- study 2017: public squares in Spain
  - ◦ density and diversity of natural elements
  - ◦ architectural variation
  - ◦ psycho-environmental indexes
    - ▪ **orientation**
    - ▪ **coherence**
    - ▪ **enclosure**
    - ▪ **imageability**

- **prospect**
- **mystery**
- **singularity**
- **identity**
- **uniqueness**
- **exploration**
- **tranquillity**
  - questionnaires for subjective but quantitative evaluation of
    - their emotional state (tension ↔ anxiety, depression ↔ dejection, anger ↔ hostility, fatigue, vigour)
    - happiness and stress
    - perceived restorativeness of place

Step 2: Subsuming them into one list (table continued on next page)

Step 1	Step 2	Step 3
List of All Characteristics from Above	**Original Characteristics Sorted into Groups**	**Subsumed Categories for Guideline in Method (as used on page 104 in thesis)**
coherence (order and a connectedness)	coherence (order and a connectedness)	1. <u>Coherence (9 mentions)</u> ◦ order, structure ◦ connectedness, consistency, compatibility ◦ for flora, fauna and inanimate objects
complexity (diversity of detail)	order	
legibility (readable pattern for orientation)	Order, regularity	
mystery (interest evoking, hidden, intriguing elements)	Accordance with architecture	
beauty	coherence	2. <u>origin & belonging of elements (8 mentions)</u> ◦ for flora, fauna and inanimate objects ◦ native and local ↔ not native and not local
diversity	inconsistencies (opposite of connectedness / coherence)	
harmony	structural features (order, disorder etc.)	
order	compatibility	
safety	coherence	3. <u>orientation (6 mentions)</u> ◦ readability, legibility of patterns for orientation
accessibility		
visibility	complexity (diversity of detail)	
expressiveness	diversity	4. <u>accessibility and usability (6 mentions)</u> ◦ of place and elements
Order, regularity	complexity	
Quality of man-made elements	complexity	5. <u>complexity / diversity of details (4 mentions)</u> ◦ for flora, fauna and inanimate objects
Visible human intention	legibility (readable pattern for orientation)	
Particularity	visibility	
Use of outlandish species	readability	6. <u>comfort (4 mentions)</u> ◦ feeling of safety or danger
Use of natural forms	legibility	
Accordance with architecture	legibility	7. <u>interest / uniqueness (4 mentions)</u> 1. aspects that separate the place from others and make it special
Biodiversity	orientation	
Accordance with landscape type		
Native species	mystery (interest evoking, hidden, intriguing elements)	8. <u>visual presence (4 mentions)</u> ◦ place that is a considerable point of visual interest (image) or offers points of considerable points of interest
Natural elements	fascination	
Carelessness	exploration	
Wildlife		
Unaffected nature processes	safety	9. <u>local identification (4 mentions)</u> ◦ intensity of people's place identity & place identity of place
readability, use, context, visual, value, state	security	
	safety	
accessibility, usability, profitability	potential dangers (opposite of safety)	
coherence		10. <u>mystery / intrigue (3 mentions)</u> ◦ aspects / structure that intrigues and makes you want to explore
imageability	accessibility	
historicity	accessibility	
sense of place	accessibility	11. <u>boundaries / open spaces (3 mentions)</u> ◦ degree to which and the way in which a place feel spacious and enclosed
visual impressiveness	accessibility	
stewardship	use	12. <u>affordances (3 mentions)</u> ◦ flexible / multi-purpose ↔ inflexible / one-purpose ◦ interactive ↔ not interactive ◦ what affordances?
complexity	usability	
legibility		
originality	expressiveness	
accessibility	Visible human intention	
naturalness	state	13. <u>intentionality of design (2 mentions)</u> ◦ degree and manner in which the place looks intentional and how intense any intentions are expressed
security	profitability	
inconsistencies		
city (place) identity	Particularity	
accessibility	originality	

multi-functionality
safety
legibility
sustainability
identity
interactivity
flexibility
scenario
complexity
structural features (order, disorder etc.)
focal points
spaciousness
surface textures
potential dangers
water
being-away
fascination
extent
compatibility
orientation
coherence
enclosure
imageability
prospect
mystery
singularity
identity
uniqueness
exploration
tranquillity
	singularity
	uniqueness
	
	Use of outlandish species
	Use of natural forms
	Native species
	Natural elements
	Wildlife
	Unaffected nature processes
	naturalness
	sustainability
	
	context
	historicity
	
	imageability
	visual impressiveness
	scenario
	focal points
	
	sense of place
	city (place) identity
	identity
	identity
	
	stewardship
	
	multi-functionality
	flexibility
	interactivity
	
	spaciousness
	extent
	enclosure (opposite of extent and spaciousness)
	
	being-away
	tranquillity
	
	<u>Ignore because besides the point for genius loci:</u>
	beauty
	harmony
	Carelessness (not clear how it is meant)
	visual
	value
	human scale (because in description through archetypes)
	surface textures (because in description through archetypes)
	water
		14. <u>state of the place (2 mentions)</u>
		   ○ functionality (practical and economical) and quality (intact ↔ disrepair) of place
		
		15. <u>context (2 mentions)</u>
		   ○ historical (natural & cultural context)
		
		16. <u>connection to the outside environment (2 mentions)</u>
		   ○ sensual connection or separation (visual, auditive, etc.)
		
		17. <u>stewardship (1 mention)</u>
		   ○ people in charge of place
		   ○ over course of time