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Aesthetic experiences and their theoretical and neuroaesthetic context

An integrate literature review of the theoretical concept of
Einfühlung and its relation to neuroaesthetics

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Abstract

Aesthetic experiences and their theoretical and neuroaesthetic context: An integrate literature review of the theoretical concept of *Einfühlung* and its relation to neuroaesthetics

How we as viewers emotionally connect and interact with art and other aesthetic experiences is a widely debated topic in the art historical discourse. Following German aesthetician and philosopher Robert Vischer's theorisation of the concept of *Einfühlung* during the 1870s, the empathic discourse has intrigued and engaged thinkers throughout centuries. With the discovery of mirror neurons in the human brain in the 1990s, the actuality of the empathic discourse resurfaced, marking empathy as a corner stone in theoretical development of theory of attentiveness and embodied simulation theory. In the contemporary discourse, neuroaesthetics and neuroarthistory have been introduced as new disciplines, utilising neuroscientific research as an approach to systematically study aesthetic experiences. The purpose of this study is to outline selected conceptualisations of empathy and their art historical context. Secondly, the study will aim to examine how the concept can be utilised in the contemporary empathic discourse, in relation to recent neuroscientific research and found evidence of mirror neurons. An integrate literature review will be conducted on a selection of historic and contemporary literature. The research question (*In what ways can the concept of *Einfühlung* be considered in relation to neuroaesthetics and how can it be used regarding aesthetic experiences?*) will be answered through two partitions. Firstly, the study will regard the results of the integrate literature review, considering at the conceptualisation of *Einfühlung* and its contextual and historical relevance in the contemporary discourse on neuroaesthetics and aesthetic experiences. Secondly, the study will discuss the critique posed against neuroaesthetics and embodied simulation theory, again considering the results of the integrate literature review. The study will be concluded with a discussion regarding suggested further study on the subject.

Key words: empathy, *Einfühlung*, empathy theory, embodied simulation, mirror neurons, neuroaesthetics, aesthetic experiences

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Glossary and definitions

The terminology has been translated and defined by the author. The translation has been concerned by keeping the original intent, although this might divert from a literal translation into English. Considering some of the translated literature being historical texts from more than a century ago, the translation has intended to keep the original intent, although utilising contemporary words and terms in the translations. Some terms will consequently be used in their original language to clarify their contextual meaning and definition.

Aesthetic experience: An experience induced by either an aesthetic object, such as classical Western art (paintings, sculpture, literature, music etc.), newer media (performance, installation, land art etc.), art from non-Western cultures, or from other aesthetic aspects of our lives such as nature, atmospheres, cinema, fashion, video games etc. Will be utilised as proposed by Yuriko Saito in *Everyday Aesthetics* (2007).¹ The term will not get further analysed though *Erlebnis* as developed by H-G Gadamer and H. U. Gumbrecht.

Atmosphere: See *Stimmung*

Einfühlung: A concept composed by the by the German word *die Fühlung* (feeling) and the preposition *ein* (in/ into), directly translating in English as “in-feeling” or “feeling-into”. The term is both considered with “feeling-into” both other subjects and inanimate objects. Will be utilised as developed both by Robert Vischer and Edith Stein in their original German terminology.

Embodied simulation: A mechanism where perceived and understood actions, emotions or sensations activate internal bodily or sensory engagement. The stimuli is experienced as if we partook in a similar action or emotional sensation.²

Empathy: Conceptually and linguistically derived from the term *Einfühlung*. Recognised in the contemporary discourse foremost as an intersubjective concept where we empathise socially and sometimes bodily with others, based on direct or indirect communication.

Epiphany: A subconscious, individual elevated connection with object, artefacts, or other aesthetic experiences.

Formsymbolik: Literally translates to symbolism of form. A theory developed by F. T. Vischer where all forms can become matters of an involuntary act of transcending the viewers

¹ Y. Saito, *Everyday Aesthetics*, Oxford University Press, Oxford, 2007, pp. 9-11.

² D. Freedberg & V. Gallese, ‘Motion, emotion and empathy in esthetic experience’, *TRENDS in Cognitive Sciences*, vol. 11, no. 5, 2007.

feelings, ascribing a soulful (seelenvollen) engagement onto, or into, a form.³ A rarely utilised theory in the contemporary discourse.

Gaze: Translated from the German term *Blick*, which for Vischer aims to define a way of seeing where both the effortless, immediate look and a more active and engaged seeing is utilised. This results in an elevated way of seeing, with which we can engage in *Einfühlung*. Will be utilised both as developed by Robert Vischer and Norman Bryson in 'The gaze in the Expanded Field' (1988).

Mirror neurons: A class of neurons in the ventral premotor region F5 in the brain. Neurological activation occurs both during a conscious act of moving, as well as when observing another performing the same conscious act.

Neuroaesthetics: A field within aesthetics aimed at scientifically studying and define cognitive responses regarding neuropsychological research and aesthetic experiences.

Object: Inanimate object, here often used to refer to an artwork or artefact.

Seelenkontakt: Literally translates to soul contact and means in Vischer's terms to deeply connect and engage with an object, bodily and mindfully. The literal translation is flawed as Vischer does not foremost define the soul (Seelen) as a spiritual entity, but rather as an elevated concept of the individuality of the combined subjective body and mind.

Stimmung: Literally translates to mood. Will be translated to its accepted translation in the art historical context, atmosphere. Will be utilised as defined as Gernot Böhme in *The Aesthetics of Atmospheres* (2017), where atmospheres are seen as how we experience the world. Since we cannot see the world, nor specify it, we can still get a sense of belonging, feeling into spaces and situations (atmospheres).⁴ The term also occurs in *Über das optische Formgefühl*, but the term will not get further analysed through Vischer's terminology.

Subject: An individual with a tangible human body and mind.

³ R. Vischer, *Über das optische Formgefühl*, B.U.H, Stuttgart, 1873, p. III.

⁴ G. Böhme, in J. Thibaud, ed., *The Aesthetics of Atmospheres*, Routledge, New York, 2017, pp.11-13.

1 Introduction

For long, I have pondered about the correlations and relations that occur between artwork, space, and the viewer within institutional settings - how these relationships are created and in ways directly connected through aesthetics, curation, or reception, and how in other ways they are not. This stretches beyond a theoretical quandary and asks in extension about the role of the viewer, questioning how we as viewers see, comprehend and experience works of art differently. Furthermore, it asks about individuality in aesthetic experiences, and what determines how we will react, or respond, as the impacts differ strongly from one and other. These are questions that can be disassembled and analysed through new perspectives continuously, as the artworld constantly changes and evolves.

1.1 Background

Regarding an art historical perspective, questions of how we as individuals emotionally and bodily relate to art, architecture and atmospheres can be traced back in the art historical discourse. Following German aesthetician and philosopher Robert Vischer's theorisation of the concept of *Einfühlung* during the 1870s, the concept of empathy has intrigued and engaged thinkers throughout centuries. The empathic discourse and conceptualisation also influenced other art theoretic approaches such as affect theory and embodied simulation theory. Empathy theory and embodied simulation theory are both concerned with how we as individuals create relations, interact with, and are affected by others, as well as inanimate objects, such as works of art. Recent neuroscientific research from the past decades has found evidence of so-called mirror neurons in our brains, indicating a unique neurological response mechanism which gets activated when performing an activity, but also when observing that same activity being performed by others. Since the discovery, the possible function and role of mirror neurons have been widely speculated upon, particularly focusing on the social cognitive aspects they might affect. Vittorio Gallese, professor of Psychobiology at the University of Parma and previously professor in Experimental Aesthetics at the University of London, is one of the scientists who partook in the discovery of mirror neurons.⁵ Gallese has since the discovery been working on the connections between mirror neurons, aesthetic experiences, and embodied simulation. His conducted research indicates that mirror neurons allow us as individuals to instinctively connect and relate to aesthetic objects and aesthetic experiences on an empathic level. According to

⁵ P. G. Falvo, 'Conversation with Vittorio Gallese about empathy and aesthetic experience', *Studies in Digital Heritage*, vol. 2, no. 1, 2018.

Gallese, when we are faced with works of art or engage in aesthetic experiences, we as individuals can create relations through a subconscious action, experiencing *epiphanies*. These epiphanies are rare occasions that we as spectators should treasure, as they tell us as much about the artwork we engage in, as it does about ourselves. This relatively new field of connecting neuropsychological research with aesthetics is characterised as neuroaesthetics and has the objective to scientifically study and outline cognitive responses in relation to art and aesthetic experiences.⁶

1.2 Purpose of study and research question

The overall aim of this thesis will be to contribute to the purpose and quandary about the relations between artwork, space, and viewer as stated in 1.1 Background, by conducting a directed study. This directed study will aim to outline how the conceptualisation of empathy, its art historical development, and how the concept can be used in relation to recent conducted neuroscientific research and found evidence of mirror neurons. The study will not aim to conduct a complete historical representation of the concept of empathy but will rather aim to review and discuss selected key works within the discourse of empathy. By performing said directed study, a theoretical and historical groundwork will be laid out, supporting further possible research. The study will limit itself to examine the concept of *Einfühlung* from a perspective concerning both art historiographical conceptual analysis and history of ideas. The study is conducted with the purpose of finding an answer to the following thesis question: *In what ways can the concept of Einfühlung be considered in relation to neuroaesthetics and how can it be used regarding aesthetic experiences?*

The thesis question will be answered by reviewing and synthesising the concept of empathy, as derived from *Einfühlung*, relating the concept to embodied simulation theory as well as neuroaesthetics. Different theoretical approaches divide empathy theory, and this research will aim to cross-examine the different and selected aspects. A discussion on embodied simulation will also be included, regarding its a theoretical and methodological framework. This will be performed to map out which perspective, or perspectives, will be the most beneficial regarding the research question. The study will argue that reviewing a historical conceptualisation of *Einfühlung* provides valuable contextualisation to the contemporary discourses on empathy and neuroaesthetics. The study will be concluded by a discussion regarding the research question

⁶ Freedberg & Gallese, op. cit., p.197.

and will suggest further study on the subject. Further research regarding this subject may utilise the conducted theoretical review as a foundation. Research could include atmospheres, architectural and institutional involvement in spaces, further investigating the empathic relations between art, space, and viewer.

Studies on the concept of empathy and its relevance to aesthetic experiences may be beneficial when studying empirical material which directly aims to express and create discussion around human emotions or experiences. Multiple examples can be found throughout artistic movements, including all kinds of media, techniques, and dimensions. In Yoko Ono's performance *Cut Piece* from 1964, the audience were invited to utilise a single pair of scissors placed in front of the artist, and then one by one, piece by piece cut off garment directly from her body.⁷ A more recent example is Mariana Abramović's performance *The Artist Is Present* from 2010, where the audience were invited one by one to approach Abramović and sit down in front of her, interacting without saying a word.⁸ These performances are both examples where the vulnerability of both the artist and audience is exposed, aiming towards achieving strong intersubjective responses.



Figure 1: Yoko Ono, *Cut Piece*, 1964-65, performance, Carnegie Recital Hall, New York, 1965, photo: Minoru Niizuma.

Figure 2: Marina Abramović, *The Artist Is Present*, 2010, performance, MoMA, New York, 2010, photo: MoMA New York.

⁷ MoMA Learning, 'Yoko Ono *Cut Piece* 1964', *MoMA* [website], < www.moma.org>, accessed 20 May 2021.

⁸ MoMA Learning, 'Marina Abramović *The Artist Is Present* 2010', < www.moma.org>, accessed 20 May 2021.

Other examples which include objects can be Tracey Emin's *My Bed* from 1998, and Felix Gonzalez-Torres *Untitled (Perfect Lovers)* from 1991, where again the artworks invite viewers to intimate parts of the artists' lives. Emin showing the world a piece of furniture where we perform some of our most vulnerable and private acts such as sleeping or engaging in sexual activities, also showcasing objects (liquor bottle, cigarette package etc.) indicating intimate parts of her lifestyle. Gonzales-Torres invites us with his work in the intimate sphere of two lovers dealing with an AIDS diagnosis, using clocks to show the uncertainty of their time and future.



Figure 3: Tracey Emin, *My Bed*, 1998, installation, Tate Modern, London, 1998, photo: Tate Galleries.

Figure 4: Felix Gonzales-Torres, *Untitled (Perfect Lovers)*, 1991, sculpture, MoMA, New York, 1991, photo: MoMA New York.

These examples have been presented to show where the discourse of empathy may be beneficial to insert, but will not be further studied or analysed as the main purpose of this study is to discuss the concept of empathy through a directed integrate literature review.

1.3 Theory and method

This study will examine the development of *Einfühlung*, regarding the selected literature theoretically through *Wirkungsgeschichte* as developed by H-G Gadamer in his book *Truth and Method* (1960). Gadamer positions himself as opposing the idea of the existence of an empty gap between the world of text and the actual world. Gadamer argues that the gap instead is filled with centuries of knowledge, interpretation, and history that will influence and affect any investigations of historical texts. Thus, for Gadamer, it is important to acknowledge the layers of interpretation and historical influence. This is theorised as *Wirkungsgeschichte*, or history of

effect, and emphasises how we are our coloured both historically and contemporary when attempting to re-interpret historical texts. Gadamer's approach focus on how the historical impact and past actuality of a text can be placed within our contemporary context. The theory also questions objectivity and the existence of objective knowledge, stating how we must be aware of our historical and subjective consciousness.⁹ Although being a theoretical approach, *Wirkungsgeschichte* works in its extension also as a methodical tool. *Wirkungsgeschichte* can be used as a hermeneutic method when regarding historical texts, emphasising our consciousness of the hermeneutical situation as readers. This is a rather difficult task to perform, as the foundation of the notion of the situation proves that we are inside of it, hence obstructing our objectivity.¹⁰ Although not being the main methodological approach, *Wirkungsgeschichte* will influence the study methodologically to some extent, as it will not be possible to elude the reviewed texts as traces of a long historical context and discourse. The study will not approach the selected literature strictly hermeneutically, nor historiographical, but will consider both aspects.

The methodology which will be utilised in conducting this research will be an integrate literature review, as methodised by Richard J. Torraco in his 'Writing Integrative Reviews of the Literature: Methods and Purposes' from 2016. The integrative literature review aims to consider, criticise, and synthesise selected literature and thus possibly generating new knowledge, or narrowing a knowledge gap. The integrated literature review allows identification of conflicting perspectives within the literary context.¹¹ This is performed though highlighting strengths and weaknesses in the selected literature in relation to the research topic. Regarding the thesis subject and question, an integrate literature review will be beneficial in regarding the theoretical historical concept of empathy, where an opposition will be made considering different theoretical perspectives. The integrate literature review will also be beneficial when consequently evaluating newer research on neuroaesthetics, considering, and utilising the stated theoretical historical background. The integrate literature review will not aim to perform a complete historical presentation, but rather showcase selected key literature through a directed study. Despite its limitations, the integrate literature review will allow for the study to methodically regard the selected literature, and thus discuss a directed aspect in the

⁹ H-G. Gadamer, 'The Principle of History of Effect (*Wirkungsgeschichte*)', in H-G Gadamer's *Truth and Method*, 2nd ed, tr. J. Weinsheimer & D. G. Marshall, Continuum, London & New York, (1960), 2004, pp. 299-306.

¹⁰ *ibid.*, p. 301.

¹¹ R. J. Torraco, 'Writing Integrative Reviews of the Literature: Methods and Purposes', *International Journal of Adult Vocational Education and Technology*, vol 7, no 3, 2016, p. 63.

vast literary spectra on the concept of *Einfühlung*. The integrate literature review will initiate by tracing the development of the concept, and theorising, of empathy within art historical writings. The empirical material has been selected based on their historical and influential value in the discourse of *Einfühlung* and empathy. The selected literature stems from two different theoretical perspectives, which will highlight two main opposing standpoints in the discourse of *Einfühlung*. After tracing the historical development of the concept, the integrate literature review will shift focus to more recent research on embodied simulation theory as developed by Vittorio Gallese and David Freedberg based on research and found evidence of mirror neurons.

The literature has been selected though the following criteria: 1. The literature's clear relevance and focus on *Einfühlung*, embodied simulation theory, neuroaesthetics, mirror neurons and/ or aesthetic experiences, 2. Recentness and actuality, and 3. Legibility. This resulted in the selection of the following books and articles: Robert Vischer's *Über das Optische Formgefühl*, 1873, Edith Stein's *Zum Problem der Einfühlung* (as well as its English translation *On the Problem of Empathy*), 1916, David Freedberg & Vittorio Gallese's 'Motion, emotion and empathy in esthetic experience', 2007, Vittorio Gallese, 'Mirror Neurons, Embodied Simulation, and the Neural Basis of Social Identification', 2009, Whitney Davies 'Neurovisuality', 2011, Thomas Fuchs 'Levels of Empathy – Primary, Extended and Reiterated Empathy', 2017, and Andrea Pinotti and Massimo Salgaro's 'Empathy or Empathies?', 2019. Further literature will be utilised within the study to place the selected literature within a context, to criticise, or to confirm a certain standpoint.

1.4 Previous research and relevance of subject

Considering its historical context and discourse, extensive studies and research on the topic and concept can be found, exploring diverse theoretical perspectives. Robert Vischer's exploration of *Einfühlung* came to inspire generations of art historians and thinkers such as Heinrich Wölfflin, Aby Warburg, Bernard Berenson, Wilhelm Worringer and Horst Bredekamp. In Wölfflin's *Prolegomena to a Psychology of Architecture* from 1886, Wölfflin focused on how observation of specific architectural forms engaged the viewers bodily, and what their physical response looked like. Bernard Berenson on the other hand, had a clear focus throughout his studies on how observation of the movements in Renaissance artworks heightened the viewers' tactile bodily understandings and experiences. In Aby Warburg's *Pathosformel*, which he wrote from 1893 and onwards, Warburg studied the notion of how the outward forms of movement

in an artwork revealed the inner emotions of the figure in question.¹² Considered as one of the pioneers in the development of *Einfühlung*, Theodor Lipps investigated the relationships between aesthetic experiences and pleasure, regarding bodily engagement with space, architecture, and fine art. Although building on diverse theoretical framework, what these thinkers have in common is their belief that the feeling of physical involvement in artworks not only encourages a sensation and urge of imitation of the represented movements, but that this connection also enhanced the viewer's emotional responses.¹³ These extensive works on the concept of empathy have influenced contemporary art writings. Notable researchers include Laura U. Marks, *The Skin of the Film* (2000) and Jill Bennett, *Empathic Vision* (2005) and their works on affect theory, foremost in cinema, feminist art and the expressions of trauma. On the account of mirror neurons and embodied simulation theory, extensive research has been conducted, many of which criticise the general assumptions which are often made in the field of neuroaesthetics. One approach to connecting neuroscience with art is the one of neuroarthistorian John Onians, who in his books *Neuroarthistory: From Aristotle and Pliny to Baxandall and Zeki* and *European Art: A Neuroarthistory* explore the concept of the human brain as the key function of producing art. Onians argues that the brain and mind are inseparable, utilising studies on both functional magnetic resonance image (fMRI) scans, where stimuli from art gives a distinguished result and activity compared to other stimuli, and mirror neurons. For Onians, neuroarthistory is also a way of understanding why man begun creating art at all and passed the tradition on to coming generations. This question is answered by pointing at neurological stimuli, suggesting that creating art provides the brain with the release of neurotransmitters, as it is a way of further assure our survival and memory as individuals and as a species.¹⁴ Regarding the relationship between artwork and beholder, there is a large quantity of research focusing on the matter. What is collectively agreed is the fact that art is created to be seen, addressing the beholder directly. Relevant research is Wolfgang Kemp's essay on reception aesthetics in *The Work of Art and Its Beholder*, 1998, David Carrer's *Art and Its Spectators*, 1986, and Brian O'Doherty's *Inside the White Cube*, 1976. Neither research is concerned by the concept of empathy, nor have insight in neuroaesthetics, but all treat the concept of the gaze in various manners. Similarities between reception aesthetics and Vischer's theories on *Einfühlung* can be seen, as Kemp discuss the "ideal beholder", stating that all works

¹² Freedberg & Gallese, op, cit., p. 198.

¹³ *ibid.*

¹⁴ J. Onians, *European Art: A Neuroarthistory*, Yale University Press, New Haven and London, 2016, p.31.

of art has a specific and ideal addressee, and is as concerned with seeing, as being seen.¹⁵ Neither Kemp, Carrer or O’Doherty discuss the concept of empathy, nor potential individual neurological involvement when regarding the relationships between artwork, space, and beholder.

1.5 Subject delimitations and empirical material

Considering the vast literary material on the subject, the study will be narrowly delimited. The study will restrict itself to performing an integrate literature review on a small selection of empirical material, only regarding empathy theory as conceptualised by Robert Vischer and Edith Stein and embodied simulation as developed by David Freedberg and Vittorio Gallese. Robert Vischer’s *Über das Optische Formgefühl* have been studied in its original German. Edith Stein’s *Zum Problem der Einfühlung* has been read both in its original German and its English translation (*On the Problem with Empathy*). Although defined differently, both Vischer’s and Stein’s terminology will be named with their original German term *Einfühlung*. Neuroaesthetics will be foremost understood through Vittorio Gallese’s writings and research on mirror neurons in macaque monkeys and humans since its discovery until today in relation to aesthetic experiences. The study will restrict itself to only considering the perspective of aesthetic experiences regarding the discovery and discourse on mirror neurons. By performing this directed study, the study will be faced with an epistemological issue, questioning which type of knowledge which will be generated. Both in the terms of connecting to the issue of individual experiences and if they ever can be defined or communicated, and in the terms of the limitations and small selection in the vast discourse of empathy.

1.6 Disposition of the thesis

The second chapter will begin with a review of the historical concept of empathy, regarding F. T. Vischer’s and Robert Vischer’s ideas on *Einfühlung* as developed in *Über das Optische Formgefühl* from 1873, regarding gaze, the subject, and the object. Vischer’s ideas on *Einfühlung* will be discussed in relation to Edith Stein’s writings in *Zum Problem der Einfühlung* from 1916. The study will argue Stein’s position as phenomenological as she highlights individual experiences, and intersubjective communication as the core of *Einfühlung*. The chapter will be concluded by a short discussion on the two presented perspectives. Chapter

¹⁵ W. Kemp, ‘The Work of Art and Its Beholder: The Methodology of the Aesthetic of Reception’, tr. M. A. Cheetham, *The subjects of art history:*

historical objects in contemporary perspectives, Cambridge, 1998, pp. 180-183.

three will begin with introducing research on mirror neurons in macaque monkeys and humans and its relevance to neuroaesthetics, as developed from the 1990s until today. The concept of embodied simulation theory as developed by David Freedberg and Vittorio Gallese will be discussed and challenged by writings of Thomas Fuchs and set in relation to the previously conducted investigation of empathy theory in chapter two. Critiques by Whitney Davies and Andrea Pinotti will be presented in opposition to Freedberg and Gallese's ideas on embodied simulation theory. This will be followed by an overview of individual aesthetic experiences, so-called *epiphanies*, and the chapter will be concluded by shortly regarding embodied simulation and neuroaesthetics in relation to *epiphanies*. Chapter 4 will attempt to answer the thesis question through a discussion on the found results and suggestions regarding further research. The study will finish with a conclusion in chapter 5.

2 Einfühlung and empathy

The human ability to emotionally connect and relate to others around us as well as inanimate objects is a subject of study to philosophers, aestheticians, and art historians we can trace long back. The concept which we today define as empathy, was theoretically developed amongst aesthetic philosophers in the late 19th century Germany, foremost by Robert Vischer and Theodor Lipps. In his doctoral dissertation *Über das optische Formgefühl*, with which he disputed with in 1873 at the university of Tübingen, Robert Vischer uses the term *Einfühlung* as a noun, based on earlier works from his father, Friedrich Theodor Vischer.¹⁶ Although the concept had previously occurred during the 18th century amongst philosophers such as Hume, Burke and Smith (and even used in the literal sense of *Einfühlung* in works by Herder), the importance of the concept was not recognised until *Über das optische Formgefühl*.¹⁷ F. T. Vischer had previously used the term *Einfühlen* in his explorations of symbolism of form. In his discussions about pure form, F. T. Vischer asserts that a meaningless form ought not to exist, as they all may represent a spiritual life of their own (*Seelenleben*). All forms can become, according to F. T. Vischer, matters of an involuntary act of transcending one's own feelings. An act in which we as viewers ascribe a soulful (*seelenvollen*) engagement onto, or into, a form. F. T. Vischer names this as symbolism of form (*Formsymbolik*) and describes it as an intimate feeling for image and content.¹⁸ Around the 1930s, the discourse on *Einfühlung* stagnated due to alternative views on aesthetics, where emotions no longer were discussed within the field in the same extent. This was stated and canonised by R. H. Collingwood in *The Principles of Art*,

¹⁶ Vischer, loc. cit.

¹⁷ Freedberg & Gallese, op. cit., p. 198.

¹⁸ Vischer, op. cit., p. III-IV.

published in 1938, where Collingwood argued how art should be separated from emotion, advocating for art to be thought about as a matter of pure cognition. Although aesthetic experiences still being a topic of discussion in the mid-20th century, possible neurological or biological involvement had ceased to be a topic of discussion.¹⁹ The discussion of possible neurological involvement in aesthetic experiences had an upswing after the discovery of mirror neurons and influenced further theoretic discourse such as embodied simulation theory and affect theory in the 1990s and early 2000s.

2.1 About *Einfühlung*

Composed by the word *die Fühlung* (feeling) and the preposition *ein* (in/ into), the word *Einfühlung* directly translates to “in-feeling” or “feeling-into”. Quite literally, it means to project oneself as a feeling and tangible being into a set environment, state of mind, inanimate object, or atmosphere. In the first decade of the 20th century, the term *Einfühlung* gets translated to empathy by Edward Titchener, introducing the word to the English language.²⁰ Looking at the term and literal meaning of *Einfühlung*, we see that the concept is as concerned with relating to inanimate objects and atmospheres just as much as to other beings and human experiences. In the foreword of *Über das optische Formgefühl*, Vischer states that the original intention and purpose of the thesis was to further study his father’s understandings of symbolism of form in relation to *Einfühlung*. As he engaged in his studies, Vischer realised that the concept regarding immediate bodily and sensuous stimuli regarding aesthetic experiences would instead become his focus. Vischer states that he with this essay would attempt to shed light on the “darkness” that is *Einfühlung*, and interestingly chooses to explain and define *Einfühlung* as “where the nerve centre and soul are united”, although scientific evidence of mirror neurons were not discovered until more than 100 years later.²¹

2.2 Seeing as an entity

A central aspect in Vischer’s theories on *Einfühlung*, and what according to him foremost forms the relationships and connection between subject-object as well as subject-subject is the gaze (*das Blick*). To define the gaze, Vischer presents two other definitions of seeing. *Sehen*, a simple and unspecified physical act of seeing which we perform without extra effort. *Schauen*, which is more agitated than *Sehen*, since it is not just based upon an effortless physical act, but

¹⁹ Freedberg & Gallese, op. cit., p. 199.

²⁰ T. Fuchs, ‘Levels of Empathy – Primary, Extended and Reiterated Empathy’, in V. Lux, S.

Weigel eds., *Empathy*, 1st ed, Palgrave Studies in the Theory and History of Psychology, 2017, p.27.

²¹ Vischer, op. cit., pp. VII-VIII.

demands individual action, such as looking up and down, left and right. *Schauen* is more conscious than *Sehen* as it aims to examine forms and place them in a functional context. Vischer states that after *Schauen* has been satisfied through activation, the impressions we obtain from *Sehen* gets elevated. Thus, a cohesive, elevated image has been created through sight. This act is what Vischer names *Blick* (gaze). Vischer writes:

Es handelt sich hier um das einfache Aufnehmen des sich darstellenden Bildes, um das gerade, breite, unpoıntirte Vordringen zum Ganzen der Erscheinung; oder, objektiv gesprochen, um den ruhigen Abdruck, um die Photographie des Gegenstandes in unserem Auge. Bei näherer Selbstbeobachtung findet sich zwar, dass hiebei der Akt des punktuellen Blickes allerdings mitwirkt, indem wir, ohne es zu wissen, ein mit seiner Umgebung gänzlich verschmolzenes Centrum einhalten, welches einerseits von unserem Standpunkte [...] und andererseits von dem Augenfälligsten im Gegenstande selber (Licht) bedingt wird.²²

It is a matter of simply taking in the image represented, of the straight, broad, unpunctuated penetration into the whole of the appearance; or, objectively speaking, about the calm imprint around the photograph of the object in our eye. On closer self-observation, it is found that the act of the selective gaze is involved in, where we, without knowledge of it, maintain a centre that is completely merged with its surroundings, which on the one hand is conditioned from our standpoint [...] and on the other hand from the most obvious in the object itself (light).²³

Different types of seeing is a widely debated topic in visual culture and contemporary gaze theory, legitimising its actuality. In ‘The gaze in the Expanded Field’ from 1988, Norman Bryson examines the concept of the gaze, “a term that has become important in contemporary discussions of painting and of visuality [...]”.²⁴ Bryson traces the term back to French authors and philosophers Jean-Paul Sartre and Jacques Lacan in their literature from the mid 1900’s. Bryson describes Sartre’s definition of the gaze as a traditional perspective, distinguishing the seeing subject from the observed object. Quite similarly to *Einfühlung*, Sartre argues how the subject projects their consciousness and being outwards onto a situation or object through the gaze. Lacan, influenced by Sartre, also theorises the gaze from a subjective centre, but questions if we as subjects always feel ourselves to be at the centre of our vision. Lacan is concerned of the centralisation of the observed, claiming that the observed “does not stand at the center of control over these motions of the signifier; he or she is more like their bewildered observer.”²⁵ Although initiating this decentralising of the subject, Lacan does not, according to Bryson, completely succeed and turns instead to Japanese philosophers Nishida and Keiji Nishitani. According to Bryson, Nishida and Nishitani do not limit their perspective of the gaze as defined

²² Vischer, op. cit., p. 1.

²³ [Author’s transl.]

²⁴ N. Bryson, ‘The gaze in the expanded field’, in H. Foster ed., *Vision and Visuality*, The New Press, New York 1988, p. 87.

²⁵ *ibid.*, p. 94.

by subject and object, but utilises nihilistic concepts of being, questioning the presence and appearance of the observed.²⁶ The gaze moves from being a subjective-centred act to instead becoming the connection between the viewer and the world. A viewer who can only exist through the existence of everything in the universe. This Gaze of Śūnyatā²⁷, or blankness, completely decentralises the subject from utilising the gaze as an active force and places the viewer instead through immersiveness.²⁸ This concept stretches towards Böhme's ideas on atmospheres, in which we simply accept, see, and feel the world as it is. Similar ideas can be found in Vischer theorisations on the gaze, as he names the gaze as an instant act, where we see and completely embrace what is presented before us. The gaze is for Vischer firstly what helps separate the subject from the object, as one is the active observer, and the other being observed. Secondly it is the sum of the accepting and relaxed *Sehen* and the directed and conscious *Schauen*. This places the gaze as a central component in the concept of *Einfühlung*, as *Einfühlung* for Vischer is an utmost visual concept. This is a fundamental part of Vischer's conceptualisation of *Einfühlung* and what foremost differentiates Vischer's conceptualisation of the term from other discourses of empathy, such as psychology and sociology, where the central component in empathy stems from intersubjective communication or interaction.

2.3 The subject and the object

Regarding the subject and object, Vischer is interested in characterising the sensation of *Einfühlung*, and argues that for him, the sensation of empathy towards objects is only a sensuous state of being in a relation with an object. The gaze is interlinked, as we cannot engage in empathic acts without it, but how come we are more drawn to some objects than others? Vischer argues that a possible measure could be to use the concept of resemblance in harmonies. According to Vischer, it is not about either a harmony within the object nor as much as a harmony between object and subject, but rather as the harmonic form produced by the object, corresponding to a subjective harmony.²⁹ This confirms Vischer's concern of subjectiveness in all aesthetic experiences. In the chapter 'Gefühl und Gemüth'³⁰ Vischer further develops the notion of harmonies and draws connections to the term *Seelenkontakt* (soul contact). A term that does not foremost connote to the soul as a spiritual entity but rather as an elevated concept of the individuality of the combined mind and body. Vischer writes, by basing our interactions

²⁶ *ibid.* p. 98.

²⁷ Śūnyatā: a Buddhist concept with multiple meanings often translated as emptiness, blankness or voidness.

²⁸ Bryson, *op. cit.*, p. 98-100.

²⁹ Vischer, *op. cit.*, p. 6.

³⁰ Literally translates to 'Feeling and Mind', but *Gemüth* for Vischer also connotes to the soul (*Seele*)

solely upon the gaze and perception, there cannot be an authentic soul contact with an object, nor with other subjects. The sensation received by only utilising the gaze is only partial in the act of *Einfühlung*, as this does not influence physical involvement. To be able to fully engage in the act of *Einfühlung*, in all its physical and mindful sense, one must have spiritual value, which for Vischer is gained by having wandered through life.³¹ In other words, Vischer believes that it is through lived and experienced situations in which we build up the cognitive functions to be able to engage in *Einfühlung*. Although Vischer's earlier statements regarding the possibility of "feeling-into" objects utilises the gaze and corresponding harmonies, Vischer later states that true, complete connection between the subject and the object can only be achieved if the latter contains a person. Despite our ability to engage in the act of empathy towards objects, our egoistic nature only knows how to compare itself with the egoism of others.³² Vischer writes:

Der Empfindung im Bunde mit der Vorstellung gelingt nur die zweifelhafte Vergleichung mit dem Aeusserlichen, Peripherischen, Ungeistigen an der Erscheinungen. Im Gefühl aber concentrirt sich ein wärmerer Blick nach ihrem geistigen Kern, ohne deshalb die Gediegenheit ihrer Körperfülle preiszugeben. An die Stelle der Sache, von welcher unser Leib eine Förderung oder Hemmung erfährt, tritt jetzt eine lebendige Individualität oder eine Gemeinschaft von Individualitäten, welche uns, unsere Lebenssituation, unseren Lebensdrang freundlich mitfühlt und unterstützt [...]. Und die harmonische Beziehung zwischen Subjekt und Objekt vertieft sich hier zu einer solchen zwischen Subjekt und Subjekt. Das Gefühl beruht also auf einer Förderung oder Störung des ganzen Menschen, als einer individuellen, wesentlich auf ihre Gattung bezogenen Lebenskraft.³³

The sensation in association with the imagination succeeds only in the dubious comparison with the external, peripheral, unconventional in the eruptions. In the feeling, however, a warm gaze is concentrated on her spiritual core, without therefore giving up the solidity of her body. In place of the thing from which our body experiences a promotion or inhibition, there now comes a living individuality or a community of individualities, which sympathetically feels with us and supports us, our life situation, our urge to live [...]. And the harmonious relationship between subject and object deepens here into one between subject and subject. The feeling is based on a promotion or disturbance of the whole person, as an individual life force essentially related to their species.³⁴

Vischer reflects on the problematic with this statement, questioning his feelings, love, and appreciation for inanimate and lifeless things in this world, such as space and time, stillness and movement and all forms of "life" though blood does not pump. The perception of a harmonically corresponding form can indeed evoke a sensation and feeling of pleasure, and hence can empathic relations with an object also be attained. Henceforth, we have an ability to subordinate our subjective form through a bodily self-perception onto an objective form and

³¹ Vischer, op. cit., p. 18-19.

³² Vischer, op. cit., p. 19.

³³ *ibid.*

³⁴ [Author's transl.]

feel fulfilled. What separates harmonically corresponding objective forms from other is highly individual to all, as we postulate our personality in *Seelenkontakt*.³⁵

2.3 Empathy from a phenomenological perspective

In 1916, Edith Stein disputed with her thesis *Zum Problem der Einfühlung*, from the University of Göttingen, as a student under Edmund Husserl, one of the pioneers of phenomenology.³⁶ Although also utilising the term *Einfühlung*, Stein positions herself far from Vischer theoretically. Stein moves away from the form-foundation and regard instead *Einfühlung* from a phenomenological perspective, understanding *Einfühlung* foremost as an exchange between living and experiencing subjects. Stein's position might have been coloured by her personal life and situations, as she paused her doctoral writings to take a position as a nursing assistant during the first world war. She was later ordained a Carmelite nun in 1933, and after her death in Auschwitz-Birkenau in 1942, declared a Catholic martyr and saint.³⁷ Stein explains the act of *Einfühlung* as an act of perceiving, declaring *Einfühlung* a core part of phenomenology. Stein writes:

[...]: es gibt sich nicht als physischer Körper, sondern als empfindender Leib, dem ein Ich zugehört, ein Ich, das empfindet, denkt, fühlt, will, dessen Lieb nicht nur eingereiht ist in meine phänomenale Welt, sondern das selbst Orientierungszentrum einer solchen phänomenalen Welt ist, ihr gegenübersteht und mit mir in Wechselverkehr tritt.³⁸

This individual is not given as a physical body, but as a sensitive, living body belonging to an 'I', an 'I' that sense, thinks, feels, and will. The living body of this 'I' not only fits into my phenomenal world but is itself in the center of orientation of such a phenomenal world. It faces this world and communicates with me.³⁹

As Stein emphasises, the concept of *Körper* is here used as a physical (physischer) entity, utilising the word to explain the human carnal life-form. *Leib*, on the other hand, is used to explain the emotional and feeling subject and identity, which may be dislocated from our carnal body. Stein states that this "I", this *Leib*, is at the core of our perceptions and understandings of the world. *Leib* is thus inevitable in our phenomenological perceptions, as it is through which we *meet* the world.⁴⁰ Although we enter this world in a physical body (*Körper*), our physical body does not determine our emotional or mental state, as the body belongs to the mind (*Leib*)

³⁵ Vischer, op. cit., p. 21.

³⁶ C. Beyer, 'Edmund Husserl', *The Stanford Encyclopedia of Philosophy* [website], 21 December 2021, <www.plato.stanford.edu>, accessed 25 April 2021.

³⁷ T. Szanto & M. Dermot, 'Edith Stein', *The Stanford Encyclopedia of Philosophy* [website], 18

March 2020, para. 1, <www.plato.stanford.edu>, accessed 23 April 2021.

³⁸ E. Stein, *Zum Problem der Einfühlung*, Buchdruckerei des Waisenhauses, Halle, 1917, p. 3.

³⁹ E. Stein, *On the Problem of Empathy*, 3rd vol, tr. W. Stein, ICS Publications, Washington D.C., 1916 p. 5.

⁴⁰ *ibid.*

and not the other way around. The physical body can act as a tool for sensation and feeling, as we use it to tangibly orient our minds. Stein states how everything experienced in this world is based upon, and asserted by individual, subjective experiences and understandings. Thus, there is no general or universal phenomenon, only individual. Stein uses the example of a person experiences hallucinations, in which the phenomenon is for them as real and experienced though their minds as *reality*. Only in listening, engaging, and placing ourselves in the other person's perceived reality, can we achieve *Einfühlung*. *Einfühlung* is thus retrieved from an external source and is thus not a primal feeling which arouses unprovoked within oneself. *Einfühlung* can be fed by previous memories, dreams, fantasies, and imagination but the core and essence of the experience of *Einfühlung* is dependent on exchange.⁴¹ For Stein, the community thus paramount the individual regarding the act of *Einfühlung*. Although, we are dependent on our cognitive experiences and data, as we cannot understand or receive outer perceptions of feelings, only *embody* the perceived feeling, and relate to internal subjective experience. By considering Stein's definition of *Einfühlung*, is *Einfühlung* a real internal feeling, or can it only be achieved/ realised through adapting to another living thing? Would *Einfühlung* exist without emotional communicative exchange between subjects? Stein herself also raise similar questions when she introduces three questions asked by her fellow student under Edmund Husserl, Moritz Geiger: "(1) Are empathised experiences primordial or not? (2) Are foreign experiences objectively given as something facing me or given experientially? (3) Are they intuitively or non-intuitively given (and if intuitively, in the character of perception or of representation)?"⁴² By addressing her preceding argumentation, Stein answers the first question in the negative. Regarding the second question, she argues that there is a two-sidedness to the essence of acts of *Einfühlung*, which build on each other, as an act of *Einfühlung* evokes subjective experiences, but it may be fully led by an external cause and is thus independently given and experientially created. Regarding the third question, Stein points at the need to distinguish *Einfühlung* from perception. According to Stein, the third question asked by Geiger was poorly formulated, stating that she could not have given a correct answer. The essence of the act of *Einfühlung* is to use a pre-existing subjective experience and sensations to intuitively relate empathically to communicated feelings and experiences of others. Thus, Stein emphasises *Einfühlung*'s demand of communication, stating:

⁴¹ *ibid.*, p.11.

⁴² *ibid.*, p. 19.

Und die Erfahrung, auf welche das Wissen um fremdes Erleben zurückweist, heißt Einfühlung. Ich weiß um die Trauer eines anderen, d. h. entweder ich habe diese Trauer einführend erfaßt, verweile aber nicht mehr in diesem ‚anschauenden‘ Akte, sondern begnüge mich jetzt mit dem leeren Wissen, oder ich weiß von dieser Trauer auf Grund einer Mitteilung; dann ist sie mir nicht anschaulich gegeben, wohl aber dem Mitteilende – ist dies der Trauernde selbst, so ist sie ihm originär gegeben in der Reflexion, ist es ein Dritter, so erfaßt er sie nichtoriginär in der Einfühlung – und von dieser seiner Erfahrung habe ich wiederum Erfahrung, d. h. ich erfasse sie einführend.⁴³

And the experience back to which knowledge of foreign experience points is called empathy. I know of another's grief, i.e., either I have comprehended this grief empathically but am no longer in the 'intuiting' act, content with empathy knowledge, or I know of this grief on the basis of a communication. Then the grief is not given to me intuitively, though surely to the communicator. (Should this be the griever himself, it is primordially given to him in reflection. Should it be a third person, he comprehends it non-primordially in empathy.)⁴⁴

What majorly distinguishes the two presented authors, is their fundamental theoretical perspectives. Vischer clearly states his intention and foundation in symbolism of form. He thus understands and handles *Einfühlung* as an immediate activity connected and shaped through the gaze, as well as being a more elevated connection. This elevated connection may be created by correlation of harmonies and thus allows us to feel *Seelenkontakt*. Vischer believed this act of *Einfühlung* to have neuroscientific support, although lacking neurological evidence. Vischer debates whether true empathy is constructed around subjective individuality and if we as egoistic and self-concerned creatures can fully engage in an act of *Einfühlung* when facing an inanimate object, despite its so-called harmonic correlation with the subject. Vischer also sees the problematic here regarding worldly phenomenon, with which, regardless of having a body, pulse, or intellect, still can be utmost vivid, and thus lets us fully empathise with. Stein on the other hand, regards empathy from a phenomenological perspective, basing her theories foremost around the concept of exchange between feeling subjects, where one's memories, fantasies or even delusions are as valid as the *real* world, in engaging the act of *Einfühlung*. *Einfühlung* is an embodiment of external perceptions and is thus dependant on communication but could also not exist without subjective and individual emotional experiences, as these lie as a foundation for our empathic response.

3 Neuroaesthetics, embodied simulation and epiphanies

In 1992, a group of neuroscientists at the University of Parma in Italy published their research on the discovery of a class of neurons in the in the ventral premotor region F5 in the brains of macaque monkeys. The class of neurons got activated both when the studied monkey grabbed an object, as well as when the studied monkey watched another monkey grab that same object.

⁴³ Stein, *Zum Problem der Einfühlung*, op. cit., p. 20.

⁴⁴ Stein, *On the Problem of Empathy*, op. cit., p. 16.

The class of neurons were named *mirror neurons*, as an activation based on a visual stimulus, is dependent on an interaction between the performer and object, as well as when others engage in interaction towards the same object.⁴⁵ Although humble in its discovery, the findings of so-called mirror neurons in primates led to further research on humans where the same class of neurons were identified in the human brain. What distinguishes mirror neurons from other ‘motor’ or ‘sensory’ neurons, is that mirror neurons get activated both during the conscious act of moving, as well as when observing another performing the same conscious act. In other ‘motor’ or ‘sensory’ neurons, the discharge is connected either with observing or performing, never both.⁴⁶ That the activity in mirror neurons is based on a perceived action and its meaning, rather than being activated based on a visual perception has been verified through studies conducted in 2001 and 2002. In the first study, conducted by Umiltà et al. in 2001, it was found that a subset of mirror neurons in macaque monkeys were activated even when part of the observed actions performed by another monkey were hidden, suggesting that mirror neurons gave discharge even on a speculated action, based on previous individual actions. In the study conducted by Kohler et al. in 2002, it was demonstrated how mirror neurons can help us code actions based on sound. This class of mirror neurons, named ‘audio-visual mirror neurons’, gets activated not only when the monkey performs and observes the act, but also when hearing specific sounds indicating the action being performed. This concludes that further studies on mirror neurons inform us of the existence of an internal mechanism where both expected, observed and audio indications of actions equally activates the same neurons as when we ourselves perform said action.⁴⁷ Gallese states, that although elegant in its discovery and results, the studies performed on macaque monkeys cannot be directly translated to the human mind. Human social cognition and functions are much more sophisticated as our action are not only motorically and visually coded, but also ethically, morally, and socially. In addition, we also have the possibility of asking ourselves *why* an action is performed and can thus include intention when drawing conclusions of our perceptions. When studying human mirroring mechanisms, several different methodologies and techniques has proven activation from a range of functions. The activation has been found in a multitude of actions such as imitation of simple and complex movements and skills. Both in the perception of instructed or communicated

⁴⁵ V. Gallese, ‘The ‘Shared Manifold’ Hypothesis’, *Journal of Consciousness Studies*, vol. 8, no. 5-7, 2001, pp. 33-35.

⁴⁶ J. M. Kilner & R.N. Lemon, ‘What we Know Currently about Mirror Neurons’, *Current Biology*, Dec 2013, accessed 2021-05-04.

⁴⁷ V. Gallese, ‘Mirror Neurons, Embodied Simulation, and the Neural Basis of Social Identification’, *Psychoanalytic Dialogues*, 19:5, (2009), pp. 519-536.

actions, as well as in detection of intention.⁴⁸ The same activation has also been discovered when the studied subject perceives basic emotions and sensations such as pain and touch expressed by others. These results suggest that the ability to empathise is connected to mirror neuron mechanisms. Empathy is thus, according to Gallese, “to be conceived as the outcome of our natural tendency to experience our interpersonal relations first and foremost at the implicit level of intercorporeity, that is, the mutual resonance of intentionally meaningful sensory-motor behaviors [...]”⁴⁹ Gallese links these neuroscientific findings with embodied simulation, claiming these scientific findings as evidence of an embodied simulation model. Gallese defines embodied simulation as a description of a happening between subjects in social constructions where we absorb, understand, relate, and in ways embody the other. This is performed instinctively though perceived or communicated emotions and actions.⁵⁰

3.1 Embodied simulation

Embodied simulation, as terminologically used by Gallese and Freedberg, refer to a foremost physical act where we as viewers bodily copy or simulate perceived movements, facial expressions or intended movement.⁵¹ This is done both in intersubjective interaction, as well as when we engage in aesthetic experiences. Although not being aware of supporting neurological evidence, ideas of physical embodiment has indeed been a part of the empathic and art historical discourse since the 18th century. In the article ‘Motion, emotion and empathy in esthetic experience’ from 2007, Gallese and Freedberg address the following questions: “[...] how relevant is empathy to esthetic experience, and what are the neural mechanisms involved?”⁵² The study intends only to regard aesthetic experiences through classical art forms. Michelangelo’s *Slave called Atlas* (ca. 1520–1523), Goya’s *Desastres de la Guerra* (1810-1820), Pollock’s *Number 14: Gray* (1948) and Lucio Fontana’s *Concetto Spaziale ‘Atteza’* (1965) are used as visual examples to support the argumentation. Gallese and Freedberg argue that the empathic engagement derives from a physical recognition, which triggers bodily and empathic responses from the viewer. In understanding physical consequences of the displayed acts, simulation in viewers is evoked, as they can find themselves instinctively copying the perceived physical movement or emotional expression.⁵³ Through analysing the pictural documentation, the authors elevate their subjective empathic bodily responses to a universal understanding of the artworks. In the article ‘Mirror Neurons, Embodied Simulation, and the

⁴⁸ *ibid.* pp. 522-523.

⁴⁹ *ibid.* p. 523.

⁵⁰ *ibid.*, p. 524.

⁵¹ Freedberg & Gallese, *op. cit.*, p. 197.

⁵² *ibid.*

⁵³ *ibid.* p. 197-198.

Neural Basis of Social Identification’ from 2009, Gallese presents his belief on embodied simulation being the core of how we interact socially, as it defines how we can perceive, understand, and share the meaning of actions, feelings, and emotions with others. Gallese places embodied simulation as a foundation of identity, as well as community, where we empathise and thus create ethical and moral common grounds, which lies as the basis of our social development and existence.⁵⁴

The conducted studies by Gallese and Freedberg have been met with critique both from within the community of art historians and theorists, aesthetic philosophers, as well as within the community of psychiatrists and sociologists, foremost questioning the legitimacy of embodied simulation regarding aesthetic experiences. Thomas Fuchs, professor of Philosophy and Psychiatry at Heidelberg University, states his phenomenological approach to the aspect of embodied simulation and its role in empathy theory. Fuchs argues how we in most situations do not use “imaginative, introspective simulation routines, or inferences when we interact with another person. Instead, we immediately perceive the other’s intentions and emotions in his expressive behaviours and in his meaningful actions as related to the context.”⁵⁵ Fuchs argues that Gallese and Freedberg’s methodisation of embodied simulation disregards a sociological perspective. Fuchs preferences interaction theory as an alternative approach to social understandings and cognitions, where body language and perceived bodily intentions is the focus of study to understand human interaction and bodily social communication.⁵⁶

In the article ‘Neurovisuality’ from 2011, art historian Whitney Davies argues for the importance of investigating both experimental neuropsychology and art history together. This should be done to extensively understand visual culture and the power artworks or images can possess. Davies approaches neuroaesthetics from the perspective of neurophysiologist Semir Zeki, who claims that active visual-aesthetic understanding has its own functions and rules within our brains.⁵⁷ Davies writes:

⁵⁴ Gallese, ‘Mirror Neurons, Embodied Simulation...’, op. cit., p. 520-523.

⁵⁵ Fuchs, op. cit., p. 28.

⁵⁶ *ibid.*

⁵⁷ W. Davies, ‘Neurovisuality’, www.nonsite.org [website], 12 June 2011, accessed 28 April 2021.

Active visual-aesthetic configuration of the visible world has its own “rules and programs” in the brain, as Zeki puts it, whether we refer to electrochemical activity in the brain that materially accompanies our experience of a painting as an art or refer to activity that produces it in the sense that if we were to stimulate or simulate the activity in the brain—let’s say by giving the subject an ‘art pill’ or an ‘art injection’—we would induce just that aesthetic experience of just that painting. Soon enough, artists will begin to administer art pills, if they do not already do so, and the neurophysiological claim in aesthetics will have come full circle. For according to the strongest version of neuroaesthetics any artwork simply is an art pill or an art injection. Why?⁵⁸

Davies here questions the relevance between neuroscience and art production and provides logical reasoning towards the actuality of neurological involvement and application on aesthetic experiences. Davies questions the narrow view on paintings, believing that a general discussion on images and visual culture would be beneficial, also including how we respond to and engage with techniques, media, and context. Thus, Davies points at neurovisuality, a discipline which rather than examining individual aesthetic experiences received through regarding specific artworks, points at a general neurological function which is concerned by visuality and images in general.⁵⁹

Andrea Pinotti, one of Italy’s most renowned researchers in empathy, generally positions himself questioning the validity of embodied simulation in his research. The article ‘Quasi-soggetti e come-se: l’empatia nell’esperienza artistica’⁶⁰ from 2010 is a direct commentary on Gallese and Freedberg’s ‘Motion, emotion and empathy in esthetic experience’. Here Pinotti examines the proposed methodology in respect to other artforms such as architecture, music, dance, and theatre. Pinotti concludes that we must see *art* as an umbrella term, as different artistic mediums differ tremendously from each other, requiring further specifications. For instance, in aesthetic experiences based on three or more dimensions such as virtual reality, embodied simulation is a vital part in the artwork itself.⁶¹ In painting on the other hand, embodied simulation is debatable. Secondly, Pinotti address the problematic with discarding the traditional distinction as can be seen in theories on *Einführung*. Pinotti requests a theorisation where the artistic experience stems from the object, rather than the subject, which is the case in the embodied simulation perspective. Pinotti writes:

⁵⁸ *ibid.*, para 22.

⁵⁹ *ibid.*

⁶⁰ Quasi-subjects and what if’s: empathy in the artistic experience [Author’s transl.]

⁶¹ A. Pinotti, ‘Quasi-soggetti e come-se: l’empatia nell’esperienza artistica’, *PSICOART*, no. 1, 2010, pp. 16-18.

Sbaglieremmo però se intendessimo questo manifestarsi, questo esprimersi, come incentrato sul polo del “dentro”, come se il “fuori” non fosse altro che l’estrinsecazione materiale o mediale di un significato già interiormente costituito. È solo in questo particolare “fuori” – nel medium, differente e irriducibile nella sua singolarità, di questa sinfonia rispetto a questa architettura, di questa novella rispetto a quel dipinto – che questo particolare senso viene all’esistenza.⁶²

We would thus be wrong if we meant that this manifestation, this expression, was centred around the pole of the "inside", as if the "outside" were nothing more than the material expression or medial of a meaning already internally constituted. It is only in this particular "outside" - in the medium, different and irreducible in its singularity of this symphony with respect to this architecture, this novel compared to that painting - where this particular sense comes to existence.⁶³

In an article from 2019 written together with Massimo Salgaro titled ‘Empathy or Empathies?’, Pinotti and Salgaro address questions regarding the empathic process and its unresolved issues. They question whether empathy is a bodily or mental process, as well as if it is foundationally instinctive, rational, or emotional. They also question with whom or what we empathise and if it is based upon our individual preferences and similarities, or even the opposite. Pinotti and Salgaro argue that despite all literature and studies within the field, a clear concept of empathy is still lacking.⁶⁴ Regarding contemporary studies on neuroaesthetics, embodied simulation and mirror neurons, Pinotti and Salgaro believes there to be an over-developed discourse. Pinotti and Salgaro calls this an “empathic hype” and claims there being an overemphasis on the connections between empathy and neuroscience, stating that “[...] these studies only focus on positive emotions in art reception and positive concepts of fictional empathy.”⁶⁵ What Pinotti and Salgaro’s article suggests is foremost a more distinguished terminology regarding the concept of empathy, as the notion of empathising as well as embodiment have unclear definitions, and is thus difficult to utilise in the neuroaesthetic discourse.

3.2 What is an epiphany?

Without deepening too far in its religious, literary, or philosophical connotations and context, the notion of the epiphany is a reoccurring notion throughout literature and the art historical discourse. What exactly constitutes as an epiphany, its bearings and occurrences are questions often addressed. In ‘Epiphany /Presentification /Deixis’ from 2004, German literary theorist and Professor Emeritus in literature at Stanford University, Hans-Ulrich Gumbrecht, presents his standpoint on the notion of the epiphany. The epiphany, here also referred to as “moments of intensity”, is presented by Gumbrecht as probably not more than a feeling of an exceptionally

⁶² *ibid.* p. 16-17.

⁶³ [Authors transl.]

⁶⁴ A. Pinotti & M. Salgaro, ‘Empathy or Empathies? Uncertainties in the Interdisciplinary’, *GESTALT THEORY*, vol. 41, no. 2, 2019, p. 142.

⁶⁵ *ibid.* p. 145.

high level of cognitive, emotional, and possible physical engagement.⁶⁶ The epiphany cannot be guaranteed or taught, neither forced nor prolonged, as it is seemingly dependent on more than just the object from where the epiphany originally stems. “It might happen—but I know and I already anticipate my action of regret about this experience—that it will only happen for a moment (if it should happen at all).”⁶⁷ Gumbrecht argues that the epiphany (and all aesthetic experiences) entail intensity which we cannot find in the everyday world. This leaves us with a sense of loss or nostalgia in its memory, as we treasure its uncertainty. Gumbrecht’s perspective is as intrigued by the subjective experience as by the object inducing the experience, as the same object may not induce an epiphany twice.⁶⁸ Gumbrecht’s contemplative and somewhat wistful approach towards the epiphany demonstrates the strong emotional affect the epiphany can have. In 1989, Canadian philosopher and Professor Emeritus at McGill University in Montreal, Charles Taylor turns to modernist art and aesthetics when trying to answer questions regarding identity and ideal self-authenticity. Taylor questions if there is a source other than the self that can help us define and articulate our true self. He addresses the epiphany, defining it as “a manifestation which brings us into the presence of something which is otherwise inaccessible, and which is of the highest moral or spiritual significance.”⁶⁹ The epiphany for Taylor can clearest be found in modernist art and poetry, as it demonstrates a subjective and inwards expression, yet not functioning as an expression of disordered subjectivism. For Taylor, the epiphanic experience is closely bound to individuality, a concept which we cannot escape, as it functions as an internal compass which shapes the fundamental orientation of our lives.⁷⁰ This argumentation is also used by Vittorio Gallese, when he in an interview from 2018 states how aesthetic epiphanies says as much about the regarded object, as it does about the individual. Gallese states that although simulating a depicted bodily movement and creating relationships due to the neurological functions of mirror neurons, it is only certain aesthetic experiences that “leaves a mark”, indicating a stronger empathic connection where we as viewers do not only simulate the portrayed act or movement, but also feel a higher sense of recognition.⁷¹ The epiphany is a highly individual and personal experience which cannot and should not be compromised to comparison, or judgement.⁷² What distinguishes then one aesthetic experience

⁶⁶ H. U. Gumbrecht, ‘Epiphany /Presentification /Deixis: Futures for the Humanities and Arts’, in H. U. Gumbrecht ed., *Production of Presence: What meaning cannot convey*, Stanford University Press, Stanford, p. 100.

⁶⁷ *ibid.*, p. 99

⁶⁸ *ibid.*

⁶⁹ C. Taylor, *Sources of the Self*, Harvard University Press, Massachusetts, 1989, p. 510.

⁷⁰ *ibid.*

⁷¹ Falvo, *op. cit.*, para. 11-15.

⁷² *ibid.*

from the other, enabling us to indulge in a higher emphatic response? Following Gallese and Freedberg's methodisation, all works of art or aesthetic experiences may induce empathy and thus sensational stimuli and emotional responses. Although this might be the case, the epiphany is, as later also established by Gallese, a rare occasion which we as viewers should treasure. In addition, epiphanies could be compared to what was named by Vischer as *Seelenkontakt*. As Vischer argues, using the gaze allows us to *see* objects but it is not until we have *Seelenkontakt* we as individuals can experience *Einfühlung*. This elevated experience is essential for Vischer, who already in the 19th century speculated that this indeed may have neurological involvement.⁷³ What role does then the epiphany play? Throughout the studied literature, in all theoretical and methodological approaches, is the significance of the heightened aesthetic experience discussed. Although the epiphany is distinguished differently through definitions and diverse terminology, or even procedures, the notion is present.⁷⁴

4 Discussion

Considering its extensive historical tradition, the discourse on empathy has been studied, utilised, and criticised through a range of disciplines, spanning from art history to sociology. The addition of neurological evidence of mirror neurons which supports the theory of actual physical involvement in the empathic act, has become a clear divider. Some believe this evidence being a clear indication and support of previous theoretical speculation, while others believe that its capacity and actuality has been overemphasised. Regardless of one's approach, it is safe to say that the discussion of neurological involvement in aesthetic experiences is here to stay.

Regarding the historical perspective, the study has presented selected key works from Robert Vischer and Edith Stein on the conceptualisation of the term *Einfühlung*. In the contemporary discourse, how we generally define empathy can be traced back to Stein's theoretical approach to *Einfühlung*, as the concept often refers to intersubjective activities. This places the contemporary empathic discourse on the phenomenological spectrum, which can be seen in the theorisation and methodisation of embodied simulation. Vischer, on the other hand, whose ideas have had a greater significance within the art historical canon, is throughout the studied literature often used solely as a historical example. This is an interesting aspect regarding the research question: *In what ways can the concept of Einfühlung be considered in relation to*

⁷³ Vischer, op. cit., p. I-VII.

⁷⁴ See Appendix 1

mirror neurons and how can it be used regarding aesthetic experiences? The problematic that can be seen in the current discourse on empathy, is although concerned of relationships and aesthetic experiences, the contextual core must still be the inanimate object with which the empathic response is connected. Considering Vischer's theoretical perspective will allow for the artwork to exist as an entity, binding the discourse of aesthetic relationships to an art historical foundation. Although also centring around the individual and their sensorial and emotional responses, the source of the empathic response comes from the artwork, inviting us to relate and connect. To study the relationships between viewer and art, Vischer utilises recognised art historical terms and methods, allowing for the discourse of *Einfühlung* to take place in an art historical context. Questions considering on different types of seeing, subjectivity, and objectivity are discussions we can find repeatedly within the art historical context, justifying its usage. In the contemporary empathic debate, this terminology is often discarded, solely regarding responses from a neuroaesthetic perspective. How does this affect the art historical context and tradition? The studied literature regard historical texts and conceptualisations of *Einfühlung* as just that – historical. Hence, theoretical and art historical foundations and ideas are not brought into the contemporary discussion. This study argues that the conceptualisation of *Einfühlung* is highly relevant, grounding the contemporary discourse of empathy to an art historical foundation. In what ways can we then utilise this theoretical and historical foundation when we talk about the concept of empathy today, through the means of neuroaesthetics? Looking at neuroaesthetics, however intriguing it may be, the discipline is filled with assumption and speculation. The discipline has been met with extensive critique, continuously aimed at the overemphasis of the importance of mirror neurons, as well as the methodisation of embodied simulation, as seen in the critiques by Pinotti, Salgaro, Whitney and Fuchs. Despite the neurological evidence of mirror neurons, the problematic seems to surface back to the theorisation and methodisation of embodied simulation. The uncertainty lies in the connection between the conducted research on mirror neurons and embodied simulation, as the research on mirror neurons cannot function as proof of embodiment in aesthetic experiences. This implication was only found in the articles by Freedberg and Gallese, and although physical or bodily involvement is discussed, neither Vischer nor Gumbrecht imply embodiment. The results of the integrate literature review points to an uncertainty regarding physical embodiment and interprets both Vischer and Gumbrecht as addressing possible neurological activity as “physical response”. Only for Stein can embodiment function as a way to achieve *Einfühlung*, which is critically met by Fuchs as not being related to empathy at all, but simply being a part of how we interact socially.

Although clarifying the conceptual development of *Einfühlung* and legitimising its theoretical and historical standpoint regarding mirror neurons and embodied simulation in this study, some questions remain. What determines if we as viewers engages in either an embodiment or elevated aesthetic experience (epiphany)? Can epiphanies be artistically, curatorially or institutionally induced and how does this affect the subject-object relation? And, if epiphanies are inconsistent in their occurrence, how can they ever be definitely determined? The study will suggest further research to be conducted based on the presented theoretical foundation. Questions of how we emotionally, neurologically, and possibly physically respond and react to elevated aesthetic experiences are integrated in the general art historical discourse, and as the artworld changes and evolves, these questions will follow. Interpersonal relationships, space and atmosphere are all aspects that would be of interest to further study, as well as clearer definitions of so-called epiphanies.

5 Conclusion

The study has conducted an integrate literature review based on selected key empirical material, regarding the conceptualisation of *Einfühlung* and empathy. With their different theoretical perspectives, Vischer and Stein have in this study been opposed against each other to establish the theoretical foundation from which empathy theory stems. Regarding the contemporary discourse, the general definition of empathy can be traced back to Stein's theoretical approach to *Einfühlung*. Although not having the same significance in the art historical canon as Vischer, Stein's ideas has been of great importance to the empathic discourse, foremost in embodied simulation theory. This places the contemporary empathic discourse on the phenomenological spectrum focusing the concept on subject-to-subject based interaction.

Regarding the research question – *In what ways can the concept of Einfühlung be considered in relation to mirror neurons and how can it be used regarding aesthetic experiences?* – the study has attempted to answer the research question through two divisions. Firstly, through an integrate literature review, examining the conceptualisation of *Einfühlung*, presenting a theoretical and historical foundation of the concept. Although narrow in its execution, the conducted integrate literature review presents the historical significance of *Einfühlung*, providing a valuable contextualisation. Secondly, the study has presented scientific research regarding mirror neurons, and different aspects and critiques towards neuroaesthetics. The final discussion proposes the theoretical framework as a functional tool when considering the

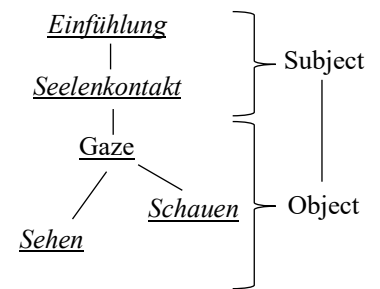
contemporary empathic and neuroaesthetic discourse, to understand the historical context and development, as well as to connect the discourse to its art historical foundation. The study questions the theorisation and methodisation of embodied simulation, as it is difficult to trace the evidence of mirror neurons as a certain indicator of embodied simulation. The study has interpreted Vischer and Gumbrecht as addressing foremost a possible neurological involvement when discussing heightened aesthetic experiences (epiphanies), as none of the writers directly imply embodiment.

Appendix 1

To clarify the different approaches and theorisation of *Einfühlung*, empathy and embodied simulation, visualisations are here shown. The models have been simplified, trying to showcase the rough outlines of the different approaches.

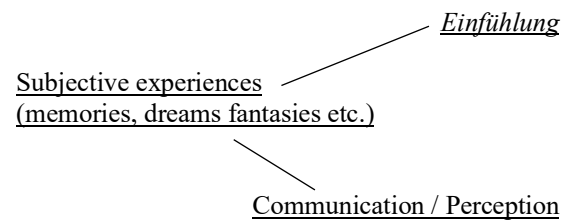
Robert Vischer:

For Vischer, the initial step towards *Einfühlung* is *Sehen*, which then in combination with *Schauen* allows for the Gaze. In the case of harmonic resemblance between the object and subject, *Seelenkontakt* may be achieved, leading to *Einfühlung*. The Gaze stems from the object but a relationship between the subject and object must exist to achieve *Einfühlung*.



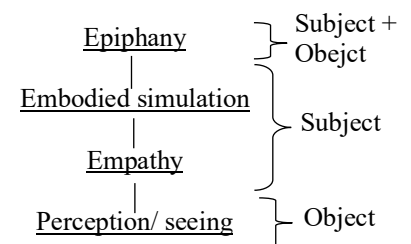
Edith Stein:

For Stein *Einfühlung* is foremost an intersubjective act where Stein believes that *Einfühlung* is achieved through perception or communication, which then in combination of subjective experiences gets elevated and internally understood.



David Freedberg & Vittorio Gallese (embodied simulation):

In the embodied simulation model, the bases come from perception or seeing an object. We then empathise with the movements or expressions as seen in the object, leading us to embody or simulate. The epiphany can then be reached only when the subject and object correlate on a heightened level. Through which means this is achieved or measured is not determined.



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Figure 1: Yoko Ono, *Cut Piece*, 1964-65, performance, Carnegie Recital Hall, New York, 1965, photo: Minoru Niizuma, accessed through accessed through MoMA Learning [website], 'Yoko Ono Cut Piece 1964', <www.moma.org>, accessed 20 May 2021.

Figure 2: Marina Abramović, *The Artist Is Present*, 2010, performance, MoMA, New York, 2010, photo: MoMA New York, accessed through MoMA Learning [website], 'Marina Abramović The Artist Is Present 2010', <www.moma.org>, accessed 20 May 2021.

Figure 3: Tracey Emin, *My Bed*, 1998, installation, Tate Modern, London, 1998, accessed through Tate Galleries [website], <www.tate.org.uk>, accessed 30 May 2021.

Figure 4: Felix Gonzales-Torres, *Untitled (Perfect Lovers)*, 1991, sculpture, MoMA, New York, 1991, accessed through MoMA New York [website], <www.moma.org>, accessed 30 May 2021.