

A phenomenological approach to the tactile art of Jan Švankmajer

How the artworks *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub* appeal to tactile sensibility and generate aesthetic experience

By: Melania Pomante

Supervisor: Erik Wallrup

Södertörn University

Bachelor's thesis / 15 credits

Aesthetics | spring semester 2022



SÖDERTÖRN UNIVERSITY | STOCKHOLM
sh.se

Popular scientific summary

Though unusual, there are pieces of contemporary art intended to be touched by the public. A series of tactile artworks are described in this research together with the consequences that the human touch implies both for the tactile artwork and the individual. The relations between them are analysed in terms of phenomenology and aesthetics, two branches of philosophy. My series of tactile artworks involves *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub* created by the artist Jan Švankmajer. In this thesis, I study and describe the features of these pieces to understand the kind of sensations generated by the encounter of the body touching and getting touched by this series of tactile artworks. Finally, I will explain how tactile artworks can be understood and how they generate values relevant for aesthetic experiences.

Abstract

A series of tactile artworks – documented in the book *Touching and Imagining, An introduction to Tactile Art* by Jan Švankmajer – is investigated with the phenomenological concepts of flesh and reversibility of touch. Central aspects of this investigation are the aesthetic encounter of sensing body and tactile art, the attributes of tactile knowledge and the position of touch and Tactilism in the fields of aesthetics and fine arts. The aesthetic meanings of patina, skin, roughness and tactile memory deepen the pragmatic descriptions of the artworks *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub*. This investigation ends considering the role of tactile sensations and the emotions of the sensing body among the factors that determine a tactile aesthetic experience. My thesis is a contribution to awaken the interest of artists, aestheticians and the general public to create, study, understand and experience tactile forms of art.

Table of contents

Popular scientific summary	2
Abstract	2
1. Introduction	3
1.1 Question and scope	4
1.2 Phenomenological approach to tactile aesthetics	5
1.2.1 Flesh and reversibility of touch	6
1.2.2 An overview of tactile aesthetics	7
1.3 Method	8
1.4 Delimitations	8
1.5 Sources	9
1.6 Disposition	10
2. Investigation	11
2.1 Tactile experimentations	11
2.1.1 Pioneristic Tactilism and tactile art expressions	11
2.1.2 Jan Švankmajer as tactile artist	12
2.2 On tactual knowledge	13
2.3 Multileveled investigation of <i>Tactile Study</i> , <i>Tactile Wooden Spoon</i> , <i>Tactile Rolling Pins</i> and <i>Tactile Tub</i>	16
2.3.1 Descriptions	16
2.3.1.1 <i>Tactile Study</i>	17
2.3.1.2 <i>Tactile Wooden Spoon</i>	18
2.3.1.3 <i>Tactile Rolling Pins</i>	19
2.3.1.4 <i>Tactile Tub</i>	20
2.3.2 Features appealing to tactile sensibility	21
2.3.2.1 How patina exists on tactile artworks	21
2.3.2.2 Sensing while exploring	22
2.3.2.3 Vibrant roughness	24
2.3.2.4 Modalities of tactile memory	25
2.3.3 Tactile art as aesthetic experience	26
3. Conclusion	28
4. Bibliography	32

1.1 Question and scope

A series of seven tactile artworks is the starting point of this investigation. The pictures of *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub* are documented in the book *Touching and imagining, an introduction to tactile art* (2014, from now on *Touching and Imagining*) written by Jan Švankmajer. The analysis of this series of tactile artworks opens the discussion about the aesthetic experiences generated by the perception of tactile art. This investigation presents a perspective on the possible understanding of the relationship between touch and the surfaces of tactile artworks. Therefore, their qualities and roles in the field of tactile aesthetics are highlighted in this research. This thesis responds to the following questions:

- How can the touch of the sensing body and the tactile artworks chosen for this thesis be understood as a tactile aesthetic experience?
- How does tactile art generate values relevant to understand aesthetic tactility?

My aim is to research causes, consequences and relationships between touch and tactile artworks with a phenomenological approach. The research continues with the analysis of the confluence of touch and tactile artworks into aesthetic experience. The scope of this research is to provide a viewpoint on how tactile artworks and their surfaces can affect perception, body and consciousness. The problem consists in circumscribing the way tactile artforms dialogue with the sensing body in terms of aesthetic experience. This investigation does not focus on the whole human body, but just on the upper and lower limbs in terms of movements necessary to examine how touch and artwork relate to each other within the aesthetic experience.

Touching and Imagining is a theoretical and literary framework in which Švankmajer represents his surrealist tactile artworks. Therefore, the reason why I choose to discuss Švankmajer's artworks relies on his writings about tactile art. In *Touching and Imagining* he documents his tactile experimentations, he narrates his reflections on the communicative power of touch, he studies the nature of tactile phenomena and explores the relationship between imagination and the human sense of touch. *Touching and Imagining* gathers Švankmajer's ideas about the physical dimension of touch.¹ My choice of *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub* depends on the assemblage of the materials and the items used for their creation. These materials and items express continuity and common traits that are detailed in paragraph 2.3.1. One more reason for my choice consists in the possibility to experience them with the upper and lower limbs. The final reason for this selection depends on the logical order I could create for the tactile

¹ Jan Švankmajer, *Touching and imagining, an introduction to tactile art*, (London: I.B. Tauris, 2014), p.xv.

exploration. The order implies gradual body movements. *Tactile Study* can be explored with fingers and hands, *Tactile Wooden Spoon* and *Tactile Rolling Pins* involve a wider range of movements of the upper limbs. *Tactile Tub* requires the entire displacement of the body to stand into the basin. Detailed descriptions of the features of this tactile series follow in paragraphs 2.3.1.1, 2.3.1.2, 2.3.1.3 and 2.3.1.4.

1.2 Theoretical perspective: phenomenological approach to tactile aesthetics

The French phenomenologist Maurice Merleau-Ponty (1908-1961) dedicated his life to study the role that perception plays for how humans experience the world. Both *Phenomenology of Perception* (1945) and *The Visible and the Invisible: The Intertwining–The Chiasm* (1964) include concepts that are relevant for this investigation, that is flesh and reversibility of touch.

The book *Phenomenology of Perception* is “a description of perceptual experience”.² Therefore, phenomenology suits the investigation of the relationship between tactual perception and understanding of tactile artworks. In this investigation the phenomenological perspective triggers the discussion on the modalities of correlations between tactile senses and the world determining the aesthetic experience in the sensing body. Merleau-Ponty's phenomenological theories of flesh and reversibility of touch are convenient to analyse the dialogue between touch and tactile artworks. In terms of touch, phenomenological analysis describes the variety of contents and connections that are part of the experience of touching by distinguishing the possible forms of presence and absence of an object. The special trait of the tactile experience is the constant presence and absence that manifests “distinctions and combinations of immediate sensory experiences parallel to memory, forgetfulness and longing.”³

The description of a phenomenological analysis is not influenced by introspection or subjective psychology. On the contrary it develops on learning to feel thoughts and sensations in bodily terms, in other words the *felt* phenomenology.⁴ Provided that tactual perception involves perceiving a relationship between the sensing body and the material object, it is important to underline that for Merleau-Ponty perception is a process that involves the whole body rather than a conscious event that manifests in the brain.⁵ Phenomenology enables a rich sensuous description of manifold tactile experience in terms of immediacy of proprioceptive cutaneous sensations. Besides phenomenology gives space to the account of the dynamic touching-as-feeling

² Taylor Carman, “Merleau-Ponty and the mystery of perception”, *Philosophy compass* 4:4 (2017), p.634.

³ Mark Paterson, *The senses of touch: haptics, affects and technologies*, (Oxford: Berg, 2007), p.24.

⁴ Paterson 2007, p.25.

⁵ Carman 2017, p.634.

and the analysis of qualitative factors of the tactile experience⁶ that are discussed in paragraphs 2.3.2, 2.3.3 and 2.3.4.

To sum up, the reason why phenomenology suits my investigation depends on the *vinculum* of the self and the things generated by the relation of one's own body to itself towards the world.⁷ The role of touch in this relation is to activate the very process that generates the *vinculum*, i.e., the connection between the sensing body and the tactile artworks.

1.2.1 Flesh and the reversibility of touch

For Merleau-Ponty flesh designates the mode of being of the world for the incarnate existence.⁸ Flesh is a structure for existence or a principle of presence.⁹ His theories about the concept of flesh and the nature of being concern the:

- relation between the body and the world (chiasm or intertwining)
- relation between the sensible and the sense (the visible and the invisible)
- nature of the afore-mentioned correlations

To grasp the notion of flesh as the visibility of the world, it is necessary to analyse how touch and vision relate to each other, as well as the relation between the shifting of the senses within the totality of the sensible. Touching exists only within the body, that is only as an incarnation of sensibility. Even if the incarnated touch dialogues with the object, the perception touching-touched stays in the body in a definite form, as if crystallised. On the contrary vision seems to surpass the body, as if it were endowed with the ability to overcome its incarnated condition.¹⁰ Together with flesh, Merleau-Ponty refers to the notions of chiasm and reversibility to discuss the connection between vision and touch. Chiasm refers to the inverse relationship between the sensing and the sensed not merging into each other. Due to the principle of reversibility of touch, the touching and the touched are distinct and at the same time reciprocally related. Merleau-Ponty takes the glove as an example to explain the principle of reversibility. Both inner and outer sides belong to the same object, but one cannot see the inner and the outer at once.¹¹ Besides, it is possible to turn the right-handed glove inside out to fit the left hand, but the same side of the glove does not meet

⁶ Paterson 2007, p.155.

⁷ Mika Elo & Miika Luoto, *Figures of touch – senses, technics, body*, (Helsinki: The Academy of Fine Arts at the University of the Arts Helsinki, (2018), p.107.

⁸ Elo & Luoto 2018, p.109.

⁹ Elo & Luoto 2018, p.128.

¹⁰ Elo & Luoto 2018, p.110.

¹¹ Elo & Luoto 2018, p.127.

both hands.¹² At the same time, it is possible to see the outer side of the glove while the inner side is sensed by the skin. The merleau–pontian concept of flesh (*chair*) manifests for Merleau–Ponty the constitution of touch and seeing in terms of their divergence and unity. At once the flesh shows us something and its density prevents us from seeing it completely bare.¹³

At the same time the body has a double function. On one hand, it functions as a reflective screen mediating the contact between perceiving and perceived. On the other hand, the simultaneity of perceiving and perceived makes it impossible to distinguish separately internal and external body experience.¹⁴

1.2.2 An overview of tactile aesthetics

As a matter of fact, topics like touch and tactility have been marginally explored in the field of aesthetic research. Studies and research on tactile aesthetics are not copious if compared to the studies on vision.¹⁵ In fact

in the academic world touch has often passed under the radar. It has been taken for granted as a fundamental fact of life, a medium for the production of meaningful acts, rather than meaningful in itself. The history of touch is difficult to define as touch itself.¹⁶

This is particularly true in the field of aesthetics. A reason for this neglect might rely on the “common attitude not to attribute the concept of ‘beauty’ to the sense of touch”.¹⁷ In 2021 it is still claimed that tactile aesthetics is a concept mainly unexplored.¹⁸ Alberto Gallace and Charles Spence are the authors of the first research¹⁹ (dated 2011) on tactile aesthetics. Their research highlights the characteristics of the aesthetics of touch.²⁰ The outcomes of their research are also discussed in two recent studies of tactile aesthetics dated 2019 and 2021 (paragraph 1.5).

According to Madalina Diaconu, philosophers are reticent about a subject like touch for reasons like the poor and vague terminology²¹ and the lexical imprecisions of the Indo–European languages in terms of

¹² Elo & Luoto 2018, p.128.

¹³ Elo & Luoto 2018, p.128.

¹⁴ Elo & Luoto 2018, p.126.

¹⁵ Roberta Etzi, “Textures that we like to touch: An experimental study of aesthetic preferences for tactile stimuli”, *Consciousness and Cognition* 10:29 (2014), p.178.

¹⁶ Constance Classen, *The Book of Touch*, (Oxford: Berg, 2005), p.2.

¹⁷ Etzi 2014, p.178.

¹⁸ Abby Treers, *Defining tactile aesthetics: evaluating need for touch preferences and aesthetic emotions*, Master’s Theses (Newark: University of Delaware, 2021), p.x.

¹⁹ Treers 2021, p.2.

²⁰ Alberto Gallace & Charles Spence, “Tactile aesthetics: Towards a definition of its characteristics and neural correlates”, *Journal of Semiotics* 21:4 (2011), p.2.

²¹ Madalina Diaconu, *Reflections on an Aesthetics of Touch, Smell and Taste*, (Michigan: Michigan Publishing, 2006), p.2.

expressions of tactile-related concepts; thereof the tendency to a metaphorical language. The powerful erotic impact of touch is a further obstacle to the idea of aesthetic experience.²² Finally, Western *oculocentrism* belittles the power of touch to understand the world in favour of vision.²³

1.3 Method

The method consists in analysing and discussing a series of Švankmajer's tactile artworks with articles and studies concerning phenomenology and tactile aesthetics. With a pragmatic approach I studied the pictures of *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub*. I reflected on their forms, structures, components, materials and the possible relations among them. I also imagined physically experiencing them with the limbs in a museum or a gallery of contemporary art. Afterwards I searched for phenomenological studies and cognitive experiments on tactile aesthetics. Tactile aesthetic is versatile and suitable for research in different fields.²⁴ There are other perspectives than the phenomenological one. Therefore, in my method I included a process of sorting articles that I read, but they did not prove to be relevant for a discussion in phenomenological terms. In fact, some of the articles I read analyse touch and tactile aesthetics from the perspective of digital design, Interactive objects (IO's),²⁵ neuroscience,²⁶ psychology,²⁷ technology and engineering²⁸ and studies on vision and blindness. The articles that I used are listed in paragraph 1.5.

1.4 Delimitations

Studies and reflections on the impact of tactile artworks for blind and sight-impaired subjects are excluded. The reason for this delimitation depends on the significance that both Švankmajer and Merleau-Ponty give to the relation between touch and vision. Švankmajer himself explains:

The point of my experimentation is to find out if touch is capable of penetrating (as an independent sense) the realm of art, and to what degree is it able to influence and enrich it. I didn't include works created by artists for blind people, because they are in direct contradiction to the thrust of my experimentation, that is aimed to the Touch–Vision relationship.²⁹

²² Diaconu 2006, p.3.

²³ Diaconu 2006, p.6.

²⁴ Igor Juricevic & James Kaufman, "Translating Visual Art into Tactile Art to Produce Equivalent Aesthetic Experiences", *Psychology of aesthetics, creativity, and the arts* 3:1 (2009), p.22.

²⁵ Alessandro Soranzo & Daniela Petrelli, "On the perceptual aesthetics of interactive objects", *Quarterly Journal of Experimental Psychology* 71:12 (2018), p.2586.

²⁶ Gabrielle Starr, "Feeling beauty, The neuroscience of aesthetics experience", *Eighteenth – Century Fiction* 28:3 (2016), p.583.

²⁷ Luigi Tamè & Elena Azañón, "A Conceptual Model of Tactile Processing across Body Features of Size, Shape, Side, and Spatial Location", *Frontiers in psychology* 10:291 (2019), p.291.

²⁸ Chi ThanhVi & Damien Ablart, "Not just seeing, but also feeling art: Mid-air haptic experiences integrated in a multisensory art exhibition", *International Journal of Human–Computer Studies* 108:12 (2017), p.2.

²⁹ Švankmajer 2014, p.82.

As for Merleau–Ponty, the relevance played by the connection between vision and touch is explained in paragraph 1.2.1.

Besides, the tactile artefacts created for blind and sight-impaired are not pieces of contemporary art. Those artefacts are reconstructions with the function of tridimensional representation of the forms that blind and sight-impaired cannot see.³⁰ As explained in paragraph 2.3.3 the aesthetic experience of an artwork is selfless, purposeless and not functional for utilitarian scopes.

Nevertheless, both sighted, sight-impaired and blind are capable of expressing aesthetic judgements based on their own tactual sensations,³¹ despite the different visual abilities.

The last delimitation regards the milieu for the exploration of tactile artworks. In the context of this thesis the milieu is a museum or a gallery of contemporary art. Yet this delimitation does not exclude or prevent that phenomena of tactile aesthetics might happen outdoors or in any other milieu with an object different from a tactile artwork.

1.5 Sources

The primary source of this thesis consists of a series of tactile artworks described in section 2.3.1 accompanied by pictures available in *Touching and Imagining*.

The secondary sources are a constellation of studies and research on touch relevant to discuss tactile artworks in terms of tactile aesthetics and phenomenology. The main texts to discuss the phenomenological approach to tactile art are

- “A little distance please - on the relationship between mediality and touch” by Maiju Loukola in *Figures of Touch – Sense, Technics, Body*
- *Merleau-Ponty and the Mystery of Perception* by Taylor Carman
- *The sense of touch – Haptics, Affects and Technologies* by Mark Paterson

Cultural reflections on touch are provided with the essays “Fingerprints: Writing About Touch” in *The book of touch* and “Tactile Arts – The aesthetics of touch” in *The deepest sense: A cultural history of touch*, both written by Costance Classen.

³⁰ Aksinja Kermauner, Art paintings accessible to the blind, *Nova prisutnost* 19:3 (2021), p.607.

³¹ Etzi 2014, p.178.

The tactile artworks are also analysed with the help of academic studies, writings, scientific articles and research performed in laboratories:

- “Patina – Atmosphere – Aroma: Towards an Aesthetics of Fine Differences”, *Logos of Phenomenology and Phenomenology of the Logos*, written by Madalina Diaconu (paragraph 2.3.2.1)
- “From active touch to tactile communication: What’s tactile cognition got to do with it?” in which Jude Nicholas deepens the topic of tactile memory, describing its variety in detail (paragraph 2.3.2.3)
- “Tactual perception of material properties” in which Wouter M. Bergmann Tiest researches qualities like roughness, compliance, coldness and friction. The interactions explored between perception of the different material properties are also reviewed³² (paragraph 2.3.2.3)
- “Tactile aesthetics: Towards a definition of its characteristics and neural correlates” by Alberto Gallace and Charles Spence
- “The development and validation of sensory and emotional scales of touch perception” is a study based on three experiments conducted by a team guided by Steve Guest. The experiments are intended to research the lexicons to express the human experience of touch³³ (paragraph 2.3.2.2)
- “Quantitative assessment of pleasant touch,” collecting the studies of an Anglo-American pool of researchers about the hedonic attributes of tactile stimulation³⁴
- “Il ruolo delle emozioni nell’esperienza estetica” by Stefano Mastandrea is a further academic source. His wide and detailed study aims to understand the role of emotions in the aesthetic experience (paragraph 2.3.3)

1.6 Disposition

Merleau-Ponty's theories of flesh and reversibility of touch are presented in the introduction with an overview of tactile aesthetics. A short anthology of Tactilism precedes description and investigation of the series *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub*. Afterwards it is the central discussion on how phenomena like patina, sensing body, rough vibration and tactile memory appeal to the tactile sensibility. The impact of emotions in the aesthetic experience concludes the discussion.

³² Wouter Bergmann Tiest, “Tactual perception of material properties”, *Vision Research* 50:24 (2010), p. 2775.

³³ Steve Guest, “The development and validation of sensory and emotional scales of touch perception”, *Attention, Perception, & Psychophysics* 73:2 (2010), p.531.

³⁴ Greg Essick, “Quantitative assessment of pleasant touch”, *Neuroscience & Biobehavioural Reviews* 34:2 (2010), p.192.

2. Investigation

2.1 Tactile experimentations

Compared to visual arts, the tactile artistic experimentations are few and relatively recent. Some of the experimentations related to art and tactility are described as follows:

2.1.1 Pioneristic Tactilism and tactile art expressions

At the end of the sixteenth century, in England tactile exploration is common and allowed during museum visits. In general, the visual impression of an object can be complemented by the tactile traits of its contours. Multisensorial analyses improve the understanding of the nature of the object.³⁵ The role of touch is to adjust the misinterpretations of sight, for example it is possible to lift an object to estimate its weight.³⁶ This kind of tactile exploration is related to experiential knowledge,³⁷ that is, the tactile exploration of materials builds on previous experiences and the acquired knowledge is the basis for possible further developments.

During the Spanish Baroque (throughout the 17th century and the first half of the 18th century) the statues are polychromatic and characterised by naturalistic elements like real hair and glass tears to emphasise the emotions of the believers. In other words, the 'realistic' statue aims to affect human perception. The tactile values of the naturalistic elements play the main role in the process of the identification of the believers with the pain suffered by the saints.³⁸

Umberto Boccioni (1882–1916) is an Italian Futurist artist and art theorist. At the beginning of the twentieth century, he creates *Fusion of a Head and a Window*³⁹ a sculpture made of iron, porcelain and female hair. As a consequence the naturalistic structures are freed from the realistic context and the focus shifts on the tactile values of the material.⁴⁰ Boccioni lets the sculpture manifest the essence of the nature of the materials.

³⁵ Constance Classen, *The deepest sense – A cultural history of touch*, (Urbana: University of Illinois press, 2012), p.139.

³⁶ Classen 2012, p.141.

³⁷ Camilla Groth & Maarit Mäkelä, "The knowing body in material thinking", *Studies in material thinking* 14:02 (2016), p.18.

³⁸ Švankmajer 2014, p.85.

³⁹ Švankmajer 2014, p.88.

⁴⁰ Švankmajer 2014, p.90.

The Polish-Italian poet Guillaume Apollinaire (1880–1918) writes about tactile art as a new kind of art defining rules, techniques and principles. He underlines the qualities perceivable through touch:

Dryness, dampness, wetness, various degrees of cold and heat, stickiness, coarseness, smoothness, softness, hardness, springiness, oiliness, silkiness, velvetiness, roughness, graininess, etc. randomly combined or contrasted, become the rich material from which derives witty, grandiose combinations of tactile sensations⁴¹

(Some of the above-mentioned qualities are relevant for the forthcoming discussion on Švankmajer's artworks in the paragraphs of section 2.3.3.)

The Italian author Filippo Tommaso Marinetti (1876–1944) is the founder of Futurism. This artistic movement imagines “a world in which vibration and speed are the dominant sensations.”⁴² In his *Futurist Manifest*, Marinetti creates categories and scales “of tactile values for Tactilism, the art of touch.”⁴³ He proposes tactile objects, furniture and the materials to create them.⁴⁴ It is relevant to mention some elements that can be recognized in Švankmajer's artworks: sandpaper, tinfoil, combed wool, sponges, brushes and feathers (paragraph 2.1.2). Marinetti's lack of enthusiasm for colour might have influenced Švankmajer's monochromatic choice to document his tactile works in *Touching and Imagining*. This choice may also appeal to the oneiric sphere of the reader. Besides, monochromatic images detach sight from the familiarity of the objects and the materials that compose the structure. Therewith sight focus only on shapes and textures.

2.1.2 Jan Švankmajer as tactile artist

Jan Švankmajer (b.1934) is a multifaceted artist. He is a filmmaker, who has even worked as a scriptwriter, poet, artist and puppet-theatre master. In the mid–1970s, Švankmajer creates objects for tactile experimentations while collaborating with the Group of Czech-Slovak Surrealists. Švankmajer studies the nature of tactile phenomena and explores the relationship between imagination and the sense of touch.⁴⁵ His experimentations aim to research if touch (as an independent sense) can influence artistic processes and artistic creations.⁴⁶ By studying the relation between touch and imagination, Švankmajer understands the importance of imaginative experiences in childhood. He points out the necessity to liberate touch from the

⁴¹ Švankmajer 2014, p.91.

⁴² Classen 2012, p.185.

⁴³ Memofonte, *Il Tattilismo Manifesto Futurista*, 2022, <https://www.memofonte.it/files/Progetti/Futurismo/Manifesti/II/147.pdf> [Accessed 2022-05-08].

⁴⁴ Memofonte, *Il Tattilismo Manifesto Futurista*.

⁴⁵ Švankmajer 2014, p.xv.

⁴⁶ Švankmajer 2014, p.82.

utilitarianism of manual work. The liberative purpose of art is crucial for Švankmajer⁴⁷ in order to rediscover the authentic and original meaning of touching. Reading *Touching and Imagining* we learn that Švankmajer's tactile collection consists of portraits, poems, objects, games, alphabets, drawings, sketches, studies, puppets and marionettes. In total eighty-eight pieces are kept in his private collection in his country house. These pieces are made with a wide range of materials, such as tinfoil, sandpaper, sponge, feathers, pinecones, broken shells, uncooked rice, molten candle wax, nails, textiles, straw, wires among others. Švankmajer believes that touch fits the functions of modern art.⁴⁸ The goal of his experimentations is to study if touch as a sense can perceive an artwork in a way similar to vision and hearing.⁴⁹

2.2 On tactual knowledge

The sense of touch involves the processing of a sequence of varying sensations that the sensing body perceives by pressure and friction on a surface. The simple gesture of touching a surface with the hand includes a range of sensations affecting the whole sensing body.⁵⁰ Therefore, touch is the sense that gradually searches and acquires data with bodily movements and bodily contact by focusing on the perceiving-perceived relation in a specific instant. The concepts of tactile perception, proprioception and kinaesthesia are indispensable to discuss the generation of tactual knowledge. Proprioception is the neurological process in which muscles and joints are stimulated to operate in order to be aware of one's own bodily movements and positions. Proprioception is akin to kinaesthesia, that is the cognitive ability to know where one's own limbs are and how they are moving. Awareness is the key term to understand the interconnections among tactile perception, proprioception and kinaesthesia. The tactile perception implies the awareness of things through the physical sense of touch during the acquisition of tactile sensations with manipulative skills and manual exploration of the palpable features. The proprioceptive process of acquisition requires kinaesthetic awareness of the spatial position and the movements of one's own limbs.⁵¹ A further trait of awareness arises from the stimulation of nerve endings in the moving muscles and joints. The interconnections of tactile perception, proprioception and kinaesthesia convey meanings and knowledge through physical contact.

⁴⁷ Švankmajer 2014, p.xx.

⁴⁸ Švankmajer 2014, p.2.

⁴⁹ Švankmajer 2014, p.13.

⁵⁰ Hans Jonas, "The nobility of sight", *Philosophy and Phenomenological Research* 14:4 (1954), p. 509.

⁵¹ Jude Nicholas, "From active touch to tactile communication: What's tactile cognition got to do with it?", *Danish Resource Centre on Congenital Deafblindness*, 2010,

file:///C:/Users/NL005/Downloads/From%20active%20touch%20to%20tactile%20communication.pdf

Notwithstanding the significant relevance of vision in the perception of the environment, the sense of touch is crucial for the aesthetic experience. In other words, tactile gradual exploration steers the other senses in the perception of an object in terms of aesthetic judgement,⁵² unlike sight that allows a complete and simultaneous vision of the elements of an area.⁵³ Western cultural education assigned the task of grasping knowledge to sight and hearing. The philosophical reflection on touch dates back to the fundamentals of Western philosophy, when Aristotle declares vision and touch respectively as the most and least important of the senses in the sensory hierarchy.⁵⁴ The dichotomy touch-vision echoes from the biblical myth of Genesis, when the attraction for wisdom and knowledge fascinated the eyes of Adam and Eve.⁵⁵ At once they realised the vulnerability of their bodies.⁵⁶ Afterwards God created garments of skin to clothe them.⁵⁷ It is a matter of fact that only humans protect their bodies with garments. The functions of sight and hearing would be limited, or at least different, if constantly shielded. For its own sake, the body is enveloped in clothes and garments, like a ‘second skin’ that metaphorically deafens and blurs perceptions and sensations. By paraphrasing Merleau-Ponty’s example of speech and primordial silence,⁵⁸ our view of touch and tactility remains incomplete unless we return to that origin when skin and touch were not half conscious under a ‘second skin’ of fabrics. On a more general level, the holistic approach seems to be a reasonable method to interpret the contact of the sensing body with the material world. In fact, the distinctive ability of “each perceptual sense”⁵⁹ concurs together to grasp knowledge from a phenomenon. On a beach, the sensing body can feel the texture and the temperature of the sand under the feet. Sight alone could not distinguish *a priori* the consistency of the ground. Further sight does not tell anything about the sound of the waves or the smell of the breeze. Even hearing and smell function thanks to the tactile sensibility of the skin that covers and protects the respiratory and the auditory systems. And when it gets darker the mind relies on other senses, rather than sight. In the dark the sensing body will still perceive the floating waves, the breeze, the sand and the smell of the sea regardless of sight. However, all the senses can be regarded as an extension of the sense of touch – as a specialisation of the skin. If we imagine for a moment a more ordinary case of dental surgery, we see that due to temporary dental anaesthesia the patient does not feel pain around the teeth, but sometimes the dental anaesthesia affects even the tongue, hindering the functions of taste. The

⁵² Soranzo & Petrelli 2018, p.2600.

⁵³ Jonas 1954, p.510.

⁵⁴ Jenny Lauwrens, “Touch as an aesthetic experience”, *Journal of Visual Art Practice* 18:4 (2019), p.131.

⁵⁵ Genesis 3:6.

⁵⁶ Genesis 3:7.

⁵⁷ Genesis 3:21.

⁵⁸ Maurice Merleau-Ponty, *Phenomenology and Perception*, (London:Routledge, 2002), p.214.

⁵⁹ David Espinet, “In the Shadow of Light: Listening, the Practical Turn of Phenomenology, and Metaphysics of Sight”, *Phenomenology and the Metaphysics of Sight*, Antonio Cimino and Pavlos Kontos red. (Brill 2015), p.199.

temporary insensibility of touch inhibits the sense of taste. Or similarly the functions of olfaction get restrained in case of a cold due to the momentary tactile insensibility on the nose.

An aspect of tactual knowledge regards the function of touch as an interface between the skin and the environment.⁶⁰ In her article “Merleau-Ponty and Irigaray in the Flesh,” Elizabeth Grosz notices the following:

Our interaction with the environment changes us and develops us. Through the perceptual feedback of our actions with the environment, or a material, we gain experiential knowledge that helps us recognize and judge future actions.⁶¹

Garments represent an obstacle to the human experience of the environment through touch and tactility. The perception of the environment would obviously feel different if, for example, eyes and ears were constantly covered.

Tactual knowledge cannot be associated with a specific organ, unlike sight, hearing, smell and taste. Often just hands are associated with touch, even if touch is the most diffuse sense on the surface of the human body. The association hands-touch is not sufficient, because hands and fingers provide just partial and localised knowledge. Moreover, the same surface is perceived differently if touched with the palm and the back of the hand, the forearm or the elbow or the soles of the feet.

Elizabeth Grosz observes that:

[t]he visible requires the tangible, but the tangible is perfectly capable of an existence autonomous from the visible.⁶²

In other words, vision reveals what the touch already knows. We could describe the sense of touch as the unconscious vision.⁶³ For example, sight needs touch to realise the ideas of “distance, outness and profundity of space.”⁶⁴ The movement of the body is a further aspect of the afore-mentioned example of perception of the environment on a beach. Vision understands that the displacement of the body is necessary to grasp a stone to notice the details of its surface or to walk closer to a lighthouse. Definitely, none of the five senses can singularly give the absolute perception of the outer world. Yet tactual knowledge is indispensable to the understanding of the environment.

⁶⁰ Juhani Pallasmaa, *The eyes of the skin*, (Chichester: Wiley-Academy, 2005), p.42.

⁶¹ Groth & Mäkelä (2016), p.18.

⁶² Elisabeth Grosz, “Merleau–Ponty and Irigaray in the Flesh”, *Thesis Eleven* 36 (1993), p.50.

⁶³ Pallasmaa 2005, p.42.

⁶⁴ Pallasmaa 2005, p.42.

2.3 Multilevel investigation analysis of the series *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub*

This central section suggests the intellectual approach and the bodily actions necessary for the tactile understanding of an artwork. Detailed descriptions of *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub* follow afterwards. The analysis continues with the discussion of the concept of patina in phenomenological terms and how phenomena like vibration and tactile memory affect the sensing body. The investigation ends by explaining the role of emotion in aesthetic experience.

Like an architectural structure,⁶⁵ a tactile artwork generates a set of complex and interrelated impressions due to the simultaneous perception of volumes, textures and surfaces. A tactile artwork is not experienced as a collection of isolated parts, but as a full body that incorporates physical and mental structures. The tactual experience of an artwork is more complex than the mere act of vision. Yet both sight and touch are essential to understand the environment.

The exploration of a tactile artwork can begin with a calm observation of the overall form, the structure, the textures, and the details of the artwork. Further thoughts can concern the materials used. More reflections may occur in terms of difference of perception of the senses of touch, sight and hearing. A subject educated to touch a tactile artwork, touches it widely, conscious of the direction one's own hands can reach out. The subject touches with the fingertips concentrating at one point, keeping the skin sensation sharp and feeling with the whole body. The tactile experience is the prerequisite for noticing and realising one's own potential in terms of touch, or tactual sense. The tactile experience involves psychophysical changes and discoveries that can lead to a dialogue with tactile artwork within one's own imagination.⁶⁶ This does exclude the fact that a tactile aesthetic experience might occur in a forest, on a beach or elsewhere.

2.3.1 Descriptions

The aim of the first four paragraphs is to describe the features of our tactile series composed by *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub*. The paragraphs that follow afterwards analyses how the concepts of patina and sensing body, the quality of roughness and the complexity of memory appeal to tactile sensibility.

⁶⁵ Pallasmaa 2005, p.44.

⁶⁶ Kojiro Hirose, "Research on Methods of Touching the World—The Aim of the Exhibit Area of Tactile Learning in Japan's National Museum of Ethnology", *Disability Studies Quarterly* 33:3 (2013), <https://dsq-sds.org/article/view/3743/3245> [Accessed 2022-02-09]

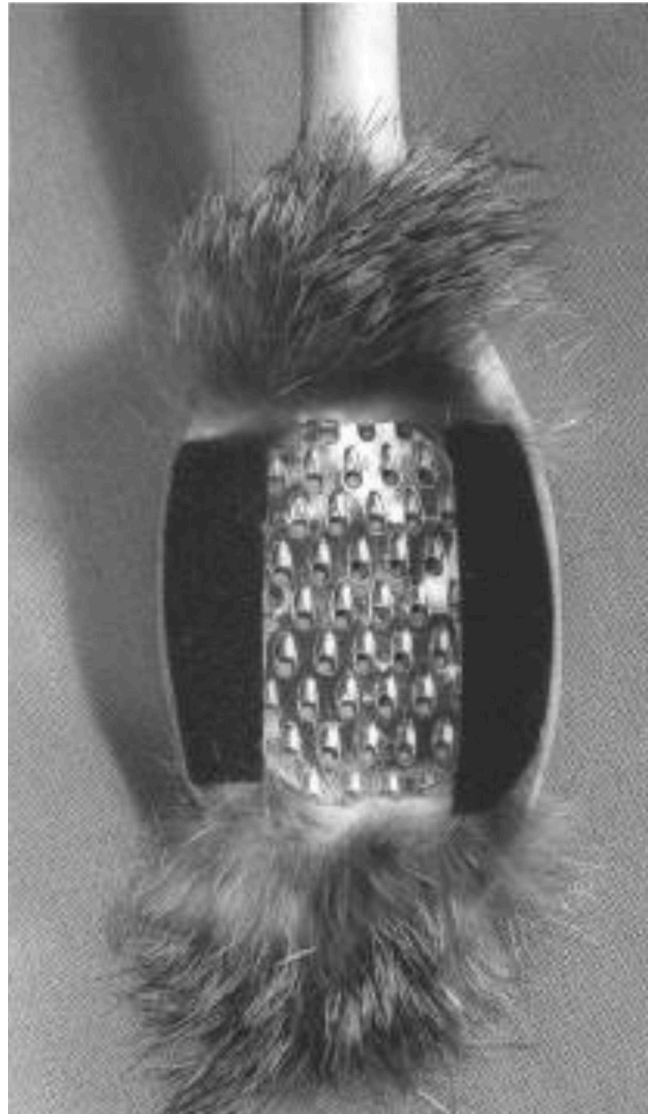
2.3.1.1 *Tactile Study*



© Jan Švankmajer, 2014, *Touching and Imagining: An Introduction to Tactile Art*, I.B. Tauris, an imprint of Bloomsbury Publishing Plc. Used with permission.

Tactile Study is a composition of three different kinds of graters combined with crumpled, rounded and flattened tinfoil. Two graters on the right have bigger holes than the grater on the left with a thicker pattern of smaller holes. The outline of *Tactile Study* looks like an irregular rectangle shaped with soft fur, folded and sewed fabric. Different volumes and roughness define *Tactile Study*: stiff, sharp and possibly dangerous metal surface of the graters, malleable tin foil, downy fur and soft piece of fabric. The implications of roughness in tactile aesthetics are discussed in paragraph 2.3.3. The variety of the composition is harmonic notwithstanding the irregularity of the details. Though *Tactile Study* shows a multifaceted variation of features, the principle of aesthetic contiguity is clear thanks to the different levels of roughness that the materials have in common. On the whole *Tactile Study* is a stiff, sharp, malleable and soft multifaceted piece. It evokes both hostile perceptions and welcoming sensations. With its rectangular outline and lack of handles, *Tactile Study* calls forth the touch of fingers like for a tactile picture.

2.3.1.2 *Tactile Wooden Spoon*



© Jan Švankmajer, 2014, *Touching and Imagining: An Introduction to Tactile Art*, I.B. Tauris, an imprint of Bloomsbury Publishing Plc. Used with permission.

Tactile Wooden Spoon is a composition mounted on the bowl of a wooden spoon. The concave side provides space for assemblage of elements. The composition consists of a grater with large holes placed in the centre of the bowl, sandpaper on the left and right sides, and fur on the upper and lower sides. The bowl shows a distinct alternation of tactile impressions due to the sharp differences of the objects. The differences of this contrast are described as coarse and flat sandpaper, sharp edged grater and voluminous fluffy. *Tactile Wooden Spoon* is both familiar and puzzling; it does not look like spoons since the bowl is no longer empty. With its long handle, *Tactile Wooden Spoon* rather recalls the possible function of a bathing brush.

2.3.1.3 *Tactile Rolling Pins*



© Jan Švankmajer, 2014, *Touching and Imagining: An Introduction to Tactile Art*, I.B. Tauris, an imprint of Bloomsbury Publishing Plc. Used with permission.

Tactile Rolling Pins is a series of three pieces with different sizes and handles but have in common the features of the assembled materials. Two of the rolling pins have cylindrical and tapered handles. The handles of the third rolling pin are just cylindrical. Nails of different sizes are fastened on the three pieces of this group. When hammered the longest nails got bent. Two of the rolling pins are wrapped in wool. White wool is irregularly mixed with the nails on the largest rolling pin. The smaller rolling pin has very few nails grouped and separated by the black wool that covers most of the surface. The choice of black and white wool suits the monochromatic pictures.

2.3.1.4 *Tactile Tub*



© Jan Švankmajer, 2014, *Touching and Imagining: An Introduction to Tactile Art*, I.B. Tauris, an imprint of Bloomsbury Publishing Plc. Used with permission.

Tactile Tub is a medium sized round metallic basin with handles. A set of materials and objects are placed on the bottom and on the internal edge of the basin. There are sponges, a piece of wellpapp, floor brushes, graters and furs. They are placed in a way that generates alternated stimuli in the sensing body. Švankmajer suggests experiencing this piece standing inside and barefoot. Therefore, a complete displacement of the body is necessary to experience *Tactile Tub* as Švankmajer suggests. The lower limbs play the main role in kinaesthetic and proprioceptive terms. The vertical position and the weight of the body temporarily modifies the shape and the volumes of the sponges due to the displacement of air. Also, this piece strikes for the extreme variation of the generated perceptions that range from fluff sponge, soft fur to the stiff bristles of a floor brush. Air plays a role in the perception of the spongy components depending on the pressure of the lower limbs. Sponges are the most performance of the contact. Graters are least influenced by pressure and air.

2.3.2 Features appealing to tactile sensibility

The following paragraphs analyse how the concepts of patina and sensing body, the quality of roughness and the complexity of memory appeal to tactile sensibility.

2.3.2.1 How patina exists on tactile artworks

The concept of patina is relevant for the implications of a phenomenological investigation of touch and the aesthetic criteria of tactile artworks. As a phenomenon patina is originally related to the tactile experience. Concretely patina is a material accretion that appears on the surface of an object that is repeatedly touched over a long interval of time. Material, time and touch are the factors that cause the aesthetic values of patina.⁶⁷

In this investigation the concept of patina is intended in a broad sense. The concept refers to every sensible modification provoked by the act of touching the surface of artefacts made with degradable materials. Time plays a crucial role in these modifications, by acting as an aesthetic agent altering a surface⁶⁸ and generating an aesthetic value.⁶⁹ Since the tactile artist creates the circumstances that let phenomena manifest themselves, the tactile artist can be regarded as a ‘phenomenologist’. For example, Švankmajer assembles objects without manufacturing their original shapes. He does not even significantly alter those shapes. Brushes, furs, fabrics, sponges, graters, rolling pins and the tub are still recognizable. Afterwards time and circumstances would eventually and differently modify the components of this tactile series. Simultaneously patina manifests the touching of the sensing body and a degree of sensitivity and vulnerability of the structures of the touched material. The latter reacts to the actions of the sensing body by generating traces, spots, marks, scratches and fissures.⁷⁰ As a phenomenon, patina is the stratification of fingerprints and traces that concretize the absence of the subjects who touched the object.⁷¹ In a way patina resists time “and saves the past from oblivion.”⁷² Inevitably the tactile artwork is at the mercy of both sensing body and time. The latter witness aesthetic and positive values. In other terms:

Patina records the passage of an object through time, whether continuous and homogenous or violent and discontinuous; it stores history – the object’s story within the life-world.⁷³

⁶⁷ Diaconu 2006, p.131.

⁶⁸ Diaconu 2006, p.132.

⁶⁹ Diaconu 2006, p.131.

⁷⁰ Diaconu 2006, p.133.

⁷¹ Diaconu 2006, p.134.

⁷² Diaconu 2006, p.133.

⁷³ Diaconu 2006, p.133.

Due to the recurrent action of the human touch, furs, wool and fabrics of *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub* most likely wear out faster than the graters. The bristles of the brushes in the *Tactile Tub* subside and flatten under the weight of whole bodies. The impact of the body on the bristles of *Tactile Wooden Spoon* is much milder. The upper limb holding one of the *Tactile Wooden Spoon* steers the friction on the opposite hand, arm, on a cheek or the forehead. Besides, the upper limb holding *Tactile Wooden Spoons* can resist the force of gravity, unlike a whole body standing in the *Tactile Tub*. Dust and cutaneous layers would eventually deposit around the holes of the graters and the bristles of *Tactile Study* and *Tactile Tub*. Fingerprints would stain the handles of *Tactile Rolling Pins* and *Tactile Wooden Spoon*. The phenomenological patina exists on tactile artworks in terms of fingerprints and deterioration of the pieces. Patina - in the phenomenological sense - witnesses all the contacts of the tactile artworks with sensing bodies.

2.3.2.2 Sensing while exploring

According to Švankmajer

[t]he perception of a tactile object is like an expedition into an unknown country of dreams, where nothing is certain, where even clearly familiar objects assume the appearance of something unreal, where one has to rely on one's own ability of association and tactile memories which, however, can always mislead us.⁷⁴

First of all, the perception of our series of tactile artworks requires that the sensing body is free and able to act and move. The process of tactile perception depends on the morphological layers of the skin: the innervation of hairy skin is different from glabrous skin, like for example the axillary sites are different from the glabrous fingertips, or the hairless portions of the forearm. The differences in skin's morphology influence bodily movements responding to tactile stimuli⁷⁵ while the sensing body is touching and exploring a surface. Pieces like *Tactile Wooden Spoon* and *Tactile Rolling Pins* can be sensed on the hairy and glabrous portions of the forearm. These pieces generate multitudes of sensations thanks to the manifold features of their surfaces and the wide spectrum of morphological skin differences in the upper limbs.

The above-mentioned quotation of Švankmajer fits in the TPT (Tactile Perception Task) experiment. In this scientific experiment the participants described sensory, emotional and evaluative aspects of touch.⁷⁶ The results of this experiment are useful to describe the aspect of pleasantness when touching the graters and the

⁷⁴ Švankmajer 2014, p.12.

⁷⁵ Guest 2010, p.547.

⁷⁶ Guest 2010, p.548.

nails on *Tactile Rolling Pins* and *Tactile Wooden Spoon*. Graters and rolling pins are familiar objects in the kitchen and in general, the handling of graters and nails demands care and attention. More caution is necessary when the graters and the nails assembled on *Tactile Rolling Pins* and *Tactile Wooden Spoon* touch delicate skin rather than a crust or a wall. According to the 'TPT' experiment, the modality of how an object is moved across a human body is decisive in the perception of its materiality. The emotional response of the sensing body to the experiment is different depending on who moves the material on the body. As happened for the participant of the 'TPT' experiment, it will feel less pleasant for the sensing body if someone rolls *Tactile Rolling Pins* and *Tactile Wooden Spoon* on your body rather than if you do it by yourself. The reason depends on the lack of control of the force with which material is applied.

By reflecting on Loukola's⁷⁷ explanation of the reversibility and chiasmatic nature of touch, we understand that the touching body and the tactile artwork get in relationship with each other, but they do not fuse into each other. The sensing body does not recognize a surface because it has the same features, but because of the ability of touch to understand and decode tactile values. The sensing body does not understand the material property because of symmetries, similarities or common traits between the natures of skin and surface. Rather understanding happens through the flesh that makes possible the dialogue between touch and the sensible world. The persistent separation despite the ongoing contact generates an inevitable tension between the sensing body and the sensed tactile artwork. This tension expresses the reversible and intertwining nature of touch. During the contact, the essential nature of the surfaces of skin and artwork are preserved. This type of contact can be described as an asymmetrical encounter or an irregular correspondence. Merleau-Ponty's notices that touch is always marked by a certain foreignness. Touch is a question of a two-directional relationship whose parties approach a boundary that separates them. This demarcation is a prerequisite for the contact to take place, without it being a matter of merging into one.⁷⁸ For Merleau-Ponty the thickness of flesh does not deny access to things, thanks to the ability of the body to perceive. Being able to distinguish and self-distinguish, the sensing body grasps the nature of otherness, in other words it understands what is foreign to itself.⁷⁹ The structure of flesh is similar to the structure of an amphitheatre. Flesh is the stage where touch encounters the world. Flesh makes possible the contact of touch and sensing body with the environment.

⁷⁷ Elo & Luoto 2018, p.130.

⁷⁸ Elo & Luoto 2018, p.130.

⁷⁹ Elo & Luoto 2018, p.128.

Despite their whole assets of knowledge and skills of the sensing body and touch, the understanding of the world happens unconsciously. According to Carman,⁸⁰ flesh refers to the basic unconscious bodily continuity with the world perceived by the sensing body. The reason for this unawareness depends on the fact that the sensing body is not just in the world, the sensing body is part of the world.

2.3.2.3 Vibrant roughness

The concept of roughness is essential for this investigation because all the pieces of our tactile series generate vibrations: the grater, the sandpaper, the tinfoil, the fur, the sponge and the brushes. Roughness is a common topic in tactile aesthetics. The article “Tactual perception of material properties” by Wouter M. Bergmann Tiest contains a study on roughness that suits the discussion of this central section. The tactile perception of roughness is associated with physical qualities of the surfaces such as height difference, friction, spatial period and dot spacing. Roughness perception is mediated through two distinct features of the surface: vibrations of the fine structures and spatial variance for coarser surfaces.⁸¹ On *Tactile Study* the vibrations are generated by the fine structure of feathers and tiles. Further vibrations are generated by the coarse surface of the graters. The perception of a tactile texture relies on the scales *smooth–rough* and *soft–hard*. The movement of the fingers, the palms of the hands on a rough surface arise haptic vibrations spreading into the skin.⁸² This is an example of how the sense of touch reverses on itself in phenomenological terms. When kinaesthetic, proprioceptive and tactile skills meet a surface through the flesh of the sensing body, the sense of touch appropriates the tactile information of that surface. Afterwards the tactile information is received by the flesh becoming part of the tactile asset of the sensing body.

According to the results of the study of Bergmann Tiest, the rough texture is preferred over smoothness in more composite stimuli.⁸³ Besides, moving stimuli influences attention and arousal more than static stimuli.⁸⁴ Indeed, none of the pieces of our tactile series are smooth. On the contrary, Švankmajer manipulates smooth materials to the point that vibrations generate varied sensations on the skin. He creates several layers of roughness on the smooth surface of the rolling pins, the bowl of the spoon and the tub. He also modifies the originally smooth tinfoil and fabrics by crumpling and sewing them.

⁸⁰ Carman 2017, p.634.

⁸¹ Bergmann Tiest 2010, p.2778.

⁸² Essick 2010, p.202.

⁸³ Soranzo & Petrelli 2018, p.2599.

⁸⁴ Soranzo & Petrelli 2018, p.2599.

2.3.2.4 The modalities of the tactile memory

Švankmajer claims that

[t]here exists such a thing as ‘tactile memory’, reaching into the most recesses of our childhood.⁸⁵

It is worth referring to the study of Jude Nicholas about the complexity of touch in order to discuss the relationship between tactile memory and our series of *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub*. In the article “From active touch to tactile communication – what’s tactile cognition got to do with it?” Jude details how touch processes the tactile information of our environment. By analysing the manifold connections of tactile information, he explains how tactile processing involves the continuity of phases such as tactile sensation, tactile perception and tactile cognition. The human brain classifies tactile data through cognitive processes like registration, encodement, storage and manipulation of tactile data.⁸⁶ The tactile cognitive processing consists of a multifaceted system based on *tactile short-term memory*, *tactile working memory*, *tactile attention*, *tactile learning*, *tactile memory* and *tactile language*. The function of the *tactile short-term memory* is to keep a small amount of tactile information in mind in an active and readily available state. *Tactile working memory* involves the ability to hold and transform tactile information while stored in the *short-term memory*.⁸⁷ *Working memory* is essential to avoid that the initial tactual perceptions will fade away rapidly.

Tactile attention can be described as the ability to focus attention on a tactile stimulus, ability to sustain, or keep it. And most notably in the ability to select attention (maintaining tactile attention avoiding distraction from irrelevant information). When specific attention is given to the tactile stimuli the more active the tactile brain becomes and better is the ability to focus and maintain attention, particularly when other events are serving to capture attention.⁸⁸

Tactile attention involves the concept of mental speed to process tactile *information*. It shows the efficiency of the attention system. *Tactile learning* consists in the acquisition of new data through tactile exploration. These data persist in *tactile memory* and are available for a considerable time (long-term memory). *Tactile memory* diverges in *procedural*, *declarative*, *semantic episodic* and *autobiographical memory*. *Procedural memory* makes it possible to remember how to perform a task. *Declarative memory* refers to the factual information acquired by the sensing body within the environment. In turn *declarative memory* is both *semantic* and *episodic*. The former

⁸⁵ Švankmajer 2014, p.xxii.

⁸⁶ Nicholas 2010, p.1.

⁸⁷ Nicholas 2010, p.4.

⁸⁸ Nicholas 2010, p.5.

schematizes facts and generalised information, the latter recalls past events and personal experiences and stores information as images.⁸⁹

At this point *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub* are discussed in terms of modalities of tactile memory. The *tactile short-term memory* registers the different structural features of the materials forming graters, furs, fabrics and brushes. These differences are interpreted by the *tactile working memory* and classified in qualitative ideas such as stiffness, sharpness and fluffiness. *Working memory* holds the physical features of the materials perceived during the actions of tactile exploration. *Tactile attention* possibly prevents the sensing body from getting distracted from the environment, for example other visitors moving and chatting around. Artwork such as *Tactile Tub* has a major impact on the process of *tactile learning*. The sensing body needs to adjust while standing barefoot inside the basin learning how to act and feel on a set of brushes and sponges. The knowledge and skills acquired persist in *tactile memory* that could recollect personal episodes like standing barefoot on stony sand, on some grass or in the path of a forest.

2.3.3 Tactile art as aesthetic experience

The study of Stefano Mastandrea on the role of the emotions in the aesthetical experience suits our discussion on tactile art. Mastrandrea begins by excluding the psychological perspective from his research. The psychological perspective does not affect the discussion on aesthetic experience, even if the latter is the result of intellectual and cognitive processes that involve attention, memory, imagination and emotion. Such processes may occur even while observing an ordinary object, therefore the psychological analysis is insufficient to define the aesthetic experience.⁹⁰ A further clarification concerns the difference between artworks and ordinary objects. Artworks generate emotions similar to those experienced in daily life, like for example fun, joy, melancholy, disgust or anxiety. The crucial difference consists in the utilitarian trait of ordinary emotions. They are generated by a common course of events. Utilitarian emotions can only contribute to an aesthetic experience in connection with the artwork that is the generating source of aesthetic emotions. In other words, aesthetic emotion responds to an object classified as artwork.⁹¹

In fact, the emotional process of an aesthetic experience occurs with the perception of the artwork, being analysed in its structural characteristics like lines, shapes, colours and materials. Successively a physiological response in the organism of the sensing body follows in terms of expressive reactions evoked by the sensed

⁸⁹ Nicholas 2010, p.6.

⁹⁰ Stefano Mastandrea, "Il ruolo delle emozioni nell'esperienza estetica", *Rivista di estetica* 48 (2011), <http://journals.openedition.org/estetica/1539> [Accessed 2022-05-22]

⁹¹ Mastrandrea 2011, §35.

emotions. Depending on the level of intensity, contemplative circumstances lead to a real aesthetic emotion. Some traits defining aesthetic emotions are admiration, charm, wonder and amazement among others. Finally, after the culminating phase of emotion is over, the subject will feel the general, pervasive and beneficial effect of the emotional experience.⁹² Mastrandrea explains the difference between feeling and emotion. The emotion is composed of five phases of feelings: appraisal, arousal, expressiveness, motivation and subjective experience. Therefore, feeling is a component of an emotion and not its equivalent.⁹³ Emotion refers to the process of evaluation, intense interest, expression in terms of motivation and physical reaction. Firstly, Mastrandrea proposes to analyse the physical qualities of the artwork and the characteristics of the sensing body. The physical qualities refer to the structure of the artwork meant as the intrinsic aesthetic properties like proportions, symmetry and harmony. The formal elements and the objective features are decisive for the aesthetic preference of an object. Initially the physical features of our tactile series (*Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub*) stimulate visual and tactile explorations.⁹⁴ Further decisive factors are novelty, surprise, the possibility of interpretations and the manifold elements of the compositions.⁹⁵ The ability of the sensing body to process tactile data of this tactile series depends on one's own personal skills, emotional experience and personality. The role of emotion is predominant in the perception of a tactile artwork. To the initial identification of the artwork, it may follow its perceived aesthetic value and its emotional effect. The latter determines the difference between utilitarian experience of an object and aesthetic experience of an artwork.⁹⁶

The transition from utilitarian to emotional phase is unaware, unintentional and uncontrollable due to the activation of hedonic and affective stimuli evaluating basic categories like good/bad, pleasant/unpleasant, positive/negative.⁹⁷ As already explained, the evaluation of an artwork can lead the observer into a phase of arousal.⁹⁸ Therewith even *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub* may conduct to a phase of arousal. The aesthetic arousal generated by one or several pieces of our tactile series is a mere physiological reaction that does not imply an active predeterminate action.⁹⁹ Mastrandrea explains:

When an artwork touches us deeply, our attention is totally involved and the rest fades away. We no longer hear noises or people in the museum room where we are, we remain silent, we enter a phase

⁹² Mastrandrea 2011, §36.

⁹³ Mastrandrea 2011, §32.

⁹⁴ Mastrandrea 2011, §2.

⁹⁵ Mastrandrea 2011, §5.

⁹⁶ Mastrandrea 2011, §8.

⁹⁷ Mastrandrea 2011, §9.

⁹⁸ Mastrandrea 2011, §34.

⁹⁹ Mastrandrea 2011, §20.

of isolation and suspension from factual reality, time has a different flow, we get disconnected from the ordinary life due to the ongoing exclusive relationship with the work.¹⁰⁰

This kind of relationship is selfless, purposeless and not functional for utilitarian scopes. The aesthetic emotion can generate contemplation, in-depth and prolonged observation to focus on the different meanings of a work.¹⁰¹ An emotion occurs with a modification in the most important systems of the organism.¹⁰² An intense aesthetic experience can generate goosebumps, shivering and tears that on the neurophysiological level leads to behaviours closer to contemplation and meditation.¹⁰³ Contemplation can even provoke spontaneous reactions like crying and tears due to deeply touching impressions.¹⁰⁴

The experience of an aesthetic emotion depends on the interest aroused by the pieces of our tactile series. The interest activates the whole sensing body towards the perceived pieces. Afterwards the intensity of the interest leads to contemplation, that is a kind of estrangement from reality that occurs in terms of temporary and exclusive interest for the relationship with the pieces. Reflection and meditation are the result of this deep mental attraction for the pieces.¹⁰⁵

3. Conclusion

The original source of inspiration of this thesis relies on the books of two authors of the 20th century: the French phenomenologist Maurice Merleau-Ponty and the Czech artist Jan Švankmajer. *Phenomenology of perception* meets *Touching and Imagining: An Introduction to Tactile Art* entering into a dialogue that is based on the merleau-pontian concepts of flesh and touch and the surrealist artworks *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub*. The fundamental questions of this discussion aim to understand how touch and tactile artworks express generative values that prelude to the tactile aesthetic experience. My approach tends to harmonise phenomenological theories, scientific experiments on tactile aesthetics with my own reflections on the peculiarities of *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub*. Švankmajer created tactile artworks combining materials and objects with opposite qualitative features. He manages to combine common and familiar objects into unique and original artistic compositions to the point that their utilitarian traits fade away. He succeeds in his intention of blending intrinsic aesthetic

¹⁰⁰ Mastrandrea 2011, §27.

¹⁰¹ Mastrandrea 2011, §37.

¹⁰² Mastrandrea 2011, §33.

¹⁰³ Mastrandrea 2011, §20.

¹⁰⁴ Mastrandrea 2011, §28.

¹⁰⁵ Mastrandrea 2011, §28.

qualities like proportions and symmetries creating with compositional techniques like contiguity, repetition and alternation.

Since tactile artworks are intended to be touched, the qualities of the objects and materials used by Švankmajer are suitable to treat the phenomenological concept of patina. The concept refers to every sensible modification provoked by the acts of touching the surfaces of the tactile artworks. Contemporaneously, patina – in the phenomenological sense – witnesses the previous contact of the sensing body with the tactile artworks. Though tactile artworks are at the mercy of sensing body and time, the concept of patina resists time indeed. In fact spots, marks, scratches on the tactile artworks concretize the absence of the actions that impacted the surface of tactile artworks.

Tactile Study, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub* generate multitudes of sensations due to the interface of complex systems such as:

- manifold features of the surfaces
- wide spectrum of morphological differences of the skin surface of the human limbs
- ability of touch to understand and decode tactile values

Tactile Study, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub* require a bodily approach and unusual body contact that surpasses the mere visual contemplation of art. These tactile series involve tactual exploration and body displacement of objects created with the union of unexpected materials. The sensing body needs to move and adjust to interact with objects that lost their utilitarian functions and that interact with the environment unconventionally.

The vibrating impact of the rough surfaces of *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub* is significant on the sensing body. The prominent effect of roughness on tactile perception depends on the vibrations of the fine structures and spatial variance that rough surfaces can generate during the tactual exploration. Rough textures are preferred over smoothness in composite stimuli. The scales *smooth–rough* and *soft–hard* of the rough textures arise haptic vibrations that propagate into the skin. In terms of intellectual and physiological reactions like attention and arousal, the moving stimuli cause a more powerful impact on the sensing body than the static stimuli.

Tactile memory is involved in the process of tactual acquisitions of environmental information. Through peculiar functions of the *tactile memory*, the human faculties able to feel emotions and understand things will process tactile information. *Tactile short–term memory* is a trait of these peculiar functions. *Tactile short–term*

memory consists in the registration of structural features of the materials. A further trait is the *working memory* that involves the interpretation and classification of qualitative concepts such as size and texture. The last trait of the *tactile memory* is *tactile attention* with the function to hold the physical features of the material perceived during the tactile exploration. *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub* appeal to tactile sensibility, enlacing connections between the sensing body that touches dynamic surfaces. The continuous development of dynamic surfaces relates the sensing body with personal and environmental circumstances. Vibrant surfaces affect *tactile memory* recollecting tactual exploration to personal episodes. Moreover, the phenomenological patina shows the impact of previous actions of human touch connecting *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub* and the sensing bodies in the environment.

It is the interlace of the above-mentioned connections that appeal to tactile sensibility leading to the aesthetic experience. At this point the conditions necessary for *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub* to appeal to tactile sensibility are established.

Afterwards, the individual classification of an artefact as tactile artwork or as a mere utilitarian object determine the crucial difference in the understanding of the aesthetic and the ordinary emotion. The structural and phenomenological features of *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub* transcend the ordinary classification of their components as utilitarian objects. For this reason, the sensing body experiences the tactile aesthetic experience in the phase of contemplation of *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub*.

The fundamental elements of the tactile aesthetic experience are the sensing body and the surface. The preliminary conditions consist in the

- ability and possibility of the sensing body to touch, perceive, move and displace in the environment
- contact of the sensing body with rough surface of a tactile artwork

The tactile perception of a tactile artwork gives space to a set of interrelated impressions that derive from touching volumes and textures created with the combination of lines, shapes and materials. The tactile perception is followed by the tactile experience. The latter involves psychophysical changes and discoveries that can lead to the dialogue between the tactile artwork and one's own imagination. The sensing body and the tactile artwork get in relationship with each other through the flesh. At the same time the flesh prevents them from fusing into each other preserving the essential nature of their surfaces. Tactile artworks are intended to arise emotions like fun, joy, melancholy, disgust or anxiety. The touch of a tactile artwork leads to aesthetic emotions expressing admiration, charm, wonder and amazement. Emotions imply a process of

evaluation, intense interest and motivation that generate an aesthetic experience, depending on the level of intensity and contemplative circumstances. The effects of tactile aesthetic experience on the sensing body manifest with goosebumps, shivering and tears. After the culminating phase of emotion is over the sensing body feels the pervasive effect of the emotional experience.

Tactual perception is a process that involves the whole body rather than a conscious event that manifests in the brain. The understanding of the world happens unconsciously due the contiguity of the sensing body to the perceived world. The reason for this unawareness relies on the fact that the sensing body is entirely part of the world, and not just in the world. The phenomenical interface of the sensing body exploring surfaces endowed with appreciable rough attributes arise emotional circumstances that generate the aesthetic experience, if *Tactile Study*, *Tactile Wooden Spoon*, *Tactile Rolling Pins* and *Tactile Tub* are interpreted as artworks.

Bibliography

- Bergmann Tiest, Wouter, “Tactual perception of material properties”, *Vision Research* 50:24 (2010), p.2775–2782.
- Carman, Taylor, “Merleau-Ponty and the mystery of perception”, *Philosophy compass* 4:4 (2017), p.630–638.
- Carlsson, Allen, *Aesthetics and the environment*, (London: Routledge, 2000).
- Classen, Constance, *The Book of Touch*, (Oxford: Berg, 2005).
- Classen, Constance, *The deepest sense – A cultural history of touch*, (Urbana: University of Illinois press, 2012).
- Diaconu, Madalina, *Reflections on an Aesthetics of Touch, Smell and Taste* (Michigan: Michigan Publishing, 2006).
- Diaconu, Madalina, “Patina – Atmosphere – Aroma: Towards an Aesthetics of Fine Differences”, *Logos of Phenomenology and Phenomenology of the Logos* (Dordrecht: Springer, 2006).
- Elo Mika & Luoto Miika, *Figures of touch – senses, technics, body*, (Helsinki: The Academy of fine arts at the university of the art Helsinki, 2018).
- Elo, Mika & Luoto, Miika, *Senses of Embodiment: Art, Technics, Media*, (Bern: Peter Lang, 2014).
- Espinet, David, “In the Shadow of Light: Listening, the Practical Turn of Phenomenology, and Metaphysics of Sight”, *Phenomenology and the Metaphysics of Sight*, Antonio Cimino and Pavlos Kontos red. (Brill 2015), p.184–207.
- Essick, Greg, “Quantitative assessment of pleasant touch”, *Neuroscience & Biobehavioral Reviews* 34:2 (2010), p.192–203.
- Etzi, Roberta, “Textures that we like to touch: An experimental study of aesthetic preferences for tactile stimuli”, *Consciousness and Cognition* 10:29 (2014), p.178–188.
- Faucheu, Jenny, “Textures that we like to touch: An experimental study of aesthetic preferences for tactile stimuli” *Acta Psychologica*, 4:11 (2019), p.1–10.
- Jonas, Hans, “The nobility of sight”, *Philosophy and Phenomenological Research* 14:4 (1954), p. 507–519.
- Gallace, Alberto; Spence, Charles, “Tactile aesthetics: towards a definition of its characteristics and neural correlates”, *Social semiotics* 21:4 (2011), p.569–589.
- Grosz, Elisabeth, “Merleau-Ponty and Irigaray in the Flesh”, *Thesis Eleven* 36 (1993), p. 37–59.
- Groth, Camilla; Mäkelä, Maarit, “The knowing body in material thinking”, *Studies in material thinking* 14:02 (2016), p.1–18.
- Guest, Steve, “The development and validation of sensory and emotional scales of touch perception”, *Attention, Perception, & Psychophysics* 73:2 (2010), p.531–550.
- Juricevic Igor & Kaufman James, “Translating visual art into tactile art to produce equivalent aesthetic experiences”, *Psychology of aesthetics, creativity and the arts* 3:1 (2009), p.22–27.

- Jonas, Hans, “The nobility of sight”, *Philosophy and Phenomenological Research* 14:4 (1954), p.507–519.
- Hirose, Kojro, “Research on Methods of ‘Touching the World’ – The Aim of the Exhibit Area of Tactile Learning in Japan’s National Museum of Ethnology”, *Disability Studies Quarterly* 33:3 (2013), <https://dsq-sds.org/article/view/3743/3245> [Accessed: 2022-02-09].
- Kermauner Aksinja, “Art paintings accessible to the blind”, *Nova prisutnost* 19:3 (2021), p.599–612.
- Kirsch, Louise, “Shaping and reshaping the aesthetic brain: Emerging perspectives on the neurobiology of embodied aesthetics”, *Neuroscience & Biobehavioural Reviews*, 62:3 (2016), p.56–68.
- Lauwrens, Jenni, “Touch as an aesthetic experience”, *Journal of visual art practice* 18:4 (2019), p.323–341.
- Lauwrens, Jenni, “Seeing touch and touching sight: a reflection on the tactility of vision”, *The Senses and Society* Volume 3:14 (2019), p.297–312.
- Mastrandrea Stefano, “Il ruolo delle emozioni nell’esperienza estetica”, *Rivista di estetica* 48 (2011), <http://journals.openedition.org/estetica/1539> [Accessed 2022-05-22].
- Memofonte, *Il Tattilismo Manifesto Futurista*, 2022, <https://www.memofonte.it/files/Progetti/Futurismo/Manifesti/II/147.pdf> [Accessed 2022-05-08].
- Merleau–Ponty, Maurice, *Phenomenology of perception*, (London: Routledge, 2002).
- Merleau–Ponty, Maurice, *The visible and the invisible*, (Evanston: Northwestern University Press, 1969).
- “Maurice Merleau–Ponty”, Stanford Encyclopedia of Philosophy, 2016, <https://plato.stanford.edu/entries/merleau-ponty/> [Accessed 2022-05-08].
- Nicholas, Jude, “From active touch to tactile communication: What's tactile cognition got to do with it?”, *Danish Resource Centre on congenital deafblindness*, 2010, <file:///C:/Users/NL005/Downloads/From%20active%20touch%20to%20tactile%20communication.pdf> [Accessed 2022-05-22].
- Pallasmaa, Juhani, *The Eyes of the Skin: Architecture and the Senses*, (London: The World Universities Insights Limited, 2009).
- Paterson, Mark, *The senses of touch: haptics, affects and technologies*, (Oxford: Berg, 2007).
- Soranzo, Alessandro & Petrelli, Daniela, “On the perceptual aesthetics of interactive objects”, *Quarterly journal of experimental psychology* 71:12 (2018), p.2586–2602.
- Starr, Gabrielle, “Feeling beauty, The neuroscience of aesthetics experience”, *Eighteenth – Century Fiction* 28:3 (2016), p.583–587.
- Švankmajer, Jan, *Touching and Imagining – An Introduction to Tactile Art*, (London: I.B. Tauris, 2014).
- Tamè Luigi & Azañón Elena, “A conceptual model of tactile processing across body features of size, shape, side and spatial location”, *Frontiers in psychology* 26:2 (2019), p.1–19.

ThanhVi Chi & Ablart Damien, “Not just seeing, but also feeling art: Mid-air haptic experiences integrated in a multi-sensory art exhibition”, *International Journal of Human–Computer Studies* 108:12 (2017), p.1–14.

Treers Abby, *Defining tactile aesthetics: evaluating need for touch preferences and aesthetic emotions*, Master’s Theses (Newark: University of Delaware, 2021).