A short chronology of my research

In my doctoral research I study large-scale metal sculptures and the way the material and the female sculptor’s body affect each other in the creative process. In order to understand this interrelationship – also expressible as material exchange in the field of New Materialism where I anchor this research – my case studies are two Finnish sculptors, Eila Hiltunen (1922–2003) and Laila Pullinen1 (1933–2015) and the metal works they created in the period 1961–1969. As a visual artist I complement my study by hand-folding a large-scale copper relief to investigate the theoretical considerations of my dissertation topic in practice.

I started my research with a review of selected works and working methods of Hiltunen and Pullinen from a neo-materialistic viewpoint. I have alternated the study phases within the archive collections of the Finnish National Gallery with my training in the traditional crafts technique of the standing seam – a technique derived from traditional roof making – under the supervision of a professional smith and roof maker. The standing seam technique is the main technique that I use for creating the work of art within my doctoral study. In the last part of my study, I will compare and analyse the findings collected by creating the large-scale copper relief with the data collected from the case studies on one hand and my theoretical frameworks on the other hand.

Revisiting Martin Buber, Eila Hiltunen and Laila Pullinen from the viewpoint of the rather young field of New Materialism

Central to New Materialism is the vitality of materiality, which per se never comes alone: changing the status of matter in this world also bears the readjustment of the human being’s status. Every member of a group – regardless of whether they are subject or object – individually possesses a certain vital force that strengthens it by grouping with other vital

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1 Laila Pullinen’s archive material is located in a private collection and is currently being studied for this dissertation.
forces. Some scholars divide those groupings of human and non-human matter into micro- and macro-actants, others purposefully neglect the actant-order and see any materia as having equally dynamic forces. Areas of interest within the field of New Materialism range from investigations in the field of fashion into the ‘cloth-body’, to phenomena such as voice hearing. Their common denominator is expressing relational practices that take place beyond the human and involving their surroundings. Neo-materialists build on the philosophies of, for example, Gilles Deleuze, Martin Heidegger or Maurice Merleau-Ponty.

The philosophers nurturing my study are Martin Buber and Peter Sloterdijk. In his book, *Spheres, Vol. 3*, the contemporary German philosopher Peter Sloterdijk applies the morphology of foam to outline individual and societal pluralisms and their dependencies. For this exercise, Sloterdijk divides the anthropocentric space in a nine-dimensional room, each with their distinct topoi. The nine dimensions Sloterdijk creates describe the being-together of humans and non-humans as well as the constant formation of the anthroposphere. The room I chose to work with is Sloterdijk’s ‘chirotope’, addressing the scope of the human hands.

Buber’s philosophy of dialogue stands in the tradition of Jewish thinking: his writing I-Thou is a philosophy of relation and mutuality. Therein, Buber develops the thought that only by addressing the other as Thou are we creating the I. What is valuable in Buber’s thoughts for my research is his perspective on the self as a being in need of the other to exist.

In my opinion Eila Hiltunen and Laila Pullinen artistically extend Buber’s thinking to any materiality. A substantial component of their work is the communication between materia, being vibrant through materia, seeing the essential relation in art practices not between matter and form but between materials and forces while creating and borrowing manifold working methods in order to interact with materia adequately. Therefore, studying their insights is of great value for my research.

In the following I will give a tour, guiding the reader through the archive collections of the Finnish National Gallery, encountering Eila Hiltunen’s files and then to a workshop, where I sculpt my relief.

### Researching Eila Hiltunen’s legacy at the FNG archive collections – when the artist’s body encounters working material

I am trained neither as an art historian nor in archival work. There was nothing else for me but to follow the material. As sitting in front of numerous, well sorted folders, I try to ascertain what I am explicitly looking for in Hiltunen’s legacy.

Correspondences between the artist and, for instance, art historians or engineers from the stainless-steel manufacturers Outokumpu that discuss material encounters in detail, reveal quickly that Hiltunen was driven by her belief in needing to know a material in great detail in order to be able to work with it. Being driven is one of the characteristics that describes Hiltunen in general well. She discloses in numerous interviews and personal notes

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that she is obsessed by the same compulsion to exhaust herself that artists from the times of Michelangelo were. Protocols demonstrate how meticulously her own exhibitions and the course of events were planned; most of the remaining and archived exhibition catalogues, as well as invitation cards, are covered with her scribbled thoughts. Hiltunen’s famous *Sibelius Monument* (1967) for example, could be understood just as a starting point in the line of created architectural scale-sized sculptures by the artist. Hiltunen dreamed of and planned

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to make great welded constructions such as cathedrals and towns. Creating as the actual physical realisation made the artist experience a strong feeling of energy: ‘[…] one works right till the end and something definitive is created.’

For me as a researcher, it is an enormous asset to see how skilfully both Hiltunen and Pullinen expressed their thoughts in the process of creation. Not only did both artists carry out a vast amount of very distinct material studies, posing questions for example on the performance of certain materials under certain weather conditions, or on how to use dynamite as a working technique in order to sculpt copper sheets installed on a cast, or on how to cool certain sized stainless-steel tubes while processing them further with welding wire, and so on. They also put into words the expectations they had of the material, of themselves, of their chosen tools, and of their working surroundings.

The more I learn about both artists by examining their legacies, the more I marvel at the energy they have put into material. One might fittingly speak of their life-long attempts to tame and equally be tamed by the artworks. Seemingly, the way for them to succeed was by overcoming any borders between the works of art and their own bodies.

**Material conversion – when the artist’s body interrelates with the working material**

‘[…] In my opinion man is also a dynamic part of nature, not as an individual, but as a form, which is part of the cosmos to which it adds with its lines […] of the harmony of his movements. […] I remember that while I spent summer evenings in the park welding the monument to Sibelius, I sometimes felt exhausted by eight or nine o’clock; physically exhausted because I had to climb high up on top of the tubes. Wearing a welder’s helmet, dragging my cables along I would position myself in the evenings so I could hide in the monument’s cavity.’

The concept of *living form* was cultivated by the Vitalism Generation in Finland of the 1950s and 1960s, whose sculptors started to be force-fields with their materials: these practitioners wove their own (female) pathways into (hard) materials and received the material’s reaction in return.

Hundreds of photographs taken by Otso Pietinen, Hiltunen’s husband and a prominent photographer, give reference to how close and extremely intimate the relationship between Hiltunen and her artworks was. With regard to the *Sibelius Monument*, Hiltunen plainly entered into a symbiosis with the steel structure. Visuals are strengthened by personal writings and concepts by the artist recounting how much time she spent with artworks and how she felt while sculpting. Descriptions such as *becoming one with the material*, *seeing the self as a tool*, one’s own body as the materiality that influences the substance and vice versa, are recurrent themes. Hiltunen depicts the welding process in the making of the *Sibelius Monument* as follows:

‘I am neither a human being nor a woman anymore, I have turned into a tool. A current of work passes through my body.’

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Both Hiltunen and Pullinen express over and over again the way their own bodily boundaries were merging with the material they were forming. The more time Hiltunen has spent with the *Sibelius Monument* under physically tiring conditions, the more the material and the artist’s body seemed to interrelate. And the more strength she felt she was gaining in the process:

‘It’s been years now. I have written kilometres, tens of thousands of kilometres, kilometres of electric arc, with the mouth of my welder. I am hermetically separated from the outside world, behind the wall made of the crackle of my welder, of the murmuring of the evaporation of the cooling water and of my machines and instruments [...] It’s strange to stare at the small red point of welded metal. It hypnotizes me to the point that I lapse into a strange state of deep concentration – as if I too had been welded into the mass of this gigantic steel structure. By climbing onto this structure of elements I sometimes feel as if I were on top of a mountain, and other times in a valley. Working on every detail of this sculpture I have come to know every inch of it.’

From the archives to the workshop

‘The experienced hand is trained as much through the resistance of the material as through the experience of its surmountability.’

It is widely known that Hiltunen was captivated by welding as an artistic method. Her first contact with heavy ‘man-like’ materials she had as a child due to her father’s profession as an armourer, ‘a fact that makes [her] feel drawn by blood to the profession of a metal man’. My artistic practice is markedly influenced by my grandfather’s profession as a smith and roof maker and his lifelong devotion to the process of converting and forming materials. His career started as a 14-year old being ordered to dismantle bells from local churches in the German scrap metal drive during the Second World War. Materials ranging from profane household tools to sacred church décor were melted and remodelled to create military material and handed over to the young soldiers who were sent to war. At the end of the War, the Allies gave the order to convert leftover weapons by melting into building material to reconstruct the war-torn country. Most roof makers from the 1950s and 60s, including my grandfather, themselves encountered their working material in various modes of being. This intense experience of working with metamorphosed materials determined my grandfather’s whole career. When I was five years old, he made me a money-straightening press from a part of a former roofing sheet, hand-folded with the skills of a smith. However the relevance for my research study of those past events surpasses the enchantment of a granddaughter for her ancestor.

The vitality of copper, as well as the method of joining adjacent sheets with a double locked standing seam, became the centre of my artistic production. I consider copper as vital due to its propensity to change its appearance continuously, depending on its environment (oxidation-sensitivity), its endurance (long life cycle) and its property as an excellent heat exchanger. Technically, in a standing seam, the higher rim of one metal sheet is folded over the lower rim of another metal sheet and then both rims are folded a second time to lock the seams. Today, for efficiency reasons, this technique is performed with pans that are industrially pre-formed and joined on the spot with a machine seamer. In traditional roof making as well as in my art production, all the working steps (cutting, measuring, bending, folding) are done by hand with seaming pliers, tongs, hammers and seaming spoons and anvils.

To join different sized copper sheets – all 2mm thick – into an approx. 20sq m relief by hand-folding them will take time. The exact measurements, a skilled choice of the tools, the angle of my body in relation to the sheets, are all essential ingredients of the study. The shape and seams of the relief have to be well planned, with no material wasted. Therefore preliminary exercises using materials and tools in various scales are essential.
By working with copper and my chosen roofing technique, I aim to explore and provide perspectives on how to recognise and express (artistically and in language) non-human materia as living and our bodies’ structures as porous boundaries that are in constant exchange with their surroundings. Therefore, I artistically try to suspend any object-subject dualism and investigate questions such as: how much strength and energy does my female body require to bend and fold copper sheets; when do I overcome; when do I surrender to its...
hardness; how do I move with the material to process it the way I want it to develop? How will the material heat me, strengthen and harm my hands? How will it alter (oxidize) while I work with it and afterwards? How much will the material shape my body while I learn to move with its developing shape? I gather the research data from the art production through methods such as video recordings, working diaries and photographs taken of both the relief, as well as my own body.

The data collected on vitalist artists Pullinen and Hiltunen contributes to my own art practice by guiding me with a non-dualistic vocabulary: I study, analyse, use the artist’s expressions and complement it with the language developed by myself. For instance, how did Hiltunen describe herself when working with the *Sibelius Monument*? Are there descriptions that reflect my own practices when working with the copper relief? Which expressions do I use to portray myself fittingly, being with and through my working material? Which methods bring me closer to my material, which divide me from it?

Eila Hiltunen and Laila Pullinen are both excellent examples of artists who developed the ability to articulate how to be with and through matter, never hesitating to fuse with a non-human opponent in order to learn from materials and alongside them.

Through making my own work as well as analysing the case studies of Hiltunen and Pullinen, I am interested in exploring the notion of being in a constant interaction with all materiality around us. On a wider, more general scale, a better understanding of the fluidity and constant exchange of all materials is the first step towards more attentive encounters between humans and their surroundings.