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A liminal lens: How Exoskeleton (1999) and Eingeweide (2018) allow for a new way of looking

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**A LIMNAL LENS:
HOW *EXOSKELETON* (1999) AND *EINGEWEIDE* (2018)
ALLOW FOR A NEW WAY OF LOOKING**

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"It has fallen largely to the art of our time to explore and clarify the sense of dissolution, fragmentation, simultaneity and decomposition that proved so subversive of earlier notion of "reality", and contemplate what the future might hold" - Douglas E. Williams

CONTENTS

INTRODUCTION.....	4
 (I) INTRODUCING THE UNCANNY AND THE LIMINAL.....	7
I.i <i>EXOSKELETON & EINGEWEIDE</i>	8
I.ii THE FLESH AND THE METAL.....	11
I.iii THE LIMINAL AS A WAY OF LOOKING.....	13
I.iv THE UNCANNY AND THE APPARENT IMPOSSIBILITY OF THE LIMINAL.....	18
 (II) THE UNCANNY: HOW DO <i>EXOSKELETON</i> AND <i>EINGEWEIDE</i> MAKE US FEEL?.....	22
II.I THE UNCANNY IN <i>EXOSKELETON & EINGEWEIDE</i>	22
II.I.i <i>EXOSKELETON</i> 'S <i>MISE-EN-SCÈNE</i> : STELARC'S USE OF STILLESS AND SILENCE.....	22
II.I.iii <i>EXOSKELETON</i> : "UNCERTAIN OBJECTS".....	25
II.I.iv <i>EINGEWEIDE</i> 'S <i>MISE-EN-SCÈNE</i> : PASSIVITY AS IMPOTENCE.....	27
II.I.v <i>EINGEWEIDE</i> : "UNCERTAIN OBJECTS".....	30
 (III) LIMINALITY IN <i>EXOSKELETON</i> AND <i>EINGEWEIDE</i>.....	34
III.i READING LIMINALITY.....	34
III.ii THE METAL AND THE FLESH: A LIMINAL NEGOTIATION.....	35
III.iii THE LIMINAL AS A WAY OF LOOKING.....	36
 CONCLUSION.....	39
 WORKS CITED.....	41

INTRODUCTION

The central concern of this thesis is to ask what it is to be a human. Specifically, how can we think of the human in a time when mechanisation of the body has become commonplace and we must now work to unpack the seemingly self-evident impacts of this enmeshment. I take as my starting point art, and how it can help us navigate the boundaries between the flesh of the human body and the metal of machines. I am interested in the way in which certain pieces present the human/machine assemblage so that they problematize this relationship, and bring under a microscope the intricate politics of the boundaries of the body. Specifically, I will explore how two performative artworks, *Exoskeleton* (1999) by Stelarc and *Eingeweide* (2018) by Marco Donnarumma X Margherita Peveri, throw us outside of any fixed or static conception of the body, and make space for contradiction and oscillation within identity. As such, the idea of boundary, of threshold, of what we can call the liminal sits centrally within this project. But there is something more than simply this exploration of in-between spaces in Stelarc and Donnarumma & Peveri's works. There is also the uncanny. Art, in all of its forms, has the capacity to move us. One such way is to stir up such dread that we feel disturbed, leaving trace of this even in our bodies. *Exoskeleton* and *Eingeweide*, in different ways, do just that. Importantly, this feeling of existential anxiety is meaningful. Understanding how it arises in us and through what methods the performances can provoke this affective response, we can perhaps shed some light on our fundamental attitudes towards our relationship with machines, and more generally, the human body. And so, I will be looking at how we can understand what it is to be human through an exploration of the liminal, of anxiety, and of the uncanny.

My research questions are as follows: *How do Exoskeleton (1999) by Stelarc and Eingeweide (2018) by Marco Donnarumma X Margherita Peveri suggest new ways for us to negotiate our relationship with technology? In what way do these works expose underlying anxieties surrounding the potential of the human body in a technological world?* To answer this, the thesis proceeds with three chapters.

In chapter one, I will introduce *Exoskeleton* and *Eingeweide* as performances, undertaking to describe the scene presented in both. Thereafter, I provide methods of reading them. I propose to look at the pieces as real, objective, phenomena in so far as we can read the entities on stage as “objects” for analysis — here I draw from Mark Windsor's exposition of an aesthetic account of the uncanny.¹ Moreover, I draw attention to the position into which the performances force us as spectators — that is, the liminal position. This way of looking, or place from which we can say something about the pieces,

¹ Windsor, Mark. 2019. “What is the Uncanny?.” *The British Journal of Aesthetics*. Vol. 59 (1). January 51–65.

facilitates a critical position and draws from Sylvia Wynter's work.² Through my espousal of these methods, I also define the liminal and the uncanny in conjuncture with one another — ultimately speaking of how both affect the reading of the works and how I, spectator and analyst, am pulled into and live through these performances.

Going forward, chapter two focuses on the materiality of the works and the uncanny. It is not yet apparent to us how the liminal position described in the first chapter plays into this reading, but what is important is that we must first go through this analysis to uncover its significance. Here I am concerned with exploring how the performances make us feel. As such, some guiding questions are; How do *Exoskeleton* and *Eingeweide* engage with the uncanny? Why is this uncanniness an important aspect for how we understand or read the liminal in the works? To answer these, I put forward that both performances build up an uncanny *mise-en-scène*, and that they engage with the uncanny by presenting to us, what I call, "uncertain objects". These objects explicitly navigate the liminal space between the metal and the flesh, and trouble the boundaries between the animate and inanimate — both of which serve to provoke a profound sense of uncertainty and anxiety in the spectator surrounding the body/machine assemblage before us. In Stelarc's *Exoskeleton* the uncertain object we are faced with is the enmeshment of his body with the six-legged pneumatic machine, whilst in *Eingeweide* we are thrown into uncertainty and anxiety due to the assemblage between Donnarumma's body and an artificially intelligent robotic arm attached to his face.

Chapter three reads the liminal that plays out in each work, and compares the way in which there has been a shift, both thematically and materially, between *Exoskeleton* and *Eingeweide*. I posit that this is largely to do with the context of each performance, *Exoskeleton* having been performed in 1999 and *Eingeweide*, more recently, in 2018. Ultimately, the vulnerability, lack of agency, and fragmentation that we see so prevalently in *Eingeweide* works to say something about our increasingly intimate, dependent, and impotent relationship with machines over past decades. Moreover, having undertaken to do such a reading of the works, we suddenly find that we have been forced by the works themselves into a liminal position. To speak about liminality in these works means to be thrown outside of the fixed structures of identity that usually pertain to the human body — that is, that we can think of it as the flesh, and as animate and living. It becomes apparent, only at the end of the thesis that the method for reading these works only becomes possible by having suffered *through* the anxiety and uncertainty that their uncanny liminal spaces provoke.

All of these steps are taken to show that; *Stelarc's and Donnarumma & Peveri's work, respectively, suggest new ways of thinking about the relationship between the human body and the*

² Wynter, Sylvia. 1984. "The Ceremony Must Be Found: After Humanism". *Boundary II*. 12:3 & 13:1.. 17–70.

*technical body in that they provide **liminal** grounds for dialogue between opposing categories such as the flesh and metal, and in so doing draw attention to the underlying anxieties we have towards a contradictory definition of the human being.*

(I) INTRODUCING THE UNCANNY AND THE LIMINAL

This thesis centres on the relationship between the human and the machine, and more specifically how this dynamic plays out in the performative art pieces, *Exoskeleton* by Stelarc (1999) and *Eingeweide* by Marco Donnarumma in collaboration with Margherita Pevere (2018). These works can be thought of as part of an overarching trend in art in recent decades where technology has become a critical theme across various movements. We have seen this play out in the work of cyborg activists, for example, with key artists being Neil Harbisson and Moon Ribas, both of which using their own bodies experimentally to draw attention to the potential for extending human senses through machines. There are of course also artists from the post-humanist trend that engage with the human/technical relation framework. For instance, Natasha Vita-More's *Primo Posthuman* (2002) explores the way in which technology can be used to modify and shape the body at will to speak about the boundaries of the body and its potential capacities in the future. Additionally, there have been “bio-artists” like Orlan, Eduardo Kac, or Julia Reodica, who all to varying degrees play with how technology can shape both the appearance and cultural standards surrounding the body. Orlan goes through surgical self-experimentation, primarily on her face, to call into question beauty standards. Eduardo Kac works with biotechnology and genetics to manipulate DNA, his most famous piece being *Alba* (the green fluorescent rabbit) (2000), in order to critique the ethics of certain scientific technologies. Julia Reodica grows petri-dish hymens out of various human and animal tissue cells to undermine pervasive cultural stereotypes surrounding gender and sex³.

Both *Exoskeleton* and *Eingeweide* centre around human/machine enmeshment and call into question the malleability of the human body when entwined with and connected to robotic systems. This, in and of itself, already places them firmly within the aforementioned trend. What I am interested in, however, is their engagement with the liminal. Indeed, Jens Hauser in his “Sk-Interfaces” (2008) points to the emergence of in-betweenness as a theme in art that explores the boundaries between the human body and the technological. And so, I put forward that it is through this “in-betweenness”, or liminality, that both *Exoskeleton* and *Eingeweide* navigate and push against fixed notions surrounding the human body in the context of a world where machines are ever more pervasive. As I will show, the liminal in both of these works plays out materially on stage, but also occasions a reading of them from a liminal position which becomes important if we want to establish methods for dealing with identities that trouble norms surrounding the body.

An important facet of the material exploration of liminality in *Exoskeleton* and *Eingeweide* is the way in which they colour these in-between spaces with uncanniness. This eerie or weird experience

³ Julia Reodica. Hymnext Hymen project. (2004-2008). <https://www.fact.co.uk/artwork/hymnext-hymen-project-2004-2008>

serves to stylise the relationship between the human body and machines — impressing a sense of anxiety, uneasiness, and even disgust in us as spectators. As such, I hope to not only show that the liminal in *Exoskeleton* and *Eingeweide* destabilises the boundary between body and machine, but simultaneously lays bare our fundamental uncertainties surrounding this assemblage through an engagement with the uncanny.

However, if I want to say anything at all about these works, it is important to first consider the different methods necessary to uncover the different types of meaning at work in the performances. There are two ways in which I will approach this analysis. The first focuses on the materiality of the works themselves, as real phenomena that unfold before us in space and in time. The second method, or way of looking at these works, posits a place from which to look. I will suggest that the liminal, as proposed by Sylvia Wynter as an “outsider” or observational position, can help us to navigate the experience of conflicting identities at play within Stelarc’s and Donnarumma’s pieces (1984; 1996). Specifically, through this position we are able to comment on the way in which certain categories come together and suggest new forms or ways of being through *Exoskeleton*’s and *Eingeweide*’s performances. Later in this chapter, I will clearly define which identities I mean here, but for now I will preliminarily name them as the metal versus the flesh. Both “ways of looking” take root in our experience of the performances as spectators; of the themes, structures, narratives, and emotions the works give rise to. Going forward, this chapter will attempt to introduce the different aspects of the liminal that ties itself up with these experiences. Let me begin, however, by introducing the works in question.

I.i EXOSKELETON & EINGEWEIDE

In 1999, Stelarc performed his work, *Exoskeleton*⁴, for the first time in Bern. The audience watches as a man, dressed in black, is strapped to a six- legged pneumatic machine by various engineers. This man is Stelarc himself, a performance artist, and as we watch *Exoskeleton* unfold, we may expect to watch a piece that grapples with technological body extension, fitting with its title. And while there are elements of this, we too are confronted with something more ambiguous. First, we watch as Stelarc climbs onto the machine and stands upon a mounted platform which centrally connects the six robotic legs. He is helped into a brace, composed of metal and wire, that wraps around his torso like a rib-cage and extends down his arms. His right arm is extended as a robotic hand, composed of metal, and reaches past his own hand, made up of skin, bone and flesh. Together the arm is now an assemblage of human and mechanic parts. A thick collection of wires rises up to the ceiling, like an umbilical cord, attaching itself to an out of sight power source. The being on stage takes shape as a part man, part machine creature, the bounds of each

4 *Exoskeleton*, Stelarc, <http://stelarc.org/?catID=20227>

becoming increasingly ambiguous. The engineers depart the stage and we see a new form before us; now man and technical system are connected in chimeric form. The performance truly starts with the clicking and hissing of pneumatic pumps that move the legs of the machine. As the robot becomes animate, it jerks and twists Stelarc's body, thrusting it spasmodically throughout the performance. As we watch, we, the audience, become implicit in negotiating a certain in-betweenness that unfolds before us. Indeed, the viewer is pulled into the dialogue that takes place between Stelarc's body and the machine, and as such we too find ourselves in a liminal space. A bright light projects the silhouette of this new being's outline on the wall behind the performance, the boundaries of its body creating an altogether novel shape. An overhead camera records and captures its movements from above.

Looking at this, an eerie feeling sets in, a feeling of what Freud would call *unheimlichkeit*⁵, as we are confronted with a seemingly impossible reality. This impossibility springs forth from the interplay between identities, within the exchange between metal and flesh, the interaction between Stelarc's freedom and his impotence against the machine, the material dialogue between the animate and the inanimate - indeed the entire fixity of identity categories unravels. And yet, this feeling of unease seems too to stem from the familiar aspects of the performance, I can identify Stelarc's body as a male human body, it is ordinary and familiar to my perception in that I can fix its identity, but the performance's suggestiveness and the relationality into which his body is thrown with the machine reveals a certain ambiguity that plays out in the liminal. The man-machine assemblage exhibits a transitional or gestational phase, which in turn suggests something about the potentiality of human form and existence when we entwine ourselves with technology. But what is this something? What is the dynamic at play within this liminal exchange? What is it about *Exoskeleton* that makes it uncanny? And crucially, why is this of consequence for our understanding of human-machine relations?

Almost 20 years after *Exoskeleton*'s debut, Marco Donnarumma and Margherita Pevere perform *Eingeweide* (2018) — “Eingeweide” being the German for innards, guts, or entrails. It is important to note that my focus will be on the first version of the performance carried out in 2018 at the Romaeuropa Festival. This version does not make use of an overhead live feed, which records and presents Donnarumma and Pevere's choreography from a bird's eye perspective on a large screen (as seen in more recent performances in 2022, for example). I will also not focus on the entire performance, as the thematic and symbolic density of the piece spans beyond the scope of this thesis. The stage is dimly lit. Along the periphery, spotlights illuminate two naked bodies so enmeshed with one another that they form a totally new, ambiguous silhouette. The background consists of a metal cage and two giant skin hides, these are sporadically lit up by strobe lights, impressing the scene with a sense of a stormy wasteland. The performance takes place in what can be thought of as three “acts”. On one side of the stage, Donnarumma

⁵ Sigmund Freud, 'The Uncanny'. *Imago*. 1919. 1-21.

performs. His body contorted and twitching, he has an electronic arm attached to and obscuring his face. At first, I fix this body as human, but as the performance goes on, uncertainty creeps in.⁶ I cannot be sure as to the identity of this being on stage, it may not be human after all. The electronic arm covering Donnarumma's face bends, then stabs and gropes around disjointedly as he moves enmeshed with it. Where does his being end and that of the mechanical arm's begin? On the opposite side of the stage, Pevere carries out her performance. Her body is knotted up and writhing on top of what appears to be a small mound of salt or earth. Her face too is covered, but instead with a thick film of synthetic skin that hangs loosely down and drags across the floor with her heaving movements. The scene, coupled with a dark ambient soundscape, stirs up an anxiousness in the viewer. I am disturbed, and experience quite viscerally the uncanny atmosphere that the performance affects me with. As *Eingeweide* reaches its climax, the two individual performers, once again, slowly scuttle, jerk, and squirm towards the other's body. Their flesh and wiring seem to collide into one moving organism, organic matter and technological extension in synchronisation. The performers' bodies meet in the centre of the stage to create that same impossible and fragmented being that we witnessed at the beginning of the performance. But it is now charged with energy; the space between their bodies, and the embodied extensions attached to them, becoming the site of liminal negotiation. This liminality is characterised entirely by the uncanniness that permeates the performance.

What connects these two works is the liminal categories at play in both. Indeed, both *Exoskeleton* and *Eingeweide* throw forward a kind of thematic conflict or dialogue between the flesh and the metal. Whilst this allows for me to undertake an analysis of the performances as objects, and as works that produce a method for reading liminality, they are also connected through me — the spectator and the analyst, because as viewers we are experientially *between* them. My being in-between these works stems from the fact that *Exoskeleton* and *Eingeweide* are performed and placed in two different points in time (in 1999 and in 2018 respectively), and as such binds an analysis of them to my understanding of their temporal contexts.

Some questions arise from what I have just said; what do I mean when I say “the flesh” and “the metal”? How can we navigate both these aspects if we are to look at these performances? From *where* can we say something about the in-between? I will first address this first question.

⁶ When I talk about fixing here and throughout the thesis, I am drawing attention to the Nietzschean critique (elaborated in much of his work; *Homer's Contest* (1872) *Human, all too Human: A Book for Free Spirits* (1878, 1986), *Thus Spoke Zarathustra* (1968), *The Will to Power: An Attempt at a Revaluation of all Values* (1967), *Nachlass* 9[97]) for our need to stabilise metaphysical categories of truth and reject contradictions inherent to reality and to life through epistemological structures. Michel Haar (2018) says of this; “Our logical and psychological categories derive their falsehood precisely from this 'will to find out the truth' - i.e., from that which is fixed, stable, identical, and noncontradictory. But by devaluing contradiction, we bring into evidence a moral prejudice at the very basis of knowledge [...] this will is, then, for Nietzsche, a way of negating 'life'”. (18).

I.ii THE FLESH AND THE METAL

Throughout this thesis, I will often refer to the dichotomy that plays out in *Exoskeleton* and *Eingeweide* between what I call “the flesh” and “the metal”. But how can we understand these terms in the context of the performances? Neither of these are arbitrary categories assigned to the works, but instead sit at the thematic and material nuclei of each performance, and as such they throw forward these identities for analysis. The word “flesh” is a term that describes a facet of the body’s identity that sits at odds with the idea of a unified and coherent subject — the latter being a notion proposed by, and reified through, Western philosophy.⁷ Instead, we can think of the flesh as the body dispossessed of subjectivity, symbolism, and personhood. To help us think through this notion, we can turn to Hortense J. Spillers who, in *Mama’s Baby, Papa’s Maybe: An American Grammar Book* (1987), draws a distinction between the body and the flesh along similar lines. Spillers posits that; “before the “body” there is the “flesh”, that zero degree of social conceptualisation that does not escape concealment under the brush of discourse, or the reflexes of iconography” (1987, 67). The flesh in this sense is devoid of any feature that might suggest a person is attached to it; she says:

“we lose any hint or suggestion of a dimension of ethics, of relatedness between human personality and its anatomical features, between one human personality and another, between human personality and cultural institutions[...]To that extent, the procedures adopted for the captive flesh demarcate *a total objectification*, as the entire captive community becomes a living laboratory” (1987, 68).

Spillers is, in particular, concerned with female slave identities and the way in which they have been violently shaped, appropriated, and brushed over by accounts dealing with the Atlantic Slave Trade. And whilst this is not the focus of this thesis, the idea that the flesh is empty of any personhood and that it lends itself to objectification is important in two key senses. Firstly, it allows for us to think of the flesh as fragmented and, secondly, that it is something exchangeable, disposable, or commodifiable. This latter idea aligns itself to a long standing devaluation of the body to profitable flesh. We see this demonstrated in Shakespeare’s *The Merchant of Venice* (1600), for example, where Shylock holds Antonio to their contract by demanding from him “an equal pound of your fair flesh, to be cut off and taken in what part of your body pleaseth me”.⁸ Recognising this “profitable atomising” makes space for us to graft a

⁷ We can perhaps see the best examples of such accounts of subjectivity manifest in the works of René Descartes and Immanuel Kant among others (particularly in the German Idealist tradition; thinkers like Fichte, Schelling, and Hegel for instance)

⁸ William Shakespeare, *The Merchant of Venice*, ed. Barbara A. Mowat and Paul Werstine (Folger Shakespeare Library) 1.3.161-163. References are to act, scene, and line.

conception of the flesh as a notion separate from stable subjectivity, but still valuable in terms of thinking of the body as “culturally unmade” and outside of the “traditional symbolics” that characterise personhood (Spillers 1987, 67; 72; 80).

Thinking of the flesh in this way also positions itself alongside the idea that the body is obsolete. According to Kluszczyński in *Meat, Metal, and Code: Contestable Chimeras* (2014), the “obsolete body” is a notion furthered by Stelarc throughout his works and is instead signalled through “meat” instead of “flesh” (11). Thinking of the body as meat and as obsolete does *not* indicate a need to abandon the body entirely; indeed Stelarc himself says that “we cannot operate disembodied”⁹, but instead offers up a configuration of the body that pivots upon fragmentation and a dependent relationality with its environment. For Zylinska, in the essay ‘The Evolution of Stelarc’ (2014), this decentres the functions and operations internal to the body, as well as all symbolic and cultural meaning attached to it, and therefore puts forward the “meat”, or as I call it “flesh”, as a differentiated vessel whose agency is dispersed across its external relations (in particular with machines) (102). Donnarumma, *Eingeweide*’s composer, too weighs in on this in the chapter ‘Fluid Flesh and Rhythmic Skin: On the Unfinished Bodies of Stelarc’ (2014), whereby he characterises this fragmentation as a kind of “unfinishedness” of the body, or the suggestion in Stelarc’s works that the “human body is an incomplete entity or an object possible for redesign” (156 -162). This “unfinishedness” in conjuncture with the delineation of the body as “an object possible for redesign” is significant for how we can understand the ultimate objectivity of the flesh and its final form always being open-ended through the repeated action of being “seared, divided, and ripped-apart(ness)” (Spillers 1987, 67). Donnarumma’s explicit engagement with flesh in this sense also suggests that he is responding to this frame of reference within his own performances and indeed, in *Eingeweide* also.

This unfinished facet of the flesh lends itself well to the notion of the liminal which, as I will explore, manifests through oscillation or flickering between states. This is because to be open-ended in this way suggests an inherent relationality with other objects and bodies that turns upon a kind of dynamic negotiation between the flesh and whatever it comes into contact with. In this sense, the flesh is in a movement akin to that of the “Middle Passage” that Spillers takes note of — in a movement between places, “unmade” and “exposed” but still thought of as a quantifiable object (1987, 72). In this thesis the flesh is linked to other, distinct, but related categories of identities that we can think of as the “living”, the “organic”, and the “animate”. But now we must ask; To where does the flesh reach? And with what is it in a relationship?

⁹ Joanna Zylinska and Gary Hall. ‘Probings: an Interview with Stelarc’ (with G. Hall), in *The Cyborg Experiments: the Extensions of the Body in the Media Age*, ed. Joanna Zylinska. London and New York: Continuum. 2002, pp. 123.

Exoskeleton and *Eingeweide* posit a relationship between the flesh and the metal. When I talk about “the metal” in these works, I am referring only to the machines involved in each performance. For Stelarc’s piece this means the six-legged pneumatic robot that takes up the stage with his body, and in Donnarumma and Pevere’s work this will refer to the artificially intelligent robotic arm that Donnarumma attaches to his face throughout the performance. I am aware, however, of the line of philosophical thought, pointed out by Pastor in the paper ‘Human as machine: A discussion on the transformations and exhaustion of a metaphor’ (2021), that plays with metaphors describing the body as a machine. This is first made explicit in the works of Descartes and Hobbes, and later expanded by La Mettrie, and is still used now to draw analogies between human consciousness and artificial intelligence (for example in Daniel Dennett) (Pastor 2021, 1).¹⁰ I want to take distance from such an understanding of the machine, and focus once again on “the metal” as that of the electronic, mechanic, metallic, wired bodies on stage. In this sense the metal is linked to, and can be better understood through, the identity categories of “non-living”, “inorganic”, and “inanimate”.

Now that I have defined the terms, let me proceed by outlining the methods with which I will undertake to analyse the liminal spaces between these binary oppositions.

I.iii THE LIMINAL AS A WAY OF LOOKING

The first central claim that this thesis pivots upon is the following; *Stelarc’s and Donnarumma & Pevere’s work, respectively, suggest new ways of thinking about the relationship between the human body and the technical body in that they provide **liminal** grounds for dialogue between opposing categories such as human and mechanical, or flesh and metal.* But what is liminality?

Anthropologist Victor Turner in *The Forest of Symbols* (1967) describes liminality through the notions of “limen”, or threshold, and posits that we can think of it as a transitional phase or state (Turner 1980, 10). The liminal is therefore not fixed or rigid, but is inherently dynamic and processual. Another crucial facet of Turner’s liminal space is his characterisation of it as something that always holds potentiality within its structure. We can perhaps understand this as a nascent possibility of future identities. To make this more clear, we can turn to what he writes in his chapter concerning ‘*rites of passage*’, where he states that the liminal contains in it a “fructile chaos” (1980, 11). This term “fructile” seems to denote an innate productivity in these spaces, where “chaos” refers to the *movement* of flickering

¹⁰ See Descartes: *Passions of the Souls* (1649), *Meditations and Other Metaphysical Writings* (1641) and *Discourse on Method and Related Writings* (1637). See Hobbes: *Elements of Philosophy: The First Section Concerning the Body (De Corpore)* (1655). See Dennett: *Consciousness Explained* (1991) and *From Bacteria to Bach and Back: The Evolution of Minds* (2018).

or oscillation that the identity of the liminal takes on; as opposed to a “chaos” of disorganisation or lack of purpose. Indeed, this idea of intentional motion and latent potentiality is confirmed when Turner says that the liminal is, “a storehouse of possibilities, not by any means a random assemblage but a striving after new form (1980, 11-12). The liminal is therefore a productive notion for thinking through the ways in which different identities come together in artworks to suggest new forms, or at least the potentialities of these new forms. In this context we can ask: in what way can liminality be used to understand the relationship between the metal and the flesh? And indeed where the boundaries (understood as both outline and threshold) of Stelarc’s and Donnarumma & Pevere’s works themselves are when they interact with us as spectators?

I want to suggest that the liminal plays out in two distinct ways. Firstly, as something that unfolds within the performances as objects or experiential phenomena. That is, as a conflict of identities between the body and the machine that takes place in real space. Delving into this involves being clear as to how the specific performative tactics and strategies employed by two pieces work to colour the liminal with the uncanny. I will return to this in the following section. The second type of liminality can be thought of as a position into which the audience is thrown. In fact, we can go so far as to say that *Exoskeleton* and *Eingeweide* demand that we look at them from this liminal perspective, which too instantiates a method for analysing them. Through forcing us (the spectators and analysts) into this position, we are provided a space where we can reflect on the mechanisms of restraint thrust upon us by the performances — as we will see later, these “mechanisms of restraint” take the form of suffering through the uncanny and the underlying anxieties this exposes in us. But, what is this way of looking then?

To clarify the kind of positionality I mean, we can turn to Sylvia Wynter who, in ‘The Ceremony Must be Found: After Humanism’ (1984), develops a notion of the liminal as a method of discursive critique. Wynter speaks of the liminal as a position between and outside of fixed and prescribed structures of order (39). Already, this reference to “fixed and prescribed structures of order” sits in line with the idea that the metal and the flesh are not chosen but impressed onto us by *Exoskeleton* and *Eingeweide* themselves. Moreover, Wynter says that the liminal acts as a “frame of reference” from which those who inhabit this perspective can perceive “the grammar of regularities of boundary and structure-maintaining discourses” (1984, 39). To inhabit this space, then, is both to be under the impression of fixed structures, as well as to have the agency to recognise and be conscious of the dynamics through which these identities interplay. In other words, the liminal serves as an observational stance which can be both free from and freeing of categorical identities, in so far as to take up the liminal position is *to be able to* weigh in on the contradiction between what Wynter calls “actual lived experiences” and “the grammar of representations” (1984, 40). When Wynter speaks of boundaries and structure maintaining discourses, she refers to the internal organisational logic of societies and the structure of their normative isomorphic

representations in language and culture. And so, according to Paquette in *Universal Emancipation: Race Beyond Badiou* (2018), what sits at the centre of Wynter's critical project is to expose "the inexistence and oppression of particular groups of people due to the logics of a state" (205). In particular, Wynter has in mind the subject-other binary logic of Western subjectivity that posits "rational Man" as the subject and negates the other who does not fit into that order, i.e. "marginalised peoples like Black, gendered, or gay people" for example (Paquette 2018, 207). In Paquette's words, the importance of Wynter's liminal perspective, is "its capacity to provide a view from which to *understand* a dominant/normative structure and equally to *provide the space for a discursive intervention* from this frame of reference (209). Indeed, a crucial aspect of Wynter's liminal account is to give agency those in the threshold, and present a legitimate discursive stance from which they can call into question fixed narratives through "exposing all the injustices inherent in structure" (Wynter, 36).

Whilst the project of this thesis is not directly tied up with the justice and emancipation of marginalised societal groups, I believe that the liminal as a critical position is an incredibly fruitful perspective with which we can look at Stelarc's and Donnarumma and Pevere's works. In the first instance, it provides for us a view from which we can *understand* the negotiation between the human body and the machine in *Exoskeleton* and *Eingeweide*. Specifically, it can reveal how the performances work to free us of rigid and opposing binaries concerning the human body and its relationship to the technical. In this context, the emancipatory aspect of the liminal serves as a way of revealing how the art works eschew, criticise, and turn over the normative and binding categories of identity. There, on stage, are human performers, it is a real phenomenon that occurs before me, and yet despite this materiality it is difficult to understand these beings on stage; we are confronted with suggestion and ambiguity surrounding the flesh/metal assemblage. And so we see that both performances provoke us to ask: "what am I looking at?", "what are these beings before me?". More specifically, inhabiting the liminal here pushes me to question: "what is a human?" and "where does the human being begin and end?". That these questions sit centrally within our analysis highlights a kinship with the project of Humanism (also in line with Wynter here) that this thesis pursues, and its particular focus on the distinction between human/machine (instead of on questions concerning race or gender, or other distinctions like animal/human). Indeed, this seems important in a time when the human body is becoming ever more politicised in the context of its enmeshment with machines.

And so, given its focus on human/machine relationally, I too recognise that the project of this thesis also ties in closely with posthumanism and cyborg anthropology. Focusing on the way in which technical bodies shape and constitute our human identities, it is clear that thinkers like Katherine Hayles (*How We Became Posthuman*, 1999), and Donna Haraway (*Cyborg Manifesto*, 1984) sit in the contextual background of this forthcoming analysis. But I will not take on their methods for looking at *Exoskeleton*

and *Eingeweide*, although both play out thematically in the work, because my ultimate focus is the liminal and how *this* position can inform an understanding of human identities and their inherent dynamism.

Returning again to the liminal as a position, we see something interesting arise here. Particularly, this being forced into “inhabiting the threshold”, as Wynter says, raises questions surrounding the boundaries of *Exoskeleton* and *Eingeweide* as performances themselves. Where do *they* begin and end? As viewers we are not neutral or impartial to the happenings on stage. We *share* the liminal space with the performance through our experience of them. The open-ended negotiation between the flesh and the metal, between the human body and the machine, is extended to us by the artists as a suggestion about what *our* bodies could look like when enmeshed with technical systems, about how *our* flesh could look within the schema of human-technical bondage. As soon as we watch the performances we too enter into, what Susan Broadhurst in *Liminal Acts* (1999) terms “a no-man’s-land betwixt-and-between” (37). To recognise ourselves *in* the performances like this reminds us of the kind of “mirroring” that Lacan speaks of in *The Mirror Stage as Formative in the I Function* (1949, 2006). Here, he talks of the way in which seeing, or looking, at your body in the mirror confirms and reifies the subject’s experience of themselves as a unified “I”. It is a stage of identification; whereby the self becomes whole through recognition of the imago, and the body momentarily escapes its inherent fragmentation (the experience of this fragmentation draws on repeatability, which later will become important for how we experience the uncanny aspect of the works). This kind of looking seems to be directly relevant for how we live through and identify with the liminal in *Exoskeleton* and *Eingeweide*. We can say that the boundaries of the performances elicit an exchange of exposing and of recognising, in so far as they hold up a mirror to us as spectators, and it is only by living *through* this reflection that we can begin to piece together our bodies and their specific relationship with machines.

John Martin, reifies this claim, in his book *Introduction to the Dance* (1939), whereby he characterises mirroring as a “re-creation” (53). In this context, he refers to a kind of “inner mimicry” through which audience members re-create dance performances in themselves (1939, 53). Of this, Martin states that we, “cease to be mere spectators and become participants in the movement that is presented to us, and though to all outward appearances we shall be sitting quietly in our chairs we shall nevertheless be dancing synthetically with all our musculature”. (1939, 53). Where Lacan says that we can constitute ourself by recognising the image of the mirrored self (who here is the other), Martin translates this to the stage and demonstrates how this mirroring mechanism allows us direct access to the feelings of the body on stage. And whilst this kind of mimicry or mirroring is important for thinking about the boundaries of *Exoskeleton* and *Eingeweide*, the liminal position that I have suggested goes further than this. As a place from which I look, it also presupposes a shared *space* with the performers and a type of embodied understanding of the works that permits affective responses to them. Kaja Silverman, in *The Threshold of*

the Visible World (1996), in response to Lacan's mirror stage posits bodily ego upon the notion of "proprioception" which also considers spatiality and not just image (16). Through this, the subject "apprehends" or understands itself through being "keyed" into concepts like "here", "my", or "there" which are made up of both embodied sensation and a "constellation of cultural images" (14; 17). In this sense, being "keyed" into a space refers to the body being "in tune" (as in music), and so also denotes a kind of being in harmony with the external world. What is important here, is the relationship that the subject has to itself through being constituted by the images *and* space around it.

Mieke Bal, in the introduction to *The Practice of Cultural Analysis* (1999), points to the importance this notion of "keyedness" in terms of reading cultural objects. According to Bal, the significance of Silverman's account is its focus on *feeling*, specifically "how the subject feels his or her position in space" (here referring to the notion of *deixis* from the Greek "to point" or "to indicate") (11). What this opens up, is a way of thinking about the relationship between the individual and cultural images as bodily. Interestingly, Bal continues; "what we call "feeling" is the *threshold* between body and subjectivity *and* between body and outside world" (11). This "threshold" between the body and the outside world, that is feeling, denotes the liminal position that I suggest in that it speaks of an affective and embodied type of understanding of the works through being "keyed" into them. More than this, drawing attention to Silverman's concept makes it possible for us to speak of the works thrusting themselves upon us because it highlights how looking or reading depends on the relationship between my body and what I perceive. Importantly, to be "keyed" into a space also places some distance between my body and the images that it recognises itself in/as — it does not collapse my personhood into its reflection. This is because Silverman's account posits reflection and then recognition as an interactive process between bodies situated in space and in time.

By proposing that the works throw us into a liminal position, I am also recognising that they make us, including our bodies, look at them and feel a certain way. Drawing attention to the fact that we are pushed into a liminal position takes seriously, and perhaps even necessitates, that we are keyed into the space of the performances and that their boundaries fold around the viewer — but importantly, that they demand this type of being in tune with them through their imposition of anxiety and uncanniness. We must live, or rather suffer, through their mirroring of us so that we can speak of them.

And so, if the second argument that I want to advance in this paper is that: *through the liminal, Stelarc and Donnarumma & Pevere are able to provoke underlying anxieties surrounding the potential of the human body*, I now want to explore the uncanny in relation to this.

I.iv THE UNCANNY AND THE APPARENT IMPOSSIBILITY OF THE LIMINAL

Whilst describing the works, I referred to the feeling they impress upon the viewer as a type of uncertainty stemming from an ambiguity surrounding the identities of the beings on stage. But this ambiguity serves only to enforce a deep sense of anxiety that we experience when watching *Exoskeleton* and *Eingeweide* that comes from the inherent uncanniness of the performances. Already, there is a connection between the liminal and anxiety in these works, but before describing how this plays out, we must first ask in what way does the liminal inform anxiety? It is important when broaching this topic to be precise as to the nature of the ideas mentioned, and to take care in not conflating the notion of anxiety with the uncanny, or the liminal with anxiety, or indeed the uncanny with the liminal. For it is true that not all liminal spaces are uncanny (for example Turner's *rites of passage* explanation of the liminal as a transitional phase in people's lives), and that not all anxiety stems from the uncanny. So how are they connected in *Exoskeleton* and *Eingeweide*?

Firstly, to understand what the uncanny is, it feels necessary to look at what Freud says about this notion in his seminal essay 'Das Unheimliche' (1919). The term "uncanny" for Freud undoubtedly refers "to all that is terrible — to all that arouses dread and creeping horror" (1). Whilst elaborating on this definition, Freud draws attention to a paradox that only becomes apparent through considering the German term "heimlich". That is, the etymological doubleness that connotes both the familiar and homely *and* the concealed, hidden, and secretive; the latter of which evokes in us a threat or danger (1919, 3-4). The "unheimlich" for Freud, then, is a revealing or unveiling of something that is hidden or private, and not only from others but also from the self. As such, the uncanny in this sense marks the return of the repressed and that "particular variety of terror that relates to what has been known for a long time, has been familiar for a long time" (Freud 1919, 17). In describing this recurrence or repeating, Freud undertakes to interpret the uncanny in *Der Sandmann* (1817) by E.T.A Hoffmann, where he draws from contemporary psychoanalyst, Ernst Jentsch. Jentsch, in 'On the Psychology of the Uncanny' (1906), furthers the idea that to experience the uncanny is to experience a kind of "intellectual uncertainty" (11). Specifically as a "doubt as to whether an apparently living being is animate, and conversely, doubt as to whether a lifeless object may not in fact be inanimate" (Jentsch 1906, 11). For Freud, what is important about Jentsch's insight is how this animate/inanimate distinction in the uncanny also relates to anxieties surrounding death or lifelessness. "Many people experience the feeling (of uncanniness) to the highest degree to death and dead bodies" (Freud 1919, 13). In fact, Freud goes on to say: "man's attitude to death, involuntary repetition, and the castration complex compromise practically all the factors which turn something fearful into the

uncanny”¹¹ (Freud 1919, 14). This aspect of the uncanny, that is recurrence or repetition and anxieties surrounding the life/death opposition need to be recognised when dealing with the themes inherent to *Exo-skeleton* and *Eingeweide*. I will later expand on the significance of repetition, but for now, it is already worth pointing out that the bodies in both performances oscillate between animacy and inanimacy. There is a play between the living and the non-living through the enmeshment of the metal and the flesh in these performances and, through Freud and Jentsch, we can already posit that uncertainties directed at these bodies play on nascent underlying anxieties already present in us surrounding death and a certain “doubleness” that arises from being unsure about whether something is living or not.

To help us think this through in relation to the performances, Mark Windsor’s in his essay ‘What is the Uncanny?’ (2019), says that we can think of the term as “*an anxious uncertainty about what is real caused by an apparent impossibility*” (2019, 51). Windsor’s stance puts forward that the uncanny is “an affective state directed at objects in the world”, in particular, it is “an object-directed *anxiety*” (2019, 55). This opens up the possibility for the uncanny to become a critical facet of the aesthetic analysis of the performances themselves, as characteristics and features that play out *as and through* real and material objects in the world. We can look at them as directly experienced phenomena. Indeed, it demands that we focus on specific, real entities (human-machine assemblages), movements (choreography), set design (lighting, sound, stage props), and how these things all come together to establish the uncanny within these performances. But *how* can the uncanny play out materially according to Windsor? Of David Lynch’s *Eraserhead* (1977) he states;

Eraserhead evokes an uncomfortable mood of alienation through its bleak, industrial *mise-en-scène* [...]. But punctuating the presentation of this *unheimlich* cinematic world are particularly uncanny objects and events which focus and amplify the viewer’s feelings of anxiety [...] The mood of uneasiness evoked by the film’s audio-visual presentation cues the audience to experience these particular objects and events as threatening and strange; and, vice versa, these uncanny objects and events contribute to the mood of uneasiness that pervades the whole (2019, 55-56).

And so, in terms of establishing grounds for what makes a particular piece uncanny there is a certain need to focus on, what Windsor here calls the “*mise-en-scène*”, or the general arrangement of the performers,

¹¹ What is important to note here is the distinction that Freud makes between fear and anxiety. Fear is thought of as being directed at a threat to our well-being, whereas anxiety occurs instead as an objectless fear — this will be elaborated in in chapter (II). Later we see philosophers (existentialists and otologists) like Sartre and Heidegger continue to draw lines between fear and anxiety in not dissimilar ways.

the performance, the stage, etc. However, it also includes a look at the specific signification of objects and entities themselves and of *how* they move together in the intricately woven narrative of each performance in order to move us in this anxious way.

Another significant aspect of Windsor's definition is that the uncanny is caused by being faced with "*an apparent impossibility*" (2091, 51). I want to suggest that this "apparent impossibility" plays out as the liminal on stage; it is exactly the uncertainty which arises through the dialogue between opposing categories as they are exhibited in *Eingeweide* and *Exoskeleton*. It is the real and material space between Stelarc's body and his six legged pneumatic machine, it is the embodied enmeshment of Donnarumma and the robotic arm attached over his face. It should not be possible, according to structures of fixed identities, that I can witness this type of existence. The living, organic, and animate aspects of the human body's flesh should not be able to be entwined with the non-living, inanimate metal of the machine in such a dynamic and reciprocal way.¹² And yet, because it appears before me, the uncertainty I feel in not being able to fix this flickering provokes an existential anxiety in me.

The uncanniness that we experience when we watch *Exoskeleton* and *Eingeweide* is much more, however, than the "intellectual uncertainty" we see apparent in Jentsch's account. The uncanny is experienced viscerally by the audience as an anxiety that we must suffer through. Tied back to being "keyed" into the space of the performances themselves, the uncanny too imposes itself onto our bodies and forces us to participate. Brinkema in *The Forms of the Affects* (2014) speaks of the power of this dynamic when she says that, "to immediately impose itself on an unwilling perceiver who recoils in disgust, seems to be, far more than grief, an affect bound up with bodies, to implant itself without mediation on a skin or a consciousness, to have a direct target on the repulsed sensorium of its victim" (Brinkema, 133). Like this, the liminal is built into our understanding of the uncanny and is as such also an experiential facet of the performances (as well as the observational position, or "way of looking" described earlier). It is the very space of negotiation between the flesh and the metal in the artworks themselves, and how they impress themselves onto me as a viewer, that is at stake in this method of analysis.

To be clear, the liminal exists in both works as both an aesthetic theme that manifests physically in each performance, *and* as a conflict between normative categories of identity pertaining to the human body. Moreover, these are both inextricably tied to our underlying anxieties concerning the human body, and more specifically its enmeshment with machines. Going forward, this project, in an attempt to answer

¹² What counts as a body, and how bodies may live and die, also becomes a political question here. For ideas on this see Foucault's concept of "biopower" in *The Will to Knowledge* (1976) and Achille Mbembe on *Necropolitics* (2016; 2019). This once more relates to the project of this thesis in relation to Wynter and the issue of where the boundaries of a human being lies.

the following questions; *“How do Exoskeleton (1999) by Stelarc and Eingeweide (2018) by Marco Donnarumma X Margherita Pevere suggest new ways for us to negotiate our relationship with technology? In what way do these works expose underlying anxieties surrounding the potential of the human body in a technological world?”*, will (1) provide an analysis of the aesthetic features/themes of the performances as material phenomena and real world objects from the perspective of the uncanny, and (2) will undertake to explore how the liminal as a position helps us to look at the pieces as well as suggests its productivity for looking at other artworks that broach the liminal.

(II) THE UNCANNY: HOW DOES *EXOSKELETON* & *EINGEWEIDE* MAKE US FEEL?

So far, I described the different types of liminality that we experience in *Exoskeleton* and *Eingeweide*. On the one hand, the liminal is afforded to the viewer as a position or point of view; a site of liminality is impressed upon the spectator which allows them to say something about each performance. The second plays out as a material liminal space within the works themselves. In this chapter, I will be concerned with an analysis of the latter and will proceed under the assumption that we already understand the position from which we read the works — the reason for this will become apparent later. For now, I want to look at *Exoskeleton* and *Eingeweide* as objects with which we are faced, and that provoke a sense of anxiety in the spectator through the navigation of liminal spaces in an uncanny way. With this in mind then, the guiding question of this chapter asks: how do *Exoskeleton* and *Eingeweide* engage with the uncanny? I posit that the liminal spaces in these works are coloured with uncanniness, and that this in and of itself provides me (the spectator) with a way of both navigating and characterising the liminal space between the metal and the flesh as something that I need to be cautious or anxious about. This is done through the establishment of an uncanny *mise-en-scène*, but more crucially, through the bodies of the performers themselves who destabilise the identity of the human body when they enmesh themselves with machines.

II.1. THE UNCANNY IN *EXOSKELETON* AND *EINGEWEIDE*

I want to begin by discussing the way in which Stelarc and Donnarumma & Pevere create an atmosphere of uncanniness in their performances. I ask: how do the works engage with the uncanny? And, crucially, why is uncanniness an important aspect of navigating the liminal in the works? How can we look at it as a fundamental characteristic within Stelarc and Donnarumma & Pevere performances? I will begin with Stelarc's *Exoskeleton*.

II.1. i *Exoskeleton*'s "mise-en-scène": Stelarc's use of stillness and silence sound

Exoskeleton somehow disturbs me when I watch it. But why is this? Stelarc's performance begins well before the six legged chimeric robot/man moves across the stage. Indeed, it begins with silence and with assembling. The stage is mostly dark, a spotlight hangs over its centre, illuminating the pneumatic machine that stands there statically. As Stelarc enters in silence, he mounts and stands upon a platform within the machine. He is joined by two mechanics, who begin to strap him into the robot. This entire spectacle creates an anticipation in the onlooker. What is happening? What will we see? We watch as he

becomes entwined with this machine, and even though we witness the process of enmeshment, it does little to ease our uncertainty about the new interconnection of metal and flesh; the performance is already saturated with ambiguity. As man and machine begin to move as one, an unnerving soundscape composed of disjointed industrial sounds begins, accompanied by an arrhythmic metal clicking and hissing.

Windsor, like Freud, cites E.T.A Hoffmann when describing the uncanny as “that horrible, eerie, shuddery feeling’ [...] in response to certain phenomena [...] which are characteristically creepy, and weird” (2019, 51). Stelarc’s opening sequence here can certainly be read as eerie, creepy, and weird through its engagement with a bleak industrialism. This is what Windsor would call an “uncanny *mise-en-scène*” (2019, 54). Before Stelarc enters, the machine sits, under spotlight, solitary on the stage. The silence and stillness of the machine works to evoke an uncomfortable and alienating feeling in the audience. From the outset, this scene frames the six-legged robot within an uncertainty surrounding its autonomy; whether it will become animate on its own. In his book, *The Analysis of Performative Art* (1999), Anthony Howell describes silence as the ground upon which artists will build their performance or into which they will pour the content of their actions (6). He describes this structurally, as an empty silence and stillness that often precedes performative pieces.¹³ In *Exoskeleton*, the silence is not empty. Stelarc already fills this space with the stillness of *the machine*, an object that as audience members we can only guess the purpose of. What this does is propose it as a that thing performs – the machine is not a neutral object, it *acts upon* the audience. Howell reifies this point when he states that “stillness is *performed*, however immobile it may be” (Howell 1999, 7), and whilst the author is referring to human performers who sit in stillness or in silence, it also holds for the machine in *Exoskeleton*. From the moment the spotlight reveals the six-legged robot, it implicitly becomes a co-performer and as such Stelarc uses this kind of performative agency as a way to introduce the uncanny into the performance through the suggestion that this thing does something in its stillness — the silence here is saturated with meaning. Specifically, it highlights the disconnect between the audience’s understanding that the robot is an inanimate object and their anticipation that it may come to life. Framing of the machine in this way suggests that it could at any moment (once again) become animate. But why is this uncanny?

Howell, when describing how audiences read performances states that stillness allows for me as a viewer to read the scene at my own pace, “as the eye travels as it wills upwards, downwards, and across

¹³ Of note here is my referral to the word “performative”. I am not referring to “performative” in the sense that J.L. Austin means where “the issuing of the utterance is the performing of an action” (*How to Do Things With Words* 1975, 6) and is followed up by Derrida who speaks of this kind of performative in terms of the “event of a speech” (“Signature Event Context” from *Margins of Philosophy* 1982, 326). Moreover, I am not referring to Butler’s definition of “performativity” who instead of focusing on language acts refers to the process through which subjects constitute their identities of gender and sexuality through a process of enacting certain practices (*Gender Trouble*, 1990). Instead, I only mean to talk about performative as denoting or pertaining to performances and actions of artists or performers on or off a stage.

in either direction” (2000, 10). The important insight here is that this allows me to develop my own thoughts about the piece in front of me, indeed that “the emphasis on stillness in a piece of performance art enables this active process to occur in the spectator” (Howell 2000, 11). We see then that what Stelarc’s use of pre-performance silence really does, is play on the nascent questions within the audience themselves as to what the status of his machine is. The silence pushes me to ask; what is it? Is it going to come alive? If we turn back to Freud, we can say that Stelarc’s machine and the way in which it has been framed, plays on the underlying anxieties that spring forth from an uncertainty surrounding whether inanimate or dead bodies will suddenly come to life. Taking some distance from Howell here, who puts forward the silence and stillness induces a kind of zen- or meditative state in the viewer, I posit that this stillness in *Exoskeleton*’s first minutes fosters a space for growing doubt and uncertainty in the spectator. The silence, providing no answers itself to these questions and serving only to confirm the strangeness of the object before me, works to double onto itself as a space which becomes filled with the meaning (and anxiety) I place into it. And so, whilst it is true that in this moment “we have little else to work with than our own mental observations” (11), what we are left with here is something unstable and ambiguous which transforms itself into the uncanniness of the machine and the unsettling *mise-en-scène* before us.

After Stelarc enters, he is (s)trapped into the machine by the engineers, a part of the performance that can be seen as experimentation involving both assembling and restraining, it is then that the new interconnection of man/machine comes to life. As this occurs, the silence, experienced by the spectator until this point, is broken and the unnerving accompaniment of hissing and clicking ensues. Stelarc’s movement is limited. The only degree of movement Stelarc has is in one hand and wrist, whereby he directs the movement of the robotic legs backwards, forwards, and sideways. The sound that we hear as an audience stems from the machine itself; the pneumatic pumps hiss, the metallic clicking and clanging comes from its jerking movements. This creates a strangeness or uneasiness in the performance space because the soundscape that Stelarc creates is reminiscent of a techno-dystopia, and harks from what Ross Farnell calls, in his “Stelarc - Performance Artist ‘Becoming Posthuman’”, a cyborg aesthetic present in science fiction representations (2000, 110). Indeed, Stelarc achieves this through the characteristically industrial and alienating nature of the sounds that emanate from the interaction between his body and the machine. This contributes to the feeling eeriness of the scene before us. Simultaneously, the sounds work to reify the idea that the machine is coming to life. What we hear is in fact the beating heart of this robot, and so once again, the notions of living and non-living or of animate and inanimate come to the fore as oppositions that work to unsettle us.

It is as such, through the use of stillness and sound, that from the outset Stelarc is able to frame the machine as a dubious and ambiguous entity. A question mark hangs over our heads when we see the robot in this context. Specifically, that *Exoskeleton* throws forth an unsettling ambience to impose this

sense of uncanniness in the spectator. Whilst the *mise-en-scène* that I have described is important for understanding the uncanny character of the liminal, the assemblage¹⁴ of Stelarc *and* the machine is truly what grabs us. Let me explore this further.

II.I.ii Uncertain objects: Exoskeleton

When referring to Ridley Scott's *Blade Runner* (1982) where "virtually-indistinguishable-from-human 'replicants'" take centre stage, Windsor states that we experience uncanniness when we see "objects that trouble the boundary between the human and the non-human, the animate and the inanimate" (2019, 52). Windsor continues by saying that these objects throw forward "an ambiguous suggestion" through a sort of flickering between categories (2019, 53). And so, by an "uncertain object" I make explicit reference to the liminal and to the uncanny — liminal in that they oscillate between identities and uncanny in that they straddle between *specific* binaries that *provoke* anxiety. As such, they are uncertain in two ways. Firstly, in so far as they are not fixed or stable, and secondly through the uncertainty they make me feel when I watch them. They are objects in that they fit into Windsor's description of real and material phenomena (2019, 57).

Stelarc presents to the spectator a monster; a hybridised human/machine chimera— this is our uncertain object. What is so uncanny about it is not that it scares us but that this newly formed entity eludes our perception of it. There is a continuous oscillation between the flesh and the metal, so that we cannot fix the identity of this entity. The uncertainty that ensues from this attempt provokes anxiety in the viewer, not fear. Of the distinction between the two Freud, in his lecture on a 'General Theory of Neurosis: Fear & Anxiety' (1920), says that fear is a "reaction to the perception of external danger viz., harm that is expected and foreseen" (344). Anxiety (*Angst*), by contrast, is to "ascribe dreadful meaning to all uncertainty" (1920, 344). For Freud, anxiety is an objectless fear. Windsor confirms this by describing anxiety as "an uncertain, existential threat", or "a tense and unsettling anticipation of a threatening but formless event; a feeling of uneasy suspense." (2019, 57). And so, what is interesting is

¹⁴ Assemblage in this sense has two referents: On the one hand, there is reference to Deleuze and Guatarri, who in *A Thousand Plateaus: Capitalism and Schizophrenia* (1980), coin the term "assemblage" to comment on social formations as not being posited on fixed and stable ontologies. What I take from this kind of assemblage when describing *Exoskeleton* and *Eingeweide* is a certain fluidity and exchangeability that entities have, as well as a dependence on their environment through connectivity with it. Moreover, I recognise and also refer to the connotations the term has with transformation and becoming. The second is to Katherine Hayles. In *Unthought: The Power of the Cognitive Nonconscious* (2018) who talks about "cognitive assemblages" in human-technical interaction. Here she is raising up the status of cognition (and cognitive function) over consciousness, and so too disperses agency across the connectivity of human/machine relations. Both are centrally tied up with power and with agency, a key theme also in *Exoskeleton* and *Eingeweide*.

not that I fear this object (because I know it poses me no threat) *or* that *it* simply makes me anxious – but more subtly, it is the uncertainty that it gives rise to *in me* that provokes this kind of anxiety. It is in this way that we can think of it as a “*kind of object-directed anxiety*” (Windsor 2019, 55). And that to understand “the subtle nature of the threat issued by the uncanny object” is to recognise that it “blur(s) the categories of truth” (Windsor, 2019, 58). But is the blurring of categories enough to issue this kind of “existential threat? Is it really uncertainty alone that provokes this anxiety?

What we recognise as human, when we see Stelarc’s body, and what we recognise as a nonhuman machine become blurred to the audience members through the movements and choreography of the newly formed creature. But, it is this *recognising* that becomes important in how it is an uncanny object. Again, if we recall what Freud says on the “unheimlich”, as that “particular variety of terror that relates to what has been known for a long time, has been familiar for a long time” (Freud 1919, 17). Then we can perhaps read the uncanniness in *Exoskeleton* as a recognition of what plays out on stage as a repetition or recurrence of ourselves and our relationship with machines. We somehow see ourselves in this human/machine assemblage, the “heimlich” or familiar parts of the entity is that which is human but also highlights a familiar relationship to machines. *Exoskeleton* as a performance exposes to us this familiarity as something that was obscure, and so forces us to suffer through this repetition in the same way that Freud speaks of anxiety in relation to the compulsion to repeat.

But what is interesting about this, is that despite this recollection, the uncertain object here does not *originate* in us. Brinkema draws attention to this particular dynamic: “That things repeat because they never took place is also the lesson of Freud’s essay on the uncanny, the concept that anticipates anxiety as a formal problematic of awkward, difficult, repetitious movements — and on the level of textual form no less” (2014, 304). What we can gain from this insight, is the idea that we could only ever have recognised ourselves in the human/machine enmeshment by having had this image reflected back at us by *Exoskeleton*’s uncertain object. The repetition of the performance makes us anxious in its capacity to shine a light on “something repressed which *recurs*” (Freud 1920, 13). Moreover, only now do we see ourselves in it because it has been expressed and unified *outside* of our bodies, it was not visible to us until this moment, it was hidden. The idea of reflection here too links back to the idea of mirroring that was introduced in the first chapter. If we recall, according to Lacan, the subject can only reconcile its fragmented body with its personhood upon seeing its reflection for the first time, as a whole, in the mirror (1947; 2006). Similarly, we could argue that *Exoskeleton* holds up a mirror to us, and *forces* us to recognise ourselves in this sense because it crystallises an aspect of our identities through reflecting it back at us. We could also say then, that this kind of repetition lays bare anxieties surrounding a certain fragmentation inherent in subjectivity, or at least exposes the dynamic through which we construct ourselves. It is precisely this unveiling of something that is familiar but that has been secret, which makes

Stelarc's body strapped into his pneumatic robot uncanny. Again, Freud is illuminating in this regard. Whilst citing Schelling he says that the uncanny is, "the name for everything that ought to have remained...hidden and secret and has become visible" (Freud 1919, 4).

With this in mind, I now want to turn to *Eingeweide* and compare its engagement with uncanniness to that of *Exoskeleton*.

II. I. iii *Eingeweide's mise-en-scène*

In an attempt to answer the question "how do the works engage with the uncanny?", I will once again describe the construction of the *mise-en-scène* in *Eingeweide* before describing the particular material manifestation of the liminal through this uncanny lens. I want to explore how the engagement with the uncanny, and its ultimate impact on the liminal spaces, varies from what we have seen in *Exoskeleton*. Indeed, this needs to be taken seriously, because I believe the narrative presented in *Eingeweide* points to a fundamental shift in our existential relationship with machines, and works to problematise *how* we have become enmeshed with these technologies in the past twenty years (and so dealing with a time period of unprecedented technological development after *Exoskeleton* was composed). I will argue that Donnarumma and Pevere weave closeness, vulnerability, and intimacy through anxieties surrounding agency and impotence to re-characterise the liminal in a contemporary but profoundly unsettling way.

I will look particularly at Donnarumma's movements. This is because Donnarumma himself is tied to and enmeshed with an artificially intelligent robotic arm as it is strapped to his face — which is of most pertinence to this thesis. Indeed, liminality between the metal and the flesh principally plays out through *his* body, and his relationship to Pevere. Pevere's performance will therefore only be considered in light of how she comes together with Donnarumma. Some questions arise here, that I do not have time to answer here but are worth raising: is Pevere's performance in *Eingeweide* simply supplementary to Donnarumma's? Can we only look at her in so far as she gives his performance meaning? Is the alignment of a male body to technology and the female body to the organic an intentional choice from the artists? If so, is the piece making a critical and subversive commentary on this connotation, or do they fall into reinforcing these symbolisms? Indeed, we can ask much about the way in which the choices surrounding gender play out in this work. However, leaving this aside for now, let me turn back to the central question of this chapter; how do the works engage with the uncanny? And crucially, why is this uncanniness an important aspect to navigating the liminal? Let me begin by exploring *Eingeweide's* ambient design.

Eingeweide, like *Exoskeleton*, unsettles me. And whilst this is not entirely to do with the particular aesthetic the piece engages with, the uncanniness of it can be in part located in the way in

which the scene is set. We can ask, therefore, what are the “material” facets of this *mise-en-scène* in *Eingeweide*? In the first instance, the performance begins in near total darkness. The only thing we see is a dim flickering of blue light in the back left corner of the stage. It is not yet clear what it should illuminate, but it seems as though it is a broken and forgotten light. Slowly, in the centre of the stage, a pulsing form is illuminated out of the darkness. As our eyes adjust to the scene, we see that this form are the napes and shoulders of two human bodies. They are jostling and twisting into and through one another, to the extent that we begin to question whether this shape is a human one at all. Perhaps it is just made up of familiar parts? As we try to puzzle out this ambiguous cluster of flesh, a rhythmic flashing lights up two giant skin hides that hang loosely on the right side of the stage; a deep synthetic bassline pervades the soundscape and punctuates the scene as it comes on and off in time with the illumination of these hanging skins. This sound is reminiscent of the buzzing or humming one hears when your finger accidentally touches an auxiliary cable — it is mechanic and abrasive.

Already in just this first minute of *Eingeweide*, there is much to unpack by way of describing the ambience created by Donnarumma & Peveri. Here, unlike in *Exoskeleton*, there are multiple facets playing together in this dynamic introduction. Where Stelarc uses stillness and silence to impose the ambiguous status of his robot onto the audience, *Eingeweide* uses a multitude of different visual and sonorous inputs which are thrust upon me as I try to orient myself. If *Exoskeleton* presented us with a scene, *Eingeweide* sets up its performative atmosphere by dropping us into an explicitly techno-dystopian landscape.

Douglas E. Williams in his *Ideology as Dystopia - 'Blade Runner'* describes dystopias as “negative utopias, images of a future so terribly imperfect that, given the chance, people would prefer to flee as far as their wherewithal can possibly take them” (1988, 384). A dystopic aesthetic conjures up “nightmare visions of the future” where we are both thematically and physically presented with the realities of “irreversible environmental pollution, numbing overpopulation, frighteningly violent crime, and the most heartless forms of exploitation” (Williams 1988, 384). Williams goes on to say that the genre as a whole “clearly reflects the exhaustion of contemporary ideologies and their inability to escape from the “imagination of disaster” that has become so prevalent in the last century (384). In *Eingeweide*, there can be no doubt that the world that Donnarumma & Peveri set up is a bleak one, and considering what we learn from Williams and techno-dystopic imagery, it is clear that *Eingeweide's* *mise-en-scène* problematises contemporary trends that could turn “the festering hell-hole of technological overkill” (Williams 1988, 385) into reality in the not-too-distant future. The hanging skin-hides speak to themes of environmental pollution and exploitation, whilst the metal cage with its robotic arm sit ominously at the back of the stage to serve as a reminder of “the radically narrowing gap between humans and machines” (Williams 1988, 385). The various scenes are fragmented and broken up across the stage, which works

too to tinge this techno-dystopic landscape with a distinct surrealism (Williams 1988, 382). But it is this world that we are given which is the biggest difference between the works.

Eingeweide's world has history and, as we watch the performance unfold, presents a narrative. In contrast to the stillness and silence in *Exoskeleton*, Howell posits that when we follow a story "we are given little time to develop our own thoughts," instead, "we are receivers of a piece" (2000, 12). And what we receive here is a multitude of sensory inputs to support this story. From the various visual scenes unfolding before us across the different parts of the stage, to the loud soundscape that pervades my experience of the different sites of performance – all these aspects occurring simultaneously serve to not only plunge us into the scene, but work also to create a sense of entrapment in that world. We are now submerged *in* it, and we cannot escape. The point here being that the uncertainty, and indeed the uncanny *mise-en-scène*, is *pushed upon me*. This creates an uneasy feeling in the spectator because it limits the power I have as a reader of the piece to interpret it - at least for the time that I am engaged with it. This does not mean that I cannot fill the space with any meaning whilst I am watching *Eingeweide*, but rather this highlights the fundamentally different dynamic at play between it and *Exoskeleton*. In Stelarc's piece, I "develop a mental subtext of the event" (in this case of the ambiguous status of Stelarc's robot) (Howell 2000, 11). That is, *Exoskeleton*'s very *mise-en-scène* allows for active readership by presenting a still and silent pre-performance space, whilst *Eingeweide* demands what Howell would call passivity through following a narrative (12). That is, *Exoskeleton*'s very *mise-en-scène* allows for active readership by presenting a still and silent pre-performance space, whilst *Eingeweide* demands what Howell would call passivity through following a narrative (12).

I want to further this notion of passivity that Howell describes, however, because in *Eingeweide* this "passivity" plays out in me more like impotence. This happens through, on the one hand the presentation of a fragmented techno-dystopic scene. But more than this, the eerie feeling I experience also stems from an uncertainty I have regarding my freedom to choose from where I look at the performance or how it touches me.¹⁵ The fact that the stage is dimly lit means that the line between the performers and the audience almost disappears. There is not an "over there" of the stage; we are forced into inhabiting the same darkness as the performers and the ambiguous form of their bodies emerging from it makes me feel more vulnerable to it than I am to *Exoskeleton*'s six-legged machine. This is important because I believe that a feeling of impotence and vulnerability are two themes that sit centrally within *Eingeweide*'s

¹⁵ It is useful to think of this in terms of Roland Barthes' notion of "punctum" from his *Camera Lucida* (1980): When describing the analysis of photographs Barthes draws attention to the aspect of a picture that stands out without you needing to do anything. It simply grabs your attention and arrests you. "This time it is not I who seek it out, it is the element which rises from the scene, shoots out of it like an arrow, and pierces me [...] I shall therefore call it punctum; for punctum is also: sting, speck, cut, little hole [...] A photograph's punctum is that accident which pricks me" (23-24). Introducing the punctum in this sense, already opens up the question of agency in *Eingeweide*.

engagement with the uncanny. That said, I do not mean to say that *Eingeweide* creates a more uncanny scene than *Exoskeleton*, but rather that both works provoke this eerie and creepy feeling in the audience through specific styles that will ultimately work to characterise the liminal space between the metal and the flesh in different and important ways. That both works evoke a different type of uncanniness once again speaks to how they demand that our bodies, as spectators, be “keyed” into the specific spaces of each performance. It is this being in tune with *Exoskeleton* and *Eingeweide* that facilitates a reading of them.

Thematically, it is also worth briefly taking note of the difference in names between *Exoskeleton* and *Eingeweide*. “Exo” denoting external to or an extension that can be added to the outer body, whereas “Eingeweide” pertains to guts or innards. There is certainly a question of distance that can be raised between the two pieces that once again latently suggests an inherent vulnerability and intimacy in the latter. In *Eingeweide*, we are in an inseparable relationship to these beings – they are *in* us and already constitute our form. Machines can no longer simply be attached to us externally, they are as intimately entwined with us as our own viscera.

With this in mind, I now want to move onto the way in which the dialogue between the body and the machine is navigated in *Eingeweide*.

II.I.iv Uncertain objects: Eingeweide

Looking back again at the question; how do the works engage with the uncanny? I want to posit that, much like in Stelarc’s performance, *Eingeweide* makes us feel anxious. The uncertainty we experience here takes the form of two uncertain objects, significant for different reasons.

Firstly, as a cluster of fragmented body parts when Donnarumma and Pevere’s bodies are enmeshed at the beginning of the performance — this “object” calls into question whether we are truly looking at two human bodies. However, as the piece progresses, it becomes clear that these pulsating, symmetrical, forms are evidently two halves of the same organism. Here, flesh meets flesh, and the identities of each half is both unknown and irrelevant; their faces are hidden and even appear to have grown into one another. This amplifies the idea that *the dynamic between Donnarumma & Pevere* is what constitutes the identity of this creature. Its movements, spasmodic and seemingly uncoordinated, give us the sense that this life-form is still trying to learn how to navigate the world. A struggle ensues between their two bodies, which plays out as a pushing back and forth between the performers. The jerking movements of the performers themselves suggest that the relationship between their bodies is one that is characterised both by struggle and by dependency. As they move it seems that each half learns from the other and simultaneously pushes against itself in a kind of battle for autonomy. In terms of answering

how the works engage with the uncanny, we can say that the dynamic of this relationship, coupled with the jarring imagery of what appears to be fragmented body parts, distinctly colours my experience of this uncertain assemblage with anxiety and unease.

Soon after we watch the, literal, unfolding of this ambiguous life-form, the struggle between its two bodies reaches its tipping point. They break apart, and on the stage we witness a type of sensory disorientation or paralysis experienced by the separated halves. The metallic beating and incessant droning soundscape as well as the flashing lights, that have until now pervaded this scene, too break off. We are left with the juxtaposition of a flat line ringing and stillness of movement, the performers only twitch their rigid bodies so filled with movement but a moment ago. Slowly, Donnarumma scuttles and drags himself towards the back of the stage. There, the seemingly abandoned flashing light illuminates a metal cubicle. His movements are laboured and appear painful as his body scrapes against the floor. As we watch this unsettling choreography, Donnarumma reaches the cubicle and an unfamiliar shape begins to gyrate at his oncoming presence. Whatever is in this cubicle has the capacity to sense its environment and respond to it. The light brightens and we see that it is a robotic arm, capable of independent movement, that stabs and feels out its surroundings. It is clearly a machine, but seems to have a fleshy skin covering its metal. Donnarumma pulls himself to his feet, evidently drawn to this thing, and we watch as he attaches it to his head, obscuring his face. The arm now juts out in front of his head, like a trunk, as it swings through the air looking to touch or grab something. Donnarumma's movements change now too, he can crawl on his feet and hands and scuttles about the stage exploring the landscape with this new limb. It is as such that we are presented with another "uncertain object" or assemblage. Both "uncertain objects" work to say something about how we can think of the body in *Eingeweide*. That is, as something that constitutes itself through relationality with its environment and as something that is fragmented.

In terms of how the body is defined through its relationship to external machines and entities, we can see that the human/machine enmeshment in *Eingeweide*, as well as in *Exoskeleton*, plays out through a kind of dependency on the external world to constitute the body and our identities. Zylinska, in her chapter 'The Evolution of Stelarc' from *Meat, Metal, and Code: Contestable Chimeras* (2015), states that, "it is only through relationality with what is not in us – with other living beings but also with the widely conceived "environment" that consists of animate and inanimate entities and processes – that we can activate the life that is in us. And it is only through instruction in wisdom that we can learn to apprehend our own situatedness" (124). What Zylinska says here supports Deleuze and Guattari's concept of an "assemblage" in so far it recognises the *process* through which the human and machine entities in the performances constitute one another, and ultimately merge to form a "territorial" unity (1980, 7). The use of the term assemblage in both contexts takes this notion of process seriously, because it displaces the

functions of the body and situates it necessarily within the social, cultural, and political relations that compose it.

What sets *Eingeweide* apart from *Exoskeleton* however, is the characterisation of that relationship as vulnerable. In this context, it is perhaps productive to turn to what Judith Butler, who in *Vulnerability in Resistance* (2016), has to say of the term; “vulnerability is not a subjective disposition, but a relation to a field of objects, forces, and passions that impinge upon or affect us in some way. As a way of being related to what is not me and not fully masterable, vulnerability is a kind of relationship that belongs to that ambiguous region in which receptivity and responsiveness are not clearly separable from one another, and not distinguished as separate moments in a sequence. (17) The insight here is that vulnerability is not simply a fixed description or characteristic, but rather that it pertains to a certain relationship that someone or something has to its environment. Moreover, that they do not have total control over that relation or its situation. The uncertain objects are vulnerable in the Butlerian sense of being related, receptive, and responsive to the other parts of their assemblages, which expresses that they do not fully master the relationship. We see much struggle between the two halves as they push back against, resist, and constitute the other. This makes sense if we understand that vulnerability and resistance are not mutually exclusive/oppositional forces but in fact inform one another and the relationship an entity has to the world (Butler 2016, 1). But more than this, vulnerability also plays out through the way in which the audience has Donnarumma & Peveré’s nudity imposed onto them through these uncertain objects.

Howell posits that nudity, and the way in which it is enacted on stage, has the capacity to thrust the audience into a certain voyeuristic position. He states; “Very natural acts become transgressive by being performed in front of the average audience: nudity, pissing, masturbation, shitting, fucking, etc. when such transgressions occur, the audience, while necessarily present, is nevertheless forced back into the role of (hidden) voyeur, because it is obliged to observe what cannot (or should not) be seen”. (Howell 2000, 57). A good example of this occurring in *Eingeweide*, takes place in an instance when Donnarumma, after having become connected to the robotic arm, performs a kind of sexual act with the machine. Given that there is some ambiguity surrounding the boundaries of this assemblage, it is unclear as to whether we are watching a masturbatory act of self-penetration or an intimate copulation between his body and the artificially intelligent arm. As such, vulnerability colours the relationship the audience has with the piece in so far as we are forced into watching certain acts. These acts become transgressive due to the way in which they take place, and serve to impose the strangeness of the human/machine assemblage onto us. We are vulnerable to the performance, just as the performer’s bodies are vulnerable to each other and to the machine – as spectators this vulnerability shapes us because we tune into what *Eingeweide* demands us to see. In this way we see how vulnerability frames the uncanny, though it is not

itself an uncanniness — it tinges our relationship with the piece through playing on the themes of dependency as well as impotence..

Returning again to the notion of the uncanny, it is also important to point out *Eingeweide*'s focus on fragmentation — which further separates the piece from *Exoskeleton*. Donnarumma and Peverè's bodies appear so fragmented that we struggle to understand what we see before us, though we do recognise specific human body parts: a neck, a shoulder, a leg, an arm. Here we can once again turn to Deleuze who, in his 'Postscript on the Societies of Control' (1992), coins this term "dividual" to speak of the way in which a "control society" divides up individuals into units; parts that, moreover, are not self-contained (5). The insight here is that as subjects we are no longer self-sustaining indivisible bodies, but broken-up marketable, trackable, pieces (Deleuze 1992, 6). That we are divided into "dividuals" speaks to the departure from Foucault's "disciplinary society" where the smallest unit over which a society could gain control was the "individual" (Deleuze 1992, 5). Deleuze's theory speaks, at its core, to the way in which we have become increasingly fragmented in a technological or computerised society. Indeed, we have become broken-up and spread thin across a variety of systems that work to monetise and market our dividual pieces. But how does *Eingeweide*'s presentation of fragmentation in this way play into the uncanny?

If we recognise ourselves somehow in the human/robot assemblage through repetition in *Exoskeleton*, the same occurs in *Eingeweide* except here, the "human" aspect of this enmeshment has no unified identity, and is continuously broken-apart and put back together in a multitude of ways; first as flesh with flesh, then with flesh and metal. The fact that, for the most part, Donnarumma and Peverè's faces are obscured signifies an uncanny anonymity of the bodies we see on stage, and reifies once more the lack of any unified or stable personhood. What we recognise of ourselves in *Eingeweide* is the inherent fragmentation or dividualisation of our bodies and of our subjectivity through the mechanisation of both the human body and the system that it belongs to. And so, we can say that the uncanniness of *Eingeweide* plays on underlying anxieties surrounding this fragmentation in so far as it holds up a mirror to us and repeats, on stage, a recognisable interpretation of our shattered bodies. Deleuze's dividual theory is tied up centrally with control and the agency over the body, and so we can also say that *Eingeweide*, in making apparent to us our fragmentation, too reflects a certain lack of power we have over these specific, exchangeable, commodifiable pieces of flesh.

(III) LIMINALITY IN EXOSKELETON & EINGEWEIDE

III.i. Reading liminality

So far, I have described the way in which the *mise-en-scène* of each performance works to set up and frame the dialogues of identity within *Exoskeleton* and *Eingeweide*. That is, that the eerie and unsettling aesthetic of the works contribute to the uncanniness of the human and non-human assemblages on stage. Moreover, both pieces suggest that there is an ambiguity seated within the relationship between the human body and the machine. In Stelarc's piece this plays out both as an uncertainty surrounding the status of the robot itself, as something that pushes us to question its status as a being, but more crucially within the presentation of a new form or object made up of the enmeshment of Stelarc's and this machine. He navigates the opposition of the metal and the flesh by troubling the boundaries between his body and the robot. These themes are also taken up by Donnarumma and Pevere in *Eingeweide* — except here, they colour this uncertainty with vulnerability and intimacy. Moreover, I have so far referred to these phenomena as uncertain objects that I watch and am presented with on stage. It is not enough, however, to merely draw attention to the ambiguity of the phenomena within these works. I want now to highlight that these objects, or material assemblages, are through their very exhibition are able to demonstrate an active and liminal negotiation. More specifically, I want to put forward that through presenting to me an apparent impossibility *Exoskeleton* and *Eingeweide* can suggest that new embodied configurations are in fact possible. Through engaging with the liminal, given that its very definition is a threshold or transitional phase (that is *movement* from one state to another), *Exoskeleton* and *Eingeweide* make space for a more dynamic and ambiguous conception of the human body through expressing the potential that machines have in reshaping us. As such, other notions like mixing and contamination are made possible through a liminal dialogue.

First, let me recall what liminality is before I look more closely at how the works differ and what each is trying to say through their engagement with the liminal. In chapter one, I referred to Turner's definition of liminality from his essay concerning 'Rites of Passage' in *The Forest of Symbols* (1967). To reiterate, he describes liminality through the notions of "limen", or threshold, and posits that we can think of it as a transitional phase or period (Turner 1980, 10). What is important about such a definition of liminality for this thesis is the inherent dynamism that liminal spaces are saturated with. Indeed, a liminal state or space cannot be fixed or rigid, but necessarily finds itself caught up with processes and movement towards potential forms. Again, the liminal "a storehouse of possibilities, not by any means a random assemblage but *a striving after new form* (1980, 11-12). Adding to this notion is Van Gennep who, *Rites of Passage* (1909), further characterises the liminal as a "transitional, dynamic, intermediate condition

placed between hardened and transformed structures” (42). It is as such that I finally define the liminal as a dynamic and intermediary state/condition that sits between fixed categories or structures of identity and that strives towards new forms. Both Van Gennep and Turner refer to the liminal within the context of rites of passage, and so when they describe it as a state of being in-between structures, they are referring to being between other stable and fixed phases in a person's life or position in society. Instead, I will take the liminal to mean a state between rigid *cultural* structures and norms surrounding the body and its identity. In *Exoskeleton* and *Eingeweide*, this specifically plays out as the liminal space between the flesh and the metal, the body and the machine and the animate and the inanimate. What is important here, is the potentiality that the liminal has in the technological context of suggesting a certain kind of malleability of the human body and the possibility that rigid and static conceptions of it can be overthrown *through* such performances. Before I explore this further, let me be specific as to the liminal spaces in each work.

III.ii The metal and the flesh: a liminal negotiation

In the previous section, I discussed the way in which each work engages with the uncanny. I now ask how do they engage with the liminal? And, why is this uncanniness important for how the pieces engage with the liminal?

Both *Exoskeleton* and *Eingeweide* put forward what I have called “uncertain objects” that grapple with the relationship between a man/machine assemblage. What occurs here is a kind of flickering or oscillation of identity – where we see in one moment a man, and in another the machine, emerging then as a new figure that appears to us through an impossible enmeshment. I want to further the idea here that the liminal *is* this oscillation. Through their engagement with liminal spaces both works are able to present a relationship with machines that, at its core, points to 1) an inherent malleability of the human body and 2) the different ways in which machines can mould, shape and change us. Indeed, the liminal as a negotiation takes place within the very locus of the apparent impossibilities within the performances, which is itself the site where boundaries are troubled and truths are blurred (Windsor 2019, 60). We could even say that the liminal is necessarily contradictory in that it exists as two opposing identities at once, and so too works against the pervasive philosophical law of non-contradiction left over from ancient logic. The liminal spaces in both *Exoskeleton* and *Eingeweide* takes shape as a dynamic and intermediary negotiation between the “hardened structures” of the metal and the flesh, between the body and the machine, and opens up that new embodied configurations, that themselves flicker between these identities, are possible. In fact, through an engagement with liminality we can also say that the works are “striving after new form” in so far as they throw forward specific suggestions as to what these assemblages could look like. It is as such that the liminal in this sense can open up the idea that identities

need not be fixed or stable, but necessarily negotiate and move between hardened structures. If this is the case, what does the liminal challenge in *Exoskeleton & Eingeweide*? What does the liminal work to say ?

In the first instance, the liminal in these works shows how the “human body is obsolete” (Kluszczyński 2014, 17). I explored already in chapter one, when defining the flesh and the metal, that such a project sits centrally within Stelarc’s works. We can now see that in many ways this is also expressed through *Eingeweide*. What we know, having looking at the works, is that the “demise of the body” (2000, 87), as Howell says, occurs not through discarding the body itself as an obsolete entity but through the displacement of its function and the fragmentation of its identity. The liminal spaces between the metal and the flesh of the uncertain objects works to tell us the human body is obsolete in so far as the meaning of the term has changed. We cannot think of the body outside of its interaction and connectivity with its environment, and moreover, that it depends on this kind of relationally. Now, to think of the “human body” is to recognise *it* as a potentiality and as a threshold through which the external world can come to bear upon it.

However, what is also interesting is that a shift takes place *between* the works themselves, a liminal space between *Exoskeleton* and *Eingeweide* emerges. This can be thought of mainly as a temporal shift, in that *Exoskeleton*, having been conceived in the late 1990s responds to different cultural and political structures surrounding technology. That Stelarc’s *Exoskeleton* (intentionally or not) engages with a kind of “mad-scientist trope”¹⁶ (Schummer 2021, 223-226) by calling up of connotations of laboratory experimentation speaks to a relationship with machines that is still tied up with technology as an emergent and exciting entity in society, not yet threatening and able to be manipulated for human ends. By contrast, the assemblages in *Eingeweide* are characterised through their fragmentation and impotence. The liminal space between the metal and the flesh here speaks to a larger social commentary, also mentioned earlier in terms of Deleuze, surrounding a shift towards a society of control (1992, 2). The relationship between the human body and the machine is no longer negotiable and is deeply vulnerable. That *Eingeweide* deals with these themes almost twenty years after *Exoskeleton* (in 2018) points to how it problematizes the shift in human/technical relations and points to the changing political boundaries of our bodies.

III.iii The liminal as a way of looking

This previous section served as a reading of the liminal spaces presented in *Exoskeleton* and *Eingeweide*, but something becomes clear to me when I look back at my analysis. That is, that there seems to already be a space from which I speak and look at these pieces through my critique. A position that has been

¹⁶ Joachim Schummer. 2021. ‘Art and Representation: The Rise of the ‘Mad Scientist’. A Cultural History of Chemistry in the Long Nineteenth Century. Ed. Peter Ramburg, London: Bloomsbury. 217-238.

thrust upon me by the works themselves and the exercise of weighing in on their respective meanings. What becomes apparent is that I have been speaking, from the beginning of my analysis, from a liminal position. It is only through analysing these works, that this stance or approach becomes apparent. Indeed, the way in which liminality plays out in these works is two-fold. It takes place within the works themselves as an oscillation or flickering between two different identities at once. But at the same time, it throws me, not just the spectator but as an analyst of these works, outside of fixed and hardened structures of identity and into the dialogues itself; that is, into a liminal position. Indeed, by reading the performances as I have, it becomes apparent to me that the works themselves produce the conditions through which this kind critique becomes possible. The specific condition(s) I speak of here is the anxiety that the works provoke in me — *Exoskeleton* and *Eingeweide* make it clear, that if we are to speak of the liminal in them, then we must first suffer through the uncertainty and dread that these spaces evoke in me as a spectator. As such, the liminal position becomes the method or lens with which we can look at artworks, because it provides a position that allows for me to become aware of particular opposing identities at play. This is important because the liminal position provides a critical method which takes seriously the possibility of dialogue, negotiation, and flickering. Before I elaborate on this, I shall first revisit Wynter's definition of a liminal position.

In the first chapter, I outline how Wynter defines the liminal as a position between and outside of fixed and prescribed structures of order. It is a "frame of reference" from which those who inhabit this perspective can perceive "the grammar of regularities of boundary and structure-maintaining discourses" (39). In other words, the liminal serves as an observational stance which can be both free from and freeing of categorical orders of normative societal identities" (40). In other words, it can serve as a critical position that is aware and emancipatory of fixed categories of identity. As such, I finally define the liminal position as an "outsider" position through which it becomes possible to look at and critique rigid and pervasive categories of identity. By throwing me into this perspective, *Exoskeleton & Eingeweide* provide for me a critical ground from which I can view them as works that challenge and overthrow stable identities surrounding the human body and its relationship to machines. It is as such, that the importance of Wynter's liminal perspective, and indeed this position, is its capacity to provide a view from which to *understand* a dominant/normative structure and equally to *provide the space for a discursive intervention* from this frame of reference (Paquette 2018, 209). That is, this way of looking uncovers the dynamic at play within the liminal negotiations in *Eingeweide* and *Exoskeleton*. But more than this, that the works themselves demand such a reading through their material engagement with these "apparent impossibilities. To be clear, it is the particular liminal negotiations between the metal and the flesh in each performance, expressed ambiguous and uncertain objects, occasion such thrownness in me as a commentator.

In terms of what this position does for my understanding of the performances, a few points come to the fore. Primarily, the liminal as a lens allows for me to say something about how human/machine assemblages truly trouble the boundaries of the body. The particular material enmeshment of the metal and the flesh in both works serves to underline that the body is malleable when in a relationship with machines, and crucially, we can understand *how* this occurs by means of the liminal way of looking. Indeed, this perspective can make us conscious of the way in which identities can clash by throwing us outside of them, but crucially, the implications for this. Specifically, we see *Eingeweide* present to us the dystopian reality of human dependence on machines and automated systems, and in *Exoskeleton* Stelarc suggests a new form that undermines the absolute agency of human body. Moreover, what is important about the “outside” position afforded to us by the liminal lens is that it can give the body, and indeed identities in general, the space to be dynamic and to oscillate.

Eingeweide and *Exoskeleton* throw us “into” the liminal. But this can only occur by sharing an embodied space with the works. Being “keyed” into or being in tune with the specific spaces of each performance is an incredibly significant aspect of this method because it implies that it is necessary for us to first live through them. This living through, in *Exoskeleton* and *Eingeweide*, involves experiencing the uncanny as well as the uncertainty and existential anxieties that this imposes upon us. In short, we cannot possibly understand the liminal without the uncanny in these works and we must *suffer* through them so that we can analyse them. What is truly interesting about this, is that through imposition and impotence, *Exoskeleton* and *Eingeweide* actually give us back a certain power to speak. Suffering through these works involuntarily, actually affords us an agency to analyse the liminal itself. There is something uncanny and paradoxical about the method itself. Indeed, my lack of agency as a spectator to choose from where and how I look at the pieces is precisely what affords me the agency I need to be able to critique them. It is as such that the uncanny produces a liminal reading of the performances.

Finally, the liminal position does not only allow for us to look from in-between the identities I have already mentioned, but also places us between the works themselves. As an analyst, looking at two works within the same trend of performance art, I am able to map shifts and changes inherent to the way in which the body is portrayed in its relationship to machines across time. Specifically, we can look at the different portrayals of themes like agency, vulnerability, assemblage, and live through the political and cultural changes that the works themselves respond to over any given period. Going forward, we can use the liminal lens also a productive method for dealing with change and movement between points in time.

CONCLUSION

The guiding questions of this thesis have been: *How do Exoskeleton (1999) by Stelarc and Eingeweide (2018) by Marco Donnarumma X Margherita Pevere suggest new ways for us to negotiate our relationship with technology? In what way do these works expose underlying anxieties surrounding the potential of the human body in a technological world?* A few important steps have been taken to answer this.

In chapter one I set out to define the metal and the flesh as identities through which we can think about the relationship between the machine and the human body. These definitions sprung forth from *Exoskeleton* and *Eingeweide* themselves. The aim of this chapter was to provide for a sound theoretical base from which to build up an analysis on the pieces — with specific focus on the notion of the uncanny, the liminal, and theories that worked to bring them together in the spectator.

In the second chapter, my focus was primarily on the uncanny and the way in which the “uncertain objects” that are imposed upon us work to unsettle us, and provoke underlying anxieties surrounding the dead/living body and the body’s (political) agency alongside machines. In this chapter too I worked to draw distinctions and connections between the two performances, concluding that the decisive difference between the works’ engagement with the uncanny was *Eingeweide*’s colouring of it with vulnerability and intimacy through its specific presentation of flesh/flesh and metal/flesh assemblages on stage.

The final chapter sought to do two things. Firstly to undertake a reading of liminality in *Exoskeleton* and *Eingeweide* in light of the aforementioned discussion surrounding the uncanny. And secondly, to finally shed light on the position from which we can actually analyse these works. An exposition of method only comes at the end of the thesis because just like suffering through the uncanniness of the performances, one too must first analyse them to recognise that we are being thrown into the liminal. The structure of the thesis reflects the structure of analysis. Here are some final remarks concerning this method.

The liminal position or perspective that a reading of *Exoskeleton* and *Eingeweide* has facilitated, is perhaps useful not only in looking at artistic objects that straddle between identities. The liminal, as a way of looking, helps us to continue with the project of overcoming the law of logical non-contradiction, long pursued by thinkers like Nietzsche. The liminal allows for us to be comfortable in contradiction, not only because it gives us the capacity to navigate the dynamics at play within it, but also because it takes seriously that we live as conflicts of identity. It embraces that reality and lived experience takes place *as* the movement within the threshold of states of being. It is a method that demands life. A method that is only accessible by entering into the peripheral space between fixed and static structures. In this sense, we see it is also relevant for questions concerning issues like gender or race — in any place where identities

flicker and boundaries are permeable. So whilst it is certainly a helpful method for continuing the analysis of uncertain objects in artworks, it is also a lens and a way of living through the inherent dynamism that reality presents to us.

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