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Antumbral Memory: A Psychosomatic Phenomenon in *Phantom Limb*

Ali Shobeiri

No more than two decades ago, Alison Landsberg introduced the term “prosthetic memory,” arguing how new media can provide us with vivid recollections that are not our own. Like the replicants of *Blade Runner* who possess alienated narratives, prosthetic memories do not necessarily need the physical experiences of the body in the world. The same way we possess a memory of an event after watching it in a television program, without experiencing it through our body, for Landsberg (1995, 175), prosthetic memories “do not come from a person’s lived experience in any strict sense.” In other words, these memories are inherently distanced from our corporeal experiences in the phenomenal world, thus calling into question what counts as an experience in the age of new media technologies. Although it is true that new media have radically obfuscated the construction of memory in our time, the way in which our bodies create, preserve, and discard memories still remains obscure. In order to shed light on this murky area of study, I will look at *Phantom Limb* (2013), a short animation made by Australian director Alex Grigg. *Phantom Limb*

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not only delves into the intersection of memory and corporeality but also problematizes this psychosomatic phenomenon through a very exceptional case. The phenomenon of phantom limb refers to the sensations that an amputee feels after losing a limb, which through the linkage of psychic and bodily experiences, creates the feeling as if the missing limb is still attached to the body. In Grigg's animation, however, it is not the girl who has undergone the amputation but her partner who experiences a phantom limb, as a ghostly arm that constantly chases the animated character.

To illustrate how animation can help the phenomenological understanding of memory, I will first discuss how Grigg's animation lucidly exhibits the phenomenon of "proprioception," which suggests that the brain internalizes the physical and spatial memories of a specific limb after amputation. Then, by discussing how the traumatic shock can disrupt the body schema of the person who has undergone this experience, I will showcase why proprioceptive memories fall short in explaining how a person who has not lost a limb experiences phantom sensation. Subsequently, by drawing on Jacques Derrida's conception of "specter" and Nicolas Abraham's and Maria Torok's formulation of "the phantom," I argue that in this animation the phantom limb is experienced not so much as a "being-there of an absence," but more as an absence "buried within the other." Finally, by looking at the phantom limb phenomenon through the celestial metaphors of umbra, penumbra, and antumbra, I propose that the person who has not lost a limb, but nevertheless feels this loss, experiences what I call *antumbra* memory: a memory whose ghostly shadow is felt in a person while its bodily source is twice removed from that person.

THE PHANTOM LIMB OF THE OTHER

Grigg's animation starts with the aftermath of a motorbike accident, narrated by a medical doctor asking the female character, who is sitting next to her partner in the doctor's office, whether she has been feeling any pain or discomfort after the amputation of her arm; to which she replies: "no, nothing like that." This answer surprises the doctor, since according to him, "many patients experience a phantom limb" after the surgery. After this scene, we are confronted with the perplexed gestures of the male character, who touches his shoulders in an uncanny way, as if he, like his partner, has also lost an arm. Next, we see the male character driving his

partner back home while seeing a flying arm chasing them next to the vehicle. This arm, however, is only visible to him and not to his partner. In an unraveling flashback we soon learn that on the day of the accident the male character was riding the motorbike, thus causing his partner to lose her arm due to a possible negligence. At this point, we can anticipate that the hovering arm is the phantom limb of the female character, which, instead of appearing to her, keeps haunting the male character in a multitude of disguises towards the end of the animation.

The phantom limb sensation has remained a mystifying phenomenon that is nevertheless perceived by 98 percent of amputees. Following the mutilation, bodily memories create the feeling as though the removed limb is still attached, present, and felt by the amputee like before the surgery. These sensations may be perceived for a few days to a few decades, until they completely disappear. The phantom limb commonly appears as either resting next to the body or in a posture that resembles the position prior to the amputation (Giummarra et al. 2007, 220–21). In rare cases, however, it can take on a posture that is abnormal and disfigured, like the one in Grigg's animation where it becomes a free-floating arm chasing the male character.¹ Although the exact etiology of the phantom limb remains opaque, one of the most compelling theories that can explain these sensations is the internal operations of "proprioceptive memory." Unlike vision, which acts as an external sense, proprioception refers to "the internal awareness one has of one's body in space," which "includes the recognition of limb position and the relationship of each limb to the other limbs" (Anderson-Barnes et al. 2009, 555). It is thanks to proprioception that we can drive a car without being focused on putting our feet on the pedals and placing our hands on the steering wheel because, through repetition, these movements have become a function of the subconscious mind, or "proprioceptive memory bank" (Anderson-Barnes et al. 2009, 556). And the intriguing point is that when a person loses a limb, proprioceptive memories do not stop their operations in the body but continue their work as if the limb is still intact. In other words, after an amputation

¹In her PhD research, titled "Out of sight: using animation to document perceptual brain states," Samantha Moore foregrounds the difficulty of describing kinesthetic sensations in visual terms by asking several amputees to visualize their phantom limb sensations. While Moore's research mainly focuses on developing a methodology to explain perceptual brain states when using animation, this chapter aims to develop a theory that may explain why phantom sensations can be felt in a person who has not physically lost a limb, as presented in Grigg's animation (Samantha Moore 2014, 139–53).

occurs, these bodily memories remain embedded and active in the subconscious, hence causing the body to detect the occurrence of the phantom limb.²

The presence of the phantom arm, however, is not the same as the normal representation of an arm, but as Merleau-Ponty ([1945] 2005, 94) once examined, it is “the ambivalent presence of an arm.” As he notes, to have a phantom arm is not equivalent to feeling a physical arm that one can touch and move on demand, but it is “to remain open to all actions of which the arm alone is capable; it is to retain the practical field which one enjoyed before mutilation” (94). For Merleau-Ponty, having a phantom arm means that all the corporeal functions of the missing limb (such as movements, navigations, orientations, and tactile sensations), which have been continually registered in the proprioceptive memory bank, remain active in the body. But it does not mean that the body remembers the missing limb through proprioception, as if it could detect its mutilation, but rather that it cannot forget the presence of the removed limb. In this situation, therefore, the body remains undecided about forgetting or remembering the missing limb, stuck between the somatic absence of the limb and its psychic presence. As Merleau-Ponty puts it:

The Phantom arm is not a recollection, it is a quasi-present and the patient feels it now, folded over his chest, with no hint of its belonging to the past . . . the Phantom arm must be that same arm, lacerated by shell splinters, its visible substance burned or rotted somewhere, which appears to haunt the present body without being absorbed into it. The imaginary arm is, then, like repressed experience, *a former present which cannot decide to recede into the past.* (98–99, emphasis added)

It is this indecisive present memory that keeps haunting the male character in Grigg’s animation, appearing as a flying arm in gruesome shapes, extraordinary sizes, and different situations. Instead of regressing into the past, the phantom arm has become an ambivalent “former present” that is too accessible to the psyche to become a memory; it is a situation where temporality and corporeality cannot be synchronized in a congruent way. It nevertheless remains ambiguous why the phantom arm appears to the male character and not to his partner who has physically lost the arm.

²These sensations can cause both “voluntary movements” (e.g., the phantom hand reaching out to an object) and “involuntary movements” (e.g., the phantom hand spontaneously moves to a new position) (Anderson-Barnes et al. 2009, 556).

Although without any concrete explanation, this phenomenon is usually referred to as “empathic pain” (Giummarra et al. 2007, 224), a term that inquires into how some people experience phantom sensations when they observe another person in pain.

The root of empathy goes back to the early stages of bodily development, when the body starts creating a self-representation of itself in order to understand and share feelings with others (i.e., to have empathy). According to recent neurological studies, bodily representations can be categorized into three distinct types: first, “the body image,” which includes the names and functions of the body parts and their relations towards external objects; second, “body structural description,” which determines the topology of body part locations; and last, “the body schema,” which “is the internal, dynamic representation of the spatial and biomechanical properties of one’s body, and is derived from multiple sensory and motor inputs that interact with motor systems in the generation of actions” (Giummarra et al. 2007, 223). It is “the body schema” that is in charge of survival in infancy and, more importantly, it is this mechanism that “provides a neural platform for understanding and interacting with *others* throughout life” (223).³ Through its spatial mapping and biomechanical grounding, the body schema allows us to establish ourselves as distinct entities in the world, thus acquiring the ability to understand others; that is, it provides us with the necessary aptitude for empathizing with them. After a traumatic accident, however, the very fabric of the body schema is contorted, which causes perceptual aberrations for the traumatized person.⁴

In Grigg’s animation, the couple has undergone a traumatic accident, which, due to its unexpectedness at the time of its occurrence, does not allow the experience of it to be fully delivered to consciousness. It is this “unassimilated nature” of traumatic accidents that, according to Cathy Caruth (2016, 4), “returns to haunt the survivor later on.” For a traumatic

³The main systems that contribute to the properties of the body schema are: “a) proprioceptive and somatosensory systems, b) vestibular system, c) visual system, and d) movement systems and efference copy—that is, the neural copy of a movement command that is sent to partial cortex to be mapped onto the body schema to generate expected sensory outcomes.” (Giummarra et al. 2007, 223)

⁴The most common perceptual aberrations resulting from damage to the body schema are somatoparaphrenia, which is the denial of ownership of the limb; asomatognosia, which refers to the perceived absence of the body parts; disembodiment and out-of-body experiences; and magnification and shrinking of various body parts (Giummarra et al. 2007, 223).

accident is understood as a kind of “belated experience,” which cannot be grasped when it occurs, and constitutes what Caruth refers to as a “double telling”: “the oscillation between a *crisis of death* and the correlative *crisis of life*: between the story of the unbearable nature of an event and the story of the unbearable nature of its survival” (7, original emphasis). In other words, the traumatic experience simultaneously refuses to fully retreat into the past (to become a forgetting) and cannot aptly incorporate itself into the present (to become a memory). Instead, it remains at the boundary of survival and death, memory and forgetting, where these binaries are interlaced with each other through the shock of an unanticipated experience. As Merleau-Ponty once noted:

The traumatic experience does not survive as a representation in the mode of objective consciousness and as ‘dated’ moment; it is of its essence to survive only as a manner of being and with a certain degree of generality... which lives on a former experience, or rather on *the memory of having had a memory*. ([1945] 2005, 96, emphasis added)

The male character in *Phantom Limb* is stuck in this limbo: between coming to terms with the tragic nature of the accident and accepting the fact that his body, unlike his partner’s, has survived the accident intact; between having a memory of the day of the accident and “having had a memory” of that day. One way to endure this irreconcilable state is to empathize with his partner, trying to recognize her situation and striving to feel her pain, in order to eventually identify with her loss. But having undergone the same accident, through which his own body schema has been distorted, he is incapable of empathizing with his partner; that is, his attempt of empathizing with the other remains in vain. In fact, as Landsberg has suggested, it is the very function of empathy to manifest the inherent difficulty of identification with the other. As she notes:

We might say that empathy depends less on ‘natural’ affinity than sympathy, less on some kind of essential underlying connection between the two subjects. While sympathy, therefore, relies on essentialism of identification, empathy recognizes the alterity of identification. Empathy, then, is about *the lack of identity between subjects*, about negotiating distances. (1995, 187 emphasis added)

Despite struggling to understand the other’s loss, the male character in *Phantom Limb* cannot physically sense his partner’s proprioceptive

memories but is nevertheless haunted by them. It is because, as I have discussed before, these corporeal memories are deeply internalized and embedded in the subconscious of the person who has physically lost the limb. Instead of being able to empathize with his partner, the male character is confronted with the impossibility of identification with the other. This means, although the proprioceptive memories of a traumatized person cannot be physically transferred to another person, because these bodily sensations are deeply rooted in the body of the inflicted, they can be projected onto the other through the impossibility of empathy: through recognizing the alterity of identification. Therefore, it is not the proprioceptive memories but the struggle to empathize with the other (which cannot be achieved due to the damage to the body schema) that keeps haunting the male character in *Phantom Limb*. In other words, if for the person who has physically lost a limb the phantom sensations result from the proprioceptive memories entrenched in her subconscious, for the person who has not lost a limb, but nevertheless feels this loss, these sensations come from the lack of identity between subjects: *from the impossibility of empathizing with the other's loss*. It is this unsettling condition that keeps haunting the survivor as a former present.

However, having been exposed to the shock of a traumatic accident, these detached memories do not return to the survivor only once, but multiple times through the process of repetition. It is this repetitive aspect of trauma that brings it close to what Derrida ([1993] 2006, 10) called “hauntology,” aspiring to merge ontology with haunting in order to introduce the figure of a ghost as that which is, too, marked by repetition. Having discussed how the proprioceptive memories of a person who has lost a limb can be felt in another person, in the following section I will look into the notions of “specter” and “phantom” to better distinguish between these two types of bodily memories.

BURYING ABSENCE WITHIN THE OTHER

What is communicated through the traumatic repetition, Caruth (2016, 132) has suggested, is neither the “unrepresentability” of an event nor the “unspeakability” about it, but rather a “reenactment” that demands an answer from the survived person. The traumatic repetition, she writes,

is never simply a representation nor its absence but rather the reenactment—and potential erasure—of a history that refuses recognition . . . What

emerges from the site of this potential erasure of history at the heart of trauma is likewise not a form of representation but rather *a command to respond* that intervenes historically—in the oscillation between death and survival. (132, original emphasis)

Since trauma cannot be fully assimilated into consciousness when it occurs, traumatic repetitions allow the inflicted person to, once again, attempt to register a memory that “refuses recognition.” In other words, the traumatic repetition does not mean a memory, which has been fully registered, can be remembered, but rather that a memory that has escaped recognition comes back to the survivor for the first time. It is this temporality of trauma that commands the survivor to respond. For being a “belated experience,” it is only through repetition that a trauma of the past can become a memory for the first time. This is not, however, a temporal logic with which a traumatic experience is delivered as a memory, but as Derrida has proposed, it is in fact the very logic of haunting, that is, “repetition *and* first time” ([1993] 2006, 10, original emphasis).

For Derrida, the figure of the specter is essentially a contradictory one, as it is marked by repetition of a first-time experience. Like a traumatic memory, a specter never becomes fully present, but keeps coming back to us as an anterior present. This means, a specter haunts a person because it never fully appears in time and space but incessantly repeats its coming, thus disrupting the temporal logic of experience. As Derrida ([1993] 2006, 5) puts it: “the spectre is a paradoxical incorporation, the becoming-body, a certain phenomenal and carnal form of the spirit. It becomes, rather some ‘thing’ that remains difficult to name: neither soul nor body, and both one and the other.” What causes the specter to be simultaneously one and the other is that it is never fully present nor absent, but like a “becoming-body,” it exceeds knowledge by its ontological elusiveness: the fact that it only comes into existence through the repetition of a first-time appearance. Consequently, by having repetition as its very structure, a specter always “*begins by coming back*” (Derrida [1993] 2006, 11, original emphasis). As literary theorist Colin Davis (2013, 56–58) has suggested, Derrida’s specter is “the structural openness or address directed towards the living by the voices of the past,” vacillating between life and death and never becoming fully incorporated into the present. Like a traumatic memory that does not fully integrate into the present nor vanish into the past, Derrida’s understanding of the specter disrupts the temporal logic of being, oscillating between absence and presence thanks to the

perpetual repetition of a first-time experience. As Derrida succinctly puts it, a specter is the “*being-there of an absent*” ([1993] 2006, 5 emphasis added): the fact that absence can enter the fabric of presence through its indefatigable repetition. It is this spectral presence, which is marked by the repetition of an absence, that can shed light on the phenomenon of the phantom limb. As Merleau-Ponty has put forward:

anosognosia is the absence of a fragment of representation which ought to be given, since the corresponding limb is there, (but) the phantom limb is the presence of part of the representation of the body which should not be given, since the corresponding limb is not there. ([1945] 2005, 92–93)

That is to say, the phantom arm is not the absence of a representation, as in an anosognosic condition where the patient fails to detect the presence of a limb that exists, but it is an *actual presence of an absence*. It is the condition in which the absence of a limb reveals its spectral presence through the continuous work of proprioceptive memory banks. That is how the phantom limb phenomenon manifests how proprioception can congeal absence into presence by making the amputee feel the actual presence of a physical absence. Thus, for the person who has physically lost a limb corporeality can become spectrality through the continuous repetitive operations of proprioceptive memories, whereby the missing limb is felt as the “being-there of an absent.”

However, in Grigg’s animation it is not the spectral presence of the phantom limb that chases the male character, because the mutilated arm belongs to his partner—hence the physical absence thereof. This means, the male character is not possessed by his own bodily absence and proprioceptive memories, but rather by another person’s unconscious. That is, he is haunted by the absence of the other. This is a situation that Hungarian-born French psychoanalysts Nicolas Abraham and Maria Torok (1994, 171) referred to as being possessed by “phantom, the” referring to when a patient is not possessed by his own unconscious, but by somebody else’s.

Having “periodic and compulsive return” as its structure, “the phantom” is the “unspeakable fact” that can be transmitted from one generation to the next (Abraham and Torok 1994, 172). Without being unveiled to the person who possesses it, “the phantom” is buried in the unconscious of the subject as a secret and mystery: inexplicable and inarticulable. Like a “ventriloquist” whose voice seems to be detached from its source, “the phantom” operates “like a stranger within the subject’s own

topography” without ever residing in it (173). That is to say, “the phantom” is not located in the mental landscape of the patient—like the phantom sensations that reside in the subconscious of the person who has lost the limb—but it is somehow teleported from the unconscious of another person. According to Abraham and Torok, “the phantom” characteristics are: first, it remains heterogeneous in the psyche of the person who has it; second, it pursues its work in silence; and last, it gives rise to an “endless repetition” in the subject (175). Being an incompatible, stealthy, and repetitive intruder in the mental topography of the subject, “the phantom” remains radically indescribable for the person who experiences it. It is due to its elusiveness for the subject’s mind that “the phantom” operates as an interloper buried within the unconscious of the possessed person. As Abraham and Torok put it:

The phantom remains beyond the reach of the tools of classical analysis. The phantom will vanish only when its radically heterogenous nature with respect to the subject is recognized, as subject to whom it at no time has any direct reference. In no way can the subject relate to the phantom as his or her own repressed experience, not even as an experience by incorporation: *The phantom which returns to haunt bears witness to the existence of the dead buried within the other.* (175, original emphasis)

“The phantom” thus functions as a remote and heterogeneous gap that has been first transferred to, and second buried in, the unconscious of the other. It suggests that a gap, an absence, or a loss can be transferred to another person without being known and disclosed. In other words, if the Derridean conception of “the specter” suggests that a ghost comes into existence through the vacillation of absence and presence, Abraham’s and Torok’s conception of “the phantom” suggests that that ghostly existence can be transmitted from one person to the other. It says that an absence can be projected as an absence onto the other without coming into presence.

Going back to Grigg’s animation at this point, I would like to suggest that for the male character who has not lost the limb but nevertheless feels this loss, these corporeal memories are not spectral but phantasmal. This is because for the female character the phantom sensations are deeply *localized* in her subconscious, but for the male character these sensations are *projected* onto his subconscious, operating like a ventriloquist that echoes its discarnate voice onto the other. While the former is localized through the work of proprioceptive memories, the latter is projected

through the attempt of empathizing with the other's loss. This means, if for the female character the phantom sensations mean experiencing an absence that is localized, then for the male character this means experiencing an absence that is transmitted to the other. In other words, whereas for the female character phantom sensations disclose *the being-there of an absence*, for the male character these sensations manifest the existence of *the absence buried within the other*: a phantasmal experience par excellence.

Having discussed how the phantom sensations can become spectral for the person who has lost the limb and phantasmal for the other, I will now draw on the conceptual use of shadows in order to further nuance this difference. Although hitherto there has not been a scientific theory explaining why some people experience the phantom limb of the other, I would like to discuss next how an allegorical understanding of celestial shadows can shed light on this opaque area of study.

THE ANTUMBRAL MEMORY

What is a shadow and how do we perceive it? This is the question philosopher Roy Sorensen delves into in order to shape a comprehensive philosophical study of shadows. Generally speaking, a shadow comes into being when a dark area is produced by a body that comes between rays of light and a surface. However, not every dark area satisfies the criteria of being a shadow. For instance, a shadow differs from a silhouette by its mode of connection to its material caster. As Sorensen (2008, 9) differentiates, shadows are not part of their material caster, but silhouettes have a connection to their caster. Hence, silhouettes are produced through a "casual-process," but shadows are created through a "pseudo-process" (40). For instance, if we watch the moving shadow of a blimp flying across the sky, we observe a pseudo-process, because if the shadow meets a skyscraper, the shadow is momentarily deformed, but after passing the skyscraper, it continues exactly as before. But, if the silhouette of the blimp collides with the skyscraper, both the shadow and the blimp are destroyed, because "the silhouette is the *surface* of the object that makes it visible by virtue of the light that it blocks" (Sorensen 1999, 34–36). That is to say, while the silhouette is always "part of the object," physically and casually related to it, the shadow can appear removed and detached from its material caster (34). That is why we can see the shadow of an object that is outside our visual field but not the silhouette of the same object, because

shadows can appear in the absence of their source. They signpost that their source, that is light, has been interrupted.

However, the shadow cannot exist in the absence of light, as, for instance, darkness can. It is because, as Sorensen (1999, 28) has proposed, “the shadow is a privation of light rather than a positive force.” This means, the shadow requires light to be stopped by an in-between object in order to appear in space. Thus, for the shadow to emerge, the light source does not cease to exist, but needs to be momentarily occluded by an intermediary object in space. In turn, the shadow changes its mode of beings according to the distances in between the light source, the occluding body, and the hosting surface of the shadow. It is precisely this spatial remoteness and proximity that produces different shadow types.

One of the most fascinating manifestations of shadows, which I would like to use to explain the experience of the phantom limb of the other, is the instance of an annular eclipse. This occlusion of light takes place when the Sun and the Moon are exactly in line with the Earth, but the apparent size of the Moon is smaller than that of the Sun, thus the Sun appears as a very bright ring surrounding the dark disk of the Moon. This extraordinary assemblage of celestial bodies gives birth to three distinct types of shadows that emerge in between the Moon and the Earth, namely: umbra, penumbra, and antumbra (see Fig. 1). While the umbra is the innermost and darkest part of the shadow that remains in the closest proximity to the

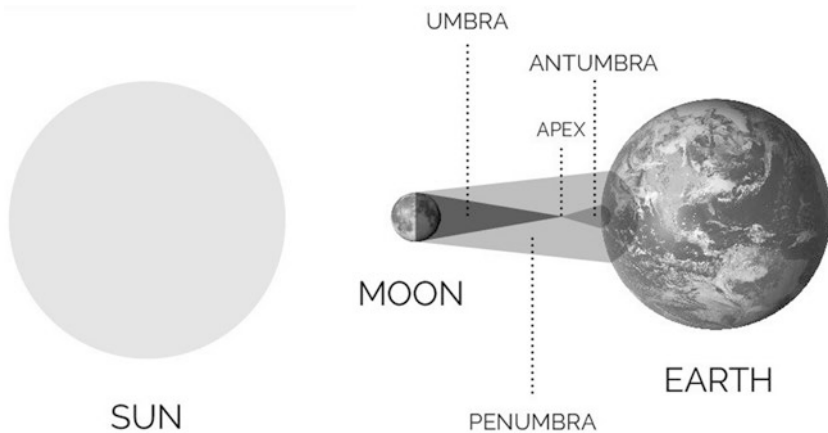


Fig. 1 Celestial shadows

occluding body (i.e., the Moon), the penumbra is the region in which only a portion of light is obscured by the occluding body. The umbra extends only as far as its apex, the point at which it dissipates due to the spatial distance between the light source and the occluding body. After the apex, the umbra turns into a second-layer shadow casted onto the Earth, which is called the antumbra. This secondary shadow appears when the light source has a larger diameter than the occluding body. But the antumbra completely disappears if the distance between the occluding body and the hosting surface of the shadow is diminished (Westfall and Sheehan 2015, 1–5). That is, the existence of the antumbra is entirely contingent upon the spatial distance between the Moon and the Earth. These three types of shadows are interlinked in an annular eclipse: the antumbra is connected to the umbra through the apex and the penumbra completely contains the other two. Although the antumbra remains within the penumbra and is marginally linked to the umbra, it is twice detached from its material source. This means, if a shadow means “a privation of light” by an occluding body, the antumbra is the privation of the privation of light. To be precise, it is the shadow of a shadow that is *twice removed* from its occluding body.

Even though experiencing the phantom limb of the other remains scientifically inexplicable, the metaphorical usage of the antumbra can demonstrate how this peculiar memory operates. As I have discussed before, the proprioceptive memories of a traumatized person can be somewhat transmitted to the other through the impossibility of empathy, as a phantasmal absence entrenched within the other. If phantom sensations are the corollary of proprioceptive memories embedded in the subconscious, suggesting that the limb has been removed from the body, these second-layer memories are forged through the extension of that corporeal removal to the other. This means, these peculiar psychosomatic memories are twice removed from their corporeal source, and like the antumbral shadow, they can only exist through the extension of distance between the two bodies: celestial in relation to shadows and corporeal in relation to memory. In this analogy, if the Moon stands for the female character who has physically lost the limb, the Earth stands for the male character who is chased by the other’s loss. If the antumbra emerges through the extension of distance between the Moon and the Earth, what I would like to call the *antumbral memory* arises from the extension of distance between the male and female character in the animation: from the impossibility of identifying with the other’s loss. Figuratively speaking, when for the female char-

acter the proprioceptive memories operate in the umbra region, for the male character these memories fall into the antumbra region, where they are twice removed from their somatic/celestial source. By the antumbral memory, therefore, I mean the following: *the psychosomatic memory whose phantasmal shadow is felt in a person while its corporeal source is twice removed from that person*. It is a memory that sepulchers a somatic absence within the other through the impossibility of empathy, through the lack of identity between subjects. It is the memory that is projected onto the other after the shock of a traumatic accident, whereby the very fabric of the body schema is contorted, and thereby the possibility of empathizing with the other is unsettled. As such, if for a person who has lost a limb the phantom sensations come from the internal functions of the proprioceptive memory, for the person who has not lost the limb (but feels this loss) they spring from the external operations of the antumbral memory. While the former is spectral and localized in its corporeal source, signaling the being-there of an absence *for* the body, the latter is phantasmal and twice removed from its somatic source, presaging the burial of the absence *within* the other. It is this memory, which cannot fully surface to the present nor sink into the past, that keeps haunting the male character as an anterior present throughout Alex Grigg's animation.

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