Anders Hougaard*

Hyperembodiment

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Abstract: The article introduces hyperembodiment as a general feature of artefacts for perception and representation and as a research agenda for cognitive semiotics and cognitive science at large. At the heart of the article, I offer analyses of two different selected examples: Hyperembodiment in a Facetime conversation and in a Snapchat message. These digital productions of appearances of social interactants are analysed with particular attention to their intercorporeal qualities and it is argued that social perception is facilitated which takes the users of visual, interpersonal communication devices beyond the corporeal limits of ordinary ways of being present for each other. Broadening the scope, I then discuss how a general focus on hyperembodiment opens new, productive avenues of inquiry. First, I relate hyperembodiment to the heterogenous field of social presence research and suggest how it may contribute to it. Thereafter I discuss hyperembodiment as a topic of cognitive semiotics.

Keywords: artefact for perception and presentation; construal; emmediation; Facetime; ground; hyperembodiment; Snapchat

1 Introduction

This article introduces hyperembodiment as a phenomenon and as a cross-disciplinary research agenda for cognitive semiotics broadly conceived. Here “broadly conceived” means cognitive semiotics (e.g., Langacker 1987, 2001, 2008; Turner et al. 2019; Zlatev 2015; Zlatev et al. 2016), embodied cognition (e.g., Biocca 1997; Cerulo 2019; Gleason 2016; Hutchins 2010; Shapiro 2011; Thompson 2010), social interaction (e.g., Hougaard and Hougaard 2009), phenomenology (e.g., Dreyfus 2009; Hougaard 2018; Klevjer 2012; Merleau-Ponty 1962 [1945]), post-phenomenology (Aagaard 2017; Ihde 2002), and in particular more recent trends in intercorporeality (e.g., Gallagher 2008; Meyer et al. 2017). The background of my endeavour here is the extent and continued increase of mediatization (e.g., Hjarvard 2008) of present-day society and the ubiquity of digital mediation down to the

*Corresponding author: Anders Hougaard, Institute of Language and Communication, University of Southern Denmark, Odense, Denmark, E-mail: hougaard@sdu.dk
level of the most intimate, interpersonal interactions. We live in a quickly expanding media and technology ecology. In this situation, it seems highly relevant to issue continued calls for such a forum as cognitive semiotics along with relevant contributing and relatable fields to bring their conceptual and methodological resources to bear on an extended and coherent attempt to grasp characteristic aspects of human experience, communication, and sensemaking. Thus, while a fragmented field of phenomenological and embodiment theory-informed techno-studies is indeed growing steadily (e.g., Aagaard 2017; Biocca 1997; Mennecke et al. 2011; Dreyfus 2009; Gleason 2016; Hougaard 2018; Ihde 2002; Klevjer 2012; Marchant and O’Donohoe 2019; Zahorik and Jenison 1998), one still finds between psychological studies and sociological questionnaires (both of which abound) a huge territory for studies of experiential, communicative, and sensemaking aspects of media and technology. And this territory grows day-by-day with the lightning-fast technological evolution. Hyperembodiment, I would like to suggest, is one phenomenon that the tide of technological development brings to the fore, which cognition research (broadly conceived) may have a lot to say about, and the exploration of which may drive other fields forward. One case in point on which hyperembodiment offers new perspectives is the media-psychological and phenomenological notions of social presence (e.g., Löwenthal 2009). And there are several ways in which the hyperembodiment research agenda may enter a symbiosis with cognitive semiotics.

In the following I will first introduce the general notion of hyperembodiment. Then in order to illustrate how contemporary communication technology brings hyperembodiment to the fore I analyse two specific instances taken from FaceTime and Snapchat communication respectively. This is followed by a discussion section in which I briefly address two issues: 1) The way in which the analyses I present relate and contribute to the issue of social presence in media and technology and 2) hyperembodiment as a topic of cognitive semiotics, which also leads to an opening between the latter and media and technology studies.

2 Hyperembodiment in the context of embodiment theory and precursors

The label hyperembodiment is intended to cover a family of ways in which technology and other artefacts may be used to create perceptions and presentations that exceed possible or typical embodied experience and appearance. That is, the constructed perception moves beyond what is facilitated by the body or what is possible under ordinary, familiar circumstances. This includes cases where the use
of some artefact intensifies, enriches, enhances, extends, and even distorts or adds dimensions to human, bodily-based experience.

The current research agenda was sparked by a strong experience I once had myself as a newcomer to Snapchat. One day, I received a message that completely overwhelmed me. I held a relatively large mobile device in my hands and opened a message with a close-up selfie that filled the entire screen and presented the face of the sender with a striking sense of enhanced appearance. I was genuinely filled with the shock of a strong sensation of holding something very lifelike in my hands that had a profound social presence and imposed itself on me intimately. Naturally, as a newcomer, I was likely to have a stronger experience of the selfie-object than a more experienced user would have. Yet, there seemed to be a lot to say about this as a particular experience created with the technology, and I set out to analyse how it is facilitated in Hougaard (2018). Here, I aim to broaden the scope and consolidate the phenomenon both as a feature connected specifically to technologically mediated, visual, interpersonal communication and as a possible general, cross-modal phenomenon of presentations and perceptions created with the use of artefacts.

Hyperembodiment may sound fancy, but it is important to emphasize that we are not primarily dealing with illusions, fictions, or artistic pyrotechnics. We are typically dealing with common artefactual or hybrid corporeal-artefactual ways of appreciating and revealing the world. To help us establish the gist of the concept of hyperembodiment as well as to situate it in a historical line of reflection on the artefacts of media, I quote Benjamin (1969) observations of the way in which camera technology has “enriched our field of perception:"

The enlargement of a snapshot does not simply render more precise what in any case was visible, though unclear: it reveals entirely new structural formations of the subject. So, too, slow motion not only presents familiar qualities of movement but reveals in them entirely unknown ones “which, far from looking like retarded rapid movements, give the effect of singularly gliding, floating, supernatural motions.” Evidently a different nature opens itself to the camera than opens to the naked eye—if only because an unconsciously penetrated space is substituted for a space consciously explored by man. Even if one has a general knowledge of the way people walk, one knows nothing of a person’s posture during the fractional second of a stride. The act of reaching for a lighter or a spoon is familiar routine, yet we hardly know what really goes on between hand and metal, not to mention how this fluctuates with our moods. Here the camera intervenes with the resources of its lowerings and liftings, its interruptions and isolations, its extensions and accelerations, its enlargements and reductions. The camera introduces us to unconscious optics as does psychoanalysis to unconscious impulses. (Ibid.: 16)

Here, we thus get a relatively early depiction of the way in which the camera constructs new perceptions and representations of the world. What Benjamin
wrote in the early twentieth century about the camera’s opening “to the naked eye” of an “unconsciously penetrated space” that “reveal[s] entirely new structural formations of the subject” is however ever more pertinent with mundane 21st century technology.

Recognizing Benjamin as a precursor, the hyperembodiment agenda moves beyond his analysis and takes as its ambition to develop a theoretical apparatus for describing and analysing a broad scope of phenomena. What these have in common is that technology or other artefacts are used to create perceptions or representations which exceed what is available to the un-augmented or un-aided body under “normal circumstances.” Hyperembodiment thus projects an agenda which includes studies of how artefacts augment, elaborate and recreate both the perceiving subjects (changing their premises and means of perception) and the perceived objects as they appear in and through media. Furthermore, such studies may reveal ways in which the environment and context of human activity change when hyperembodied effects become a part of them. That is, with the ubiquity of modern technology of representation and perception human life may be seen to enter an ecology of widespread and profound hyperembodiment which may be an important factor in setting it “quantitatively” apart from previous era’s human ecologies with less pronounced hyperembodiment. Of course, to fully develop the idea of a general and perhaps life-informing phenomenon, a whole catalogue of examples is required which must further be analysed in their full contexts. Less will have to do here. In the following sections of this article, I first illustrate hyperembodiment in action in image-based interpersonal interaction, which I claim is of interest in its own right and may contribute to social presence research. Thereafter, I make suggestions as to the broader scope of the phenomenon discussing it in relation to topics in cognitive semiotics.

The analyses presented below consider how hyperembodiment resides in the way in which interactionally engaged bodies realize affordances (Gibson 1979) for elaborations of embodied appearance and intercorporeality in communication technology. The hyperembodiment agenda is thus situated in connection to embodiment theory and intercorporeality (e.g., Meyer et al. 2017) which already affiliates the agenda with the web of theory that constitutes and surrounds cognitive semiotics (Zlatev 2015). This seems to require some specification though. In its use, “embodiment theory” refers to quite diverse work that somehow places the body and/or lived experiences in environments at the heart of whatever the object of study is. Or as Ihde (2002: xi) writes: “Bodies, bodies everywhere. Philosophy, feminist thought, cultural studies, science studies, all seem to have rediscovered bodies.” However, as authors such as Shapiro (2011) have described “embodiment theory/embodied cognition” taken as one field is highly varied and presents many substantial field-internal differences with respect to issues such as:
The role of “the mental,” for instance the degree to which meaning and cognition is constituted by or in need of “internal” or “mental” phenomena including simulations (e.g., Kok and Cienki 2017); the way in which the body may be a “vehicle” of cognition, for instance as a “source” of the “contents” of cognition (e.g., Aziz-Zadeh and Damasio 2008; Lakoff and Johnson 1999) or the way the full body may be the very locus of cognition in its whole environmentally embedded being (e.g., Thompson 2010); the role played by the environment or ecology (e.g., Cerulo 2019; Hutchins 2010; Newen et al. 2018; among many others); and so on. The current approach does not start out by taking a strong stance on these issues. However, the analytical basis of hyperembodiment (including prominently intercorporeality) involves seeing the assemblage of situations, including their bodies, objects, technology, and environment as a complex, composite locus of cognition. Moreover, the analyses below should speak for themselves to the extent that focus is on the way in which bodies, technological affordances and representations (e.g., images on devices) and the environment interact directly (not as mediated or represented by “internal” or “mental” processes). Hence, allowing for a distinction between “classic” embodiment theory which to some degree continues beliefs and concepts (e.g., a focus on “mental representation”) from “classic” cognitive science (e.g., Fodor 1975) and “contemporary” embodiment theory which is more externalist and informed by for instance existential phenomenology, we can situate the hyperembodiment agenda as originating in the latter “trend.” However, the hyperembodiment agenda is not “just” meant as a manifestation of recent trends in embodiment theory; it is meant as an extension of it. That is, if one can say that intercorporeality and embodiment theory at the outset focus on how the “naked” body has experiences with and of its environment, then hyperembodiment extends that focus to how the body that perceives and represents with, in and through “media” (technology and other artefacts) has experiences of the world.

In addition to Benjamin, other prominent scholars have more recently also proposed various kinds of hypereffects in connection to media. They include the following three. Baudrillard (1994) famously argued that media create “hyperreal” simulations of reality that are more intense and involving than the everyday life that lies outside of them. People may thus flee from the “desert of the real” by becoming absorbed by the ecstatic flux of images, codes, and models in technology’s hyperreality. Walther (1996) argues that computer mediated communication can exceed face-to-face interaction and become “hyperpersonal.” This happens through senders’ selective and optimized self-presentations and the idealized perceptions of senders that receivers read into the cues of the mediated communication. Finally, in connection to his discussion of the “progressive embodiment” that follows from the development of VR technology, Biocca (1997) proposes that social “hyperpresence” may also become possible in virtual space. This includes
technological amplification of non-verbal cues in communication which allows “inner states” to be “communicated more vividly.” It clearly is Biocca who gets the closest to forecasting the notion of hyperembodiment. Baudrillard’s work is less a technical account of artefacts for perception and presentation per se and rather a critical, existentialist account of the meaninglessness of postmodern society. And Walther’s work pertains to the psychology and interpretation of written communication in computer-mediated communication. Yet, to my knowledge Biocca has done little more than to predict possibilities in VR. He has not presented a theoretical account as such of hyperpresence. Moreover, he only considers the medium of VR. Hence though similar ideas can be found in many other places, I know of no full-fledged accounts that focus on ways in which technology or other artefacts in general takes human perception beyond the nature and limits of the perceiving, “naked” body.¹

3 Hyperembodiment in Facetime and Snapchat

3.1 From disembodiment to emmediation and hyperembodiment

Snapchat is an image and video-based instant messaging service which is particularly popular among adolescents. Previous research has shown that Snapchat is typically used for maintaining close interpersonal relationships (e.g., Vaterlaus 2016) and “bonding” (e.g., Piwek and Joinson 2016) via sharing of “spontaneous experiences” (Bayer et al. 2016) and other “personal” (e.g., Vaterlaus 2016), disclosing and sensitive content (e.g., Piwek and Joinson 2016). Snapchat is also found to be “funny” and “playful” (e.g., ibid.) and to facilitate experimentation with “presentations of self” to friends (e.g., Katz and Crocker 2015). In accounting for the popularity of Snapchat studies have pointed at the social functions and value of snapping (e.g., Makki et al. 2018; Vaterlaus 2016). Moreover, Jeong and Lee (2017) find that Snapchat facilitates a high degree of social presence and possibilities for users for applying theory of mind. In sum, it seems that Snapchat facilitates the creation of mediated experiences that otherwise belong to the intimate and private intercorporeal sphere, adding playful, creative dimensions in a safe environment.

¹ Of course when it comes to the body’s general reaching beyond itself in coupling with, integrating and experiencing the world we look back upon a solid tradition including most prominently Heidegger (1962[1927]) and Merleau-Ponty (1962[1945]) and with Clark and Chalmers (1998) and recent embodiment theory as contemporary proponents.
Studies in Facetime and other live, interactional video communication also find that they facilitate social perceptions, meaningful embodied actions (gesture, head movements, etc.) and interactional engagement (e.g., Martin-Bylund and Stenliden 2020). At the same time, studies find that such media may create positive effects socially, psychologically and practically (e.g., Bradford et al. 2012; Searles 2018; Shen et al. 2017; Zamir et al. 2018; Zouinar and Velkovska 2017), and that they may be used for a number of critical, professional tasks that demand high fidelity representation. Examples of the latter include the successful use of Facetime in medicine and healthcare for surgery preplanning (Armstrong et al. 2011), post-discharge surgical care (Gunter et al. 2016 — systematic review), diabetes healthcare (Robinson et al. 2016), cytology adequacy assessments (Agarwal et al. 2016), loneliness and social isolation within care environments for older people (Zamir et al. 2018) and even initial maternal-infant bonding when mothers and newborns are kept apart due to, e.g., caesarean section delivery or peripartum complications (Psychogiou et al. 2019).

Thus, there is plenty of evidence for the embodied, interactional, social, and perceptual qualities of image and video-based interpersonal communication media. Typically, however, media research literature labels such mediated communication as disembodied emphasizing social and perceptual shortcomings due to the lack of direct, embodied engagement. For instance, in his critical, phenomenological analysis of video-based distance learning, Dreyfus (2009) makes a central point of the way in which no shrewd use of a camera can compensate for a viewer’s lack of embodied immersion in the captured situation. Thus, for all the things a medical intern — which is Dreyfus’ example — might learn from watching an experienced doctor’s inspection of a patient via video, Dreyfus argues that:

… such distance-learners would still lack the experience that comes from responding directly to the risky and perceptually rich situations that the world presents. Without an experience of their embodied successes and failures in actual situations, such learners would not be able to acquire the ability of an expert or a master who responds immediately to present situations in a masterful way. So we must conclude that expertise cannot be acquired in disembodied cyberspace. (Ibid.: 67)

By evaluating video transmission with a focus on how good it is at representing the actual embodied experience of a scene Dreyfus in effect affiliates with a longstanding — though now challenged (see Section 4) — perspective entertained in research in computer-mediated communication (CMC). In such work, the possibility for experiencing the social presence of others is seen in terms of how good a medium is at transferring the “social cues” of face-to-face interaction (e.g., Löwenthal 2009; Walther 2011). In both the CMC studies and in Dreyfus’ analysis,
mediated communication is evaluated on the grounds that it only preserves some portion or a vain representation of comparable physical presence and copresence.

One outcome of the analyses presented below is a modification of embodiment perspectives such as Dreyfus’ that see mediated communication merely as “disembodied.”2 As we shall see, it is an important factor of mediated communication that is not just constituted by free-flowing visual and auditory representation of distant physical spaces. Senders and receivers are not just bodies at different places that perceive each other through a medium that is detached from their bodies and environments. The communication technology is materially with the user who may engage and couple with it corporeally in such a way that they create an appearance of themselves as bodies for and of the physically manifested medium.

Indeed, CMC has a range of limitations. It does not allow skin-to-skin engagement. It does not capture the full sensory array and quality we find in face-to-face interaction (e.g., Meyer et al. 2017). And a free, 3D, embodied exploration of the physical world that is represented in the medium is not possible for the receiver (Dreyfus 2009). Yet, while mediated communication in so many ways has much less to offer in terms of direct physical presence and copresence, the engagement with video-based media may on the other hand facilitate the creation of an amplified, intercorporeal experience with selected modalities that the user can modify. Below, we will see how this plays out in techno-human hybrid intercorporeality (Hougaard 2018), which is achieved through embodied practices of what I shall refer to as emmediation.

3.2 Hyperembodiment as a resonating superhead

The sequence of screenshots (Figure 1) analysed here comes from a Facetime chat between two brothers (at the time 3 and 15 years old) at bedtime for the little brother. The screenshots were produced by yours truly (the father of both boys) who held the phone for the little brother. Hence, the actual unfolding conversation was witnessed directly by the author of the paper. Nonetheless, the analysis will not claim to capture my own or somebody else’s actual, specific, first-person

2 The notion of media’s disembodiment of the user goes way back. Famous media theorist Marshall McLuhan (1978) wrote: “Any medium presents a figure whose ground is always hidden, or subliminal. In the case of TV, as of the telephone and radio, the subliminal ground could be called the discarnate or disembodied user. This is to say that when you are “on the telephone”, or “on the air”, you do not have a physical body. In these media, the sender is sent, and is instantaneously present everywhere. The disembodied user extends to all those who are recipients of electric information. It is these people who constitute the mass audience, because mass is a factor of speed rather than quantity, although popular speech permits the term mass to be used with large publics.”
experience in the situation. Below as well as in the second main analysis in this paper (Section 3.3), my aim is to describe what may generally be acknowledged as “experienceable” and “understandable” in the shoes of the participants given what we can tell from the “public” availability of the visual artefacts of the communication and what we know about the situation (which the participants know too). What I aim to analyse is what is “available in” and “inferable from” the communication from “any” user’s perspective.

The sequence (Figure 1) shows the older brother doing silly things and the younger brother responding by laughing. First the older brother stacks caps on his head maintaining a distance to the lens that allows the little brother to appreciate the tall stack. Then he makes a funny face by placing the neck strap of the lowest cap under his nose tip. And finally he moves close to the lens creating for his little brother a close-up appearance as he elaborates the fun with the silly face. Notice that just as both parties in a Facetime conversation may see the other party, they may also monitor their own appearance for the other in a smaller window integrated in the larger window (Figure 1, top right corner of each image). The older brother is clearly very conscious of how he frames himself and how the distance between him and the lens creates different appearances for the little brother.

Figure 1: FaceTime fooling around, image 1–10 (top left to bottom right).
Two main points will be made in the following: First, a scene of intimate, hybrid intercorporeality and interaffectivity (Fuchs 2017) is created through the way emmediation is established. Second, the hybrid intercorporeality becomes hyperembodied in that the big brother makes his interacting face a part of the physically present (for the little brother) technological device creating an intensity, enhancement and type of appearance that surpasses direct embodied appearance in certain, selected ways.

3.2.1 Intimate, hybrid intercorporeality and interaffectivity

Hyperembodiment often involves the appearance and elaboration of bodies or body parts. In this way, I propose, hyperembodiment both taps into (as resource) and strikingly exceeds (as topic) “typical” embodied experiences and bodily memory (Fuchs 2017) of intercorporeal encounters. For elaboration of the points in this section I integrate and appropriate Fuchs’s (ibid.) account of intercorporeality and interaffectivity. The concept of hyperembodiment is not specifically tied to Fuchs’s work but the latter provides one useful conceptual framework for describing what is at work here.

In line with recent developments in cognitive science (see, e.g., Shapiro 2011) Fuchs abandons the focus on “inner” mental life and emotional states (without denying the existence of these) for a focus on the way in which bodies perceive, interact with and resonate each other. So, in keeping with the insight of intercorporeality thinking (e.g., Meyer et al. 2017), affection goes from being considered a “state of mind” to being considered in terms of interaffectivity where “subject-bodies are intertwined in a process of bodily resonance, coordinated interaction and ‘mutual incorporation’ which provides the basis for an intuitive empathic understanding” (Fuchs 2017: 196). In other words, emotions are conceived of as “phenomena of a shared intercorporeal space in which the interacting partners are involved” (ibid.: 196).

Fuchs (ibid.: 197) identifies two components of bodily resonance in the intercorporeal space: a centripetal or affective component of being affected, “moved” or “touched” through various forms of bodily sensations (e.g., the blushing and “burning” of shame); and a centrifugal or “emotive” component of bodily action readiness, implying specific tendencies of movement (e.g., hiding, avoiding the other’s gaze, “sinking into the floor” from shame). Quoting Sheets-Johnstone (1999: 267) and Fuchs (2017: 197) sums it up as follows: in emotions “we are moved to move toward or against or away.” Thus, Fuchs elaborates, interacting bodies perform “circular interactions” of emotion:
Being affected by the affective affordances or value features of the situation (affection, impression) triggers a specific bodily resonance which in turn influences the emotional perception of the situation and implies a corresponding expression and action readiness ("e-motion"). Embodied affectivity consists in the whole interactive cycle which is crucially mediated by the resonance of the feeling body. (Ibid.:197)

Finally, Fuchs (ibid.: 206) proposes that such common and ontogenetically significant encounters can give rise to “self-sustaining interaction patterns” of a “partially autonomous” intercorporeal memory system which is “actualised and modified in every new encounter of the participating agents.”

Applying Fuchs what we can observe in the sequence of screenshots (Figure 1) is the unfolding of an embodied, interactional, affectivity cycle which involves the two brothers and is mediated by their resonating bodies and the technology. The cycle moves from the initiation of emmediated fooling around and smiling by the older brother (image 1–2) and on to displays of joint, resonating laughing affection (image 3 and on), which intensifies in the older brother’s movement closer to the lens whereby emmediated movement close to the other (the little brother) is done. Notice how the older brother’s movement closer to the lens may be seen to express an emotive effect of the intercorporeal cycle: the older brother is moved by the interaffective coupling to move closer; he is as it were “drawn in” by the loop of affection he has initiated himself.

One may object against this analysis that an account of intercorporeality and interaffectivity in the flesh (ibid.) cannot just be transferred to interaction that does not involve copresence in the flesh. But that objection would disregard how the participants are using the technology for emmediation. As noted, both participants may monitor their own appearance in the small Facetime window, and during the chat the older brother would often be seen to do just that in quick gazes upwards towards the right corner of his screen. Moreover, the older brother is an experienced video communicator. Hence, it is hardly a coincidence that the older brother always appears in focus in the video frame with his face in “interactional alignment” (Kidwell 2013). He is making himself available as a living, present face. Moreover, shifts to new activities are accompanied by relevant shifts in the framing documenting further his awareness of emmediated appearance. Finally, the older brother acts interactionally relevantly before the lens by for instance initiating visually-based interaction and responding to the little brother’s sounds and facial expressions. Thus, the older brother does not only make himself available to the little brother as a body; he also performs interactional actions for the lens as for a physically and multimodally co-present other.

Hence, we can argue that the older brother emmediates himself before the lens and microphone in a way that makes him visibly and hearably present, relevant, and immediately available as a living, technologically facilitated interlocutor. We
can say that there is corporeal presence in the medium (as opposed to disembodiment in a free-flowing image) in that selected parts of the body’s appearance become of the medium. Indeed, technological emmediation does not allow physical copresence of two bodies in the flesh, but it allows physical copresence of one body in the flesh (the little brother) and a piece of technology endowed with selected aspects of another body’s (the older brother) living physical presence, which is more than enough for the participants to establish tech-human, hybrid intercorporeal interaffectivity.

3.2.2 Hyperembodiment in a close-up

It may be held against the arguments made in this paper that extraordinary perception is a default quality of technological mediation. Thus, perception of a scene as represented in, say, a picture may always, in some sense or other, be an intensification of a scene as experienced through embodied immersion. However, such default features of technological mediation may be exploited or enhanced to a striking level. Moreover, this enhancement may pick out particular moments and aspects of embodied appearance such that “communicative meaning” is produced. And this is when we would start to talk about hyperembodiment as a user-produced artefact. Thus, we are not dealing with a category of perception and presentation that has a clear or absolute demarcation but rather with an emphatic, interactionally accomplished manifestation of “latent” effects in the medium. We can observe the variation in the sequence of pictures in Figure 1.

Images 1–2 present a head and caps in focus which endow the tactile technological device with disintegrated, selected aspects of a living, interacting body. This by itself already moves beyond the physical experience of copresence. The appearance of the other (the older brother) takes the form of a super-foregrounded head whereby the interaction gets to be all around this socially primary body part. But perhaps due to the fact that the face still sits in its own “distant” context (surrounded by its own physical environment), this does not appear as striking as the following images. Culminating first in image 5 and then image 9, the older brother starts to move in close to produce extreme closeups. Image 9 is however special and constitutes the sequence’s key example of hyperembodiment. In the following three paragraphs I elaborate:

**Body-transfer:** In image 9 the face no longer has any context “of its own.” There is no visual anchoring of it at another place, hence at that moment the medium-distance between the face of the older brother (in its own environment) and the screen as physically present in the little brother’s physical environment dissolves: The face is no longer “somewhere else” in the medium; it is “here” (with the little brother) in the medium. The face’s physical context gets to be the same
space as the younger brother’s. Hence, we may say that the face shifts bodies from being a part of a body in a distant physical space to becoming a part of a present physical body (the tactile device). The face uses the medium to transcend worlds and integrates with the technology to become a tactile avatar for the little brother.

**Extended close-up visual field:** Notice that if something that is the size of a face moves very close to one’s eyes physically, its periphery becomes part of the blurry, out-of-focus periphery of one’s visual field. In fact, the whole object or face may become blurry depending on how close it gets. In image 9, the older brother’s face must be very close to the phone (approx. 10 cm the author estimates after having reproduced the same closeness with his own phone!) and it appears to reproduce for the receiver (the little brother) the impression of the same, very short distance to another face. To the little brother, however, the periphery of the face is not blurry. All is clear. Thus, the emmediated face has extended its scope of visual clarity as compared to an extremely close-up, copresent face.

**Inherent close-up:** The emmediated distance (the 10 cm) is within what proxemics (Hall 1963) would consider the closest social sphere: intimacy, a distance usually reserved for lovers or high affection. And even though the face-on-the-device is not within 10 cm of the little brother’s face (but still rather close) it will always appear as a 10 cm-away-face since it has been emmediated so. Thus, what the older brother is producing for the little brother is a physically co-present, tech-human hybrid face which no matter where it is in the little brother’s physical environment always appears as extremely close. The face-on-the-device appears as an inherent close-up.

In sum, the hyperembodied appearance in image 9 (Figure 1) consists in the body-transferred, tactile, transcendent presence of an inherently extremely close-up, super-foregrounded hybrid face that is clear and has no blurry periphery. Echoing Benjamin (1969), we can say that outside the medium we surely do not know anything of such an intercorporeal presence of a face which breaches the embodied laws of space and perception and introduces into intercorporeal interaction an extraordinary and overwhelming intimate presence of selected, central aspects (modalities) of an interacting, affectionally coupled and resonating body. All of this is a product of emmediation with which hyperembodiment often follows.

Thus, the proposal of a general phenomenon would go as follows: By interacting corporeally with the affordances of a communicative device, its software and co-participants users may at any given moment during technologically facilitated interaction recruit parts of their bodies and their environments for the medium. The medium is thus endowed with intercorporeal qualities and selected aspects of intercorporeality may become hyperembodied in the coupling with the technology. The fact of such emmediating-and-emmediated behaviours warrant a definition of medium as something that is much more encompassing than a technological assembly of affordances (Gibson 1979) through which contact may
be established. Therefore, a medium is here seen as a dynamic, socio-technotcorporeal space of mutual attention and action possibilities. And techno-corporeal hybridity is seen to emerge as the participants endow the object of technology with aspects of their living, situated appearance through performing for it and with it. Furthermore, these aspects are then often given over to the medium in a way that has their medium presence take on an amplified form, and this is where hyperembodiment emerges. We now turn to another type of manifestation of this.

3.3 Hyperembodiment and merger of viewpoints in a “footie”

We have just seen how a face may transcend the medium and integrate with the device in a kind of avatar (“crossing over”) manoeuvre. That way emmediation

![Image: Insanely productive day]

*Figure 2: Snapchat “footie.”*
may have the effect of bringing a distant body close to the user. In other cases emmediation may provide the possibility for the user’s experience to transcend the bounds of its own body and move its vantage point outside of its own physical vicinity to merge with the emmediated experience of a sender.

Consider the image in Figure 2. A male student in his early twenties has sent a Snapchat image to one of his friends who is also a male student in his early twenties. Notice again that, as with the Facetime sequence, my aim is to describe what from a user’s perspective can generally be acknowledged as “experience-able” with the material given its “public” availability and what we know about the situation as opposed to trying to capture somebody’s (here the actual receiver’s) specific, first-person experience. What I analyse is what is “available in” and “inferable from” the communication.

The image may be recognized as a type of “selfie” in that it presents a part of the sender. However, in this case the perspective is reversed to produce a “footie” which invites the receiver not just to behold the sender but to experience with the sender what the sender is experiencing. In fact, the receiver is offered the possibility of fusing in the medium with the sender’s emmediated body and stepping into his emmediated world.

This can be considered an instance of the general, mediated move of taking on an external body (including non-living things and representations of non-living things) as experiential vantage point. Such moves vary greatly in terms of the nature and degree of identification and merger with the extra-body. One important variant here is whether, how and to what extent the extra-body becomes a new, self-governing basis for extending action, cognition and perception into its environment. Using the jargon of Merleau-Ponty, the question is whether the extra-body is a body of “I can” which engages with its environment and extends around it an “intentional arc” (see Dreyfus 1996). Gaming avatars (see, e.g., Klevjer 2012) and VR (Gleason 2016) where some digital body in a medium is entered experientially constitute a variety of such extra-bodied, virtual I-can-ness. The present example does not involve these qualities of movement, interaction and perception. It is not a proper case of avatar immersion. Instead, however, the footie presents to the receiver an extra-body which affords an emmediated, hyperembodied form of joint attention (Tomasello 1995). The following two sections unfold that claim.

3.3.1 Stepping into your legs

Notice how the Snapchat image projects an ideal perceptual posture for the receiver: Imagine holding a phone at comfortable reading-distance from the face around hip-height. This would be one likely and common way of engaging with the phone when beholding a snap or any other content for that matter. Held thus, the image in Figure 2
gets to offer an extension of the receiver’s body by completing the pattern of a full body where the torso is the receiver’s own torso and the legs are the legs in the image. However, such a posture that connects receiver’s body and the body in the image is not necessary in order to get the experience that one is invited or indeed drawn into the perspective of the lying body’s emmediated first-person perspective. No matter how one engages with the image the legs extend from the beholder’s perspective and thus may be experienced to impose themselves on the viewer as a corporeal foothold in an emmediated environment.

Visually the method is the same as in first-person computer games where parts of a body are shown from a first-person perspective. But there are some important differences in the Snapchat image: The Snapchat image receiver does not enter an anonymous, autonomous body which then becomes his own body; he is invited into the perspective of an identified other person’s emmediated body, and that other person is still presented as owning the body. Thus, the receiver is so to speak in the “passenger seat.” Passively the receiver may co-perceive what the other body as other body has selected for it to co-perceive in its own environment. However, despite these limitations the sender facilitates the possibility for the receiver to join a perspective which can only be achieved through emmediation: to experience the other body’s perspective as established by that body. That is not possible to achieve for ordinary physical bodies. Thus, what is special here is that two subjects may take on one body’s perspective. The medium engagement establishes virtual intracorporeal joint attention as a hyperembodied elaboration of intercorporeal joint attention (Tomasello 1995).

### 3.3.2 Mood co-experience

But there is still more to the footie-based hyperembodiment and joint attention. Notice that what the receiver is invited into in the footie is not just a first person, spatial, corporeal vantage point; it is also a first-person mood-mediated perspective constituted by the constellation of mood-affordances that create a general atmosphere (Fuchs 2017): The wrinkled linen, the jogging pants and the fact that the body is lying down on the bed all indicate that the emmediated body has “not really gotten out of bed yet.” The darkened state of the room and the turned-on TV which appears to be the object of unfocused viewing indicate that there is not much “constructive” activity going on. And the mildly messy state of the room indicates that there is work that could have been done which has not been done. Together these items create the mood of a body that does not intend to be up to much and which simply cannot find the energy and motivation for it.

This mood impression is strengthened and elaborated by the text through a rhetoric of irony. Evidently, the body is far from “insanely productive” as the text
bar says whereby the words confirm the visual impression ironically. What the text
adds then is the self-consciousness of being lazy, and the severity of the mood is
emphasized by “day”: it is a whole-day off-mode, not just a lazy moment, morning,
or afternoon. There is a great likelihood that the sender and the receiver will know
that they share the exact experience of such a self-consciously lazy mood. They are
both university students and for them a “productive day” will, presumably, typi-
cally be a day of studying, and a lazy day will typically be a day of not studying
what one was supposed to study (In addition thereto, there may be a feeling guilt
about the lack of productivity while that feeling is still not enough to get one
going). Such possible inferences may be based on intimate knowledge of the
snappers and general insider knowledge of being a university student.

In sum: the footie offers a selective emmediated foothold and extra-body
which invites the receiver to co-experience intracorporeally a mood-mediated
corporeal perspective on a life-situation characterized by a particular atmosphere.

3.4 A general phenomenon?

The programmatic claim of the hyperembodiment agenda is that we are dealing
with a general phenomenon, not only of modern video- and image-based
communication, but of technology, mediation and presentation as such (see
Section 5). What this means to the study of interpersonal communication is that
hyperembodiment becomes an integral part of media users’ experience and con-
strual of themselves and each other, and potentially that hyperembodiment be-
comes part of a range of interactional phenomena. Moreover, if daily interpersonal
communication is the vehicle of interpersonal relationships, it also means that
hyperembodiment becomes a part of the construals, memories, presentations, and
experiences that constitute these relationships. In Section 5, I discuss hyper-
embodiment both as an aspect of the communicative ground and as construal.

4 Hyperembodiment and social presence

Research in CMC (e.g., Walther 2011) has struggled for a long time with under-
standing and defining technologically facilitated “social presence” (e.g., Löw-
enthal and Snelson 2017). After decades of research and despite much
development the phrase remains highly polysemous and there is still much to
learn. Öztok and Kehrwald (2017) offer a recent critique of the varied field of social
presence in CMC and propose as a solution going back to the beginning of this
branch of research:
Here, we try to do our bit by reconsidering the rather understudied idea in Short et al.’s (1976) original definition: the relative salience of others. We define social presence as the subjective feeling of being with other salient social actors in a technologically mediated space. It is the sense of ‘being there, together’ when ‘being there’ does not involve a physical presence. (Ibid.: 263)

However, “merely” agreeing on a definition for an operationalization of social presence that secures comparability across studies is hardly satisfying for disciplines such as the ones surrounding and constituting cognitive semiotics, which make deep inquiries into the nature and emergence of human “meaning” and “being.” Moreover, cognitive, social, phenomenological, and semiotic approaches (sometimes coupled with neuroscience and biology) ought to be in high demand as CMC studies tend to find more and more nuances, complexities, and facets of social presence that challenge attempts at grasping the phenomenon (e.g., Oh et al. 2018). And indeed, social presence has already become a multidisciplinary endeavour. I would like to propose that there are at least four more or less overlapping and more or less interacting branches of virtual social presence studies. In this context disciplines related to cognitive semiotics constitute newer and much needed approaches, and hyperembodiment makes specific contributions:

Computer-mediated communication (which is rooted mainly in [social and cognitive] psychology) (e.g., Walther 2011) typically defines and studies social presence as individuals’ conscious and reportable, subjective experiences. Self-report surveys are often used to assess the degree of felt social presence. There have been many and quite varied definitions of social presence. They include Short et al.’s (1976: 65) original “degree of salience of the other person in the interaction and the consequent salience of the interpersonal relationships,” variations of the feeling of “being there” and “being real,” the ability of users to “project” themselves “socially and affectively” (Löwenthal and Snelson 2017), and many more. Traditionally, CMC research has tended to focus on social presence as a property of the medium inducing various degrees of “techno-determinism.” Thus “cues-filtered-out” theories (Walther 2011) have seen mediated communication as a technologically reduced form of face-to-face communication. However, there has been much development over the years, so that influential theories in various ways now include factors such as time, users’ use of a medium’s affordances, users’ inclination to feel presence and ascription of meaning and context (understood in different ways) (e.g., Löwenthal and Snelson 2017; Oh et al. 2018; Walther 2011). Thus, mediated communication now tends to be seen more as a mode of communication to be understood in its own right rather than as some sort of reduced face-to-face communication.

Embodiment approaches to social presence (e.g., Biocca 1997) take as their point of departure the virtual body (avatar) and apply insights from, e.g., models
and theory of social, embodied activity and interaction, developmental psychology, embodiment theory (e.g., Shapiro 2011), some phenomenology, and social cognition (e.g., Tomasello 2003) to describe how, for instance, avatars are recognized as “other” and how social “selves” are perceived in other avatars as well as in one’s own (e.g., Mennecke et al. 2011). The reason why “embodiment approaches” is listed here as a separate branch that is distinct from intercorporeality/phenomenology (below) is that models such as Mennecke et al. (2011) “Embodied Social Presence” and Biocca’s (1997) “progressive embodiment” maintain a number of assumptions and dualist or rationalist conceptions that intercorporeality, as part of their main endeavour, strives to avoid. One such classic concept is theory of mind, which Mennecke et al. (2011) propose is “at the heart of Social Presence Theory.”

Social interaction approaches study and define social presence as a practical, interactional accomplishment. A high degree of social presence may for instance here be equated to the establishment in a virtual world of “interlocking involvement obligation” where all parties to the interaction cooperate to “honor the selves projected by the other participants” (Goffman 1967: 105, quoted in Schultze and Brooks 2019: 713) and to support “the other getting and staying involved in the joint activity” (ibid.). This branch has a rich tradition to build on in terms of for instance conversation analytic and ethnomethodological inquiries into such phenomena as the initiation and termination of interaction (e.g., Goodwin 1981), “participation” (e.g., Goodwin 1981), and “availability” (Kidwell 2013; Rasmussen et al. 2019).

Parallel to the social interaction branch which sees social presence as yet another arena for the practical management of co-presence and interactional engagement, intercorporeality/phenomenology approaches tend to see social presence as yet another arena for the subject-body to “have a social world.” This general issue may be directed at the virtual world in terms of for instance exploring, as we have seen (Section 3.1), to what extent a medical student may achieve a “maximum grip” (Merleau-Ponty 1962 [1945]) on a scene and skilful coping in connection to learning from a live, video-broadcast patient consultation (Dreyfus 2009); how engineers and gamers attempt to adapt to the “impaired visual worlds” of social “digital spaces” by shifting across modalities using “spoken or written language instead of embodied signals” or “transcribing” digital “visual information” into oral language (Keating 2017); or how different types of avatars are “entered” by gamers relying the subject body’s “I can”-directedness towards the world and the body’s schemas, intentionality, and extensions (Gleason 2016; Klevjer 2012). Moreover, studies in this vein may consider the possibilities and role of “immanent intercorporeality” (Stuart 2017), “compresence” (Meyer et al. 2017), and interaffectivity (Fuchs 2017) as in this article in virtual space. To sum up: the big issues that lie ahead for intercorporeality/phenomenology is how
the body takes on a social virtual environment, how this is experienced, and how this differs from taking on a physical, social environment.

The hyperembodiment research agenda is multidisciplinary. The development of the agenda has been informed by social interaction, embodiment theory, phenomenology and intercorporeality. As already mentioned, and shown it mainly adheres to the anti-rationalist and anti-(mental)-representationalist emphases of intercorporeality as well as their corporeal focus. At the same time, hyperembodiment takes issue with other intercorporeal or phenomenological analyses of virtual presence which maintain simplistic and reductionist notions of “medium” (see Section 3.1). The contribution of the hyperembodiment research agenda to the topic of social presence thus includes: Its conceptual apparatus (e.g., emmediation and hybridization or techno-corporeality) and its discovery and study of productions of hyper-perception and hyper-presentations which it presents as candidate artefacts of “hyper-presence.” The latter may provide one order of explanations of why some media practices are perceived as being of high social, psychological and practical value (see Section 3.1).

5 Hyperembodiment and cognitive semiotics

The hyperembodiment agenda includes a range of issues which overlap with central components of cognitive semiotics. Among these are social interaction, discursive meaning construction (e.g., Brandt 2020; Brandt and Brandt 2005), the analysis of cultural artefacts and construal (Langacker 1987). The cognitive semiotician may then see the hyperembodiment agenda as one entry into the distinct spheres of technological environments and medium spaces, and as an entry which like so much other work in the field (see, e.g., Zlatev et al. 2016) is also informed by phenomenology and embodiment theory. In the following, I will discuss two ways in which the hyperembodiment agenda may claim to latch onto and extend existing cognitive semiotics studies: one concerns the construction and constitution of the very ground of social interaction and the other concerns construal.

5.1 The hyperembodied ground

Cognitive semiotics is quite different from the modern fathers of the study of signs (e.g., Saussure 1966) with its general emphasis on the integral and constitutive role of the discursive situation in the construction of meaning and the emergence of signs, symbols, and grammar (e.g., Zlatev et al. 2016). For instance, in presenting
his take on a usage-based linguistics (see also Tomasello 2003), Langacker (2001) elaborates “cognitive grammar” through the introduction of a cognitive notion of “usage event” from which linguistic units are seen to be abstracted. Central to Langacker’s account are the “ground” (G) and the “current discourse space” (CDS). In Langacker’s own words:

The conceptualization inherent in a usage event includes the interlocutors’ apprehension of their interactive circumstances and the very discourse they are engaged in. It thus incorporates their apprehension of the ground (G) and the current discourse space (CDS). The ground consists of the speech event, the speaker (S) and hearer (H), their interaction, and the immediate circumstances (notably the time and place of speech). The CDS is defined as the mental space comprising those elements and relations construed as being shared by the speaker and hearer as a basis for communication at a given moment in the flow of discourse. The ground and the CDS are among the cognitive domains capable of being evoked as the conceptual base for the meanings of linguistic elements. (Ibid.: 144)

A similar elaboration of cognitive theory is found in Brandt and Brandt’s (2005) semiotics version of “conceptual integration” (Fauconnier and Turner 2002). Brandt and Brandt (2005) propose a “semiotic space” which is the base and anchor of “meaning construction” in social interaction. The authors explicitly relate the notion of a semiotic base space to Langacker’s notion of “ground” but proceed to describe the base space in distinct cognitive semiotics terms as constituted by “at least three types of determinations” (Brandt and Brandt 2005: 20): “an inner sphere of circumstances pertaining to the expressive act as such; this sphere is contained in a larger sphere comprising circumstances that characterize a specific situation as framed by the participants; and finally an outer sphere comprising such conditions that are universally given in the human phenomenological life-world (or pheno-world)” (ibid.: 20).

The point about hyperembodiment in this context is that it can be seen to introduce a certain order of constitutive elements of the ground in all “spheres.” Thus the “expressive act as such” gets informed by the hyperembodied presentation and perception of enunciators; the framing of the “circumstances that characterize a specific situation” gets informed by hyperembodied ways “being with each other,” and the pheno-world changes as the horizon of possibilities for action and experience that every moment is imbued with extends through the affordances of technology to include hyperembodiment. However, it is only possible to fully acknowledge and take into account these elaborations if paying special attention to (em)mediated appearance as a topic in its own right. For instance, cases where a person on TV addresses viewers as if they were physically co-present has been analysed as “blended classic joint attention” (Turner et al. 2019). This may already be considered hyperembodied, but very often such mediated reproduction of
copresence goes much further. Consider for instance the news anchor in Figure 3. Not only does he invite “eye contact” (by looking into the lens of the camera); his visual appearance is also designed (through, e.g., blurring of the background and use of spotlights) to make him stand out in a way that surpasses “natural” reality and supports the sense of communicative transcendence of the medium. It is as if he stands out from the screen; he appears as hyperembodied.

Thus, one can argue that due to media and communication technology the agenda of integrating a “semiotic base space” in the cognitive study of meaning construction entails integrating also the phenomena of emmediation and hyperembodiment. And this in turn means that other aspects of the mediated action and experience naturally follow, including presence. In other words, media studies enters cognitive semiotics and cognitive semiotics enters media studies.

5.2 Hyperembodiment as construal

In addition to being a (defining) aspect of the environment (e.g., ground, space) that human activity, perception and meaning construction takes place in, hyperembodiment may also reside in depictions of the world. This takes us to the heart of cognitive approaches to meaning. In connection to language, Langacker writes:
An expression’s meaning is not just the conceptual content it evokes—equally important is how that content is construed. As part of its conventional semantic value, every symbolic structure construes its content in a certain fashion. It is hard to resist the visual metaphor, where content is likened to a scene and construal to a particular way of viewing it. (Langacker 2008: 55)

I would like to suggest that hyperembodiment may be seen as a general type or aspect of construal (supplementing such broad classes of construal as “specificity,” “focusing,” “prominence,” and “perspective” [Langacker 2008]) which means that the hyperembodiment research agenda is potentially of relevance to a wide range of topics in cognitive semiotics.

Here then, I grant myself the theoretical leeway of situating the above two cases of hyperembodiment in modern communication technology within a grand perspective involving media, art and technology. Doing so, I wish to indicate tentatively the perspective that hyperembodiment is nothing short of an ancient feature of material representation, construal, and perception that by way of smartphones and other contemporary technology has become an integral part of day-to-day interpersonal relationships. Precursors such as Benjamin may inspire such a big-scale agenda:

> During long periods of history, the mode of human sense perception changes with humanity’s entire mode of existence. The manner in which human sense perception is organized, the medium in which it is accomplished, is determined not only by nature but by historical circumstances as well. The fifth century, with its great shifts of population, saw the birth of the late Roman art industry and the Vienna Genesis, and there developed not only an art different from that of antiquity but also a new kind of perception. (Benjamin 1969: 5)

This sweeping, historical perspective on the relationship between societal and cultural change, the development of artefacts, and perception in many ways prefigures intellectual currents which would later be recognized as “media ecology” (Strate 2008) or “medium theory” (Meyrowitz 2008). Broadly conceived, these fields study how media and technology affect human life, including communication, perception, thinking, understanding, emotion, social and political structure, and more. What Benjamin’s, media ecology, and medium theory teach us is that the micro-processes of human-technology interaction may become manifest in historical, cultural characteristics and macro-structures. Inspired by this we may ask if hyperembodiment is a candidate for a general phenomenon of human cognition and perception which is both shaped by and shapes the self-made, human ecology. Indulge me:
5.2.1 Archeology

The meaning of archeological material is often contested and that warrants caution. However, one can still find grounds to pursue the idea that even prehistoric artefacts may constitute deliberate, hyperembodied construals of the world. The oldest known representations of the human female form are the so-called Venus figurines from the Upper Paleolithic. The relatively small (typically 6–11 cm high) figures have been found all over Europe. Their anatomical form is striking. They are voluptuous nudes with exaggerated breasts, hips, stomachs and pubic areas, while other parts of the body, such as the face, arms and legs are absent or downplayed.

Their meaning is disputed, but many theories involve seeing them as what I would call hyperembodied ways of perceiving the female form. For instance, Dixson and Dixson (2011) suggest that the figurines were produced by hunter-gathers during a harsh climatic period where “Perhaps only a minority of women survived to become multiparous, middle-aged, and corpulent, as depicted by many of the figurines” (ibid.: 9). Thus, the figurines may have been expressions of “hoped-for success in the very difficult struggle to survive, as well as to reproduce” (ibid.: 9). In other words, following this theory the figurines may be seen to highlight through exaggeration and distortion (downplaying or absence of other body parts) of form what women “missed” but might gain given better ecological conditions. Features that are inherent to women are enhanced way beyond their current condition and beyond most or any plausible scenarios, and this allows the beholder to appreciate a hyperembodied, female “potential” or “essence” in the actual women of the time.

Another famous case of Paleolithic artefacts is cave paintings. To the untrained eye these may often look like randomly distorted representations of the world which could be a product of the artist’s lack of “schooling” and trouble with the material. However, many scholars would dispute such assertions. For instance, Cheyne et al. (2009: 100) argue that “figurative depictions” of large mammals during the Upper Paleolithic often show “evident technical skill and intimate knowledge of the subject matter.” Moreover, they provide evidence in connection to “two commonly depicted species” for the hypothesis that “certain of these distortions are neither errors nor idiosyncratic variations, but systematic deviations from veridicality in the form of caricatures consistent with cognitive principles of graded typicality and contrast in categorisation.” Hence, Cheyne et al. (ibid.: 100) propose, “the first apparent conventions of representational art by humans were informed by basic cognitive-perceptual principles of categorisation.” We may add to that analysis the notion of hyperembodiment as construal
which systematically depicts and highlights perceived qualities in the large mammals — similar to caricature drawings.

5.2.2 Art

So far, we have considered only the enhancement of form. However, Ramachandran and Hirstein (1999) suggest that artists may exploit the so-called “peak shift” effect of enhanced stimuli or caricature — whereby a perceptual or behavioural response is enhanced due to enhancement of the stimuli — along for instance “colour space” or “motion space.” As an example, they discuss the “striking examples of the plump, cherub-faced nudes” that French painter François Boucher (1703–1770) is famous for. A case in point is the painting Nu sur un sofa ou Odalisque blonde (1753). Ramachandran and Hirstein (ibid.: 19) write: “Apart from emphasizing feminine, neotonous babylike features (a peak shift in the masculine/feminine facial features domain) notice how the skin tones are exaggerated to produce an unrealistic and absurd ‘healthy’ pink flush.” Once again, we are dealing with a hyperembodied enhancement of a feature that is both inherent to and characteristic of the represented object.

5.2.3 Modern technology

The development of technologies of perception has exploded over the last couple of centuries. Industry, science, journalism, entertainment, virtually every corner of human life has developed hand-in-hand with technologies of perception and presentation. This revolution of perception has made it possible for us to scrutinize things that are way beyond an ordinary human scale grip. Examples include everything from slow-motion in coverage of sports events to extreme close ups and POV in movies, avatar perspectives in robotic machines, visual enhancement of news anchors on TV, and camera-assisted work processes. The list is endless and it is important to notice that the explosive technological broadening of our experiential horizon is not just a question of enhancing human perception; it is just as much a question of creating a new ecology of perspectives including talking-head screens, glaciers that move at walking pace, inherent close-up perspectives in photographs, essences in caricature, and microorganisms — take for instance the way in which the COVID-19 virus particle has become part of our everyday world of visual phenomena. All can be considered examples of hyperembodied construal.

This brief tour projects an ambitious research endeavour which takes us far beyond the local and specific circumstances and details of hyperembodiment in digital, visual, interpersonal communication. We may begin to see a great variety of hyperembodiment in a great variety of contexts. In this perspective the two local,
interactionally situated items of perception analysed above can be seen as the
techno-evolutionary tip of a human-made, experiential iceberg.

Historically and culturally a whole family of hyperembodiment perceptions and presentations may be seen which are ubiquitous products of the human development of various artefacts.

In fact, one could argue that it is the combination at the level of interpersonal communication of intercorporeality and the longstanding culture of hyperembodiment that makes Snapchat and Facetime such highly potent and useful media. With modern media spectacular effects of advanced technology become mainstream. The research endeavour that is projected here may thus aim to study hyperembodiment in its many historical and cultural variations and look for evolutionary trajectories which connect the development of technology and other artefacts with a development in human perception and cognition and the many fields of human activity that are involved. Moreover, it is an endeavour which strengthened by the concepts and analytical methods of cognitive semiotics would represent a new way of studying the human media ecology (see, e.g., Innis 1964 [1951]).

6 Concluding remarks

My aim for this article was to present hyperembodiment as both a specific phenomenon of video-based interpersonal communication and as a general phenomenon and multidisciplinary research agenda for the future of cognitive semiotics and cognition research broadly conceived. My motivation for doing so is that while embodied cognition, social cognition, and phenomenology have indeed found their way into theory and analysis of technology (e.g., Aagaard 2017; Ihde 2002), digital media (e.g., Dreyfus 2009; Hougaard 2018; Keating 2017; Jeong and Lee 2017; Marchant and O’Donohoe 2019), telepresence (Biocca 1997; Gleason 2016), and avatar (e.g., Klevjer 2012; Mennecke et al. 2011), the effort remains rather scattered and there is still some way to go to before we have the kind of broad, deep, coherent milieu and research field which seems warranted by the degree of mediatization (e.g., Hjarvard 2008) of present day society. New technologies are introduced at staggering pace and in their wake follow new arenas of communication, sense-making, being and presence. Moreover, the very state of always having a variety of technologies to choose from to accomplish everyday tasks — what Madianou and Miller (2012) refer to as “polymedia” — itself becomes a phenomenon that testifies to a progressive technology immersion. Cognitive science, including cognitive semiotics, may have a very important role to play in the continued effort to understand human life with technology.
My own current contribution has included the introduction of hyperembodiment in private, interpersonal, visual communication. My analyses have involved the application of intercorporeality theory and the introduction of the concept of emmediation. Moreover, to illustrate how a branch of study that is anchored in embodiment theory, phenomenology and intercorporeality may drive other fields of media and tech study forward I have related hyperembodiment to social presence research. Finally, I have discussed how the hyperembodiment agenda may latch onto and elaborate cognitive semiotics.

The discussions above have all focused on visual effects and to some extent tactile effects. However, it is my contention that hyperembodiment is a multi- and cross-sensory phenomenon, and artefacts that evoke other senses require equal attention. To mention but a couple of examples: When going through speakers, a voice may be experienced as liberated from the voice-producing body-anchor to become a hyperembodied part of the space surrounding the listener. The voice may thus embed the listener in the same way that music may be experienced as surrounding space. This effect is explored in the movie Her (2013) where the male protagonist falls in love with the virtual AI assistant of his computer’s interactional operating system which is embodied in the female voice “Samantha.” Another example of auditory hyperembodiment is ASMR (autonomous sensory meridian response) videos where the technology is sometimes used to produce an enhanced whispering voice (e.g., Klausen 2021). Haptics is also an area to look into with, for instance, haptic feedback in virtual reality, video games, and smartphones.

Future studies may take on a great variety of perspectives and methods. In fully attempting to understand the reality and role of hyperembodiment in interpersonal communication — e.g., as part of the establishment of the discourse ground — a combination of interactional analysis, observation and interviews may be required. Studying hyperembodiment as construal may also include observation and interviews as well as controlled experiments that attempt to isolate the effects of for instance enhanced presentations. Moreover, hyperembodiment may exploratively be worked into analyses of art, technology and other artifacts as a way of elaborating descriptions of non-deigetics, style conventions, affordances, design, genre features, and much more.

Anders Hougaard is an associate professor at the Institute of Language and Communication at the University of Southern Denmark. He is a Ph.D. in social interaction and cognition. For over 20 years, he has done research and published work on social interaction, cognition, mediation, and embodiment.
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