Revisiting the Media Modalities Model: Critical Thoughts and Suggestions

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Abstract

The intermedial field of inquiry studies the relations between media and human interaction with them in perception and communication. Elleström, with his media modalities model, demarcates the perception of media products according to four modalities (material, spatiotemporal, sensorial and semiotic), while fundamentally distinguishing between semiotic and presemiotic modalities. This article systematically addresses questions, aporias and potentialities emerging during intermedial analysis, as well as indicates basic critical intermedial areas that would benefit from further research and discussion. It revisits the semiotic/pre-semiotic distinction in light of an ecological-performative-phenomenological approach, by challenging the primordiality of materiality in the perception of media products, grounding spatiotemporality in the encounter between the perceiver and the media product and highlighting the making of senso-semiotic making of meaning onthe-go, in real-time. A subjective, embodied, performative perspective from within the dynamic field of the encounter between the perceiver and the media product is proposed, instead of the point of view of an objective observer located outside. The compulsive, obligatory "correct" meaningmaking, that involves the coupling of objective entities or events with inner, subjective interpretations, gives way to a broader understanding of semiosis. where pre-interpreted, dynamic signs are abandoned for a dynamic and interactive semiotic functionality.

Keywords: intermediality, media modalities model, medium theory, ecology of perception, semiotics, cognition

Prologue

Intermediality appears to be a relatively new field of inquiry, acknowledged by scholars as having sprung out roughly around the mid-1980s, when a group of German arts and media studies specialists-researchers coined the word

Intermedialität (Larrue. 2016). and was more widely established by the 1990s (Elleström, 2010). Intermediality's alleged theoretical roots include intermedia (Bennet, 1990), intersemiotic translation (Clüver, Eco, Schober and Queiroz, indicatively, all in López-Varela, 2023) as well as "aesthetics, philosophy, semiotics, comparative literature, media studies interart studies" (Elleström. 2021. 9). Although intermediality may be considered as a rather novel field of inquiry, it carries on several discussions that are also explored in parallel by other fields and disciplines, such as semiotics, narratology, communication and media studies, media ecology, comparative literature, film and television studies, theatre and performance studies. But, intermedial theory, although in the early stages adopted "neohistorical analysis, iconography, semiotic analysis, ethnomethodology, poststructuralist, gender or postcolonial approaches" (López-Varela 2023), coined its own sub-fields of inquiry, problematics and methodologies. At the theoretical periphery of intermedial studies, several theoretical approaches and concepts were developed, such as Auslander's mediatization (1999), Bolter and Grusin's (2000) remediation (2000), and Jenkings' (2006) media convergence, which had a considerable impact on intermedial theory. Lately, new discussions emerged within intermedial studies, responding to synchronic discourses about the Anthropocene and ecocritism (Bruhn and Salmose. 2023). truthfulness in media (Schirrmacher and Mousavi, 2024), the digital turn² and established certainties (Timplalexi, 2023; Timplalexi and Führer, 2023). This polyphony and rhizomaticity of intermedial studies, in terms of theoretical origins, siblings and progeny, partly explains why there are multiple "intermedialities" (Clüver, 2007; Elleström, 2010; 2021; Kress and Van Leeuwen, 2001; Kattenbelt, 2006; Rajewsky, 2002), to name but a few.

A set of robust, thoroughgoing and enduring intermedial voices comes from Lars Elleström and the IMS intermedial group in Sweden. Elleström demarcates intermediality in a broad sense as regarding "relations among (media products belonging to) dissimilar qualified media types" (Elleström, 2021, 72), while Bruhn and Schirrmacher (2022) situate under the intermedial umbrella the comparative interaction between

media types and products and the changes when there is a process of transportation from one media type to another (3), as well as "the ways in which objects and phenomena can function as media products" (9). In effect, members of the IMS intermedial group nowadays develop their own theoretical approaches within intermedial studies, while also enhancing the Elleströmian legacy. For Elleström has indeed proffered an inspired, rich and coherent intermedial theory and terminology (2010; 2021, plus multiple chapters and articles in journals), by developing intermedial classifications (i.e. basic or qualified media, media types, media products, technical medium of display), putting forward the media modalities model (2010; 2021) and the medium-centered model of communication (2018, 2021), while foregrounding medial transformative processes, such as transmediation.

Elleström's take on intermediality, especially through his media modalities model, notably aids the intermedialist tackle the demanding and multifaceted intermedial field of inquiry with a perspective of order and abstraction. The researcher, tormented for some time by various issues cropping up during attempts at juggling with theoretical and empirical aspects of the media, observes, dispersed in Elleström's *oeuvre*, slots for questioning and challenging certainties.³ Elleström (2021) himself sporadically opens up discussions and relativises his positions, enhancing and nurturing such slots for potential re-evaluation.⁴ These slots often feel like threads that, if picked up, could lead to discoveries of new intermedial territories, new alliances with other fields of inquiry and new methodological tools.

This article, a theoretical utterance emerging from a dialogue with Elleström's texts (that, despite their admirable coherence, are considered to be open to such a revisiting perspective), comes in the form of a self-reflexive essay, in response to the assumed potential of his media modalities model (2010; 2021). It aspires at summing up most of the ideas, challenges and suggestions the intermedialist notes down, while making use of it. Obstacles met and pitfalls observed during intermedial analysis are highlighted, echoing a deep need to clarify and possibly revise points in intermedial theory,

as Elleström (2021) had started doing, judging from his *virtual* spheres model (31), which was left under development.

As technological aspects of intermedial theory are not part of the problematic, thus not discussed here, an ecological (Gibson 1979/2015), embodied-performative (Schechner, 2002) and phenomenological (Merleau-Ponty, 1945/1962) approach is embraced, rather than a post-phenomenological one, at least as outlined by Ritter (2021); a starting point that supports that a media type or a media product becomes dynamically such through a perceiving process in relation to a perceiver, rather than existing as a thing-in-itself, in its own right.

1. The media modalities model: an introduction

The major axes Elleström's intermedial theory proposes when approaching media products (Elleström, 2021) are four modalities (46), as well as two qualifying aspects, the contextual and the operational ones (60). The modalities include the material modality, which encompasses different states of matter - liquid, gas, plasma, organic and inorganic matter (47); the spatiotemporal modality, "a four-dimensional spatiotemporal entity consisting of width, height, depth and time" (48). The sensorial properties of media products "must be perceived by one or more of our senses to reach the mind and trigger semiosis" (49). Since "all media products have semiotic traits, by definition" (49), the semiotic modality serves as a "frame for understanding representation" (ibid). The general purpose, use and function of media (60) is addressed through the operational aspect, whereas the demarcation of media in specific historical, cultural and social circumstances through the contextual one (ibid.).

2. The modalities revisited

Although appearing to be inspired by the ongoing phenomenal interaction between the perceiver and the media product in real-time, a closer, scrutinizing look at Elleström's media modalities model unveils a primal scientific adherence to an objective expert stance *outside* the field of interaction under observation. Despite indications this expert observer is

immersed in a first-person perspective, as with the "traditional sculpture" example (2010, 23), such an observer exercises and expresses certain degrees of knowledge *prior* to denoting the media product. By contrast, embodied cognition, said to be welcomed by Elleström (2021, 12), as situated within the dynamic field, would coherently instead propose a subjective perceiver's point of view as a starting point, understood as embedded within a larger whole. This subjective point of view, sporadically met in Elleström's writings (such as whenever he relativises suggestions that may sound dogmatic to the reader),⁵ could be developed and enhanced with an ecological-performative-phenomenological approach to intermediality.

In this section, the media modalities are revisited and the interrelating dynamics between them are underlined, taking into account a few ignored and controversial points found available in the model.

3.1. Material modality

Elleström (2010, 15), remaining loyal to abstraction, although initially acknowledging that, for human beings, nothing exists outside perception, does not pursue this path in his analysis. By so doing, he misses the chance to question the pre-given character of materiality, exactly because he suggests a materiality known *prior* to sensoriality and semiosis. And this is a thread we are picking up here and now, questioning whether the "latent corporeal interface of the medium" (Elleström, 2010, 17) *exists* or *becomes* in the eyes of the perceiver.

Elleström's point of departure on media products is that the latter pre-exist our perception. This becomes evident by the very primordiality of the material modality in the media modalities model, instead of, for example, the sensorial one. However, when a perceiver, for example, experiences a surface, an object, a human figure (Elleström, 2010), organic or inorganic matter (Elleström, 2021), or the exact sound qualities that make them enjoy a Bach's fugue, they have to come to terms with various light levels and decibels: they may experience irritation from ambient light while seeing a painting in an exhibition hall or misophonia while deciphering a tune.

The material modality is thus revealed as primordial solely through the eyes of an omniscient observer, positioned outside the perceptual interaction dynamics, and not through those of one situated *within* the dynamic field.⁶

Indeed, the very perception and experience of any entity or event means some basic meaning-making is already at work. Elleström (2021)actually acknowledges this distinguishing between the visual and the iconic (Elleström, 2021): "whereas the visual is about using a specific sense faculty (whether this is connected to iconic, indexical or symbolic signs), the iconic is semiosis based on similarity", he notes (45). Thus, it is the sensorial that grants "access" to the semiotic, while any understanding of the material is inscribed within the semiotic continuum. Otherwise, how can anything material be categorized as, for example, two-dimensional (2010) or organic (2021)? A certain level of meaning-making, involved in recognition is here implied that remains rather latent. The perception of an entity as a surface or a human figure, liquid or plasma, inorganic or organic matter, cannot be void of semiosis already. What is a surface or a three-dimensional object without basic geometrical knowledge, or, how may a sea rock covered with tiny micro-organisms be classified as purely organic or inorganic matter, especially as the element of carbon is met in both? When encountering media products, are we not already in the domain of *semiosis*, for example, as soon as we recognise a statue as such? Several undecided or a failed automatic recognition moments of any entity or event in perception, or even moments of indeterminacy (Pepperell, 2006), outside individual or collective comfort zones, empirically testify that the primacy reserved to the material modality over the sensorial and the semiotic could freakingly creak.

In general, in terms of the material modality, it feels like the model is based on a gradual reveal of an alleged medial material essentiality, as if there is a painter that sketches actuality in layers. First appear to come the lines, straight, crooked or curved; shadows or lack of them reveal the three or two-dimensionality of an entity; its non-staticity may testify towards the shape of an animated human being, an animal or an insect. The organic and inorganic matter categories fill in the gaps, whereas solid, liquid, plasma and gas states of matter complete the material mode. A short parenthesis: in the name of consistency in an intermedial analysis, it could be argued that colour and material should be part of the material modality too. Materials, on one hand, expand in a vast array, varying from wood, plastic and marble to nowadays fabricated nanomaterials. A mention to the notion of the material could be introduced in the material modality, without the obligation to list excessively potential materials. The second notion that does not reach the material modality at all is colour; when we see a line, and recognise an entity as two dimensional, for example, we automatically perceive it as black, grey or green. The material modality could benefit from including colour too, which, as far as we know, is a specific range of wavelengths within the rather narrow visible spectrum; light waves have, in fact, been included right from the start in the list of the material modality (2010). Hence, not only the primordiality, pre-sensoriality and pre-semioticity of materiality may be questioned, but also the category of the material modality appears to be selectively restricted, as it may encompass practically infinite aspects of matter not listed in the media modalities model.

Closing with the conundrums on the material modality, last but not least comes the problematic posed by the very listing of light waves and sound waves under the material modality. Elleström probably took into account the dual nature of the electron, when including light waves in the material modality. But the wave discreetness in the environment and the media product is relative. Light waves belonging to media products, such as those available to the perceiver from a film shown on a cinema screen are not perceptually distinguishable from those available in environments. In spite of a film emitting light waves, ambient light waves dynamically interact with the filmic ones and together create a unique enmeshed ensemble. The same goes for sound. When in a concert hall, one cannot separate the sound of touching a string from the melody produced. This signifies, in a nutshell, that the overall experiential outcome of an encounter with a light or soundbased media product cannot stand on its own outside the dynamic field of experiencing environments and media products.

To recap, challenges in relation to the material modality encompass its alleged *primordiality*, *pre-sensoriality*, *pre-semioticity*; the implied *a priori* cognition of material states (solid, liquid, plasma, gas) and exact synthesis (organic, inorganic matter); the potential inclusion of several other qualities of matter under the material modality, such as material (stone, wood and plastic, for example) and colour; and finally, the alleged discreteness of light and sound waves of media products and their enmeshment with light and sound waves of their environments.

3.2. Spatiotemporal modality

When it comes to this modality, there are quite a few layers to be discussed. First of all, when Elleström describes the four dimensions of this modality, there are indications he assumes a generic, mathematical, abstract and objective space and time duality, pre-given and pre-semiotic in intermedial terms. This stance, already manifest in the subject/object divide occurring through the initial adoption of the objective observer's point of view, when taking the perceiver's biographical axis into account, rules out the crucial importance of the perceiver's space and time in their encounter with the media product, a factor to which we are coming back shortly. On a different tone, the ecological approach to perception, as proposed by Gibson (1979/2015), in combination with an embodied performative (Schechner, 2002) phenomenological approach inspired by Merleau-Ponty (1945/1962), would encourage intermedial theory to embrace the unfolding of various spatiotemporal multiplicities, instead of favouring generalised, established approaches to the spatiotemporal category. Integrating a degree of ecological, embodied-performative and phenomenological relativity would posit that different observers signify and perceive by default differently where and when entities are and events occur, due to the uniqueness of their sensorial and semiotic horizons, as well as their biographical points of departure. Here, even the "cosmic spatiotemporality" can be seen inscribed within the trajectory of the virtual, enveloped in an ongoing semiotic process.

Moreover, although Elleström coins this modality as spatiotemporal, it is then conceptually further split in space and time, probably for the sake of analysis. Although space is acknowledged in its bidirectional dimensionality, time is acknowledged as unidirectional. Indeed, space is further analyzed in width, height and depth, whereas time is taken as a single and unique dimension (Elleström, 2021, 48), and not in relation to its compounds of past, present and future, as these nuances would belong to the human perceptual/cognitive sphere. However, this is a breach of the four-dimensional spatiotemporal continuum that has some considerable implications, not only due to subjective space and time not taken into account, but because even space and time in their alleged objective physical unity change. Otherwise, temporal changes do not have a "scene" to occur, nor spatial changes register, unless time passes and present becomes past.

In addition, when contemplating the material modality, although we are encouraged to tell surfaces from three-dimensional objects (2010), that is to understand materiality in relation to space, we are not encouraged to perform an analogous understanding of time. For example, material change, such as corrosion, relevant to media products, is related to time, not necessarily in a negative way; ancient Greek statues, for example, have been loved and strongly qualified as "classical", having lost their initial colours. Or antiques are relics of commodities of other eras.⁸

If we embraced an understanding of materiality in relation to time as well, perhaps space and time would stand more equal in intermedial analysis, as space would no longer enjoy a privileged position in intermedial modalities model analysis. Only if we apply this understanding of materiality bound to time and not just space, the latent and selective spatial staticity is revealed. It goes something like this: spatially speaking, at least two discrete spatial dimensions (i.e. height, width) prevail as a prerequisite for the manifestation of media products; on the other hand, the phenomenal absence of time, i.e. a blink of an eye in a film showing (Elleström, 2010;

2021), is said to determine time staticity or non-staticity. The lack of at least two discrete spatial dimensions in media products is unthinkable, whereas the presence of time, in its totality, is alleged to be optional, since its presence or absence determines the staticity or non-staticity of a media product. such as a performance or a film. This approach is revealed as mostly conceptual, not fully empirically informed, and implies a certain degree of preference: if phenomenal time, and not conceptual, is taken into account, so as to determine a static from a non-static media product, why does not the phenomenal "shifting space" of a music tune or a dance render it non-static space-wise? Staticity, then, it becomes obvious. contemplated much in relation to spatial dynamics. Time is not the only dimension that determines staticity or impacts it, but staticity could signify relatively steady states in relation to space as well, such as those in effect for paintings or statues, whereas autonomous moving entities, i.e. humans, animals, or animated surfaces, objects, i.e. puppets, on the other, could be considered as spatially non-static. This is of major importance when contemplating, temporally speaking, non-static media types, such as clusters of media products from the performing arts, film, animation, video games or tv shows. This path of thought could return the sense of unity to the spacetime continuum, as well as provide a potential understanding of medial entities as spatiotemporally relatively static or nonstatic and events as non-static – until we realize, of course, that perceiving an entity is an event too and never static, as coming up next.

A rather obscure matter prevailing in the modalities analysis is *whose* or *what* space and time Elleström talks about: the space and time of the perceiver, of the media product or of their encounter? Elleström cannot be speaking about the perceiver's spatiotemporal dimensionality, because this is never static time-wise. Let us illustrate two examples. In the encounter between an individual perceiver and a statue, for example, the media modalities model would denote the statue as being a three-dimensional static inorganic medial entity. However, the performance of perceiving the statue is non-static, which, time-wise speaking, from the perceiver's point of view,

grants also non-staticity to the statue. This means that, even if a statue is *per se* static, neither the encounter with it is spatiotemporally static, nor its perceiver. If the case was a dance performance, it could share the notion of non-staticity with the perceiver's perceptual performance — but this non-staticity would not be identical, the same. Hence, the claim that a statue is a static media product clearly refers to a proclaimed ontological state of the media product, just as the blink of the eye does not stop physical time.¹⁰

Now, reaching another hot potato, so to say. Under the the spatiotemporal modality subcategories, virtual space and time respectively. Virtual space is unpacked with reference to perspective (Elleström, 2010), grounded in the so-called representational spectrum. However, although virtual space may be intended through a painting, for example, it does not "occur" objectively in the painting; it is rather a product of cognitive construct. We may cognitively augment a square into a cube, without any special aesthetic representational trigger; architectural media products so often do this, they provide "simple" two-dimensional representations of three-dimensional spaces. Or, temporally speaking, in a film, we may see days and nights coming one after the other and even with gaps, not necessarily successively. This time is obviously subjectively constructed to formulate a temporal continuum. Hence, virtual space and time are cognitive and not objective representational products. The skull encrypted in The Ambassadors acts as a reminder of the subjective spatiotemporal construction of the real. This results in the inscription of the perceiver within the spatiotemporal continuum and renders relevant the initial attempt to involve the perceiver in intermedial spacetime. Plus, it reveals the hybrid modal nature of virtual space and time scattered between the semiotic and the spatiotemporal. This is why rather referred to "cross-modal later (2021) representations" within the semiotic framework (68), having also planted references to virtuality in his virtual spheres model (31), where such a mental sphere is created by communicative semiosis and consisting of cognitive import formed by represented objects (29).

This latter point made, leads to an overlap between envisioned spacetime triggered by visual representation and the dramatic/diegetic/fictional one. More specifically, dramatic time and space refer to dramatic texts and theatre performance, whereas diegetic time and space to literature and film, as all share the element of fiction. In this case, the time and space proposed through the media product, such as a theatre performance, a film or a tv episode, could be claimed to be "virtual time and space" respectively, attributed meaning to in unique ways. These spacetimes "are" only metaphorically latent within the media product, but are given life to, animated only through cognitive augmentation, just as the experience of the skull in *The Ambassadors* showcases. Hence, the semiotic nature of such spacetimes becomes all the more clear.

To sum up, in this section, Elleström's abstract. objective, mathematical take on space and time was remarked. The split of spacetime and emergence of space privilege over time in intermedial analysis was underlined, especially in relation to staticity. Spacetime enmeshment between the perceiver and the perceived in their encounter was further highlighted. The performative, peripatetic, experience of static media products was found to be of central importance as a basic correlation determining, from a firstperson perspective, the experience of media products. acknowledging the perceiver's own spatiotemporal dimensionality, that of the media product, as well as of their interplay. In addition, consistent with Elleström's insistence on abstract concepts, the promising but unfortunately not fully explored aspects of virtual space and time were contemplated as semiotically augmented perceived/conceived materialities, rather than objective, materialized representational ensembles. Analogies were drawn between iconic virtual space and time and the diegetic/dramatic/fictional ones. As a result of the discussion, it prevails that any understanding of the cosmic spatiotemporal continuum, even if heralded as abstract and mathematical, is always inscribed in the interplay between the sensorial and the semiotic, as well as intertwined with the material, as a human-beings are also material entities. In short, no pre-givens make sense beyond the horizon of subjective meaning-making.

3.3. Sensorial modality

In terms of the sensorial modality, Elleström (2021) sporadically refers to sensorial traits as being inherent in the media product (20), which sounds paradoxical, since senses are hardly conceived in relation to "things". He adheres to the distinction between exteroception, which includes five main sensorial modes (namely seeing, hearing, feeling, tasting and smelling), and "other human senses", such as "interoception (sensing the internal state of the body) and proprioception (sensing body position and self-movement)" (49). This means that the human interface, as such, is seen as a limit of some sort, providing a base for understanding what it means to be human and not the environment. This feels almost a natural categorization, which can be questioned, especially in light of the ecology of perception (Gibson, 1979/2015), new materialisms (Coole & Frost, 2010), post-human performativity (Barad, 2003) and ecomedia (Rust et al., 2016).12 Since being-in-the-world is not merely a matter of agency, but also of affect, passive reception and suffering, we are inevitably also, inevitably, part of the environment. Bone aching reminds us sometimes how we resonate with levels of humidity in the atmosphere. Or, when at a wild party, we interoceptively echo loud music, with all our sensorial and material constituents mingling, we cannot tell our heartbeat from the tune rhythm. It prevails that the membrane separating us from our environment is porous and fragile, for "benefit or injury" (132), as Gibson (1979/2015) puts it. But also, psychologically speaking, human beings are part of the environment one for another, objectified through the gaze as a collective "not me", unless they attract this special mode of attention reserved to subjects. Hence, the distinction between exteroception and "other human senses" has only relative value.

There is another good reason for this. Semiosis has a strong interoceptive dimension that deserves further attention. What is semiosis if not interoceptively performed? As a sense, it refers to the sensing of "the internal state of the body". If thought and meaning making are overall considered to be

constructed and to remain within the aforementioned interface membrane of the subject, 13 the formulation of meaning-making becomes absolutely dependent on its perception, on the sense of interoception - not just exteroceptive senses reach available information. Although meaning-making appears to excessively involve outer data, it clearly also involves inner ones, like fantasies or scenarios. Hence, since interoception involves the sensorial perception of inner data, then it is this sense that gives access to meaning-making too. Intermedial theory does not in particular nurture this rationale. It acknowledges the existence of a perceived actual sphere which is "joined by mental introspection and semiosis" (31). This logic presupposes the objectivity of the perceived actual sphere, leading to an understanding of the sensorial modality as pre-semiotic. This certainty has been questioned (Timplalexi, 2023), claiming that meaning is processually produced during perception, while highlighting the latter's neglected semiotic dimension. Indeed. should sensoriality be considered as the ultimate condition for perception, and perception involves perceiving data outside-theself, but also inside-the-self (the "other senses" also sensing data). then, the formation of "presentations", subjective impressions of unique assimilations of both inner and outer data, make us cognise materialities, spatiotemporalities and attribute meaning (Timplalexi and Führer, 2024). Carrying on the same key, it could be claimed that the sensorial modality is primal and the rest of the modalities are post-sensorial. However, that could underestimate semiosis during perception. Subjective impressions are feasible only through meaningmaking, as cases of indeterminacy, illusions and affective moments of human life, outside comfort zones, often evoke.

In conclusion, with regards to the sensorial modality, issues with it being pre-semiotic have been touched upon and counter-argued. Interoception was found as potentially conceivable to bridge the sensorial and the semiotic and to frame the interplay, as well as foster the collision of inner and outer data in perception under the tab of "impressions", implying also the subjugation of the spatiotemporal and the material to the subjective senso-semiotic continuum.

3.4. Semiotic modality

Is there anything like an ideal objective perceiver, some sort of a prototype, who can sense the "real" for all of us? The uniqueness of human-beings has been widely recognised as a major criterion of humanness, despite challenges posed by materialism, new materialisms and post-human performativity. Yet, when we abstract by focusing on essential features, while omitting details or empirical instances, we tend to easily forget about the precondition of uniqueness, which both pre-requires subjectivity, as well as results in it. This technique of abstraction, as reduction of "unnecessary" elements, shapes the distinction between objective materiality and an implied subjective but "normal" sensoriality: it is not the senses that belong to perceivers but sensorial traits are said to belong to media products (Elleström, 2021, 20). Although reduction is indeed an option, some caution should be taken: instead. a truly subjective point of view would expand beyond such sensorial and semiotic "normalcies".

Indeed, while we partake in communities and the society, certain degrees of uniformity may appear to have occurred and keep on occurring, but, our assimilations (Piaget, 1951/1999) are unique, as our sensorialities and cognitive processes considerably differ. The fact that, through our cognitive development and education, a perceptual/semiotic comfort zone has been created, consisting of relatively unchallenged stable schemata. should hinder not understanding of all perceived matter as subjectively perceived and signified, a fact that becomes evident under stress or unfamiliar circumstances. Equally, any materiality, and not just that of the especially designated media products, becomes a candidate for the potential triggering of meaning. Of course, objective, media products-related matter occupies a special place in social practices and is bound to aesthetic evaluation. But this does not exclude any form of matter being potentially perceived as a media product, from a work of art to a sunset on Santorini (Timplalexi and Führer, 2023). Accepting a difference objective/subjective media between such products. individually, socially and spatiotemporally conditioned.

Intermedial analysis, and more specifically the media modalities model, does not highlight the unique assimilation of matter as a sensorial precondition, although, within the horizon of the sensorial, the importance of different sensorialities could be thought to hold some part, especially if sensorial traits were not outlined as innate to media products. More specifically, the role of the precondition of the subjective assimilation of matter in unique sensorial and cognitive ways is not addressed in the discussion of the semiotic in Elleström's model. This impacts the semiotic modality with the burden of a prototype for a correct and accurate passive reception of assumed features of pre-semiotic elements, a premise that so deeply contradicts active, fluid perception. Peirce himself must have struggled with the importance of change and movement, since he acknowledged sign chain processes being at work, but must have had difficulties in grounding the correlation between being and becoming in a subjective framework, as the overall semiotic fluidity and movement suggested is inscribed within an assumed "Firstness", a view that stabilizes becoming into existence.

Obviously, Elleström's semiotic modality is based on Peirce's version of imagination being discreet from reason. Although Peirce does use terms denoting "interiorising" processes, such as "absorb it,' 'sleep over it,' 'assimilate it" (Restrepo in Barrena, 2013), his "imagination" is capable of performing analysis rather synthesis, by separating "objective reality" from what appears to us; hence, his levels of separation include "dissociation", "prescision" and "distinction" (Barrena, 2013). However, by potentially performing these grades of separation, imagination becomes a tool to logic, rather than a matrix for it to evolve in a holistic embodied cognition perspective. In this way, a clear-cut distinction is established between the objective actual, "real", and the conceived, which stands in the way of acknowledging the real as conceived, constructed.

In effect, crucial to resolving the semiotic implications in the modalities model is the awareness of contradictions residing in Peirce's *oeuvre*, that intermedial theory has overall embraced. Peirce's semiotics are multifaceted; so many varying elements co-exist in his overall theory (Nöth, 2011). In (just some of) Peirce's own words:

A sign . . . [in the form of a representamen] is something which stands to somebody for something in some respect or capacity. It addresses somebody, that is, creates in the mind of that person an equivalent sign, or perhaps a more developed sign. That sign which it creates I call the interpretant of the first sign. The sign stands for something, its object. It stands for that object, not in all respects, but in reference to a sort of idea, which I have sometimes called the ground of the representamen. (Peirce 1931–58, 2.228, qtd. in Chandler, 2007)

Peirce starts by introducing the initial sign with a certain relativity and vagueness (something which stands to somebody for something). However, by then bringing in the interpretant (an equivalent or more developed sign) as situated in the mind, he performs a separation between the latter (the interpretant, a cognitive sign) and the initial sign. In search of the first sign's situatedness, the automatic assumption is that it has to reside in the actual world. Otherwise, Peirce would have specified that he had considered the initial sign as residing in the mind too. This topological differentiation between the sign and its interpretant, when established, consequently situates in different topoi the two signs. But, a pre-given, clear-cut distinction between "in" and "out" is not to be axiomatically accepted. Indeed, when Peirce supports that "the being of things" contains reason and logic (Pape, 2015, 1), it is logic enough to understand that he initially sees things as being and discovered correctly, rather than, right from the start, becoming in human cognition, just as his objective, dynamic objects inescapably cause universal and uniform sign-processes "that govern human conduct become effective" (Pape, 2015, 4).

Reacting to this universal and uniformal rationale of pre-givens, alternate voices in intermediality, taking into account performativity, memory and imagination (Timplalexi and Führer, 2024), argue that the initial sign, although not necessarily a conscious one, is cognitive too, and occurs on the same *topos* with its understanding – and any further chains of meaning-making. In this perspective, events and entities objectively situated in the actual world, outside the self, collide with subjective events, on the basis of their assimilation as a

subjective impression; no entities are listed here because imagining, remembering or coining a subjective entity is a cognitive performance, an event. A chair is never quite the same for each one of us, both due to sensorial differentiations as well as semiotic predispositions; the same is valid for a dream we dreamt – when we think about it, we construct our version of it. Thus, since both the initial sign and the impression are cognitive in nature, there is no need for a topological distinction putting pressures, nor for the coupling between an objective and a subjective element. The compulsive, obligatory "correct" meaning-making that involves the coupling of objective entities or events with internal, subjective "representations" has been so far dominant in philosophy and communication theory (Timplalexi and Führer, 2023). In an ecological-performativephenomenological approach to perception, this coupling between two cognitive subjective signs, also encompassing imaginary and mnemonic constructs, feels natural and logic – without an alleged necessity of a combination with an objective. actual entity or event. The formation/construction of the objective actual into a subjective process is based on the interplay between the sensorial and the semiotic.

Furthermore, Peirce soon compromises the relativity of his initial sign by stating that a sign addresses somebody, a notion grounded on a pre-existing outside, having to be assimilated passively, which makes this process sound even more inescapable, obligatory and universal. On one hand, the sign appears to have "agency" (it addresses somebody and creates in their mind an equivalent or more developed sign), instead of the perceiver actively constructing it (i.e. somebody focuses their cognitive attention on something). On the other hand, the initial sign is alleged to present overlaps with an actual object, and not with a primordial assimilation, which raises again issues with regards to "correct" couplings and interpretations; instead, the acknowledgment of this in-between senso-semiotic assimilative stage would allow in perception the very formation of impressions of entities and events.

Elleström (2021) clearly underlines the objective anchoring of the sign in reality pervading Peirce's semiotics. Indeed, just as matter *exists* and does not *become*, signs are

anchored in a universal Firstness and in pre-existing items in reality, that have to stand for objects and create in the mind interpretants. Peirce's Firstness comes in from an experiential void, as this abstraction cannot occur prior to experience; in order to abstractly distill, an experiential sum to perform the abstraction upon is required. How can we ground "redness" as a notion existing prior to experiencing red? Is there a human mind in the void, bare of experience and cognitive schemata determining what redness means to them? Besides, this whole logic totally contradicts the claim that signs are "dynamical functions established by relational constituents that exist only in interaction with each other" (Elleström, 2021, 21). An ecological-performative-phenomenological perspective would benefit the intermedial semiotic stance and allow a ray of variability and virtuality to enhance on to enhance its potential.

Let us now see in greater detail how Elleström accommodated the three Peircean sign constituents:

In brief, Peirce held that signs, often called representamens, stand for objects—this relationship results in interpretants in the perceiver's mind: 'A sign, or representamen, is something which stands to somebody for something in some respect or capacity'. This means that the representamen stands for an object in some respects and thus 'creates in the mind of that person' an interpretant (Peirce 1932: CP2.228 [c.1897]). This entails that signs are not pre-existing static items, but rather dynamical functions established by relational constituents that exist only in interaction with each other. Signification is a mental process, although both representamens and objects may be connected to external elements or phenomena; however, the interpretant is entirely in the mind. (Elleström 2021, 21).

Elleström selected a different fragment from Peirce than the one we opted for earlier. In this fragment, what stands to somebody for something, in some respect or capacity, is no longer *just* the sign, but its synonymous term, *representamen*. Elleström's selection reveals that Peirce himself was trying to take into account subjectivity ("in the mind of *that* person" – emphasis added). But, although this is a start, Peirce's Firstness, as well as the split of the object into "dynamic", preinterpreted and "immediate" (Hausman, 2006), interpreted, renders this impossible. Elleström's remark that signs are dynamical functions and not pre-existing static items,

established by relational constituents that exist only in interaction with each other, acts as one of those threads dispersed in his writings, as it reveals a different nuance of the term "dynamic". Peirce's dynamic object is assumed as pre-existing; Elleström's "dynamical function" is put forward as opposing pre-existence ("and *not* pre-existing static items" – emphasis added). May we add here, that, indeed, for this interaction to occur, it is the subjective impressions, assimilations of external elements or phenomena that are attributed meaning to, and not "objective" entities or events. Besides, to cognise anything as pre-interpreted means to have interpreted it as such.

Peirce also proposes the three modes of the sign, with his foundational trichotomy of the symbolic, the iconic and the indexical. Symbolic signs, such as language, are said to be highly conventional and arbitrary. Iconic ones, such as a painting, onomatopoeia or even metaphors (Chandler, 2007, 37) are said to evolve a certain degree of resemblance and similarity, with regards to at least some of their qualities; while indexical signs are based on contiguity, as they "direct the attention to their objects by blind compulsion" (Peirce in Chandler, 2007, 38). But, there are deeper issues with the three functions of the sign altogether.

The symbol/symbolic function is the one in which the represantamen, according to the Peircean fragment quoted in Elleström (the signifier, in Saussure's wording), is alleged not to resemble the interpretant, but their relationship is described as fundamentally arbitrary or purely conventional, so that it must be agreed upon and learned (Chandler, 2007, 36). However, if metaphor is included in the spectrum of the iconic, and metaphor is always an analogy, is not every cognitive analogy a performance bound to iconicity? In other words, when selecting a source and a target for each analogy, an iconic relationship is at work (Nöth 2024). Much in the same tone, any phase previous to the alleged agreement or convention, aforementioned as a characteristic of the symbolic function of the sign, presupposes an initially failed attempt to somehow reach a perfect understanding based on resemblance. In this case, when diachronically contemplated, the symbolic function is but a diversion of the iconic, resulting from the need for comfort and speed in human communication and interaction: we cannot dedicate too much time to recall the fact that the third letter of the Hebrew alphabet, "Gimel", once used to signify "camel" (Russell, 1972, 10). Indeed, when one does not acknowledge the symbol as a diversion of the icon, one silences the fact that the former is a "second-best" cognitive solution. rather than a discreet function of the sign. The same goes for the index/indexical function: what is an index if not an analogy between a source and a target pinpointing a physical, causal or conceived connection that has once been learned? The causal connection between smoke and fire, for example, needs to be experienced and learned for the smoke's indexical capacity to unfold. This "direct connection" semiotics attributes to the index is but an interrelation between two icons, a dual iconicity of the fire and the smoke. Hence, both the symbol and the index may be considered *diversions* deriving meta-performatively from one unique, iconic source, recognising a meta-level to the other two sign functions. The meta- of the index refers to the shaping of a causal correlation between two icons, whereas the meta- of the symbol involves a convention saving time for avoiding semiotic iconic genealogies, such as the letter "Gimel" and the camel. In this perspective, the interconnectedness and fluidity of meaning-making, this sense of becoming, highlighted on the common denominator of the icon, over the operational theorising about discreet categories of signs and sign functions with different denominators (icon, index, symbol). The latter approach reaches the intermedial semiotic modality, even if declaring that the three functions are intertwined. Instead of seeing the functions of the sign subject to another pre-given, fixed, existing taxonomy, we can appreciate them as part of the performative dimension of the semiotic modality, which is further outlined in the following paragraphs, with respect to semiotic intra- and trans- aspects of intermedial analysis.

In relation to semiotic interrelations, virtual space and time bear a considerable spatiotemporal but also semiotic load. Virtual spatiotemporality, indeed, is a cognitive outcome, depending on knowing how to understand perspective, thus to cognise a two-dimensional surface as an index for a threedimensional space. Equally, when virtual spatiotemporality involves dramatic/diegetic space and time, it depends on knowing how to acknowledge fiction and fictional characters in relation to the "real". This view not only sees virtual space and time as coming under the umbrella of the semiotic modality, but also appreciates the intra-diegetic tensions emerging between actual and virtual spatiotemporalities. specifically, the term "intra-diegetic" in this context, freely inspired by role playing games analysis (Fine, 1983), based on Goffman's (1974) Frame Analysis, denotes the dynamics between three rims, or reference frames, of performance and corresponding functional roles providing access to the rims. Further unfolding this lens, firstly, the outer rim provides the primary framework, accessible through the persistent role of the social individual. It suggests a biographical and a sociopolitical dimension. 14 Secondly, on an in-between, systemic level, the role of the player/designer permits the handling of functional aspects, such as rules and constraints. This level enables access to the third rim, the fictional layer, where the role of the fictional character allows the interaction with the specifics of the possible fictional world, the plot and fictional relationships. Put simply, when a media product is perceived, it always contains an element of make-believe, fiction, even if this is attributed thanks to the theatricality of the gaze (Féral, 2002). In such a rationale, there are media types such as theatre performance, film, desktop video games, that work with intense intra-diegetic dynamics. Here, their virtual space and time are more discreet, socially and spatiotemporally situated, causing greater friction with quotidian life, than in those media types with less explicit and discreet spatiotemporal borders, such as novels or poems and pervasive games. 16 Let us briefly explain why the friction is more traceable in the former case as opposed to the latter. When a media product is clearly framed and its process unfolds equally framed, its virtual space and time tends to be less porous than when it is pervasive - of course, there are cases of underdistancing even in such nonpervasive media types. As pervasive we can define media types and products the engagement with which manifests beyond specific social, temporal and spatial constraints (Svahn, 2014). But also, the portability of a book edition of a novel allows fragmental interaction invisible to others, without a disruption of the norm of actuality, enmeshed with quotidian life more seamlessly than watching a film at the cinema, for example. On the contrary, a theatre performance usually takes place at a specific stage for a couple of hours; a desktop video game requires the player to be usually seated, situated in the same environment for a specific time, even if on a daily basis. Thus, not only the diegetic fictional worlds of media products proposed trigger *semiosis*, but also the dynamics between their fiction and reality attract several aspects of meaning-making, and with considerable subjective variations. This is the reason why intra-diegetic dynamics are inscribed within the horizon of the semiotic.

In addition, the transdiggetic and transperformative layers in effect during the encounter with a media product even more the semiotic dvnamics. performance, film, dance, video games, extended realities (XRs) actualise alternate possible worlds and agents, human or synthetic, and encourage us to perform on a transdiggetic level by bridging different contexts and actual-virtual spacetime circumstances through multimedia franchises or transmedia storytelling. Of course, the same could be said for all media types, up to a certain extent, as make-believe is a mindset (Heliö, 2004) rather than just a matter of any designer's or author's intention.

In drawing things to a close, this section proposed an expansion of intermedial studies, confirmed to be mainly under the influence of Peircean semiotics and logics, so that principles and findings of phenomenology, performativity and ecology of perception apply. The importance of perception of the actual world in meaning-making processes has been highlighted, aspiring at subverting the topological distance between the actual and the cognitive, on the basis of the former's unique individual assimilation bv different sensorialities cognitions. Furthermore, the trichotomy of the sign functions, at least as inherited to Elleström, has been challenged, arguing the symbol and the index as meta-performative diversions of the performative icon. Enriching the understanding of virtual space and time under the semiotic umbrella completed the analysis on the semiotic, as well as suggesting that intra- and trans-diegetic and intra- trans-performative dynamics and friction levels between the actual and the virtual as also involved in *semiosis*.

4. Epilogue

In this article, an attempt was made to systematically address questions, aporias and potentialities rising during intermedial analysis while applying the media modalities model, as well as to indicate basic critical intermedial areas that would benefit from further research and discussion. Indeed, the media modalities model, even if tending to acknowledge the intertwinement of all modalities, was found to latently be organised hierarchically, by sticking to the conceptualisation of modalities as pre-semiotic and semiotic; for a modality to be pre-semiotic, it should be void of meaning. However, as with Peirce's pre-interpreted, dynamic objects and interpreted, immediate ones, for anything to be considered as pre-interpreted, pre-semiotic, an interpretation about such a nature has already taken place, constituting an a posteriori reflexive realisation, which clearly presupposes meaning making processes being at work during material, sensorial and spatiotemporal cognising. This paradox resonates respectively with implications echoing in pre-semiotic modalities. The primordiality and objectivity of materiality present in the model means that sensoriality and semiosis come after materiality and do not run parallel. Materiality is thus not cognised as subjugated to the senso-semiotic continuum, despite media products and their qualities being already paradoxically materially cognised prior to their analysis (surfaces, objects. waves, organic/inorganic matter). In this stream of thought, the pre-semiotic character of the material, but also of the sensorial and the spatiotemporal modalities, can be questioned. The sensorial modality framing perception cannot either be void of semiosis, because meaning is being made in real-time, while perceiving, as uncomfortable encounters with the unknown or the indeterminate in the environment and art indicate. Chains

of semiosis may, of course, occur theoretically forever. But even semiosis is totally dependent on the sensorial just as the sensorial is dependent on the semiotic; because, if semiosis is inner and cognitive, the sense that allows the understanding of thought is interoception. The difficulty in accepting that thoughts and meaning are also interoceptively perceived is mostly due to the privilege attributed to the mind over, for example, the heart or the stomach, but the exact nature of interoception, a discussion which we cannot exhaust here, depends obviously on how cognition is seen and defined. Finally, the spatiotemporal modality cannot be pre-semiotic, even the conceptualisation ofspatiotemporality, supposed to objectively circumscribe human life and media products, is clearly a concept, a meaning made. In addition, the spatiotemporal modality was found to rather converse with the space and time of encountering the media product, thus, bearing semiotic connotations when seen from the perceiver's side. Especially virtual space and time were found to be hybridly anchored in the semiotic and the spatiotemporal.

Hence, it prevails that, although Elleström proposed an immensely helpful abstract model that gradually unfolds and unveils medial nuances when encountering media types and products, the point of view adopted in his model is located outside the dynamic field of the encounter between the perceiver and the media product. The model does not overall challenge its keystones, such as the subject/object divide and the material/immaterial discourse. However, it suggested that Elleström's abstract model could expand and apply to a rephrased and extended understanding of the dynamic field of a perceiver's encounter with a media product, taking into account the ecological-performativephenomenological approach we proposed throughout the article.

There are some indications that Elleström (2021) would have shifted towards more subjective, phenomenological and socially interactionist approaches, seeing human communication based on shareness (28-33), rather than on transfer. Puzzling is the ascendance of the spatiotemporal modality in the model's second position in 2021 from the third

one it occupied in 2010, possibly indicating that Elleström read some tension with regards to this modality. Would the spatiotemporal modality have reached position number one, beating even the material modality at a later stage? In his virtual spheres model, "cosmic spatiotemporality" would rather fall within the category of the "unknown", circumscribing any "actual phenomenal spatiotemporality" of media products experience, communication, and meaning-making. It appears as possible that the spatiotemporal modality would have become the primordial modality in the model, an assumption worth exploring within the horizon of Elleström's oeuvre. Should, however, the emphasis have been placed on the term "virtual", met in the *virtual spheres* model, the assumption that perhaps Elleström would have doubted the pre-existence of preinterpreted dynamic objects in order to fulfill signs as dynamic functions, and not dynamic in name only, is not that preposterous. This speculation would have allowed him to see everything enveloped in semiotic processes - besides, what does "everything is intermedial" really mean?

Even if Elleström meant just as a theoretical distinction the articulation of the four discreet modalities, there remains pending a return to the modalities unity. And this unity occurs enveloped in meaning making. If knowing is an outcome of acknowledgement, the cognition of any materiality. sensoriality, spatiotemporality and semioticity comes within the space of the cognitive, hence, is attached to meaningmaking processes bound to the semiotic. In other words, even "cosmic spatiotemporality" is but a thought, a meaning made, just like colour, shape, material, and as such comes inscribed within the horizon of interoception and semiosis. Hence, there is a constant interplay between the sensorial and the semiotic with the spatiotemporal and the material. We could in fact claim that the sensorial and the semiotic modalities belong to the subjective sphere, whereas the spatiotemporal (we have spoken about virtual spacetime) and the material one are "out there", available to interfere with our subjective spheres. But, this would not pay respect neither to interoception, nor to proprioception. Even these two more objective modalities are interacted with solely if assimilated cognitively by perceiving subjects, as dementia, daydreaming or various psychological situations make us realise.

How could the media modalities model be articulated from within the perspective of the perceiving subject-media product encounter remains an ongoing project. Instead of a hierarchical construct dividing between presemiotic semiotic elements, taking for granted the primordiality and objectivity of materiality, and with the intention of relativising the modalities discretedness in light of so many modal overlaps, perhaps the potential of a layered schema, such as one proposed by frame analysis (Goffman 1974), especially as interpreted by Fine (1983), could be explored. Or, perhaps a three-dimensional moving spherical schema with the media modalities in the form of loops impacting the encounter between the perceiver and the media product could denote the centre as a dynamic point. In there could even be names describing dynamic such "materialisation". "sensorialisation". movements. as "spatiotemporalisation" and "semioticisation". Or, an even bolder and simpler proposal could be put forward, that the primal cognitive duality of the senso-semiotic matrix circumscribes spatiotemporal, material, sensorial and semioticoriented meaning, situated within cognitive horizons performances of ever-shifting impressions. Not only we cannot tell the dancer from the dance; we cannot tell the spectator from the dancer and the dance. We enrich our understanding on the relativity and hybridity of the media modalities, as they dance too, perceived from within the dynamic field, affecting meaning. perception, materiality, and spatiotemporal listening to orientation. Protagoras' whispers: χρημάτων μέτρον άνθρωπος". Only this άνθρωπος is not another one of Peirce's dynamic objects, some "universal", abstract normalcy, but humbly becomes the abstract, yet subjective and varying, sum of us all.

NOTES

¹ See indicatively Bal, 1991; Mitchell, 1986; Müller, 1996; and Wolf, 1999.

² More information can be found in the Book of Abstracts of the 7th conference of the *International Society of Intermedial Studies Intermedial Networks: The Digital Present and Beyond* (2024), available on https://open.lnu.se/index.php/indpb/issue/view/291

- ³ Such certainties mostly date back to authors who influenced Elleström (2018), such as Shannon (272) and Peirce (287).
- ⁴ For example, as with the archeological finding of a bone and the role of belief in communication (Elleström, 2021, 16)
- ⁵ See, for instance, how Elleström relativises the discreetness of "cognitive import", broadening it up to encompassing even undeveloped or intuitive meaning (2021, 12).
- ⁶ Despite few references to the term "dynamic" in Elleström's works, such as the "dynamic nature of human communication" (2021, 37), or "dynamical functions" in relation to signs (2021, 21), the notion of dynamic interaction, if inspiring, could have caused the challenging of pre-semiotic qualities of the other three modalities, as well as of the pre-given character of materialities.
- ⁷ "This is a biological rather than physical distinction" says Elleström (2021, 48) but, overall, the organic is juxtaposed to the inorganic, as if both are clearcut and homogeneous.
- ⁸ The colournessness of the statues has already been perceived as a sign, initiating a semiotic process relevant to time and change through time. Hence, subjective time, memory, imagination, knowledge, discursive power, all come into play during perception, allowing metaphorically even a backwards movement, when statues had colours
- ⁹ But, when we close our eyes, time does not stop. There are multiple levels of time involved, not solely the assumed innate time of the media product
- ¹⁰ Fluxus art has often challenged this staticity by creating, for example, ephemeral installations, or even "vandalizing" artistic works for the sake of change. Banksy's *Girl with the Baloon* being remotely commanded to be shredded at the auction stands as a rather good example. Or, what happens to media products, such as short films provided online, where the perceiver controls the arrow of time? It becomes obvious that there is a certain degree of relativity applying to the discussion.
- ¹¹ The choice of the term "diegetic" over of the term "dramatic" echoes the dominance of the narratological paradigm on the dramatic/theatrical/performative one. This is a very selective understanding; narratology wants narrative to allegedly circumscribe drama and theatre, whereas the narration process, as an element of the narrative instance, proves exactly the opposite. A narrator and a narratee are variations of the actor-spectator duality.
- ¹² For an exemplary assimilation of the ecomedial problematic within intermedial theory, see Bruhn and Salmose (2023).
- ¹³ Communication has for long been seen as cognitive transfer. Until there is adequate scientific evidence that cognitive import may travel, we could live without the literality of transfer. Our impact on materialities, literal, as well as symbolic, may trigger indications of thought to ourselves and others. Schirrmacher (Elleström, 2021) considers that in human communication "a chain of interactions' involving producer's mind, media product, perceiver's mind and everything in between" is at work (19).
- ¹⁴ Since Goffman defines performance as "all the activity of a given participant on a given occasion which serves to influence in any way any of the other participants" (Goffman, 1959, 15-16), the *role* of the social individual

is not surprising.

- ¹⁵ In fact, Féral's reference to the gaze is fundamental to the semiotic lens proposed. See Timplalexi (2024) for the interrelations between the theatrical gaze, perception and communication.
- ¹⁶ Pervasive gaming allows the leak of the domain of the fictional to the domain of the ordinary (Montola, 2009, 12), with three strategies, namely social, temporal or spatial pervasiveness (Svahn, 2014, 4).
- ¹⁷ However, even within these media types, we may have exceptions that have either a pervasive nature, or are marketed as such, i.e. immersive theatre, binge-watchable tv series. Also, within the framework of intra-diegetic dynamics, come risks or failures because of the problematic movement between the three rims, such as when role-players project fictional behaviours in their quotidian lives, or when users of extended realities (XRs), such as Virtual Reality (VR), feel restricted by conditions of XR environments.

REFERENCES

Auslander, Philip. 1999. Liveness: Performance in a mediatized culture. London and New York: Routledge.

Bal, Mieke. 1991. Reading Rembrandt: Beyond the Word-Image Opposition. Cambridge: Cambridge University Press.

Barad, K. 2003. "Posthumanist performativity: toward an understanding of how matter comes to matter." Signs 28 (3): 801–831. DOI:10.1086/345321

Barrena, Sara. 2013. "Reason and Imagination in Charles S. Peirce." European Journal of Pragmatism and American Philosophy V-1|2013, mis en ligne le 16 juillet 2013, consulté le 26 novembre 2025. http://journals.openedition.org/ejpap/575

Bennett, O. (ed.). 1990. Edge 90: Art and Life in the Nineties. London & Amsterdam: Edge Biennale Trust, Stichting Mediamatic Foundation.

Bruhn, Jørgen, and Niklas Salmose. 2023. *Intermedial Ecocriticism: The Climate Crisis Through Art and Media*. 1st ed. Basingstoke: Lexington Books/Fortress Academic.

Bruhn, Jørgen and Beate Schirrmacher. 2022. "Intermedial studies." In Intermedial Studies: An introduction to meaning across media, edited by J. Bruhn and B. Schirrmacher, 3–41. London and New York, NY: Routledge.

Bolter, Jay Davis and Richard Grusin. 2000. Remediation – Understanding new media. Cambridge: MIT Press.

Chandler, D. 2007. *Semiotics: The Basics*. 2nd edition. Routledge. https://doi.org/10.4324/9780203014936

Clüver, Claus. 2007. "Intermediality and Interarts Studies." In *Changing Borders: Contemporary Positions in Intermediality*, edited by Jens Arvidson, Mikael Askander, Jørgen Bruhn, and Heidrun Führer, 19–37. Lund: Intermedia Studies Press.

Coole, D. & S. Frost. 2010. "Introducing the New Materialisms." In *New Materialisms: Ontology, Agency, and Politics*, edited by D. Coole & S. Frost, 1-43. Durham, N.C.: Duke University Press.

de Saussure, Ferdinand. 2011. Course in General Linguistics. Translated by Wade Baskin. New York: Columbia University Press.

Elleström, L. 2010. *Media Borders, Multimodality and Intermediality*. Basingstoke: Palgrave Macmillan.

_____. 2018. "A medium-centered model of communication." Semiotica 224, 269–93.

______. 2021. "The modalities of media II: An expanded model for understanding intermedial relations." In *Beyond Media Borders: Vol. 1: Intermedial Relations among Multimodal Media*, edited by L. Elleström, 3–91. Cham: Palgrave Macmillan.

Féral, J. 2002. "Theatricality: The specificity of theatrical language." *SubStance* 31 (2): 94–108.

Fine, Gary Alan. 1983. Shared Fantasy: Role-playing games as social worlds. Chicago, IL: University of Chicago Press.

Gibson, J. J. 2015. The Ecological Approach to Visual Perception. New York and Hove: Psychology Press. [First published 1979].

Goffman, Erving. 1959. The Presentation of Self in Everyday Life. Garden City, NY: Doubleday.

Goffman, E. 1974. Frame analysis: An essay on the organization of experience. Harvard: Harvard University Press.

Hausman, Carl R. 2006. "Peirce's Semeiotic Applied to Perception – The Role of Dynamic Objects and Percepts in Perceptual Interpretation/A Semiótica de Peirce Aplicada à Percepção – O Papel dos Objetos Dinâmicos e dos Perceptos na Interpretação Perceptiva." Cognitio 7 (2): 231-246.

Heliö, Satu. 2004. "Role-Playing: A Narrative Experience and a Mindset." In *Beyond Role and Play: Tools, Toys and Theory for Harnessing the Imagination*, edited by Markus Montola and Jaakko Stenros, 65-74. Helsinki: Ropecon Ry.

Jenkins, Henry. 2006. Convergence Culture: Where Old and New Media Collide. New York: NYU Press.

Kattenbelt, Chiel. 2006. "Theatre as the Art of the Performer and the Stage of Intermediality." In *Intermediality in Theatre and Performance*, edited by Freda Chapple and Chiel Kattenbelt, 29–39. Amsterdam: Rodopi.

Kress G., and V.T. Leeuwen. 2001. *Multimodal Discourse: The Modes and Media of Contemporary Communication*. London: Hodder Arnold.

Larrue, J.-M. L. 2016. "The 'In-between' of What? Intermedial Perspectives on the Concept of Borders/Boundaries." *Digital Studies* 5 (3), http://doi.org/10.16995/dscn.33

López-Varela, Asun. 2023. Literature Review on Intermedial Studies: From Analogue to Digital. DOI: 10.5772/INTECHOPEN.112611

Merleau-Ponty, M. 1962. *Phenomenology of perception*. London: Routledge & Kegan Paul. [1945].

Mitchell, W.J.T. 1986. *Iconology: Image, Text, Ideology*. Chicago: University of Chicago Press.

Müller, Jürgen E. 1996. Intermedialität. Formen moderner kultureller Kommunikation. Münster: Nodus Publikationen.

Montola, M. 2009. "Games and Pervasive Games." In *Pervasive Games: Theory and Design*, edited by Markus Montola, Jaakko Stenros, Annika Wærn. London: Taylor & Francis.

Pape, Helmut. 2015. "C. S. Peirce on the dynamic object of a sign: From ontology to semiotics and back." Sign Systems Studies 43 (4): 419-437. 419.

Peirce, Charles Sanders. 1932. Collected Papers of Charles Sanders Peirce II: Elements of Logic. Edited by Charles Hartshorne and Paul Weiss. Cambridge, MA: Harvard University Press. [CP2].

Pepperell, R. 2006. "Seeing without objects: Visual indeterminacy and art." Leonardo 39 (5): 394–400.

Nöth, Winfried. 2011. "From representation to thirdness and representamen to medium: Evolution of Peircean key terms and topics." *Transactions of The Charles S. Peirce Society* 47 (4): 445-481. https://doi.org/10.2979/trancharpeirsoc.47.4.445

______. 2024. "Peirce's iconicity and his image-diagram-metaphor triad revisited: complements to Stjernfelt's *Sheets, Diagrams, and Realism.*" *Semiotica* 258: 143-167. https://doi.org/10.1515/sem-2023-0140

Piaget, J. 1999. *Play, Dreams and Imitation in Childhood*. London: Routledge [First published in 1951].

Rajewsky, Irina O. 2002. *Intermedialität*. Tübingen: A. Francke.

Ritter, M. 2021. "Postphenomenological Method and Technological Things Themselves." *Hum Stud* 44: 581–593. https://doi.org/10.1007/s10746-021-09603-5

Russell, Bertrand. 1972. A history of western philosophy. 60th print edition. New York: Touchstone Book.

Rust, Stephen, Salma Monani, and Sean Cubitt (eds.). 2016. *Ecomedia: Key Issues*. London and New York: Routledge.

Schechner, R. 2002. *Performance Studies: An Introduction*. London: Routledge.

Schirrmacher, B. and N. Mousavi. 2024. "Introduction: The Dynamics of Truthfulness and Media|. In *Truth Claims Across Media*, edited by B. Schirrmacher and N. Mousavi. Cham: Palgrave Macmillan. [Palgrave Studies in Intermediality]. https://doi.org/10.1007/978-3-031-42064-1_1

Svahn, M. 2014. Persuasive Pervasive Games: The Case of Impacting Energy Consumption. Dissertation Thesis. Stockholm: Stockholm School of Economics.

Ε. 2023. "Challenging Timplalexi, kev certainties communication through Elleström's medium-centred 1 model of 'Transfer' and 'medium." Explorations in communication: Media Ecology, 22 (4): 399–420.

https://doi.org/10.1386/eme_00180_1

Timplalexi, E., and H. Führer, 2023. Reconsidering Elleström's medium-centered communication model: a critical inquiry. Ekphrasis, 30 (2): 93–114.

https://doi.org/10.24193/ekphrasis.30.6

Timplalexi, Eleni, and Heidrun Führer, 2024, "Claiming an for Intermedial Home Imagination, Memory. Performativity: A Subjective Approach to the Intermediate Communication." In Performativity Representation of Memory: Resignification, Appropriation, and Embodiment, edited by Frederico Dinis, 1-28. Hershey, PA: IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-2264-2.ch001

Wolf, Werner. 1999. The Musicalization of Fiction: A Study in the Theory and History of Intermediality. Amsterdam: Rodopi.

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