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## FROM INTERSUBJECTIVITY TO INTERCULTURALISM IN DIGITAL LEARNING ENVIRONMENTS

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**Abstract.** The paper presents the work of the research program “Studies on Intermediality as Intercultural Mediation” a joint international venture that seeks to provide blended-learning -both online and in-classroom- methodologies for the development of interculturalism and associated emotional empathic responses through the study of art and literary fiction.<sup>1</sup>

Technological development is consistent with human desire to draw on previous information and experiences in order to apply acquired knowledge to present life conditions and, furthermore, make improvements for the future. Therefore, it is logical that human agentive consciousness has been directed towards encouraging action at a distance by all possible means. The evolution in media technologies bears witness to this fact.

This paper explores the paradoxes behind the growing emphasis on spatial metaphors during the 20<sup>th</sup>-century and a dynamic concept of space as the site of relational constructions where forms and structural patterns become formations constructed in interaction, and where the limit or border becomes a constitutive feature, immanently connected with the possibility of its transgression. The paper contends that the development of mass media communication, and particularly the digital turn, has dramatically impacted on topographical spaces, both socio-cultural and individual, and that the emphasis on „inter’ perspectives, hybridism, ambiguities, differences and meta-cognitive articulations of awareness of limits and their symbolic representations, and the desire either to transgress limits or to articulate „in-between’, intercultural „third spaces’, etc. are symptomatic of structural problems at the spatial-temporal interface of culture and its representations. Finally, the paper brings into attention research on the neuroscientific basis of intersubjectivity in order to point out the material basis of human knowledge and cognition and its relationship to the archiving of historical memory and information transfer through education. It also offers a brief introduction to the dynamics of SIIM.

**Key Words:** art, b-learning, cross-culturalism, intersubjectivity, comparative literature, cultural mediation.

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## 1. Introduction: state of affairs

Research has shown that conceptions of time and individual's progress through life have always been mapped in topographic terms (López-Varela, 2004). During the 20<sup>th</sup>-century, the emphasis on spatial metaphors became even more important at time when industrialization centered cultural attention on urban spaces. Views of culture as discontinuous in space and time were originally the basis for the delineation of civilizations and their differences in language, economy, technology and other modes of development, institutionalized ideological codes such as politics, religion, artistic canons, etc. Similarly, the initial stage on the formation of a territory (nation/country>county>city>community>individual) pays attention to boundaries (whether physical or ideological) with other surrounding areas (studies in cognitive science show the narrow relationship between human body perception and awareness of limits; see for example research on conceptual metaphor). A more advanced stage is the conceptualization of mindscapes in a condition of „openness' as regards to space and time, that is, taking into consideration changing topographical aspects, historical change, and also the fact that space (as subjectivity) is a result of the relation of one space – arranged around a centre- against another space with a different centre. (see López-Varela & Net, 2009).

During the 20<sup>th</sup>-century there has been a growing emphasis on the phenomenological conceptualization of space as existential dwelling place (for an analysis see López-Varela, 2010 “Exploring Intercultural Relations...”) In this approach, humans unveil space as site of relational constructions where the limit or border becomes a constitutive feature, perceived first as embodied, physical and territorial, a feature of individual and collective identity but that, in fact, encloses deep aspects of human experiences and their cultural codifications. Space is always drawn against the human being as a point of reference. The production of spatial finitude and delimitation of both space and time places the individual in the centre of perception. Existing things are felt (seen, heard, etc.) as fixed around us, placed against a particular point of reference and this constructed space acquires a sense of territorial belonging. It is through this sense of belonging that the role of history, memory and art comes into this research. Beyond the straightforward remembering of the past, the understanding of art as an „intersubjective experience' constructs interpretation absorbing outside (Other) elements plunged into the present of a *translational* or *mirroring* situation with a contextual shift. Memory, therefore, boosts the movement towards the Other, towards extraneous discourses the semiosis and representation of which resorts to various hybridizing and transposition techniques such as interdisciplinarity, collage, embedding, merging, ekphrasis or remediation of formats, among others, together with a diversity of *mirroring* strategies employed in *translating*, not just types of texts and discourses, but different modes of communication. These operations re-arrange conceptual and semiotic borders considerably, given the material, linguistic and cultural constraints imposed on them.

The phenomenological approach to conceptualizing space has been seeking to reconcile it with a dynamic approach which integrates the dimension of time. This was achieved, both in science (i.e. Einstein's relativity theory), philosophy (i.e. work by Husserl, Heidegger, Sartre, Bergson, etc.) sociological and critical history (Foucault's

problematization of ‚heterotopias’ and Gilles Deleuze’s and Félix Guattari’s concept of the smooth-nomad-space versus striated space) postcolonial theory (Lefebvre, Bhabha, Miller) and semiotics (C. S. Peirce and Merleau-Ponty) through a common emphasis on human agency. This relational understanding renders the concept of ‚limits’ and ‚boundaries’ dynamic, that is, immanently connected with the possibility of their transgression, a fact that became the cornerstone upon which cultural debates between modernism and postmodernism. Notions such as ‚hybridism’, ‚in-between’ and ‚third space’ have become powerful metaphors that include new cognitive and linguistic aspects in the description of spatial relations (individual and collective) and their limits. Insofar as hybridity brings to the fore the transitional, ambiguous and paradoxical, it touches upon the problem of categorization, enhancing the move toward pluridisciplinary approaches that require uneasy combinations of analysis from various fields of research such as anthropology, sociology, literary theory, cultural studies, architecture, etc., and which relocate cultural criticism in general (see López-Varela, 2008 “Cultural Scenarios of the Fantastic”).

Katherine Hayles was among the first scholars (along with her French sociologists and cultural theorists such as Jean Baudrillard or Jean-François Lyotard) who contended that the balance between limits and their transgression had been dramatically shifted by globalization and the development of mass media. While communication among Western individuals during the first half of the 20th-century remained based on the mobility of individuals, during the second half the digital revolution marked a decisive separation between transportation and communication, with signs beginning to move independently of geography and faster than transport replacing local communities by a kind of non-geographical “Webness” (López-Varela, 2006). But cyberspace sketches maps of new communities which continue to reveal cultural boundaries and core-periphery tensions, negotiable, transitional and continuously shaped by communities, bringing forth a repertoire of identities, evidenced as constructed, performative subjectivities (see for example Hayles, 1999; López-Varela, 2010 “Posthuman Inscriptions...”).

Analyses of mindscapes (López-Varela and Net, 2009; López-Varela, 2010 “Discursive Topographies and City Mindscapes...”) have revealed that the general mechanization of social functions through the use of technology gradually seems to reduce the relational space, both in terms of physical distance but also, and importantly, in terms of physical contact. And this lack of physical contact is felt in the relations among individuals. This is the reason why contemporary art develops a political project when it endeavors to move into the relational realm of human communication by turning it into an issue. In the post-industrial city, the intricate interconnectivity that teleconnects everyone across the globe offers delocalized and dehumanized visions of the city, alien to the supposedly natural and organic basis of our mind and capacity for relations, now turned into cybernetic organisms and processes. The loci of place are not just altered in spatial terms. They are chronotopically removed, in Bakhtin’s terms; that is, translocated and moved without actually moving. As William J. Mitchell contends, the concept of the nomadic locus/site underscores the degree to which bites of information constitute a sense of place. A semiotic consequence of this graphic overload is a multiplication of signs systems where prototypical representations of urban spaces change towards the questioning of the tradition of the evocation of monuments, public buildings, or cultural

attractions as symbols of essentialism and national differentiation, and the perception of multiplicity and continuous exchange of signs becomes the rule. Even in the case of spaces propitiating the maximum number of connections (traditionally the city, but nowadays virtual „social sites’ such as Facebook or MySpace), Otherness seems to be encountered but not fully assimilated. This paradoxical implosion (felt as lack) of intersubjective communication, at a time of maximum communication networks across the globe, is naturally the site of current interdisciplinary *desire* to research on interpersonal and intercultural relations.

Space is no longer an enabling interval between subjects and the emphasis on ambiguities, differences and meta-cognitive articulations of awareness of limits and their symbolic representations, and the desire either to transgress limits or to articulate „in-between’ „third spaces’, etc. are symptomatic of structural problems at the spatial-temporal interface of culture and its representations. Furthermore, such articulations signal culture as a set of specific dispositions, acquired but also constructed by individuals in their process of living and „being in the world’ and, as such, a principle of semiotic practice which permits inter-subjective formations of signification and meaningful action, negotiated in political, social, economic and *technological* practice.

This is where recent research on the neurological basis of intersubjectivity might be of interest in order to move towards a flexible framework that incorporates the dynamic aspects of relationship, where space-time, the grounding of all human activity, is simultaneously topographical and dynamic and not just as simple interaction between two or more agents. In traditional computational information-processing models of the mind there is a primary separation between the self and the minds of others, and cognition develops from the inside out, with innate or acquired cognitive skills eventually transferred or projected onto others by inferential processes that seek to understand their motives, experiences, mentalities, etc. Recent research (see Zlatev, Racine, Sinha & Itkonen, 2008) shows that the sharing of experiences is not only, not even primarily, on a cognitive level, but also and more basically, on the level of affect, perceptual processes and conative (action-oriented) engagements. Such sharing and understanding is based on embodied interaction (e.g. empathic perception, imitation, gesture and practical collaboration). Crucial cognitive capacities are initially social and interactional and are only later understood in private or representational terms.

The concept of intersubjectivity seems to be ontologically foundational to both intrapersonal cognitive understanding and transpersonal experiential semiotic engagement with phenomena. Intersubjectivity represents a comprehensive emotional, intentional/motivational, reflective, and behavioral experience of the other. It emerges from shared emotions (attunement), joint attention and awareness, and congruent intentions. A multilayered concept, intersubjectivity is characterized by its being the meeting point of various areas and very different methodologies. Looking back to the history of scientific thought, this sort of cross-disciplinary conceptual implosion opens the way to the opening of new research horizons. Thus, recent trends in neuroscience and cognitive studies, traditionally interested in presenting objective common correlates to world experience, and psychological research on consciousness, with a focus on subjective phenomena, seem to be moving towards bridging the gap between objective brains and subjective minds. All new approaches to consciousness view „relationship’ as fundamental. One suggestion is that mirror neurons support imitation, empathy and

social cognition in general. Relationship enables humans to understand the mental states of others through the process of simulation. The question remains, how is this achieved in digital environments?

## 2. SIIM Research

Responses to technological change and the study of multimodal communicative contexts are shaped both by material aspects and by human experiences ranging from intertextual and intermodal relations to socio-cultural and political implications (see Elleström 2010; also López-Varela, 2010 “Posthuman Inscriptions...”). Communication depends on particular topologies, ecologies, technologies etc. which shape our concepts, ideologies, etc.

Therefore, future SIIM research is oriented towards the hypothesis that intersubjectivity can transcend individual-historico-socio-cultural relative/contextual instances with the help of technology. The role of sensory experience in the discourse processing of meaning (naming, describing, narrating, and commenting) is explored, together with other non verbal (musical, visual, etc.) stimuli. For instance, specific ideological concepts can be targeted and used to examine their ability to provoke sensory and motoric reactions, linked in turn to empathic responses. Language is hereby understood not only as an externally acquired (learned) system (in accordance with the traditional definition of language as abstract, disembodied system of signs, functioning via given sets of rules), but also as an interiorised (lived) system, connected to bodily, social and cultural experience of its speakers, intertwined with other practices of signification. Though the definitions of discourse vary significantly, what they seem to have in common is that they focus on social meaning which they usually understand in terms of (predominantly) linguistic practices and their ability to reflect social and cultural values (ideology).

For this reason, SIIM’s purpose is to examine the definition of social meaning as *shared existential meaning*, embodied by individuals (in the roles of “self” and “other”) participating in social dialogues. The hypothesis is that such meanings come about through to the activation of speakers’ mirror neuron systems, which could also account for their social character and their embodied nature. Research on intersubjectivity that takes the human and social sciences as starting point (philosophy, psychology, sociology, anthropology, critical theory, art, etc.) tend to see discourse as foundational to intersubjectivity. Our phenomenological experiences are always immediate; those of others are mediated. We *expect* to have access to the Other’s so-called mental life through his/her expressions (gestures, gazes, verbal communication, etc.). The complement of our world-embeddedness, our bodies, is the necessary manifestation (expression) affording access to others. Expressions try to *translate* or *mirror* thought, but we encounter uncertainties where access is limited or disappointed.

Donald Davidson has explained that for either thought or language to exist there must first be a situation, which he calls ‘triangulation’, “that involves two or more creatures simultaneously in interaction with each other and with the world they share,” and where “each correlates their own reactions to external phenomena with the reactions of the other.” (2001: 128-9) Language, according to Davidson, is essential to thought

because “unless the base line of the triangle, the line between the two agents, is strengthened to the point where it can implement the communication of propositional contents, there is no way the agents can make use of the triangular situation to form judgments about the world; only when language is in place can creatures appreciate the concept of objective truth” (130). In other words, the ability to communicate with other people through language underlies the capacity to have thoughts about the world. The ability to describe the world (at an objective level) is therefore dependent on the ability to communicate with others at an intersubjective level. In this way, all kinds of human interactions presuppose forms of intersubjectivity, that is, the mutual recognition of the semio-cognitive inferences –something standing for something else, where sign-relations are also embedded in institutional relations and communities of practice, and contemplated not only as social interpretative forms, but also as *functional artifacts* whose meaning is based on use value as *objects of exchange* within complex systemic processes involving intentionality and agency. Human beings are reflexive agents who embody repertoires of social and cultural meanings and practices (Bourdieu’s ‘habitus’) which they appropriate, transform, and resist for particular goals and purposes. In the case of language, several thinkers (Wittgenstein, Bourdieu, Bakhtin, Peirce, etc.) coincide in maintaining that the meaning of a proposition lies in the possible consequences it may be conceived to have in the future; its meaning is thus equated with a habit or a disposition to *act* in a certain way. The reactivation of memories of sensorial experiences plays an important role in this process, with memory being constructed following narratological patterns (Bouissac, 1998: 20). Thus, if what is experienced in the future is contradictory to the consequences derived from the proposition, either the proposition, or the way conclusions are derived from it, must be false. In fact, research seems to show that human intersubjectivity is intimately tied to bodily mimesis and language acquisition, particularly in what refers to the understanding of these ‘false’ beliefs. What begins as perceptual and emotional resonance processes in early infancy, which allow us to pick up the feelings and intentions of others from their movements, gestures (pointing is the most basic form of non-verbal explicit reference; it allows pick out a specific object in the environment and make it a manifest topic for shared attention), and facial expressions, feeds into the development of more nuanced understanding of how and why people act as they do, found in our ability to frame their actions and our own in narrative ways (see Zlatev, Racine, Sinha & Itkonen, 2008). Much of this ability is interiorized through institutionalized education.

With the emphasis on the interaction between sensory and motor experiences and conceptual knowledge, SIIM research seeks to produce ‘conceptual integration networks’ (Fauconnier & Turner, 2008) to be tested out in educational environments. Conceptual outcomes will explain how exposure to different online contexts and environments (informational sites, blogs, social sites, etc., associated to the project) might lead to a variety of conceptual structures. Conceptual value of online discursive material produced by participants (naming, describing, narrating, commenting and producing information in multiple formats) will be subjected to a systematic contextual analysis which considers multiple contextual factors (immediate or real context, narrative context, social context, cultural factors etc.) Interpretation of results will take into account contextualised and culture-based analysis, stressing and developing points

of cultural relevance (e.g. ideological, religious, political) especially from a comparative point of view.

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