Intermedia, an Updated Vision in the Early Twenty-First Century

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What is it that characterizes the practice of intermedia thought? Is intermedia thought an actual phenomenon, or is it already out-of-fashion? Before the apparent lack of peer's consensus as to the actuality, terminology, and meaning of the term 'intermedia', this article presents the main characteristics and antecedents of intermedia thought and practice previously identified by other authors and, based on an actualized study, expands the set of these attributes, proposing the inclusion of the characters presentative and indisciplinary. An amplified review of the literature allows us to support a philosophical approach that demonstrates the actuality and appropriateness of Coleridge's original conception of the 'intermedium', as well as the affinity between intermedia and experimental chemistry, given its transformative, laboratorial, and experimental character, and its capacity to create new media through the fusion of existing media, in an open autopoietical process.

1 Introduction

The aim of this study is to substantiate and assert the influence and emergence of an intermedia practice and thought at the beginning of the XXI century. The present dispute about the extemporaneousness[1] or actuality of intermedia practice and thought, and about the meaning[2] of the term itself, as a common denominator of the results of several happenings, practices and thoughts in the art and design field, were taken to be a problematic worthy of this paper. This paper summarizes theorization about antecedents and concepts that support an approach to a definition of intermedia.

By relating Higgins, Coleridge and Chemistry, we approach the original conception of the term 'intermedium' as it was proposed by Coleridge, and also its adaptation by Higgins. We affirm an affinity relationship between intermedia and experimental chemistry, emphasizing its transformative, laboratorial character, and its synthetic ability as a generator of new media. We identify serendipity, indetermination, and autopoiesis as inherent characteristics of intermedia and some scientific practices.

We clarify the distinction between intermedia and multimedia concepts, arguing from the relational and plural characters that respectively associate with each of them. We discuss changes in artistic movements that were inherited by intermedia, using several examples: in Futurism, the indecency concerning the use of any mean or of the public reactions; in Dadaism, its heterogeneous strategies and its spontaneity; in the Ready-Made, the media liberation from their original functions; in Happenings and some John Cage's work, the inclusion of the audience and indetermination. We identify the concepts of threshold, hybridism, holism, continuity or fusion, as intermedia attributes that justify for its non-categorization.

It is the aim of this text to demonstrate intermedia conception as a process of indisciplinary creation, a process that generates new hybrid media through the systematization and development of fusion models from different expression media.

2 About Intermedia

2.1 Higgins, Coleridge and Chemistry

According to Kostelanetz (1999), Higgins made quite clear the view that there can be no limits to creative activities. Higgins (1966b) used the term intermedia to categorize art works that seemed to him to be found between media. Schneider (2000) considers that Higgins, by describing – with the term intermedia – art works that operate in the interfaces of established media and

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1 Authors such as Claudia Gianetti (2010) consider the intermedia as 'linked with the productions and theories of the seventies and from this point of view is a bit outdated.'

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2 There is a lack of consensus when several individuals answer the question 'what means intermedia'. Answers available at: http://hyperinstrument.com/interviews/

in the interstices between art and life, anticipated post-modern preference by hybridism instead of formal unity, as well as the challenge of art as a pure ontological category.

The term intermedia was used the first time in 1966, in 'the something else newsletter', with Higgins's attempt to distinguish Marcel Duchamp's from Picasso's work, as he tried to show that Duchamp's work was truly 'between media, between sculpture and something else'. We can speculate on the name itself of the newsletter – 'the something else'3 – but it is more interesting to stress the recurrent use of the word 'between' in Higgins's text. The prefix 'inter' is sustained, throughout Higgins's text, by the word 'between'. We will then consider the term 'between' as a keyword: to work 'between' several disciplines, between several kinds of knowledge and between several experiences.

The word 'between' helps us to understand and contextualize the works resulting from intermedia practice and thought. Those works fit somewhere in a hybrid area, between Visual Art, Sound Art, Architecture, Design, Performance and Science, amongst other fields. The prefix inter, from the Latin, is related to and is a synonymous of the word 'between'. So, a first etymologic interpretation of the term would translate intermedia as 'between-mediums.

A century before Higgins, Coleridge had already introduced, in his work 'Biographia Litteraria', from 1817, the term 'intermedium'. In an interview given to Nicholas Zurbrugg, Higgins (Zurbrugg & Higgins, 1963, p. 24) confirms that he renewed Coleridge's term. In this paper, we pretend to explore the notion of intermedia as a 'transformative chemical agent'. Coleridge is quite clear: "(...) an intermedium of affinity, a sort (...) of mordaunt (...)". The intermedium is a kind of 'mordaunt'. In spite of the fact that we no longer find the word 'mordaunt' in modern dictionaries, Doctor Alice Eldrige informs us: 'I think it's an old fashioned technical chemistry term meaning a common base – like a common ancestor.' (Eldridge, 2013) Thus, we propose the concept of 'catalyzer' as an inferential approach to 'mordaunt''s meaning. As a catalyzer, Coleridge's 'intermedium' establishes an initial affinity between intermedia and a chemical agent.

The affinity between intermedia and chemistry is corroborated by Sumich (2006) comparison between intermedia and experimental chemistry. Chemistry, as it is defined by the 'Collin's English dictionary', is '(...) the branch of physical science concerned with the composition, properties, and reactions of substances; (...)'.

Eisenkraft (et al., 2006) states that the artists are chemists, for they 'study and understand the properties of specific materials – media – and find ways to explore those properties' in order to express themselves. According to this author, chemistry resumes

3 In an interview with Zurbrügg, Higgins remember what he wrote in his 'The Something Else Manifesto': 'Whatever the other people are doing, I'll do something else.'

to change, and artists become chemists through their need to understand the materials between the materials they use. The understanding of the properties and characteristics of materials has been a fundamental component of artistic production since antiquity. Levere (2001) entitles his 'Chemistry History' as 'Transforming Matter', and he summarizes the technical competencies of chemistry applied to the manipulation, separation, combination and modification of different substances. These competencies are much alike to those practiced by intermedia artists and designers. Gardinali (2012) explores the relation between chemistry and art and states that since the discovery of fire, artists have made a creative and exhaustive use of the media which were available to them. It is consensual that both artists and chemists activity transforms.

Moody (2000) refers a mutual relation between materials and artists, and he states that both 'artists and chemists deeply value personal interaction and experimentation with materials'; or, in other words, the laboratorial component that allows the growth of understanding about the media. Glusberg (1980) already considered intermedia as 'an unusual laboratory, though, where technical and communications media are the guinea pigs'. The affinities between chemistry and intermedia are made visible in the fact that both are essentially processual, laboratorial and transformative, which enables the unexpected, serendipity and indetermination.

Serendipity may be one of the major drives for the artists and chemists in their work processes. Spector (2003) states that it is chemistry itself that seduces the chemist's imagination, which sometimes produces an intrinsic tension between the charm of the work they are developing and its final result (p. 253). This drive (intrinsic and extrinsic) is also absolutely true to intermedia practice and thought.

The identified affinities are also sustained by the arguments of Spector and Spalding discussion (2003) about art and chemistry, in which they identify, for instance, the resource to metaphor, transformation, synthesis, the production of products, symbolic language, experimental vocabulary, tools and equipment. These resources are undeniably recurrent both in the fields of intermedia and chemistry. Kultermann (1980) had already identified one of these resources as characteristic of intermedia when he states: 'One of the characteristics of intermedia is its synthesizing character'. Roald Hoffmann is another convinced supporter of the deep connections, affinities and relations between art and chemistry. One of them is precisely the creation of media (any type of media, from material to conceptual) previously non-existent. Hoffmann (1993), that locates chemistry in the field of science, states:

> Art and science share a desire for knowing that which is not yet known. They share so many things: the nature of inquiry, the intellectual process, the formulation of ideas, a concentration on the observable, a deep examination of the nature of perception and the ways perceptions change with the observer. Chemistry and art synthetize by melding old knowledge with new observations to provide us novel concepts of nature or of the human relationship to nature. (p. 9)

In this way, intermedia generates something new, in the threshold, from the transformation of existing media.
Spector (2003) states:

> Much of the identity of chemistry as a discipline is related to the generation of materials that have not existed before and have no natural equivalent, rather than to understanding what exists in the natural world – what chemists like to call "novel" molecules, compounds, or materials. To me, all these issues of natural/synthetic/imitation/novel also relate to issues of originality, which is another point of connection between chemistry and art (…). (p. 240)

If, in the previous quote, we substitute the word chemistry by intermedia and the word materials by media, the sentence will still make perfect sense and will reinforce one of the main ideas of this paper: intermedia as an essentially presentative phenomenon, and not representative or mimetic, as so many of the more traditional artistic forms.

If intermedia generates new media from the transformation of existing media, then we can both affirm the actuality and antiquity of intermedia, because the thought and practice of generating media from the transformation of existing media is a constant throughout human history. Nevertheless, intermedia has not always been recognized and validated in the artistic and academic fields, which were conceived as a hierarchic system of knowledge, of disciplinary division that evolved from the millennial fission between rationalism and idealism.

Another affinity between intermedia and chemistry is related with the question of 'indiscipline' and the breaking of disciplinary limits, as a quality of the intermedia. Chemistry can also be indisciplined, for according to Spalding (2003) 'It is surprising that chemistry can take us outside the bounds of more traditional notions of scientific reason.' (p. 236) Hoffmann (1993) states that 'the aesthetic principles of science are not that different from those of art. Beauty, elegance, deep understanding are sought by chemists just as much as they are by artists' (pp. 8-9). We may conclude that intermedia is precisely a transformative, laboratorial, experimental, synthesis process, able to generate new media.

2.2 Serendipity, indetermination and autopoiesis

When he was co-organizing the book/exhibition 'Chemistry Imagined', Hoffmann experienced indetermination and serendipity, as he explains by stating that his 'initial conception [...] was typically scientistic, therefore linear. (...) But the nature of the creative process has ways of subverting such linear plans. And the work of art (...) carves out its own space.'(1993, pp. 9-10) Hoffmann confirms the idea that often the artist's production is induced and oriented by the process of production of the work, process in which all the (in)determinants should be included. Indetermination deserves, as an intermedia quality, a deep discussion, and it is well to remind here that, for some scientists and philosophers, indetermination is also a quality of science. Elstob (1986) refers to how Karl Popper demonstrates that 'even within its own conceptual framework the deterministic scientific view exhibits an inherent indeterminism.' (p. 80) Ilya Prigogine – a physicist and a chemist – challenged scientific determinism as he affirms indeterminism and chance as integral parts of systems theory. According to Elstob (1986):

> '(In Prigogine's treaty), the indeterminism arises from thermodynamic bifurcation points where random events are what determine the future course of a system. A consequence of this view is that structures that now exist in the whorl may have resulted from purely chance events, thus denying the universal operation of determinism.' (p. 80)

Zatti (2003) discusses the possibility that the nature of the universe might be accidental. Indetermination as something inherent to life and nature justifies its use by artists that try to approach and integrate their work in life and nature. In what concerns intermedia, indetermination is associated to its creative processes, taken as open autopoietic, transdisciplinary and indisciplinary systems.

We use here the expression 'open autopoietic' systems as a meta-abstraction from the concept of 'autopoiesis', introduced by Maturana and Varela (1980). To be more precise, we use it as an abstraction of Luhmann's concept of 'autopoiesis', which is already an abstraction from the Maturana and Varela's original concept. To these authors, 'the establishment of any system depends on the presence of the components that constitute it, and on the kinds of interactions in which they may enter.' (1980, p. 95) Kultermann (1980) also characterized intermedia as an open system, giving as an exemple the relationship between audience and work. According to Seidl (2004), in the original concept of

autopoiesis, 'the elements of aupoietic systems are not produced by something exterior to the system', i.e., 'all the processes of autopoietic systems are produced by the system itself'. Seidl states that 'autopoietic systems are operatively closed', because there are no operations coming from the outside entering the system, nor vice-versa.

Luhmann indirectly applied the concept to sociology, as a radical abstraction from the original biological concept, transforming it into a general, transdisciplinary and open concept of autopoiesis. Luhmann states that 'the emerging insight is that the phenomena of interest for evolution are special kinds of systems: open systems, that is, those that can exchange energy, matter and information with their environment.' (1986, p. 148) A decade later, Guattari (1995), with or without knowledge of Luhmann's abstraction, also reformulates and expands Maturana's original concept, as when he writes:

> Autopoiesis deserves to be rethought in terms of evolutionary, collective entities, which maintain diverse types of relations of alterity, rather than being implacably closed in on themselves. In such a case institutions and technical machines appear to be allopoietic, but when one considers them in the context of machinic assemblages they constitute with human beings, they become ipso facto autopoietic. (1995, pp. 39-40)

According to Doruff (2008), Guattari appeals creativity as a means to expand homeostatic, self-referential and closed systems, turning them into open, new, imaginative systems. Hall (2010) considers that 'applied to aesthetics, autopoiesis replaces an external objective view of art with an internal relativistic understanding of creation. And this can be described as a self-functioning system of aesthetics that is open to negotiation.' Spielmann (2005) states that intermedia works are formed through the exchange and transformation of elements originating from different media. In this perspective and on these grounds we may abstract the expression 'open autopoiesis', open to exchanges with the exterior that contribute to the modelization of the structure of intermedia systems of creation and production, as well as of their resulting works. Maturana's closed concept evolved to an open concept of autopoiesis, so that we may say that the dynamics of intermedia processes are open autopoietic dynamics.

The spectator may be one of the components of the intermedia system, i.e., a medium. Having no intention to deny the Author's accountability, we affirm that the hybrid Author/Artist/Designer/Producer has no nuclear role, but is merely a necessary component of the intermedia system, is merely also a medium. Thus, the intermedia follow from the interaction of the media that compose

it. If we consider interaction and exchanges between media as a communication phenomenon, then intermedia is indisputably interactive and even enactive.

Clark (2011), who studied autopoiesis as a basis to the expansion of interactive artistic system, recovers the classical model of the artistic system proposed by Cornock and Edmonds (1973), composed by the artist, the participants, the work, the environment in which these elements are placed, and the dynamic processes or interactions that follow from this constitution. On the contrary, this paper suggests that intermedia emancipates from the system, posing itself as its own system – open autopoietic – of conception, production and materialization, and not as an element or component of the system.

In regard to the application of autopoiesis to esthetics, Hall (2010) considers the interactive art work as an evolutionary system, where the art object and the spectator become co-organizers, creating an emergent esthetics, one that we might call endoesthetics. Hall's idea is very close to the concept of enaction when we take into account the capacity of sharing proposed by Teixeira (1998), when he considers that the 'activity of communication doesn't consist in the transference of information from the emitter to the receptor, but in the mutual modulation of a common world through joint action.' (p. 147) The joint action of human beings as intermedia media confers its evolutionary character of an enactive interface. Intermedia is then a kind of hybrid of living beings and non-living beings, such as mechanic, electronic or informatics systems. This hybrid character is sustained by Barton (2008) when he states that 'intermedia often attempts to enact the symbiosis of body and machine, locating each within the lived context of contemporary experience.'

Let us remind the 'autopoietic principle' of the 'hybrid constitution' proposed by Francesco Monico (n/d.):

> Every living and non-living being has to be respected in its "self-creation" and in its expression of a fundamental dialectic between structure, mechanism and function. As an organized unity, as a network of processes of transformation and destruction of components which through their transformations continuously regenerate and realize the network of relations that produced them, and constitute it as a concrete unity in space in which they exist by specifying the topological domain of its realization as such a network.

This principle indicates the ambiguous character of the intermedia as a consequent unity of its own autopoiesis: the unity of the unique, of the uniform, of the conform and of the homogeneous, but also the unity of the deformed, of the diverse, of the

distinct and of the heterogeneous. Coleridge, in 1817, defined the 'intermedium' as a catalyzer, Cornock and Edmonds, in 1973, considered the artist as a catalyzer of creative activity, and in 2013 'Ars Electrónica' promotes an exhibition commissioned by Manuela Naveau, whose theme was the artist and the work as catalyzers. The untimeliness of the association between the terms art work and/or artist and catalyzers gives intermedia constant actuality.

2.3 Multimedia and Intermedia

Intermedia term, coined by Higgins, is previous to Multimedia term (Zuras, 2010). In order to clarify the distinction between intermedia and multimedia, let us hear what Frank (1982) wrote about this subject:

> Intermedia, in effect, denotes the wholly hybrid art forms that result from a seamless fusing of approaches and attitudes originating in the traditional arts. The elements in Wagner's operas – music, libretto, stage design and costumes, dance (such as there is) – can be functionally isolated from one another without complete loss of coherence or even integrity. (1982, p.58).

Gesamtkunstwerk is considered to be a multimedia work. As a combination of visual and sound arts, Frank places it in the category of those works which merely overlay media. Frank refers that 'the cross-referencing and combining aural and visual art is part of a wide realm of cross-artistic and even pan-artistic activity which has pertained for centuries. Multimedia manifestations comprise part of this activity.' (Frank, 1982, p. 58) Ox (1999a) emphasizes the complete difference between the concepts of intermedia and multimedia. To this author, whereas in multimedia the content is simultaneously presented in more than a medium, the intermedia combines structural and syntactic elements of different media in a single new medium. Higgins (1998) established a differentiation between intermedia and multimedia, recognizing that the former was a kind of conceptual fusion. Spielmann clarifies the distinction between intermedia and other approaches, such as multimedia, hypermedia or mixed media. The author argues that the latter may be compared between themselves because they describe the 'expansion of a singular media in terms of accumulation', whereas in the intermedia, instead of accumulation, the expansion results from a process of 'transformation'. In spite of being considered merely multimedia, Wagnerian Gesamtkunstwerk, according to Wurth (2006), premeditated, but didn't achieve, the total connection of all the media in an amalgam with no origin. And, according

to Wurth, Wagner's approach failed because it affirmed the separation and the hierarchy between the media.

> Wurth (2006) writes: For Wagner's programme of ''together-art'' feeds, precisely, on medial limits: in his outlook of the artwork of the future he starts from a hierarchy of the temporal (''human'') over the spatial (''plastic'') media and, moreover, situates each of these media within their conventionally assigned domain. Thus, painting and music or poetry are not so much fused as put together in the sense of combining while retaining their respective roles. (p. 7)

This point of view sustains that Wagnerian opera, oriented to the proscenium, is not a transformative amalgam, a confusion between arts and senses or a contamination between the media, but only a mere combination of separate parts. Meier (2012, p. 134) denominates Gesamtkunstwerk as 'non total', for the media merely collide one with each other, in a multimedia dynamics, instead of interacting one with each other, as it happens in intermedia dynamics. Meier further distinguishes Gesamtkunstwerk from intermedia, insofar as, in the first, different media cooperate in a complementary way aiming totality, while in intermedia, what happens is precisely the deconstruction of the total art work. Meier remarks: 'It is in this sense that the Gesamtkunstwerk aims at the full representation of human experience—the total work of art that should express all of life's experiences, but does not create a new life experience.' This last argument from Meier allows us to sustain that intermediality pretends to afford new life experiences, to expand the scope of experiences lived by the public, and not to make any kind of representation.

Although there is a clear distinction between multimedia and intermedia, the two can be related. Glusberg (1980) considers that the multiplicity of media, multimedia, is the infrastructure of intermedia, conceived as the totalization of the artistic forms. This author sees the intermedia as a revolution of total scale in art and affirms that the intermedia, 'in addition to being multimedia, is also transmedia'. Dias (2012), who also considers the opposition between the terms 'multi' and 'inter' in several contexts, considers the 'multi' as the confirmation of diversity and plurality. The 'inter', to Dias, is relational. Dias suggests that the multimedia 'come' before the intermedia and affirms that the relational character of the intermedia plays a constitutive role: '(…) the time of relation between the media is the time of production of the media themselves'. In other words, Dias sustains the idea that intermedia production is the production (synthesis) of new media.

In a cultural context full of frontiers, Fornäs (2002) affirms the advantage of the relational of the 'inter' over the pluralism and the combinatory of the 'multi':

> The general pluralism of the multi- has its very important points, but the relational inter- opens up wider doors toward new kinds of procesual cultural studies, by allowing for a great range of different kinds of connection, beside the mere addition of elements. This stress of the inter- is a way to navigate away from the traps of structuralism and systems theory, where dynamic relations tend to become petrified into relatively closed totalities. (Fornäs, 2002, p. 16)

Fornäs describes intermediality not only as relational, but mainly and precisely as the mixture of the breaking of the rules and the transgression of frontiers and boundaries. To this author, the liberation of disciplinary restrictions is one of the necessary conditions to creative culture. To Fornäs, multimedia are only combinations of separable media, while the intermedia concern 'the passages between the media that demand thresholds'. We may conclude that intermedia is also a 'crossing-field', a hybrid field of construction that operates in relating that which was separated and disperse. In Fornäs's thought, it is important to consider that the operations and mixtures 'of' and 'between' the media demand for human agency and contextualization. The media relate through human contextualized interaction.

> Intermediality (…) is when media (…) are connected by specific people (interpretive communities) in specific settings (physical, virtual and social spaces). (…) People necessarily mediate between media and media between people. (Fornäs, 2002, pp. 19-20)

2.4 Futurism and Dadaism

Shatnoff (1967) considered that some of the first Dadaists shows in the twenties were in fact intermedia. Gilbert Chase (1967) indicates the work of Cage in the beginning of the fifties as seminal to the development of what would later be designated as intermedia, in at least two aspects: the suppression of musical notation, as an opportunity to open the space-time of the work to the acting of the performer, and the random happenings generated in/by the environment. Kirby (1965) affirms that each one of the dimensions of Cage's work was already prefigured in the works of Futurists and Dadaists. In 1913, the Futurist Luigi Russolo writes a letter/manifest – 'L'arte dei rumori' – that Christensen (2009) considers one of the most influential texts in the musical esthetics of the twentieth century. In it, Russolo (1967), who radically

desired to change the perception of what might be considered music, expresses his claim that the noisy sounds of machines and urban life should be considered as musical tones and timbres. As the 'arte dei rumori', the 'esthetics of noise', also designated as 'bruitism' and explored by the Dadaists, also aimed, according to Niebisch (2013), 'to end this chauvinism against noise'.

In this sense, Futurists advocated a shameless attitude in relation to the use of any media in the artistic event. According to Tisdall (1978b), Futurists turned their back to the 'closed' life of the 'intellectually cultivated', a gesture that might be seen as an anticipation of the transgression and challenging attitude of the intermedia before institutional schemes and conventional definitions. Another aspect of Futurism that anticipates what would come to be the practice of Dadaists and integrates our concept of intermedia is the use of the public spontaneous reaction. Marinetti, according to Tisdall (1978a), by expanding the new form of performance, includes a greater degree of audience participation. The rather extreme use of the audience by Dadaists is even considered by Niebisch to be parasitic.

Foster (2003) considers that another aim of Dadaism was pandemonium, a total mess, the creation of a tumultuous and no-rules place. Kristiansen (1968) corroborates this idea of pandemonium, by arguing with the fact that Dadaism had a clear and unmistakable influence on 'happenings', and he quotes Clau Backman use of the same term: 'orgiastic pandemonium'. Kristiansen considered Dadaism as the opposite of an artistic movement, as a denial of all the schools, born of a necessity for independence and of a distrust before unity. The more important Dada strategies were the 'invention' of the 'readymade', the use of collage, of the assembly and the implantation of chance. These strategies, in addition to being mechanisms for the materialization of artistic objects, are also a resignation of the more traditional forms of artistic work. To buy, to edit, to fix, these were the new working forms, at that time far from being as familiar and applied as they are today. Walter Benjamin, in his polemical essay 'The Author as a Producer', congratulates Dadaists, pointing out the revolutionary force of Dadaism in the fact that it defied art's authenticity (Benjamin, 1934/2008). The artists that used chance were yet more challenging to the traditional modes of artistic work; either it was a found object or an automatic drawing, chance allowed artists to abandon the final control over their art works, simultaneously diminishing the quantity and the effect of their labor. Dadaism, according to Kristiansen (1968), anticipated and influenced the 'happening' through the heterogeneous mixture of distinct forms of expression, specially by way of three of its theories: 'bruitism', simultaneity and spontaneity. The two last theories are

essential in the construction of the intermedia concept, for intermedia works generally exhibit simultaneity of media in shaping the work, and also spontaneity of the human being, since he is free to act without no previous orientation or staging.

We can't deny the influence that the 'fluxus' movement had in what Higgins designated as intermedia. Yet, in this paper we strategically neglected that influence – given its temporal proximity to Higgins – and chose to discuss the antecedents that prefigured some of the strategies identified as characteristics of the intermedia.

2.5 Readymade and Happening

The idea of pure media, pure formats, is inappropriate to understand intermedia dynamics. Higgins coined the term Intermedia as a way of criticizing the separation, distinction and categorization of the media used in Art. These 'almost mechanical' hierarchies and separations, emphasized during Renaissance, lasted at least until XX century and was associated to society's division and subdivision in classes. According to Higgins (1966b), the tight division between social classes was absolutely irrelevant, and he also considered unnecessary the observations of art that aimed only to shelve it inside one or another particular category.

To Higgins, the Ready-made and the Happening break the idea of pure media or formats:

> The ready-made or found object, in a sense an intermedium since it was not intended to conform to the pure medium, usually suggests this, and therefore suggests a location in the field between the general area of art media and those of life media. (Higgins, 1966b)

We can see this new intermedia space in Duchamp's urinal: 'He took an ordinary article of life, placed it so that its useful significance disappeared under the new title and point of view – created a new thought for that object.' (Harrison & Wood, Eds., 2003) The subversion or transformation of the functionality of a media, evident in the ready-made, is also one of the main principles of intermedia – to liberate the media from their original functions, opening the possibility to create new thoughts, new ideas and new functions to already existing media. We may conclude that the functional transformation of objects, materials and e languages integrates the process of creation and materialization of intermedia works.

We might speculate that this ability to transform the functionality of the objects is one of the characteristics that distinguish human beings from the other animals. Schneider (2000)

introduces in the artistic, political and social lexicon the term 'nomadmedia', concerning the nomadization of media. In spite of having been created in the context of political, social and artistic activism, this term is useful to designate the intermedia liberation and subversion of existing media. In the actual context, we may define the nomadization of media as the process of transporting media out of their original contexts and functions to operate in other contexts. Duchamp's practice, in the 'Fountain', points to the concept of 'prosume', which shows up as inseparable from actual intermedia dynamics.

Intermedia practice and thought freely combines the production, the consumption and the re-using of media. We may for instance underscore the use of hardware and software (as programming environments and languages), for both uses are simultaneously production and consumption acts. We can consider as readymade either an 'arduino' or a programming language, ready to be consumed as they in fact are; but, simultaneously, they also imply the production of an electronic circuit and a program.

Higgins refers the inclusion and participation of the spectator in the 'happening' and underscores Kaprow's work as a pioneer to this kind of artistic event, emphasizing his philosophical approach to mediation in the relation between spectator and art work. Higgins (1966b) criticizes 'proscenic theatre', with its mechanical division of actors, production staff, audience, argument and script, for its lack of portability and flexibility.

> Thus the Happening developed as an intermedium, an uncharted land that lies between collage, music, and the theater. It is not governed by rules; each work determines its own medium and form according to its needs. The concept itself is better understood by what it is not, rather than what it is. (Higgins, 1966b)

As it is impossible to give an objective definition of what intermedia is, we should keep in mind that Higgins confronts two possibilities: Intermedia as a huge and inclusive artistic movement, or, by contrast, Intermedia as an inevitable and irreversible historical innovation in reaction to the compartmentalization of history itself.

Higgins introduced the term Intermedia in February 1966, and in the next month Alan Kaprow (1966) uses it in association with fusion and hybridization taken as parallel forms of a thought that is closer to life. This was the second written register of the term Intermedia. We should not minimize the considerable immediate impact that the 'readymade', the 'happening' or intermedia had in the artistic context. In the same year, Corrigan (1966) immediately refers to intermedia experience and the happening as

signs of new forms of expression with unpredictable evolution. The inclusion of the audience, as much in Futurists and Dada- ists works as in the happening and the intermedia, as a resource involved in the work's materialization, brings indetermination to the work itself. Almost 50 years later, the questions and drives of the readymade and the happening explored by the intermedia are still open and actual.

2.6 Intermedia Space-time

We can hardly categorize intermedia works as uniquely sculptural, plastic, musical, or architectonic, because they don't exclusively frame in any of these categories, while at the same time they in some way frame into each one of them. They are the product of interactions between independent space-time systems (Ox, 2001), they occupy a hybrid and ambiguous space-time. Cseres (2009) places intermedia work in that space-time between media, codes, types, genders, forms, tools and institutions. Cseres states that intermedia works defy conventional classifications, institutional schemes, as well as conventional definitions of art and creativity.

Intermedia space-time, between categories, between media, between concepts, is not the void; on the contrary, it is a space- time filled by possibilities, countless combinations and configu- rations. Fornäs (2002) alludes to this intermedia space-time as a transgression space-time, due to the fact that the intermedia operation occurs precisely at the threshold zone of the media, the disciplines and the concepts. In order to ground his idea of the threshold as a zone of space-time and not a boundary, a border or a division, Fornäs uses Walter Benjamin's conceptualization of the threshold:

> The threshold must be carefully distinguished from the boundary. A Schwelle – threshold – is a zone. Transformation, passage, wave action are in the word schwellen, swell, and etymology ought not to overlook these senses. (Benjamin, 1999, p. 494)

A threshold is a transition zone, while a border is a line that separates. Borders inhibit movements, while thresholds invite innovative change. As a matter of fact, these thresholds seem to be part of human nature, for, according to Fornäs, human com- munication and interaction are recognized as sources of thresh- old experiences.

Baker (2003b) designates the intermedia space-time as 'betweenness', and it seems that he attributes elastic and flexible properties to this betweenness, as when he states that it stretches/ expands media definitions, an expansion that occurs either

'in-between' or 'inside' the media themselves. Meier (2012) states that this space-time, which he designates as 'space in-between', '(...) has the potential to create genuine thought as an event within the concentrated form of intermedial artwork.' In other words, intermedia space-time is simultaneously a thought space-time and a thought generator space-time. Ascott (2013) designates this space-time as interstitial, and he proposes the concept of 'interstitial creativity' in reference to any type of practice that operates between the borders of media, gender or types of knowledge, with no recognition of any kind of hierarchy between them. We may conclude that these intermedia dynamics operate precisely in this interstitial space-time, full of matter and structure.

Intermedia thought and practice also have a common denominator in the holistic attribute. Although there are not many bibliographical references that use the term in association to intermedia, we may indicate Friedman's contribute (2007), where he uses the term as an adjective to qualify the intermedia as a holistic or unified program, in order to distinguish it from other concepts such as multimedia.

The hybrid character of intermedia is another consensual and transversal concept. Higgins (1967) states that intermedia covers the art forms that are 'conceptual hybrids', in-between two or more traditional media. Frank (1982) states that the more radical aspects of artistic crossings should be considered under intermedia scope, considering intermedia as the totality of the hybrid art forms. McCombe (2006) presents intermedia exactly as a synonymous of hybrid:

> These three works can be regarded as hybrid or intermedia works in which traditional art form boundaries are blurred through the intertwining of music, text, video and performance. (...) I believe that a hybrid or intermedia arts practice provides a much more fruitful and exciting creative vehicle, both in terms of the individual composer/artist/creator and in terms of the development of new work that articulates a variety of relationships between art forms and media. (McCombe, 2006, pp. 299 & 309)

McLuhan (1994) refers to the hybrid meeting between two media as an occurrence with great artistic, social and physical transformation potential, arguing that the 'meeting of two media' can, amongst other possibilities, create new forms. 'The hybrid or the meeting of two media is a moment of truth and revelation from which new form is born.' (p. 55) Kase (2009) shows that McLuhan used hybrid projects which functioned as experiences able to challenge the social conventional patterns of perception and thought. Friedman (2007), also highlighting the hybrid character of intermedia, paraphrases Higgins's concept: 'the term

intermedia referred to art forms that draw on the roots of several media, growing into new hybrids.' (p. 14)

It seems consensual that the intermedia generate something liminal and new. Ox (2001) confirms this approach: 'Intermedia is a combinatory structure of syntactical elements that come from more than one medium but are combined into one and are thereby transformed into a new entity.' (p. 47) Dorfles (1980) refers to osmosis, symbiosis and the confluence of the varied artistic languages as a trend that fosters contamination between languages and counteracts the 'stagnation' of pure languages. Dorfles relates intermedia with the new technological and mechanical discoveries, considering it as creator of a new language and of linguistic specifities constituted by the adoption of several codes. We would like to highlight the idea, in Dorfles thought, of the intermedia as a renaissance of the global creativity of the human being. Ascott (2013) affirms and actualizes this concept by designating it interstitial creativity:

> Artists will look anywhere, into any discipline, spiritual or scientific, immediate or distant in space or time, any technology, ancient or modern, to enable the untrammeled navigation of mind, and the open-ended exploration of consciousness.

> We recognize no meta-language or meta-system that places one discipline or world-view automatically above all others. We look in all directions for inspiration and understanding: to the East as well as the West; the left hand path as well as the right; working with both reason and intuition, sense and nonsense, subtlety and sensibility.

Synthesizing all the perspectives discussed above, we may say that intermedia operates, not only in the interstitial space, not only between boundaries and borders, but also, and mainly, at the threshold of media.

3 Conclusion

The mixture and fusion of media, out of which new media emerge, is perhaps a constant in the history of mankind. Nevertheless, a proper designation to this kind of activity was only established in the field of arts around the sixties of last century. Even the subversion and transformation of media functionality, validated in the artistic field with the introduction of Duchamp's Ready-made and the changes brought out by Futurist and Dada movements, is also a constant in the evolution of mankind, for human beings have always felt the will and want to create new media and transform them. From this untimely point of view, the age of the media

has no longer any sense, because all of them were young and will become old, all of them were high-tech and will become low-tech. Intermedia is then as old and modern as the human being, in spite of the fact that artistic and academic fields not always have sufficiently integrated and validated it.

Intermedia dynamics, besides operating at the thresholds and in the interstitial space-time of media and disciplines, can also integrate interdisciplinary, transdisciplinary and multidisciplinary actions. However, the aim of this paper has been the characterization of intermedia dynamics as mainly indisciplinary, considering that the prefix 'in' can be simultaneously interpreted as a negative value or as a place and movement inside discipline. Thus, we may characterize intermedia dynamics of practice and thought as indisciplinary, for, following the requisites of its own actions, they indiscriminately act 'in', inside the disciplines, using their most deep principles and premises, but also 'in', indecently negating those same principles and premises. In this way, we simultaneously challenge and actualize Higgins proposal, for whom intermedia operated essentially between media, between disciplines.

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