MEDIA, ART AND TECHNOLOGY: A CONTEMPORARY REFLECTION

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Abstract

This article is based on a report about cultural industries and their reflexes on media saturation. From that point, a reflection on technology, media and contemporary arts is presented, especially on the role of the body in the manifestation of art. This work seeks to ratify the influence of technology, of mass media and of information over the construction of the contemporary cultural values. It also provides a reflection on current contemporary artistic practices as elements that seek to evidence and question the standardizing influence of mass media and of the market. The background for the development of this article is the evolution of technologies, which expand the commodification of culture and make possible the deep social and cultural changes experienced in contemporary Western society. Finally, it is outlined a brief analysis of cultural identities and diversities in the teleinformatics era.

Keywords

Art; culture; mass media, technology

Resumo

O presente artigo parte de um relato acerca da mercantilização cultural e seus reflexos na saturação midiática, para então traçar uma reflexão sobre tecnologia, mídia e artes contemporâneas, em especial o papel do corpo nas manifestações artísticas. Busca-se, com este trabalho, ratificar a influência da tecnologia, da massificação midiática e informacional na construção dos valores culturais contemporâneos. Será apresentada também uma reflexão sobre as atuais práticas artísticas contemporâneas como elementos que buscam evidenciar e questionar a influência massificante dos mídia e do mercado. O pano de fundo no qual se desenvolve o presente artigo são as evoluções tecnológicas, que ampliam a mercantilização cultural e tornam possíveis as profundas mudanças sociais e culturais vivenciadas pela sociedade ocidental contemporânea. Por fim é traçada uma breve análise sobre as identidades e diversidades culturais na era da teleinformática.

Palavras-chave

Artes; cultura; massificação midiática; tecnologia

TECHNOLOGY, MEDIA REPRESENTATIONS AND CULTURAL COMMODIFICATION

The purpose of this article is to examine the ways in which technology and media representations promote the massification and commodification of culture, observing how the Arts (particularly the role of the body in contemporary arts) interact with and represent such saturated and standardized informational reality. Consideration will be

given to the process of hybridization of bodies, seeking to understand the role of the arts and of the artist in this new dynamic between the body and the informational massification. A brief consideration on informational systems (commodification of culture and media saturation) and on hybridization between this system and contemporary arts will also be provided.

Technology will be presented as an element that gives purpose and (re)signifies the artistic object, from a construction that draws a bridge between the relationship with the body and the contemporary arts. It will also address technology as an instrument of mediation between the cultural industry and artistic representations.

Contemporary society in the age of telematics is undergoing an inevitable pulverization of time and space. Immediacy and the need to satisfy urges become increasingly ephemeral (Bauman, 2007, p. 111). Society begins to show signs of an inability to survive without machines, capable of updating existence in a fraction of seconds (Moraes, 2006, p. 33). Navigation in informational networks and virtual environments maximized the reach and the offer of information in a means that is increasingly crowded, influential, and diffuses cultural heterogeneity. Media networks feature experiences as seductive cultural offers that should be consumed quickly, as to make room for new experiences (Bauman, 2007, p. 110). The cycle that joins consumerism, media and technology is reshaping the cultural, social and political relations in the era of telematics.

Understanding power relations in technological mediation means culturally deconstructing interests and mass media power relations. It is therefore essential that enticing cultural offers (offered by the digital media) be not only seen for their virtual sensory-cognitive experience, but it is also necessary to bring out a cultural panopticon that evidences interest and power in technologically mediated relations.

In an environment where commercial priority directly affects the supply, circulation and consumption of symbolic goods, it is necessary to rethink culture as profitable process that underpins material and symbolic relations of consumption across all fields of social life (Moraes, 2006, p. 37). The conversion of culture into economics and of economics into culture transforms culture into business and business is done with the market (Jameson, 1997, p. 58). This market dimension of culture trespasses the limits of cultural manifestations until then regarded as elitist. Mass consumption via media agendas presents art exhibitions, performances, conferences and classical music as mega events. The very concept of museum has changed. These ancient environments of aesthetic enjoyment for connoisseurs and experts in fine arts began to receive broader audiences and stood out as places that have a dynamic relationship with cultural cosmopolitanism (Moraes, 2006, p. 46).

The contemporary arts try to make visible this new cosmopolitan dimension that joins informational and ideological flow, social and cultural values. Artistic endeavors attempt to draw a body, which complexion, size and physical contours are in process of mutation. Contemporary artistic manifestations seek to understand the hybrid reality between man and technology through manifestations that externalize and seek to situate the body within its new configuration (Santaella & Arantes, 2008, p. 112). To deal with the

cultural and physical changes in the body, within the concept of art and technology, it is necessary to turn our eyes to multiplicity.

From the considerations above, the structure of this study will be drawn up based on two stages of development of the themes, with the purpose of achieving the goals established. The first part brings a reflection on technological and cultural commodification; the role of media and technicity in the (de)construction of identities will be described and analyzed. The second part draws a reflection on arts, especially on the role of the body in view of the contemporary information technologies. Lastly, a parallel will be traced on technology, arts and cultural diversity.

Technological developments, culture commodification and mass media

Mediatization of society is directly linked to the current cultural and social changes experienced. The shift in the ways of consuming symbolic products and the breaking of traditional barriers of cultural manifestations (one example among many: the abovementioned change in the concept of museum) are reflections of a media power game that joins two strategic components: vehicles and contents. These two components alone can control global public opinion and of imposing "cheaper" aesthetic standards, every day (Barbero, 2006, p. 52).

Barbero invites to a reflection about the market's current communicational hegemony over society. Communication is transformed into a "engine" for the insertion of cultures in the space/time of markets and technologies. A new map is created thus, drawn by the strain caused between culture, market and technology, aspects that destroy and create identities, reshaping cultural relations (Barbero, 2006, p. 53).

While standardized by communication, the commodification of culture is transforming identities. To secure its interests, the market tends to create a homogeneous culture, because the smaller the cultural differences, the greater is its profitability. However, one should not forget that the massification of communication aligned with globalizing strategies can also create cultural anti-hegemonic elements that feed the creation / maintenance of local identities.

Two processes transform the place of culture in contemporary society: the revitalization of identities and the revolution of technicalities. The processes of economic and information globalization (re)create issues of cultural identities (ethnic, racial and local), identities that combined with gender and age, reshape social and political relations (Barbero, 2006, p. 54). The technological revolution brings into society, in an astonishingly fast way, new machines and access interfaces. This creates a new way of relating to symbolic consumption, by building a culture based on the advancement of technologies, especially media/informational ones (Santaella & Arantes, 2008, p. 114).

By comparing the texts by Santaella and Arantes (2008) and Barbero (2006), it is possible to notice a theoretical alignment in the migration of the location of culture, when communication technological mediation ceases to be an instrument of expression to become a structural element. The location of culture migrates to technologies, as

contemporary technological mediation no longer refers to some appliances and technical gadgets, but to new perception and language ways, new cognitive sensitivities and a new way of writing. It is the face of an interaction between brain and information brought to the ultimate consequences, replacing the traditional relationship between man and machine (Barbero, 2006, p. 54).

Informational flow and the presence of the media in broadcasting point out to the material and symbolic consumption. The real ability to manipulate masses through broadcasting goes beyond the concept of a networked society based merely on technological connections. Society mediated by broadcasting is conceptualized in ideological, political and cultural relations that, through the advent of technology, allow the instrumentation of broadcasting as a new cultural environment (Bauman, 2007, p. 131).

It is important to highlight that informational technologies are not neutral because, allied to mass media, commercial and political interests, they become ideological instruments endowed with great inductive capacity (Gómez, 2006, p. 85). It is worth mentioning that the consumption options (material and symbolic) presented by the informational media have been pre-selected as per the market interests (Oliveira, 2015, p. 232). When seeking to build identities through symbolic consumption, those have already been pre-shaped and will change according to the next consumption trends (Bauman, 2007, p. 135).

Mass media have been transformed into reality-producing instruments and from this non-stop, continuous production derives a sort of past-erasing; what counts is the immediate symbolic consumption of the news happening now. However, on the next day the news has lost its relevance at the expense of fresher ones. The few minutes of fame in viral video on YouTube also exemplify this relationship of immediacy. The market is dedicated to meet immediate needs, because they keep the wheel turning and create the dynamics necessary to the flow of capital virtualization of realities (virtual reality) appears as an evolution of mass media in a technologically mediated digital environment.

The virtual space magnified and spread the influence and reach of the cultural industry. The possibility of symbolic virtualization materialized the interests by means of a screen or a mobile device. The reflection of the virtualization of realities lies precisely on this technological mediation represented by global social relations, under the pseudo aegis of connectivity and interactivity. Informational networks, in addition to being presented as elements that allow individuals to be connected by structural flows of communication, are elements of ideological formation that connect media interests. The transmission medium becomes the technology (the existence and expansion of networks are directly linked to technological development) therefore, an informational network does not exist physically. In this technologically virtual environment, connectivity became omnipotent, and the interests of the mass media are dangerously camouflaged. In this scenario, technological mediation has become an insightful element of the activity of cultural industries.

The technological mediation of a virtual reality, be a museum or a game, elevates the condition of simulacrum to a technologically mediated life in which "being" can only be experienced through the machine (Oliveira, 2007, p. 150). However, the game culture

of these relations is directly connected to market values that have been discussed since the advent of the machine analyzed by the Frankfurt School until the discussions of Paul Virilio (1993). However, one should remember that the advent of digital is just the evolution of technology over the media interests.

The advent of media technicity as a promoter of a cultural strategy provided new fields of experience in which changes are processed:

> deterritorialization/ relocation of identities, Hybridization of sciences and arts, of literary writings, audiovisual and digital, the reorganization of knowledge from flows and networks for which not only information, but work and creativity are now mobilized, as well as the exchange and cooperation in political projects, scientific research and in aesthetics experimentation. (Barbero, 2006, p. 76)

An immeasurable range of changes is related to media technicity. Therefore, the ability to break through and create boundaries has never been so evident. The "virtual socialization" to which it is possible to attribute a significant portion of these changes follows the dynamics of marketing; and its technological gadgets are produced according to the marketing needs (Bauman, 2007, p. 112).

Based on this analysis on mass media and technologies it is possible to state that the entire process of information flow, technological development, social relations in networks, homogenization of identities, have reached this level of social inclusion by following market dynamics and interests. The whole process of massification and creation of a digital society follows strict market interest that shape and destroy identities by creating a new cultural setting. It would not be utopian to highlight that the marketing interests acting in conjunction with media technicity are creating a new cultural framework, making a hegemonic ideological instrument.

This new cultural framework has been represented by arts as a way of presenting an anti-hegemonic alternative. The artistic manifestations linked to the theme of the body try to elucidate the cultural tension between technology and man, and still try to give an alternative voice to informational and marketing massification. In order to draw a parallel on such artistic themes and the contemporary cultural scene it is essential to stress the relational construction between technology and body, i.e., the conception of cybernetics as an element of cultural mediation.

From cybernetics to informational mediation

The first step to building a theoretical framework regarding the epistemological concept of cybernetics outlined by Nobert Wiener (1950) in the 1950s presents a relational construction of a system mediated by technology, joining machines and living beings. What Wiener (1950) advocated was the beginning of a new form of ideological construction, to be defined in the following decades as the information society (Wiener, 1950, pp. 23-47).

Cybernetic thinking was consolidated in the 1960s, mainly in relation to the insertion of the concept of entropy (in thermodynamics, entropy is a natural phenomenon of bodies, which tend to dynamics and to disorder), which, for cybernetics, represent the natural trend of technology as the synthetic form of structuring an order and breaking away from the entropy inherent to society.

For the cybernetic thought the advancement of entropy means the retreat of progress. Within this dynamic, information starts to be conceived as a physical sign that will be mediated by a technology capable of conveying this information within a non-organic system capable of reducing entropy (Weiner, 1950, pp. 78-122).

The evolution of information systems between the decades of 1950 and 2010 has enhanced the reduction of entropy to such an extent that with the advent of optical fiber information starts to be transmitted by light signal. This signal (which is actually a light beam) has the ability to carry data globally without any loss, i.e., there is no informational relation (only data in form of light) in the signal when it is transmitted. Information was transformed into light and can only be (re)constructed as a message with the aid of a machine.

As much as this means of access via optical fibers is used, users who access a museum somewhere via network will receive the same imagery information transmitted, but the cultural background of each user in each different region on the planet and their own enjoyment is what will determine the reading of this information as a work of art. According to Barthes (1990), the construction of the obtuse of the image will be linked to the observer's cultural conception and not to the way in which the image (in this case the information represented by the image) is inserted into a system able to convey it.

This conceptual opposition occurs due to the fact cybernetics connect epistemologically to systems engineering, which thinks information having a machine as a transmitter and receiver; within this dynamic, man is the source and the destination. Cybernetics, in this way, professes information as controllable structure through technological mediation, by means of which it would be possible to get a reaction or the behavior of a given social niche or even individually. In this way, even if one overlooks the construction of a cultural being who virtually visits a place from the perspective of their "background" and who builds a sort of enjoyment representative of the visit, the interests of the market and the construction of an information database on the preferences and habits of said observer will take place simultaneously. Such constructions are, in fact, being technologically mediated and controlled.

Therefore, the concept of information is rooted in the historical threshold of the discovery of telecommunications and closely connects to the evolutionary unfolding of these technological forms of broadcasting as mechanisms for the management of society. The use of telecommunications as ideological devices has transformed information into a major technocratic instrument. The largest communication monopolies, the State, the armed forces, the advertising agencies and other social institutions began to use information as a means to build and disseminate interests and values. Cultural industries undertake the role of ideology planners, from the advent of telecommunications.

Information mediated by technology began to be coveted and an urge to expand influence and control over large distances and societies became plausible.

In this context of technologically mediated massification, the arts seek to bring to light the dynamics between the actual and virtual environments, seek the representation of the artistic object from the technological object. Consider and question the cultural industry, the informational "obesity", media inserts, analyze speed. All of that began to problematize the triumvirate of contemporary representation: strained, complementary relations that are antithetical, at the same time, between art, technology and media.

Art, technology and media

From the reflection about the commodification of culture and media saturation, it is possible to draw a parallel about how this complex and controversial cultural moment has been understood and represented by the contemporary arts. For the purposes of this brief analysis, this work will trace a profile of the body in contemporary artistic representations.

In view of a period in which the commodification of information and media becomes a reality, and in the middle of the ongoing pulverization of styles and cultures, the role of the body in artistic manifestations should be reconsidered, especially regarding the embodiment of forms.

The new ways of relating to technology, as well as the hybridization of human relations, make new conceptual negotiations necessary to understand the aesthetics of contemporary artistic. As the advent of technology generates a break with the renaissance aesthetic paradigm, a new aesthetic form and the urgent need to understand it arise.

In order to understand the relationship between technology and art this work will resume Benjamin (2012) who, in theorizing about cinema, reminds us that what characterizes it is the way the world is represented by the machine. This representation may be updated to reflect the relationship between man and technology in the advent of informational revolution, thus, representation by arts arises from the assumption of technology to the artistic object. This way, technology begins to represent the signs and these merge with the body, conducting an interaction between man and machine in the context of the cultural, social, economic and artistic works (Benjamin, 2012, p. 76).

Hybridization is one of the fundamental concepts when dealing with the interactions between man and technology. In the society of information, it cannot be said that human relationships and interactions occur in a natural way; the whole contemporary informational system today spring up from the assumption of hybridization between man and technology (internet, social media, smartphones, tablets, computers, television, radio and other media devices). This hybridization represents an opportunity for a conscious thinking that expands beyond the human body. When taking a semiotic glance at the relationship between man and technology, it is possible to derive that where there is life there is culture (Ascott, 1997, p. 18). However, in inserting the variable of technology, a question arises: is there a means to create culture outside the body?

To address the issue of culture outside the body Santaella (2003) presents a vision in which the brain expands beyond the body limits since the advent of primary signs such as writing, drawing and painting. Soon, human evolution has led to the advent of technology (Santaella, 2003, p. 46). From that, arises the question: is technological progress is a confluence of the evolution of signs?

The perception of overcoming the cultural limits of the body is related to the ability to overcome the boundaries in which the human body is contained; to break them it is necessary to insert sensory-cognitive prosthesis resulting from technological advances that aim to expand and/or replace the functions of the body. The limits of sight vision are no longer restricted to what one can see: optical instruments and satellites take the sight beyond the limits of the Earth; microwave radios expand the ability of hearing; Magnetic resonance imaging allows viewing the inside of the body, etc. Informational revolution expanded the concept of prosthesis; in this scenario, the ability to replace or expand a body function lacks support, because in the world of telematics prosthesis can replace the body in its entirety. This replacement is plausible through computer simulations (virtual reality) that allow the existence of artificial life and virtual likeness.

Art tries to make visible this new dimension of the human body. The union between art, technology and body personifies embodies a *cybrid*[1] work in which the body, in interaction (symbiosis) with technology, allows the enjoyment of an object artistic that will be represented by the union between organic and synthetic. The arts trying to record a body which complexion, size and physical contours are under mutation (Santaella, 2003, p. 55). Artistic works from the early 20th century until the present days represent the dynamics of the transforming body as an object of representation and questioning. These studies illustrate the perceptions that the human being goes through changes. These perceptions can be observed in the work of Francis Bacon in the early 20th century, in *happenings* in the 1960s, in the series Ataduras by Del Pilar Sallum[2] and contemporaneously in the work of Eduardo Kac[3] and Stelarc[4].

From the analysis that the body is assuming new dimensions, which are linked to the interactions between the human body and the technology, the concept of a cybrid body arises: a body composed by the human body system and by technology in a symbiotic relation.

Bodies in constant interaction with the media translate an existential duality between man and technology. Feminist Naomi Wolf questions the myth of beauty in

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[1] The word *cybrid* means the union between cyber (digital) and hybrid (miscegenated). It refers to the communion of the organic body with the technology. The concept is suggested by Donna Haraway (2009, p. 36).

[2] In the work Ataduras artist Del Pilar Sallum, from São Paulo, shapes metal wires on his hand, leaving the impression of a body it used to covered but that no longer exists. A portion of the artist's collection is available at: www.delpilarsallum.com

[3] Artist Eduardo Kac Eduardo, from Rio de Janeiro, presents a contemporary and pioneering work in digital art, holographic art, the art of telepresence and bio-art. Technology is at the heart of the artist's work. The artist's collection is available at: www.ekac.org

[4] Born in Cyprus, Stelarc is one of the exponents of the Contemporary Technology Art. His work places great emphasis on the extension of the capabilities of the human body. Stelarc features a cybrid body in the construction of his performances, joining technological prosthesis to the body. Part of the collection of the artist is available at: www.stelarc.org

scanned images or in touch-ups by software, because the handling of images conceived by the media create a digital aesthetics (Santaella, 2003, p. 62). When addressing the issue of conceptual technology applied to the body, we are questioning the dualism and are led to draw the conclusion that there is no longer a nature or body in the sense portrayed by the Enlightenment (Santaella, 2003, p. 55).

The virtual reality, a product of the informational mediatization, conceived the cyberspace as a wholly digital place where there is no longer hybridization between man and technology, but the complete virtualization of the body.

From virtual reality resulted the fully digital cyber-bodies that only existed in cyberspace. These are named avatars. Currently, digital games allow the existence of parallel lives in virtual environment where the avatar has a completely simulated life, a fact that can be observed in the series of games The Sims. This type of virtual environment figures as a reflection of an extreme cultural commodification (Maza, 2015, p. 179). The media are included in games that simulate reality to the point of making an extremely profitable environment where immediacy and consumption are latent. The platforms of virtual reality represent a field where cultural values and power hierarchies are built, and identities are created and destroyed. The background to this virtual environment that has been gaining more space and dedication from the media is precisely the commodification of culture, which has transformed the environment of telematics into a field of political and ideological domination.

The revolution of telematics has maximized hybridization as well as virtual realities have left the pages of science fiction to be part of our daily lives. These changes inserted realities into society, putting into question the identity of the body. Maybe, could it be said that the body is in question?

The arts seek to understand the hybrid reality through manifestations that externalize and seek to situate the body within its new setting. Santaella (2003) assigns to this art the designation of post-human art. Because the concept of post-human presents substantial differences in literature, this art will be treated as hybrid art following the nomenclature of Stelarc (1997).

When addressing the level of evolvement, the body has reached, Stelarc (1997) emphasizes that this body can no longer cope with the amount of information and actions needed in daily reality, and technology assumes the function of creating what the body cannot cope with. Thus, the only strategy to continue evolving would be to implant this technology in the body, creating a hybrid being that joins the synthetic and the organic (Stelarc, 1997, p. 33).

The artistic works of Stelarc, usually performances, explore the didactics of the hybrid body, where the artist in search of the new identity and dimension of the body merges with digital elements. The results are interactions where the work cannot be separated into human and digital parts. This work reflects much of what is being produced in the cybrid arts, in which the work only exists in the interaction between man and machine, as well as in the relations between man and cyberspace. However, the core of the artistic production in a cybrid environment still lies in the creativity of the actor. The work does

not end when the digital object is switched off or when the body no longer interacts with the creation, but remains in the idea of building and idealizing the artistic object.

The arts seek, in the spectrum of the hybrid body, understanding this new symbolic representation that was re-signified by the advent of technology and revolution. The work of Jean Cocteau[5] in duplicate bodies demonstrates this change in the dimension of the body. The artistic representations try to translate a new reality to the understanding of the body, because there is an environment where information and technology advance in larger steps than the very mundane reality of being. Within this proposition a reflection might be suggested, drawing our eyes to multiplicities as a way to understand the body in the technological arts (Leão, 1999, p. 33).

Contemporary artistic manifestations, by joining the body and technology and by assigning the enjoyment of the work to the body, have created clear evidence of anti-hegemonic representations. Cybrid arts try to give voice to the identities of minorities; the body in hybrid arts represents the difference, the heterogeneous. Digital arts are, unlike hybrid arts, especially those connected to virtual realities (digital arts), in turn, increasingly linked to the dynamics of the market. This relationship is directly linked to what Canton (1997) named "new patronage", as the digital arts, especially those related to the gaming world, are sponsored by the leading entertainment institutions on the planet.

The symbolic body

The body as a symbolic representation is in mutation. Hybridization, mass media and the new ways of perceiving technologies in art making are experiencing a metamorphosis. This change in the role of the body, its interactions with technology and the cyberspace cannot be observed and assessed according to existing aesthetic concepts. The realities of technological arts and hybrid arts undergo a process similar to that theorized by Benjamin about the cinema. In order to understand and critique the process of insertion of the body in technological arts it will be necessary to build new concepts.

The core for defining new concepts for new forms of artistic expressions is in the speed of contemporary life, in the evolution of technology and in unmeasurable informational/media flows. The artist is responsible for seeking, understanding, and problematizing this volatility by means of works that represent this dynamic, controversial, standardized and unsettled cultural reality. The definition of new aesthetic concepts arises from the need to rethink the signs in the middle of cultural massification, where the market imposes a pre-manufactured symbolic consumption. In this universe, where the cultural industry "load the dice", the great convergence between body and artistic representation lies precisely the quest for identity. Identity that can be found under a globalizing media attempted to make it homogenous.

New aesthetic concepts designed to analyze the union between artistic representations, technology and the body must start from the point of identity. In an environment

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[5] In his work duplicate bodies, French artist Jean Cocteau uses the technology of overlapped images to create a work in which the size and location of the body as a work of art are put in question. A portion of this work can be viewed at: http://www.afsviewfinders.com/2015/04/chale-nafus-on-jean-cocteau.html

where cultural homogenization tends to become a reality, the most appropriate way of conceiving a new aesthetics is based on the difference, on contradiction, on the anti-hegemonic; therefore, from the search for a symbolic representation of identity.

The reflection needed to treat a body inserted into the universe of art and technology is in the technological dimension where art and the artist must be inserted. The technological environment evokes a reality where fluidity and evolvement expand. The physical body, although remaining the same, submits itself to this fluidity. In technologically mediated dynamics, body and technology tend to relate as a system.

Within this system is the elevation of media technicity as a strategic dimension that expands and deconstructs the cultural diversity, at the same time. Moraes (2006) reminds us that cultural diversity is not related to sensory pleasures offered by Disney or to a wide range of products by Sony or Apple, nor is it linked to the search for identity and status in compulsive shopping. Cybrid arts, in their representations, presuppose giving voice to the manifestations of the contradictory, elucidating debates, confronting the cultural reality in an environment where progress, media and technology are transforming human relationships. Diversity will enrich cultural production, the universalization of access, the heterogenous identities. In the middle of a standardized and technified cultural reality of increased contradiction and tension, as elucidated by Moraes (2006), the true meaning of diversity should be sought after: the number of worlds that the world contains. ✎

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