



Consumption, "Tourism-Merchandise" and Actor-Network Theory: The Cartography of Controversies and the Case of Telegraph Rock Trail – RJ

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ABSTRACT

The contemporaneity is marked, in part, by the Control Society, characterised, among other aspects, by consumption. In this scene, both the material and the immaterial objects come to have value in the market, so that one of the influential tools in this period is the use of sociotechnical networks, also involving the social behaviours of individuals and their desires of belonging. In this perspective, the research aims at analysing the use of the images inherent to the landscape of the Telegraph Rock Trail - Rio de Janeiro, Brazil - transmitted in these networks, as an influencing factor in the increase of the number of visitors in this place, having as background to the control society. The study attentive to Bruno Latour's Actor-Network Theory (ANT), which measures the fact that the "human actor" and "non-human" can transform the society. Thus, Facebook posts were analysed from the Cartography of Controversies, which is the operationalisation of the Actor-Network Theory (ANT). For that, the contents of the publications from the years 2015 to 2017 were

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analysed, in the page called "Pedra do Telégrafo_RJ", with 41 thousand participants. Clues point out that the use of socio-technical networks, in the scope of consumption may have influenced the process of production of the trail, through its transformation into a product that now has market value, through the logic "tourism-commodity".

Keywords: Consumption; actor-network theory; trail of the telegraph stone.

1. INTRODUCTION

The Control Society [1] is characterised by some social and behavioural phenomena such as consumption, virtual surveillance, invisibility in sociotechnical networks and a deterritorialized control, being, in a way, in the disciplinary society [2]. In the conception of the control society everyone controls all through the desire to belong and the "desire to desire." In the disciplinary society, surveillance was characterised by confinements, going into physical and spatial logic. Hardt [3], argues that there is no clear passage in this succession since the Control Society is not replacing the Disciplinary Society. In this context, the disciplinary society only expanded in the social field of production, in which consumption became a passport for the control of all over all. This control has spread through the media in the natural spaces, making them capitalizable and attractive, stamping them with the market brands and producing them to be consumed. This phenomenon can be identified in tourism and leisure activities [4]¹, where the demand for nature consumption was noticed, especially in the Telegraph Rock Trail, west of Rio de Janeiro, Brazil. In this case, it has been observed that there are clues to the increase of the consumption of the landscape through exhibitions of images represented and spectacularised by avid individuals for their consumption in the logic of "tourism-commodity", whose notion is based on the sense of "commodity culture" [6], where tourism becomes a capitalizable market product. According to the facts presented, there was a concern about the understanding of the relationships between society and consumption of nature from the increased demand for visitations to Telegraph

1 It is understood by tourism when the visitor stays overnight in the place visited, being outside of its habitual environment for leisure, business, health, among others [5]. It is also worth noting that on the theme covered, in the Telegraph Rock Trail, visitors can be found for a day (hiker) and tourists. On the other hand, leisure can be classified as tourist or not. In this sense, the proposal of this work includes both day visitors and tourists, since the region of Guaratiba has evolved in the provision of hotel and gastronomic services in order to reach this demand.

Rock Trail and the possibility of it being capitalised and produced. In this way, the behaviour of visitors and tourists may be associated with the new capitalism, through the improvement of the media that uses devices of spectacle and persuasion, seeking to manipulate social relations, transforming life and nature into products ready for consumption [4]. Thus, both can present symbolisms as if they were marks [7].

The Telegraph Rock Trail was selected as an object of study in the midst of the universe of landscapes, with productive characteristics, due to the increase of expositions of photographs taken on the spot and published on Facebook. There are indications that these images have become a vehicle for the social insertion of the individual on the spot through consumption and virtuality.

Among the virtual media that promote this possibility are the sociotechnical networks that, according to Bruno Latour [8], in the scope of the Actor-Network Theory (ANT) or Sociology of Associations, refers to the "human actor" and "human" as possessing an important role in the connection of networks, which can, therefore, transform the social and influence the creation of subjectivities.

Based on Latour's theory [8], it should be noted that studies on the Telegraph Rock Trail demand for research that understands the relationship between its natural characteristics and the "desire to belong" [9], similar to the theory of identities "prêt-à-porter" [10]. Given the potential of the interweaving of the digital world and the real life of individuals, the influence of sociotechnical networks, people's decision-making and social interference are increasingly perceptible [11]. In addressing the Actor-Network Theory, Cavalcante et al. [12] argues that there is an account of "nonhumans" as actors, preventing the distinction between people and objects. In this logic, the ANT can promote an evaluation to the understanding of the increase of placement of images in *Facebook*, that offers an optical illusion of the trail. It is noteworthy that

these exhibitions also occur because people want to belong to specific emerging groups, which reflect the production of the desires of individuals in relation to all who contemplate nature, through the expositions of their photographs in the sociotechnical networks. Based on this report, the landscape addressed as an object of research can be considered a "green mark" [13].

In this consensus, under the control society's logic, the study aims to investigate the landscape images of the Telegraph Trail as an influencing factor in the socio-technical networks in relation to the increase in the number of local visitors. This study can be justified through the relationship between tourism and sociotechnical networks in contemporary society, through the psychosocial gaze. The research will be developed from the Cartography of Controversies, which is the methodological operationalisation of the Actor-Network Theory [8] and will focus on the interdisciplinary view of philosophy and social psychology on the phenomenon of tourism. There is a need for a qualitative methodological approach that understands the sociotechnical complexity and its evolution, in which technical, political and social issues are not separated. Therefore, the methodology will be based on the bibliographical review on topics such as "sociotechnical networks", "consumption", "control society", "Actor-Network Theory and" Cartography of Controversies". The applicability of the methodology was based on analyses of publications on the Facebook network, chosen because it is one of the most used in Brazil and, especially, through participation in the group entitled "Pedra do Telégrafo_RJ" in the years 2015 to 2017. The research results aim to contribute to the reflections that surround the productization of nature, having the control society as a background, interconnecting tourism, leisure² and capital, mediated by consumption. Hence, could the relations between consumption and control in the era of virtuality, from the production of insatiable desires, be transformed into a logic of "tourism-commodity"?

² For Dumazedier, 1975 [14] the concept of leisure can be defined as the set of occupations to which the individual can give himself freely, whether to rest, to enjoy himself, to recreate and to entertain himself or to develop their disinterested formation, their voluntary social participation, or their free creative capacity, after getting rid of or releasing themselves from professional, family and social obligations (DUMAZEDIER, op. cit., p. 34) [14].

2. CONSUMPTION AND "TOURISM-MERCHANDISE" IN THE OVERVIEW OF THE CONTROL SOCIETY

The Control Society [1] can be characterised, among other aspects, by the transformation of consumption into a kind of device that allows the control of the production of desires, allowing the individual some form of affirmation of himself through society. The term was developed based on the uninterrupted surveillance that individuals exert on each other simultaneously, forming a network of domains through consumption. Its performance occurs under the prism of a deterritorialized capitalism that leads to the emergence of a new order called the World Control Society [3]. Thus, Hardt and Negri [15] define this new order as an "Empire" that operates from the global market and the companies that compose it. By this order, consumption allows for "inclusion identifications", where there is no longer "being outside" and "being inside", as everyone struggles to be always inside, and the vicious circle of consumption that makes individuals always feel out and fight (consume) to feel "inside" (belonging). From this perspective, consumption, besides other factors, becomes the cleavage of the control society. It is a fact that tourism and leisure itself are essentially capitalist activities, which depend on geographic space, as products, to happen. Thus, if these activities can contribute to the economic growth of many receiving localities, on the other hand, they can help to increase socioeconomic inequalities, when they do not include indigenous people in this process, or there is no adequate planning. For Coriolano, [16] tourism is an activity characteristic of modernity, at the moment that transforms leisure as a commodity to be consumed in travel, assuming other consumption. In this context, entertainment would be a form of consumer control, that is, tourist activity could be equated with an object that controls consumers in search of momentary desires, which is modeled on the control society proposed by Deleuze [1], marked by consumption and the desire to desire, where landscapes are often represented by the dissemination of images [17], influencing the concept of tourism-commodity.

The logic of "tourism-commodity" comes through the association with the concept of "culture of goods" by Guattari and Rolnik [6], where culture is understood as all goods, people, references and ideologies related to the production process of semiotic objects transforming it, as it was a

capitalizable product to be sold in the market. For the author, the "merchandise culture" is objective in the sense that:

(...) culture here is not to do theory but to produce and disseminate cultural goods, in principle without regard to value systems other than level A (culture-value) and without worrying about what I would call levels cultural boundaries, which are at the level B (culture-soul). It is not a question of "a priori culture, but of a culture that is produced, reproduced, and constantly modified." Thus, a kind of scientific nomenclature can be established to try to appreciate what is, in quantitative terms, There are very elaborate grids (I think of those in progress at Unesco), in which one can classify the cultural levels of cities, of social categories, and thus, in function of the index, of the number of books produced, number of films, number of rooms of cultural use, etc. (p. 19 [6]).

Hence, there is only one culture, capitalism, which can be characterised as ethnocentric and intellectocentric, separating semiotic universes, judging them better or worse in relation to a person or a group, and produces subjectivities [6]. According to this understanding, the perception of "tourism-commodity" can be understood as a new product of value of consumption in the market, transforming the experience acquired in tourism into a merchant, placing it at the same level as the commerce of cigarettes, among others. Therefore, the idea of commodity dominates all that is lived, including the experiences, thus commodifying desires.

In the case of tourism and leisure, the desire for freedom is manifested by the escape of the routine or the stress of everyday life and become products in the market to be consumed, through the logic "tourism-commodity." An example would be the emergence of ecological products, either through stamps or through the transformation of the natural landscape into product, by means of the spectacularisation of life experiences, which are many attributes used in tourist advertisements. Thus, in a world marked by fluidity, disposability and consumption, both materiality and immateriality become products, such as nature itself, in this way, Debord [17] describes present-day society as a 'society of spectacle', where it is marked by the use of images, since the human being has lost the capacity to produce his own representation of reality, thus using spectacular

images, where advertising plays an essential role in this dynamic.

Within this scenario, consumption in the Control Society offers the image of ramifications that are born, grow and are characterised to be characterised again with indefinite appearances in different places, through devices also of consumption. So, in the midst of all these transformations provided by capital, we can identify the possibilities of "productisation of nature" [18].

Thus, within the notion of "tourism-commodity" nature, as landscape, presents signs of being consumed with the clothing of a product that has a market value, as exemplified by Pelbart, 2003 [4]:

Call it as you want this around us, cultural capitalism, immaterial economy, a society of the spectacle, era of biopolitics, the fact is that growth is observed in recent decades a new way of relating capital and subjectivity (p. 34 [4]).

In this way, nature can be transformed into a product to be consumed, expanding the relation between capital and subjectivity, which is expressed as a psychosocial consumer identity, within the market and control society, where values are signified and re-signified in the relations between nature, consumption and society. This logic of immaterial capitalism functions in transforming non-capitalizable into market value. According to Tavares and Irving, [19], contemporary capitalism transforms non-capital into capital, in all spheres - let us understand tourist proposals, including the landscape incursions taken as ways of "being", "doing" and "having pleasure", obedient to the conditions imposed by desires.

And beyond the creation of desires, one constructs the sense of commodification of difference, of originality. From the concept of this net sustainability, (...) new values associated with nature emerge as a strategy of commercialisation of authenticity. Paradoxically, at the same time as the spectacularisation of nature as a product of aesthetic consumption by difference, the very conception of commodity nature becomes fragile (p. 7 [19]).

It is also emphasised that, due to the connectionist form, new appeals of authenticity

occur and the movement is continuous, due to the new forms of consumption promoted by the control society. Nature becomes a "brand" to be consumed, as well as the landscapes, entering an incessant cycle for the satisfaction of desires, which are configured in the form of new hosts. From this perspective, there is the possibility that this phenomenon occurred with the landscape of the Telegraph Rock Trail, in which images began to be commercialised from the high index of image sharing, through the logic of "tourism-commodity", increasing considerably the number of on-site visitors for tourism and leisure purposes. As a result of these observations, we attempt to approach the Actor-Network Theory [11], highlighting the relationships between the influences generated from the interference of the "non-human", which are represented by all types of technologies their actors - the "humans". From the look in the Control Society, also marked by the production of insatiable desires, how to think about the role of sociotechnical networks and of these actors ("human" and "nonhuman") as subjects?

2.1 The Sociotechnical Networks and the Latour Actor-Network Theory: A Look from the Optics of the Control Society

In the face of different arguments concerning contemporary transformations, many scholars come to the consensus that the Internet has an influential bias in the lives of individuals, whether in the social, virtual or communicational field. Today, new forms of dialogues promoted through communication, the appropriation of information and knowledge are observed in society [20]. In this scenario, sociotechnical networks arise, which can be defined as a set of heterogeneous actors associated in the process of conception, production and diffusion of knowledge. They are characterised by the existence of "human" and "non-human" networks [11]. Where accelerating processes can be decisive for the occurrence of the condition of nature produced, through the consumption of their landscapes.

For Latour [11], the sociology of scientific knowledge has undergone changes in its conventional notions and may be called sociology of associations. Insofar as society changes, the notion of demarcation between subject and object, man and nature, both human and nonhuman, also change, that is, the notion of social mute, inserting nonhumans and technical artefacts in that process. Thus, the influence of technical artifacts on the decisions of

individuals in society is increasing, which can be constantly visible in sociotechnical networks.

It is noticed that it is increasingly common the exposure of individuals on trips and/or their moments of leisure in the sociotechnical networks, mainly through landscapes images. For Sibilia, [21], what we thought we were inside the individual is increasingly shifting to the surface of the body. This can be observed from the act of self-exposure in sociotechnical networks and from the need to be seen, since there is only the confirmation of the other through the visibility of proving images, making subjectivities that offer parameters of inclusion in different social groups. Images are deeply embedded in people's daily lives since today's society is deeply visual. In turn, with globalization, this characteristic has become stronger. Thus, having as a background the control society, marked by some peculiarities, among them, the society of the spectacle [17] and of the image, where the "having" has an emphasis on "being", consumption it only makes sense when one can exhibit it [21]. In this sense, Latour [11] describes the Actor-Network Theory, correlating technology, science and society, where he proposes that the actor is defined from his role in society and what he produces in his connection network so that social task is defined by the actors themselves. For Latour [8]:

The ANT does not affirm that one day we will know if the society is "really" made of small individual calculating agents or of portentous macro actors; nor does it state that, as anything goes, one can choose his favourite candidate by chance. On the contrary, the relativistic conclusion arrives, that is, these controversies provide the analyst with the resources needed to trace social connections. The ANT only maintains that once we have become accustomed to these many changeable frames of reference, we will arrive at a good understanding of how the social is generated, since the relativistic connection between frames of reference allows a more objective judgment than the absolute (that is, arbitrary) suggested by common sense (*op.cit.*, p. 53 [8]).

It is therefore sought to highlight that the controversies from social networks will reflect a common sense among the actors, regarding the proposal of the study. Therefore, it is necessary to clarify some issues inherent to ANT. According to Alcadipani and Tureta [22], the ANT should be

based on what can be constructed from the observations made through the practices of actors that constitute this network, identifying what and who does the actions to be performed, demonstrating the presence of social. Network communication is not static, and the ANT differs from the others by the inclusion of "nonhuman" elements - in allusion to the machines or technological tools of communication - and requires the manipulation of empirical elements, where no distinction should be made a priori.

In the Actor-Network Theory, the notion of a network refers to flows, circulations, alliances, movements, rather than refer to a fixed entity. A network of actors is not reducible to a single actor or to a network; it is composed of heterogeneous series of animate and inanimate elements, connected and agitated (p. 02 [23]).

Where associations occur in the interlacing of the real with the virtual. For Latour [8], the actor, in the "visitor" case, within the Actor-Network concept would be not a source of an act, but a moving target of a broad set of entities swarming in their direction. Therefore, the Actor-Network Theory gives individuals sufficient space to express themselves, as previously mentioned. In this scenario, in the perspective of sociotechnical networks, humans would not be the only actors, but rather a node within the actions that take place in those networks. Thus, these networks can also be formed by objects.

Unlike a dualistic approach, which affirms the existence of two privileged poles - the Sun and the Earth, the subject and the object, God and the Devil - an ontology of variable geometry declares multiple possible inputs. I think it is the principle of generalized symmetry proposed by Latour as a consequence of this ontology of multiple inputs and connections (p. 03 [23]).

Alcadipani and Tureta [22] reinforce the issue of symmetry, noting that there are no humans dissociated from non-humans and vice versa and that they are interdependent since both participate in the heterogeneous network. Thus, what makes ANT differentiated would be what

(...) it does not assume, a priori, a supremacy of humans over nonhumans. In addition, it may be seen as a historical ignorance to disregard the role of nonhumans in the development of the productive process (p. 651 [22]).

For the authors (op.cit.), there is a thin boundary between "humans" and "nonhumans". Not that they are the same, but the actors and the network are not separated because in an empirical situation, both entities are inseparable depending on the activity of the actors that depend on the network and vice versa. Thus, the product "nature" is highlighted in this process. Therefore, for Latour [11] "network" means a series of transformations. It is the synthesis of interactions through various types of schemas, inscriptions and forms within a punctual site, in addition to actions that are characteristic of associated entities, not just human characteristics.

On the one hand, the network of actors must be differentiated from the traditional sociological category of actor, which excludes any non-human component. On the other hand, it can not be confused with a type of bond that connects in a predictable manner stable and perfectly defined elements, because the entities of which it is composed, whether natural or social, can at any moment redefine their identity and their mutual relations, bringing new elements (p. 02 [23]).

For Moraes [23] the networks are not amorphous, but highly differentiated, since they eliminate the binary opposition of modern thought. The network is in this sense the affirmation of such a difference. "It consolidates the power of the empirical as the ground of invention of reason, truth, society, nature" (op.cit., p.04 [23]). By entering this logic, it is possible to identify that in the network plane there are operations of translation that engender at the same time nature and society, subject and object.

The practices of meditation, of hybridisation dispose the whole space, in such a way that we no longer speak in two types of representation, but only in hybrids or quasi-objects. Latour invites us to shed light on these quasi-objects, effects of the networks of actors. The non-modernity of sciences makes such hybrid objects legitimate (p. 06, [23]).

Where these quasi-objects would be the result of the interaction between man and his technological tools of communication. In the same consensus, Moraes (op.cit., p.7 [23]) mentions that Latour reveals the "quasi-objects"

through a parliament of things. "... the parliament of things supposes an image of science as a practice of meditation, sharpening new sensibilities aimed at the proliferation of hybrids, for their entry into the collective." Latour (p. 142 [24]) defines them as "they must be represented, it is in around them that the Parliament of Things meets from now on." It is in this context that the parliament of things becomes a place of resolution of the imbroglis of the networks. So:

The principle of multiplicity, put on the scene by the parliament of things, is the connecting principle of the networks of actors: performative alliances connect heterogeneous actors among themselves and result in the many representatives who speak in the name of things. Thus, in the parliament of things, as Latour says, it does not matter if one speaks of the hole of the ozone layer while another speaks of the voters because what unites them is the unique fabric of things defined by their hybridity (p. 7-8 [23]).

In the study, the parliament of things would be present in the dialogues established in the networks where the unusual is addressed, transmitted by the images of the place in observation. In this aspect, Latour defends the Parliament of Things as an embodiment of the network of actors. "The parliament of things has a bearing on the sciences from its audacity, its experimentation, its uncertainty, its warmth, its strange mixture of hybrids, its mad ability to recompose social bonds" (p. 140, [24]). And, it is in this web that the devires contained in the actions of the actors and spectators around nature are branched. The precepts of "becoming" extolled by a consumer-controlled society with unfinished desires can promote the productization of nature as the interconnected manoeuvres between "humans" and "nonhumans" transformed by these hybridizations.

Within this scenario, the present study is based on the ANT, which runs through dichotomies that traditional sociology establishes between social and natural, viewing reality as the effect of networks of heterogeneous materials and not as something taken for granted [22]. Thus, within the scope of this work, it is understood the importance of the action of "human actors" and "nonhumans" in the production of information and individual and collective knowledge. In the case of this study, this is how the information and

images of the Telegraph Rock Trail are transmitted in the sociotechnical networks, having as "background" the control society, where the emergence of the consumer society, allied to society spectacle and technology, may have contributed to the possible production of nature, especially in the Telegraph Rock, through the verification of the increase of visitors influenced by the sharing of information in sociotechnical networks, reaffirming the sociology of associations proposed by Latour [11], where the human and the nonhuman can transform the social. So, what would the insertion of these precepts be in relation to the detail of the place? Is nature configuring itself in a product to be consumed?

2.2 The Telegraph Rock Trail: Nature for Sale?

The Telegraph Rock Trail is part of the PEPB (Pedra Branca State Park). The PEPB, according to INEA [25], is a Comprehensive Protection Conservation Unit and has 393.84 hectares and around 80 kilometers of perimeter. The PEPB is considered one of the largest urban forests in the world because it is totally within the municipality of Rio de Janeiro. It is due to this reason that the possibility of inserting the native inhabitants in the local conservation through the public use of their attractions can be seen, being able to provide a spontaneous militancy of the users in defence of this space from the intimate relation of the visitors with this natural environment.

On the other hand, this relationship can be affected by the fact that nature presents attributes of mercantilizantes values. Within this context, it should be noted that, with its 354m altitude, the Telegraph Rock Trail has attracted visitors for awakening an optical illusion in photographs. Thus, even the landscape being composed of natural resources such as Restinga da Marambaia, the oceanic beaches of the neighborhoods Recreios dos Bandeirantes, Barra da Tijuca and Barra de Guaratiba, most visitors seek to photograph and insert the spectacular images in their social networks to glimpse the possibility of being accepted in networks of people with the same identity. Many tourists and visitors come to the site for the motivation that the landscape can be shared in sociotechnical networks, since the place is famous for providing an optical illusion of a cliff facing an abyss, which becomes a beautiful setting for photographs.

The Telegraph Rock Trail, also known as "Guaratiba Hill", is possibly named after receiving during World War II an outpost of radio communication for observation of enemy submarines and prevention of attacks on Brazilian vessels [25]. The place gained evidence from the publication of a photo of the environmental engineer with his girlfriend, simulating a risk situation on the edge of a cliff in 2015. The publication received more than forty thousand tanned and had a great repercussion, which can serve as a clue to the beginning of the process of producing desires related to the consumption of that landscape and its sharing [26]. Since then, it is possible to identify signs of a growing demand for the place that was known for the unusual photos that show people on the edge of the abyss, confirming the assumptions of Network-Actor Theory. Reports in the networks discriminate that in days of the greater movement, there are queues to photograph in the place that can arrive the waiting of 2 hours [27]. The images shown below were realised through a specific angle that creates an optical illusion, as shown in Fig. 1. On busy days, the queue to take a photo at the scene may be waiting for 2 hours.



Fig. 1. Optical illusion of the telegraph rock
Source: Facebook-Trilhando Montanhas, 2018 [28]

3. THE CARTOGRAPHY OF CONTROVERSIES AND THE NETWORK-ACTOR THEORY

The notion of Actor-Network Theory for Latour [11] does not dissociate the "human" and the "non-human", stating that the two operate in the transformation of the social [29]. According to Castro and Pedro [30], in order to understand the Actor-Network Theory, first, one must keep in mind the concept of network, where "each of the nodes that make up the network constitutes an actor, this actor is, at the same time, a network, since it is composed of connections, and establishes connections other than those that are in focus" (p.354 [30]).

In this sense, the Cartography of Controversies [31,32] could be denominated as the operationalization of the Actor-Network Theory. For Cavalcante et al. [12] Cartography of Controversies translates into a methodology that enables cartography of networks, as well as its main actors ("human" and "non-human" actors), who would be the spokesmen and their respective connections. These connections came to the fore in the 1970s, when sociological researches sought to understand the fundamentals of the behaviour of the scientific community and the formation and evolution of the ideas of these virtual communities. For Venturini [33], the Cartography of Controversies works as the didactic and methodological version of the Actor-Network Theory, which presents itself as a set of techniques to map, explore and visualise controversies and controversies, mostly related to technical- scientific research. For the above-mentioned author, controversies can be identified as issues that have not yet produced consensus. Having its emergence in heterogeneous relations or collective life, where there is the existence of a varied range of actors.

Cavalcante et al. [12], analysing Latour, states that for a networks approach, seven methodological rules would be necessary to be followed, among them:

1. We must aim for a fact that is always in action - and never crystallised -, setting us up at moments of black box construction, that is, moments in which the subject in question is still subject to controversy.
2. The condition of artificiality or the nature of a fact is the effect of the processes of circulation in the networks.
3. The stabilisation of nature is always the consequence of settling disputes

- not its cause. 4. The stability of society is also always the consequence of the resolution of controversies. 5. We must put ourselves in symmetry regarding the establishment of any polarity and observe all the nodes that are being tied in these processes. 6. We need to pay attention to the extension of the network that is built in any situation of controversies involving an accusation of irrationality and search for social or logical explanations that justify such an accusation. 7. It is necessary to trace the network that supports any special quality to which we assign a dose of stability (*op. cit.*, p. 52 [34]).

Thus, according to Pedro and Nobre [34], to study these networks requires a methodology of work, where the cartographer is minimalist, valuing the observations coming from its insertion and monitoring of the network, through four stages, among them:

- 01- Look for a door of entry - it is necessary to 'get in the network', to start following the actors and, somehow, to participate in the dynamics that their movements allow to draw.
- 02- Identify the spokespersons - it is necessary to identify those who communicate the text and who end up synthesising the expression of other actants.
- 03- Access the registration devices, that is, everything that makes possible a visual exhibition, of any type, in texts and documents, and that allow to 'objectivize' the network.
- 04- Map the associations between actants. It is a matter of delineating the relations that are established between the various actors and that end up composing the network.

Within this scope, the work will use the cartography of the controversies, through the four steps described above, according to the lines of analysis pre-established from the verified clues.

3.1 Building a Method: The Cartography of Controversies and the Telegraph Rock Trail

The construction of the method was made by different tests made from the observations made in the sociotechnical networks. In this way, the research proposes to make a methodological incursion on the publications shared in the network Facebook. However, to reach this

consensus, initially, an exploratory survey was carried out for the years 2013 to 2015 of the networks: Twitter, Facebook and Youtube (Table 1). Where the preponderance, in terms of publications, of the Facebook network over the others, especially in the year 2015, was verified. This was the starting point for further research. In a second step, an exploratory analysis of four networks was performed: Instagram, Twitter, Youtube and Whattapp, which are considered the most used by Brazilians [35]. In this interregnum, it was intended to analyse the existing publications in the respective networks, from the beginning of the activities of the pages until December 28, 2017 - a period of survey of the data of the research. However, it was concluded that in the Instagram network it is only possible to analyse the totality of publications, and it is not possible to segregate the analysis by filters, exemplifying: Through a selection of the annual publications, as outlined in the research objectives [36]. On Twitter, only the quantities of publications were analysed, but the network was not welcomed at work because, a priori, it would have a much lower number of hits compared to Facebook. To use Whattapp it would be necessary to modify the method for a participatory analysis, since the authors should be part of the process. The Youtube, could not be chosen, since one could not enter into some group and check the coexistence in the network. Even so, the study was performed in each case. Finally, we opted for the observation of the occurrences in Facebook. However, by inserting in the search tool the words "Telegraph Rock", it was observed on the networks YouTube, Twitter and Facebook that the number of publications increased significantly from 2015, the year in which the photographs, are known worldwide according to Table 1. Thus, the initial expectations are confirmed.

Table 1. Amount publications / public photos: Twitter / Facebook / Youtube versus years

Year	Twitter	Facebook	Youtube
2013	03	4	1
2014	05	8	10
2015	379	1.005	73

Source: Prepared by the authors (2018)

Thus, the work is based on documentary research (of journalistic articles about the place), the literature review and the Cartography of Controversies. It is also worth noting that the research has an exploratory character and it is an issue not much discussed in the social sciences. It was then decided to emphasise the

illusion provided in the rock, which are configured as an invitation to carry out the trail, through the sale of services. Already the comments, in general, are characterised by markings of other people. In this scenario, we can observe the increase in the number of publications in proportion to the number of visitors, confirming Latour's [11] reflection on the association of the "human actor" with the "non-human", culminating in the transformation of the social, either by the relationship between the networks or through the spokespersons [37]. As the photos are published, they automatically influence the visitation to the place. Thus, it becomes apparent that consumption can transform material and immaterial goods into products to be marketed, producing them [1]. In relation to the subject at hand, Pelbart [4] discusses the capitalisation of the non-capitalizable, which can be identified in the Telegraph Rock Trail. There are clues that through the influences aroused by desire around the landscape, by leisure and by nature itself that a transformation may be occurring in the symbols that rise to the level of "marks" [7].

Although this topic presents real numbers, the research does not consider them in the final analyzes, since they have a qualitative character and aim to identify subjectivities and feelings of desire making in individuals, who share these experiences in the sociotechnical networks.

5. CONCLUSION

The Telegraph Rock Trail is famous for the possibility of optical illusion that the landscape provides. According to the research, the image of the place in the sociotechnical networks gave another dimension to the number of visitors on the trail. The study showed that there was an increase in the frequency of visitors to the place from 2015, when the placement of images became a milestone. The evidence of a rhizomatic capitalism was also verified, according to Pelbart's [4] foundations, since the non-capitalizable - nature - was capitalised and marketed by a market eager for new consumption possibilities and by individuals who wish to desire uninterruptedly. This perspective occurs due to the socio-technical networks that generate influences through images that are fixed in the daily life of the people, generating subjectivities, reinforcing that the current society is primarily visual. Thus, the analysed tourist point, based on the presented data, indicates the possibility of occurrence of a "Nature

Productivity", allowing its consumption as if it were a "green brand", adding a market value.

In contemporary times, the transformations occurred in the real and virtual fields. Therefore, there was, in a way, passage of the disciplinary society to the control society, characterised, among other aspects, by the sociotechnical and consumer networks, where control all through various means. In the meantime, networks that are characterised by the exposure of people and the same time for their invisibility in information networks, culminating in virtual surveillance. This study analysed the visitation in the Telegraph Rock Trail - RJ under the logic of the era of virtuality and consumption, background to the Control Society, building on the Actor-Network Theory of Bruno Latour [8] and in the Cartography of the Controversies of Pedro and Nobre [34].

Based on the clues presented, one can identify the reflection of Latour [8] that the "human actor" and "non-human" can transform the Social. The relationship is either between networks or through spokespersons corroborates this assertion, and consists of the publications relating to the optical illusion provided in the photographs, in the field of study, where an influence on the increase of the number of visitors to the place.

Nature as a landscape presents evidence of being consumed with the clothing of a product that has a market value from the perspective of a "tourism-commodity".

It is also identified that the market exhibits the image of nature in a produced and in agreement with the precepts of the control society, outlined by Deleuze [1]. In this logic, natural attributes dissociate themselves from the roles of components of human subsistence and associate with components of the existence of a fluid and schizophrenic in their actions. Thus, while defending nature through their rhetoric, promote actions that can jeopardize its integrity, by the decision to know the place and go along said trail, aspects. However, this study is not competed to leverage new research with the respective theme.

ETHICAL APPROVAL

All authors declare that the survey was approved by the ethics committee of CFCH – UFRJ.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Deleuze G. Conversations. Translation: Peter Pál Pelbart. São Paulo: Ed. 34; 1992.
2. Foucault M. Watch and punish. Petrópolis: Vozes; 1987.
3. Hardt Michael. The world society of control. In: Alliez, Éric. Gilles Deleuze: A Philosophical Life. Sao Paulo: Ed. 34; 2000.
4. Pelbart P. Capital life: Biopolitical essays. Sao Paulo. Ed. Iluminuras LTDA; 2003.
5. Cooper et al. Tourism: Principles and practice. 3 ed. Porto Alegre: Ed. Bookman, 2008.
6. Guattari F, Rolnik S. Micropolitics: Mapping of desire. Rio de Janeiro: Vozes; 2000.
7. Pontes, F; Tavares, F. Ecosophy of brands: The three ecologies in green advertising. Curitiba: Appris; 2017.
8. Latour B. Reaggregating the Social: An introduction to Actor-Network Theory. Savior: Eudfba; 2012.
9. Sibilia P. The show of the I: Intimacy as a spectacle. Rio de Janeiro: Contraponto; 2002.
10. Rolnik Suely. Identity junkies: Subjectivity in time of globalization. Culture and subjectivity: Nomadic knowledge. Campinas: Papirus. 1997;19-24.
11. Latour B. On recalling ANT. In: LAW, J.; HASSARD, J. Actor network theory and after. Oxford: Blackwell Publishers; 1999.
12. Cavalcante et al. The Actor-Network Theory as a theoretical-methodological reference in health and nursing research. In: Text Context Enferm. 2017;26(04).
13. Tavares F. Nature S / A? The green consumption in Ecopoder logic. 2007. 362f. Thesis (Doctorate in Psychosociology of Communities and Social Ecology) - Graduate Program in Psychosociology of Communities and Social Ecology, Institute of Psychology, Federal University of Rio de Janeiro, Rio de Janeiro; 2007.
14. Dumazedier J. Theoretical questioning of Leisure. Porto Alegre: PUCRS; 1975.
15. Hardt MA. Negri, A. Empire. Rio de Janeiro: Record; 2001.
16. Coriolano L. (Orgs). Local productive arrangements of community tourism: Actors and scenarios. Fortress: EdUECE; 2009.
17. Débord G. The society of the spectacle (trad. Estela dos Santos Abreu). Rio de Janeiro: Contraponto; 1997.
18. Tavares F, Torres G. Natureza Líquida: Brand modeling and green advertising. 1 ed. Curitiba: Appris; 2017.
19. Tavares F, Irving M. "Net Sustainability": Rationalizing Relations between Nature, Capital and Consumption in times of fluidity. Journal of Space Science. 2013;13(151):01-11.
20. Albagli S, Maciel M. Information, knowledge and power: Technological change and social innovation. Rio de Janeiro: Garamond Universitária; 2011.
21. Sibilia P. The postorganic man: Body, subjectivity and digital technologies. Rio de Janeiro: Relume Dumará; 2002.
22. Alcadipani R, Tureta C. Actor-network theory and organizational analysis: Contributions and possibilities of research in Brazil. Organizations & Society. 2009; 16(51).
23. Moraes M. The science as a network of actors: Philosophical resonances. Ator-Network Magazine. 2013;1.
24. Latour B. We were never modern: Symmetrical anthropology essay. Rio de Janeiro: 1994;34.
25. Instituto Estadual Do Ambiente Trilhas (INEA). Pedra Branca State Park / Organized by André Ilha, Patrícia Figueiredo de Castro, Alexandre Marau Pedroso, Aline Schneider - Rio de Janeiro: INEA; 2013.
Available:http://www.femerj.org/wp-content/uploads/guia_trilhas_pepb.pdf
Accessed on Dec 21, 2017
26. G1.GLOBO.COM. G1 explains trick in photos taken of 'abyss' in Rio; Watch the video.
Available:<http://g1.globo.com/rio-de-janeiro/noticia/2015/05/g1-explica-truque-em-fotos-tiradas-de-abismo-no-rio-assista-ao-video.html>
Acesso em 25 de maio de 2018.
27. Jornal O Globo. Pedra do Telégrafo, famous for optical illusion will have ordering action.
Available:<http://g1.globo.com/rio-de-janeiro/noticia/2016/01/telegrafo-famosa-por-ilusao-de-otica-tera-acao-de-ordenamento.html>

- Accessed on January 2, 2018.
28. Facebook.
Available:www.facebook.com.br
Access June 2, 2018.
 29. Lemos André. The communication of things: Actor-network theory and cyberculture. São Paulo: Annablume; 2013.
 30. Castro R, R Pedro. Surveillance experience: Subjectivities and sociability articulated to urban monitoring. In: Psychology and Society. 2013;25(2):353-361.
 31. Lourenço R, Tomael M. Actor-network Theory and cartography of controversies in Information Science. In: Transinformação. 2018;30(01):121-140.
 32. Pedro R, Bonamigno I, Melgaço L. Video-monitoring and its effects on cities: Cartography of socio technical networks and in diferente urban spaces. In: Revista Do Programa De Pós-Graduação Em Comunicação E Cultura Da Escola De Comunicação Da Universidade Federal Do Rio De Janeiro. 2017;20(03).
 33. Venturini T. Diving in Magma; how to explora controversies with Actor-Network Theory. In: Public Understanding Of Science. 2010;19(03):258-273.
 34. Pedro R, Nobre J. Reflections on the methodological possibility of the Actor-Network Theory. In: Cadernos Unifoa, ed. 14; 2010.
 35. Digital in 2017. Global Overview. Available:<https://wearesocial.com/special-reports/digital-in-2017-global-overview>
Accessed on March 14, 2018.
 36. Instagram.
Available:www.instagram.com.br
Accessed on March 20, 2018.
 37. Da Silva David, Bonamigo J. Following the Actor-Network Theory in action: First notes for a cartography of controversies. XIX Encontro Nacional da ABRAPSO; 2017.

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