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The Science and Knowledge in the 'Invisible City'

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ABSTRACT – The Science and Knowledge in the 'Invisible City'. This article analyzes the erasures of popular culture in favor of scientific knowledge, from the series *Invisible City*. Therefore, the series is analyzed with conceptual tools from Michel Foucault and Ailton Krenak. The series premiered in 2020 on a streaming platform, and is about Brazilian folk entities living in a community in Rio de Janeiro. The invisibility refers both to the nonexistence of the characters in the rational world and to the context of peripheral experience. The counterpoints between popular and scientific knowledge are constructed in the narrative, bringing elements from Brazilian histories without simultaneously pretending to be faithful to their cultural productions.
Keywords: **Humanity. Scientific Communication. Popular Knowledge. Scientific Knowledge. Brazilian Culture.**

RESUMO – A Ciência e os Conhecimentos da 'Cidade Invisível'. Neste artigo, analisa-se os apagamentos de cultura popular, em prol do conhecimento científico, a partir da série *Cidade Invisível*. Para tanto, a série é analisada com ferramentas conceituais de Michel Foucault e Ailton Krenak. A série estreou em 2020 em uma plataforma de *streaming* e versa sobre lendas brasileiras vivendo em uma comunidade do Rio de Janeiro. A invisibilidade refere-se à inexistência das personalidades no mundo racional, bem como ao contexto da vivência periférica. Os contrapontos entre conhecimento popular e científico são construídos na narrativa, trazendo elementos de histórias brasileiras, sem se pretenderem, simultaneamente, fiéis às suas produções culturais.
Palavras-chave: **Humanidade. Divulgação Científica. Conhecimento Popular. Conhecimento Científico. Cultura Brasileira.**

Introduction

Invisible City had its debut on February 5, 2021 via Netflix and, in the first few months, it has already figured among the 10 most watched productions in more than 40 countries around the world, according to the UOL newspaper (Castro, 2021), thus ensuring its renewal for a second season.

The fantasy series created by director Carlos Saldanha, Raphael Draccon, and Carolina Munhóz seeks to make a cultural rescue of Brazilian popular traditions, intertwining them with environmental and social problems faced by a fictional riverside community in the state of Rio de Janeiro.

Its plot is built from a growing trend in audiovisual productions, based on the premise that certain stories are already known by its audience – in this case Brazilian folklore –, so the production script does not intend to give further explanations and details of characters, origins, and journeys.

This type of plot, chosen for *Invisible City*, also seeks to update the folklore on which it is based, by including elements of current culture and modern issues. Known examples of this plot model are the series: *American Gods*[1], *Percy Jackson*[2], *Penny Dreadful*, and *Penny Dreadful: City of Angels*[3]. Even with a contemporary approach, experienced directors and actors, and international visibility, the series still could not avoid criticism.

More than inserting this series within the scope of a critique of the narrative itself, in this article we try to analyze the potential of the series as a tool to debate about science communication, based on what emerges in the plot of the first season of the series concerning the erasure of popular knowledge and the invisibility of individuals, in the face of the development of society, allied to scientific and validated knowledge in Western society.

Our analysis is based on Foucaultian discourse analysis, and we also use a counterpoint to the notion of a modern, Eurocentric humanity versus a relegated sub-humanity, along with the knowledge and traditions of Ailton Krenak.

We will start the analysis from the concepts of Science Communication and its relationships with a plot that speaks of science and folklore, to later analyze the series itself.

Science Communication and its Plural Definition

In March 2021, Paulo Andreetto de Muzio, author of the *Natureza Crítica Blog* in the science communication project Science Blogs at Unicamp[4], presented in the text *Invisible City is science communication about the environment, yes sir!* a debate on the potential of the recent Netflix series *Invisible City* in providing science communication about environmental issues and folklore.

In the text, the author draws a parallel between the environmental problems, presented in the series, and episodes experienced by him during his professional career at the Forestry Institute[5], inviting his readers to reflect on the role of science communication of the series and the erasures that we make this popular knowledge in favor of scientific knowledge.

> Why not accept fantastic entities to talk about science issues? […] What invisible city is this that the title of the series proposes? A community of folk creatures that walk among us without our knowledge? Or flesh and blood people we choose to ignore? (Muzio, 2021, p. 1).

From oral communication, to the first articles on science produced by journalists, to interactive media channels on Web 2.0, science communication has been revised and reformulated by researchers in the field to adapt it to communicational, scientific, and technological innovations.

These reformulations are observed and discussed from their own conceptual definition to their use in new communication technologies, showing that their concept, functions, and ways of being carried out are related to each other.

Thus, when conceptualizing the term science communication[6] in this article, one must observe this concept by authors who explored and maintained some meanings, while including new ones, according to the results of their research.

Obviously, in this article, we do not intend to explore in depth all the years of studies and analyses on the concept of science communication; thus, we will present a small review with the main objective of showing that some requirements and precautions are needed to identify whether a given production is or is not of science communication.

Bueno (1985) discussed and defined science communication as a recoding process, which should aim to make scientific knowledge understandable and uncomplicated to the public, using a transposition from a specialized language to a non-specialized language.

Moving on to Calvo Hernando (1992), this author pointed out the importance of this communication taking place outside the framework of official education, since the intention is to complement the culture of specialists outside their specialty. Mora (2003, p. 99), in turn, discusses the importance of combining scientific knowledge with sensitivity and imagination, to arouse the interest of the public.

Dias et al. (2013) and Camargo (2015) comment that science communication must go beyond recoding and transmitting information in an attractive way, and that it also needs to be carried out based on planning, ensuring that the scientific disseminator develops materials and supports accessible to society as a whole.

On the other hand, Caldas and Zanvettor (2014) add the importance of enabling the apprehension of scientific knowledge so that the

public not only understands its processes, but also participates in decisions on topics of interest to society.

In addition, according to Silva, Garcia and Amaral (2015), science communication should also serve as an instrument for the formation of scientific culture and non-formal education, dialoguing with society on issues that were previously of a specific niche.

For Bessa (2015), science communication is putting science in the public domain, that is, it is actions, strategies, and tasks performed by communication professionals and scientists that aim to inform society about what is produced by science. However, this science communication must leave the academic environment and circulate in environments accessible to society. Finally, Muzio (2019) adds that science communication cannot be only a unidirectional transfer of knowledge, but an exercise in dialogue that enables the exchange of knowledge and the transformation of reality.

This brief review of concepts about science communication helps us to realize that the very definition of science communication is not stagnant at a single time. Its plurality is precisely because it is a concept that adapts to the technological and communication innovations suffered in recent years.

Therefore, we must consider for this article that the concept studied and thought of in 1985 needs to adapt to a scientific communication that undergoes significant changes with the popularization of the internet, based on a considerable range of instruments, practices and meanings that emerged throughout these years almost 40 years. By carrying out this concept review exercise on a timeline, we sustain a choose concept of scientific communication that is updated and brings together the main points addressed by each author.

Thus, in this article we will use the concept of scientific communication, which is about placing science in the public domain, based on a recoding of scientific knowledge that allows society to be interested, understand and dialogue about science. Through resources and supports that come out of the academic environment and reach society as a whole, the scientific popularizer must include in his planning not only materials that talk about research results, but concepts, stages and problems of science, thus contributing to the public is able to use this scientific knowledge for their decision-making.

Can *Invisible City* be considered Science Communication?

When we bring this brief review of concepts about science communication, we realize that the criticisms received by the series are also configured to determine that *Invisible City* does not meet the necessary requirements for it to be considered a production of science communication.

Let us start by pointing out that the series was not intended to be about science communication, so there was no investment in scenes

that explained in more detail the folklore or environmental issues, therefore not contemplating the concepts of science communication presented above. In other words, making scientific knowledge understandable to the public to which the production is directed. The lack of explanation, even, is used as an artistic development of the script for the series, thus demarcating its choice to entertain and not to disseminate scientific knowledge.

Even so, *Invisible City* contributes so that important questions about science are presented to society. Many of these issues were even presented as arguments by the readership of Muzio's post and ignored by the scientists themselves.

When one understands that the series could not be of science communication, precisely because it is not about science, one ignores that Science is also about popular culture and traditional stories and that discussing the erasure of a culture by the imposition of capitalism and presenting environmental problems faced by traditional communities and their difficulty in maintaining their culture, traditions, and lifestyle is also talking about science.

Invisible City may not be essentially for science communication, but it allows it to be used as a science communication tool, since it is used as a premise for new content and discussions, thus performing an important social role in stimulating critical thinking about which culture we are leaving to future generations and which cultures we are erasing. It is also important to point out that his contribution of bringing Brazilian culture to the world is undeniable, even with all the "buts" that we contemplate in this article, which can even be used as suggestions for corrections in new productions of the same genre.

Invisible City brings with it discussions that are scientific and that should be more present in scientific environments and in society, for a more humanized science, committed to social problems and incorporating critical thinking. In this sense, we agree with (Muzio, 2021, p. 1) when he proposes that

> The supernatural enchants. It seduces. And *Invisible City* works with a contemporary approach to folkloric creatures to bring us current and structural issues. […] Science communication [can occur] on several levels. It doesn't necessarily have to be a complex class on the proposed subject. It can be a tease, an invitation, a flirtation. Like a film that tells the story already narrated in a book, science communication is an adaptation of science. It is necessary to abandon the need for literalness. It's okay to have elements that don't necessarily exist.

Critiques, Characters, and Narrative Choices

As a narrative choice, the series does not dedicate minutes of screen to explaining that Brazilian folklore, its origins and characters, do not have precise origins, so the series had to include visual and nar-

rative elements that rescued in the viewer's memory possible personal references about the stories. For example, the folklore represented in the series of books and television of *Sítio do Pica Pau Amarelo*[7] by Monteiro Lobato, which was very successful in the country.

The Saci, for example, has its presumed origin among the indigenous people of the Missões region in southern Brazil, in which it is presented as a young black man who has only one leg and a red cap on his head, which grants him magical powers. This same cap, when removed, attributes to the wearer the obedience and control of the Saci. This entity of popular culture is also known for playing tricks, moving through a whirlpool, and scaring night travelers with his whistles.

In *Invisible City*, Saci (played by Wesley Guimarães) is a poor black young man who lives in an occupation[8], named Isac – a type of anagram that indicates his folkloric character –, and characterized with a red bandanna that alludes to the traditional character's red cap.

The Pink River Dolphin is another interesting example of this characterization. Its origin is presumed to be from the Amazon region and it is the largest freshwater dolphin. Within the culture, it is an animal that has the power to transform into a very handsome and elegant man, usually dressed in white and wearing a hat that aims to hide his dolphin nostrils located on top of his head. This character transforms and appears at parties where he chooses, attracts, and impregnates young single women by taking them to the bottom of the river.

The Pink River Dolphin (played by actor Victor Sparapane) is portrayed early in the series and found dead on the beachfront of Rio de Janeiro. When taken by the protagonist Eric (played by actor Marco Pigossi), it transforms into a young handsome man, dressed in white and wearing a hat. Its name is Manaus, thus alluding to the possible origin of the legend.

These two examples, presented in this article, demonstrate the narrative choice of the series to rely on the public's previous memory of elements of Brazilian folklore, depositing in small details indications about what they are about.

We insist that the lack of explanation and the assumption that the public is familiar with the details and plots of Brazilian folklore, imposes the need for imagery and/or consultation in other materials and there is no guarantee that the public will carry out such task, especially when we consider that the series, being successful in more than 40 countries, is presented to an audience that is not even remotely familiar with this culture and over time the distorted versions may become better known.

A well-known example of this distortion has already occurred, even during the show's disclosure, where the Brazilian audience expressed their estrangement when the character Cuca (played by actress Alessandra Negrini) was introduced. In *Invisible City*, Cuca is a single mother, independent, strong, sensual, and who transforms into butterflies. Her house is half a bar, where she earns her living, and the other half is her place to practice magic, potions, and spells. But it was Mon-

teiro Lobato's Cuca that the public expected to see, that is, a large alligator with blond hair who lives in a cave.

Another point that should be highlighted is the choice to restrict the scenarios where the story takes place to just three places: touristic Rio de Janeiro; poor Rio de Janeiro, demonstrated by the occupation; and the fictional riverside community of Vila Toré. By choosing to present only Rio de Janeiro to the public, the series ignores the fact that folklore pervades the entire country, with punctual scenarios and characteristics that interfere in the story told. Thus, by presenting folklore in a single setting (southern coast of Brazil), the series had to create shortcuts to justify the presence of some entities in certain places – such as the Pink River Dolphin, which is a freshwater animal in a saltwater environment –, contributing to an erasure of Brazilian cultural and geographic diversity.

As a positive reviews, Cidade Invisível creates the opportunity to present Brazilian culture to people around the world, since the streaming makes the production available internationally to its subscribers. It also brings to light old environmental discussions that continue to afflict the country, such as deforestation and undue expropriation of traditional communities, addressed in the series by the antagonist Dr. Afonso (played by actor Rubens Caribé), who commits infractions and crimes by forcing the population of the fictitious riverside community of Vila Toré to sell their houses so that a resort can be built in the place.

The Disenchantment of the World from its Invisibility

> The world is so crazy that I think if they said that the production is about Brazilian folklore, perhaps it would not have generated so much interest from the audience (Muzio, 2021, p. 1).

Muzio brings a fundamental debate for us to think not only about the place of Brazilian folklore, but of the production of knowledge and information about our own history. As Ailton Krenak also observes, in *Ideas to Postpone the End of the World*, we ask: When did we lose enthusiasm for these narratives? How long has our reality been disenchanted and packaged in plastic containers ready to be consumed and thrown away?

On the other hand, in this fictional series, there is another question that is present and crosses the narrative and that is powerful for us to think about traditional knowledge considered not legitimate to the scientific and academic world. In *Invisible City*, there is a latent clash between the scientific (the fact) and the traditional, regarded as legendary. This conflict brings several reflections on our use of the world, on our relationship with the environment. We currently have a globalizing, standardizing modernization, in which individualities are erased, made invisible, as Foucault would say: "Fiction consists, therefore, not in showing the invisible, but in showing how invisible the invisibility of the visible is" (Foucault, 2009, p. 225).

We, who live immersed in the Eurocentric culture, are not interested in looking at the world from different views and constructions. Other views are frightening, since they call into question the society of the market, of machines, of absences. In fact, this civilization centered on modern assumptions can only exist as universal by the extermination of other possible humanities. As said by Krenak (2019, p. 13): "Our time is specialized in creating absences: in the sense of living in society, in the sense of the experience of life itself".

The invisibility of non-white communities, from the imposition of certain logics that validate a legitimate, neutral, and universal knowledge, is placed both in the series and in the constant discursiveness of science. By proposing the conflict between science and folklore, it inserts as a framework the condition of possibility of plausible analysis within reports, expertise: production of facts.

On the other hand, the invisible city imposes itself, with its diversity and events that do not fit into these knowledges validated by this logic – and little by little move away and break out with the plausibility of science.

Outside the fictional world, the logic given by white western society, holder of the so-called "formal knowledge," is increasingly incapable of dealing with its own lack of control, with the consequences of its production. What type of consequences?

Consequences such as those brought about in the Intergovernmental Panel on Climate Change (IPCC) report by the United Nations (UN) in July 2021. In this sense, there is no going back, climate change is occurring quickly and with a great impact of human action. Capitalist society knows such consequences and recognizes the intrinsic risks to its form of production and consumption of the world. Risk here understood from the definition of Anthony Giddens, that is, as disasters evaluated in relation to future possibilities. Risk is something specific to white western society, since the word risk only starts to make sense in "future-oriented societies" (Giddens, 2003, p. 33).

Will it be that now, with the imminence of environmental disasters, brought about by the UN report, instead of just calculating the risks and just deciding who will suffer with such consequences, will we have the courage to change the intrinsic logic of our society?

Remembering that in the contemporary world there are not only local impacts. In large urban centers, we feel environmental changes with less clarity, as Ailton Krenak (2020, p. 54) analyses well: "Those who live in the city do not experience this with the same intensity because everything seems to have an automatic existence: you reach out and you have a bakery, a pharmacy, a supermarket, a hospital".

On the other hand, some traditional peoples[9] feel the impacts of climate change on a daily basis, and they have been narrating this from the scarcity and difficulties in maintaining their lives as they were built over the generations. One of the narratives about the environmental impacts experienced daily by indigenous communities was told by Davi Kopenawa Yanomami. he and Luiz Bolognesi premiered the documen-

tary *The Last Forest* based on the book *A Queda do Céu* of Davi Kopenawa and Bruce Albert. The documentary addresses the recent conflicts between the Yanomami population and the invasion of illegal miners. Furthermore, Davi Kopenawa brings the notion of *xawara*, which are disease spirits brought by machines, that pollute the environment and impact the life of Yanomami community (Kopenawa, 2015).

In addition, throughout the Covid-19 pandemic, there was an increase in mercury contamination in Yanomami lands, also due to mining (Vilaça, 2020). Those are impacts that we in the city, accustomed to "automatic existence" as Ailton Krenak (2019) says, do not witness. We cannot measure, with our western epistemology, the intrinsic aggression of these invasions and the destruction of Yanomami territories, since, as Davi Kopenawa says, for them there is no separation between the human and the environment; on the contrary, the Yanomami are part of the forest, so the destruction of their territories, invasions, pollution, are the destruction of their own identity (Kopenawa, 2015).

Approaching the urban environment, on the other hand, which are the populations that suffer most from the increase in temperature, the scarcity of water, with the highest frequency of storms? They are the peripheral, marginalized, invisible populations that live in the morros (hills), which are most prone to landslides, and where the municipal cleaning service does not access, also they cannot shield themselves with technology from the excessive heat.

Invisible City series shows how we are living a moment of reflection on the consequences of our "humanity". Throughout the history of science, we have witnessed a distancing of humans from their production, of individuals from nature, and attempts have been made to subjugate sub-humanity to this logic.

> The only nuclei that still consider that they need to stay attached to this Earth are those that have been half forgotten on the borders of the planet, on the banks of rivers, on the edges of the oceans, in Africa, Asia, or Latin America. They are *caiçaras*, natives, *quilombolas*, aboriginals – the sub-humanity (Krenak, 2019, p. 11).

Are not the entities presented in the series the representations of these sub-humanities? Furthermore, would not the title of the series be a look at this sub-humanity, relegated, excluded? Just think about the subjects represented by the entities in the series: the single mother, the beggar, the inhabitant of an occupation, the abandoned child. Only people who live on the margins of society. As said by Muzio (2021, p. 1): "[…] and nowadays these characters live in degraded regions and occupations. The entities end up having, therefore, the same fate that traditional communities have when they are taken from their lands or when these lands are deprived of character: marginality".

Going a little beyond individuals, does *Invisible City* not refer to the very group of forgotten, invisible knowledge, thrown to the edges of the world? We choose what to ignore, we choose what exists and what does not.

Recognition of the Existence of Other Cultures

In March 2021, the Environmental Studies and Research Center (NEPAM) of Unicamp received the Mozambican biologist and writer Mia Couto to a beautiful conversation. The name of the lecture was *When the Environment has no Name* (Couto, 2021).

This name leads us to two issues: the first is the erasure of the environment in Western culture, the physical erasure, the disappearance of what was previously known, the extinction of cultures and societies, the destruction of natural environments. The second is the lack of words to designate what we call "the environment" in some cultures.

In his inspiring speech, Mia Couto (2021) tells us that in some Mozambican cultures there is no word to designate 'environment,' since, unlike European cultures, Mozambican cultures do not understand the separation between society, culture, and nature.

This population that "grabs the land" does not perceive something external called "environment", because they do not conceive the separability of their existence – as humans – and that of a natural and cultural space apart from their own existence. This second point leads us to question the if would be possible to have a dialogue between supposedly incompatible, contradictory knowledge.

In our view, the myth of incommensurability is just one more way to justify the non-use, non-recognition, and non-acceptance of knowledge that is outside the standard of Western society. Therefore, how can we get around the nonexistence of words in certain philosophies, the distancing of ways of life? A first way would be to recognize the existence of these other cultures, to make visible those who until then were considered invisible.

Science and Popular Knowledge: an invitation to learn about environment and our culture

When we look at the series Invisible City, there is a constant confrontation of the police investigator, based on scientific rationality, with the events that point to the Brazilian folkloric supernaturality. As he embarks on the meanderings of the investigation, it becomes increasingly difficult to maintain the position of rationality in face of the facts that unfold in the plot of the series.

When we bring the questions about scientific communication into the context of the series, we seek to point out this duality also present in the series. That is, in order to approach folklore, to assert the narrative of different Brazilian societies, it is necessary to abandon scientific precepts and their rationality. The historicity of peripheral populations, with their narratives and knowledge, are marked as not possessing this rationality that has as its base and foundation, the white and Eurocentric knowledge.

The *Invisible City* series, from this perspective, by presenting elements of Brazilian culture, together with environmental and political issues (such as destruction of ecosystems and reserves for construction and the threatening of individuals from marginal populations by real estate speculation), more than opposing science and rationality, makes us an invitation. Once it points out the individuals who make peripheral the popular narratives, are the same that destroy the environment within the justifications of scientific rationality, progress, and development of society.

Martin-Barbero (2003) points to the need to have a transversal study about knowledge, especially when it comes to peripheral knowledge, as in Latin America. In this sense, the author addresses various forms of knowledge as neglected and segmented from different societies that make up this continent. That is, the way some communities are constituted from oral and collective communication, with their narratives being constructed in ways different from the hegemonic scientific ones.

Transversality, says Martin-Barbero (2003), is one of the conditions to think about our society and a production of knowledge looking to the margins. Analyzing knowledge through this lens would make it obsolete if it does not encompass ethical, solidarity, and collective production issues. That is, to take knowledge production as a new possibility for the construction of society. This assumption imposes an agenda for the formation of subjects, both in school and in other informal formative spaces (such as the internet, science, communication), that also takes into account local knowledge, making it known, removing it from a merely folkloric, peripheral, and marginal narrative.

Final Considerations

Invisible City is science communication about the environment, yes sir! Provokes Paulo Muzio (2021, p. 1), pointing out how much we need to observe local productions to think about our reality, the social and environmental impact of our model of society. This serie may be, according to the author, an excellent tool for this, with accessible language and a script permeated with recognizable stories from our country.

Even with evidence of this discussion in his post on the Science Blogs of Unicamp, Muzio still got confrontations from several readers with the arguments that the series could not be science communication in social media, precisely because it was a production about traditional and non-scientific knowledge. In this confrontation, the abyss that exists between the two knowledges is clarified, or better said, the abyss of what is understood by science can and should be used for science communication. "It is not necessary to believe in supernatural entities to validate the importance of these Brazilian legends, which move the plot of Invisible City and are tools for science communication" (Muzio, 2021, p. 1).

To understand this series as a tool for scientific dissemination is exactly to accept Martin-Barbero's (2003) and Muzio's (2021) invitation to think about local knowledge articulated with hegemonic knowledge. It is to transversalize knowledge, to make it local, ours, to think from our society and the problems experienced in our country. To perceive the scientific, popular, and traditional debate within the series as part of our culture, entangled in our daily lives, producing subjects from our invisible narratives.

Invisible City is an invitation to look at these invisible knowledges, these subjects erased by a society that imposes the legitimacy of being and of knowledge. From the invisibility that occurs in the series, we can discuss the existence of different knowledges, different humanities that resist, on the margins, in alleys, with subterfuges.

History, thus, invites us to think about the humanity we decided to build and the sub-humanities we left behind. It invites us to reflect on our relationship with the environment, on the disenchantment of the world, and on this distancing between a "humanity" and an external "environment" that makes us lose the bonds of affection.

Notes

1 *American Gods* is an American drama and fantasy television series created by Bryan Fuller and Michael Green and broadcast on Lionsgate's Starz channel, based on author Neil Gaiman's 2001 novel about mythological gods and modernity.

2 *Percy Jackson* is an American film series, based on the literary series *Percy Jackson & the Olympians*, written by author Rick Riordan.

3 *Penny Dreadful* is a horror and fantasy series aired in the United States by Showtime and in Brazil by HBO. It was created by John Logan and produced by him and Sam Mendes. The series interweaves the origins of several famous characters in horror literature, such as Dr. Victor Frankenstein (from Mary Shelley's novel *Frankenstein*), Van Helsing and the vampire figure (characters present in Bram Stoker's *Dracula*), and Dorian Gray (from *Oscar Wilde's The Picture of Dorian Gray*), as well as bringing urban legends (Jack the Ripper) and mystical beings (werewolves and witches), who, together, spread their monstrous alienation across Victorian London. *Penny Dreadful: City of Angels*, in turn, takes place nearly 50 years after the original series, during Hollywood's Golden Age in the 1930s. It takes place in 1938 in Los Angeles, a time and place "[…] deeply infused with Mexican-American folklore and social tension" (Andreeva; Petski, 2018). The characters are connected in a conflict between Mexican folklore deity Santa Muerte, guardian of the dead and guide to the afterlife, and her god sister, the demon Magda, who believes humanity is inherently evil and seeks to prove her point of view.

4 Which can be accessed in https://www.blogs.unicamp.br/.

5 The Forestry Institute is the agency of the Infrastructure and Environment Secretariat of the State of São Paulo (Brazil), which researches and disseminates knowledge about forestry and conservation, and manages the state's

environmental preservation areas, a task that it started to divide with the Forestry Foundation from 2007 onwards.

6 It is important to notice that the term *science communication* is differently approached in Portuguese, with two different enters, the first one is directed to non-specialized people, and the second one is directed to communication among pairs. In the English version of this article, in function of the English language use, there is only one term, *science communication*, which assemble both meanings.

7 *Sítio do Picapau Amarelo* is a 23-volume series of fantastic literature, written by Brazilian author Monteiro Lobato (between 1920 and 1947). The work has crossed generations and generally represents children's literature in Brazil. Sítio do Picapau Amarelo has also been adapted several times since the 1950s, for live-action films and television series, with Rede Globo productions from 1977-1986 and 2001-2007 being the most popular.

8 Occupation is the act of occupying abandoned environments, normally done by poor families and people who do not have housing conditions or by social movements; thus, solutions to this social problem are required from the authorities.

9 It is also important to emphasize that, with this text, we are not seeking uniformity and homogeneity between "traditional knowledge" or "traditional peoples," since this is about heterogeneity, diversity, and difference.

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