



**SLEEPING DESIRES IN FIELD NOTES: A STUDY ON BIOLOGICAL THINKING
IN YOUTUBE CURRICULA**

***OS DESEJOS ADORMECIDOS NAS NOTAS DE CAMPO: ESTUDO SOBRE O
PENSAMENTO BIOLÓGICO EM CURRÍCULOS DO YOUTUBE***

***DESEOS DORMIDOS EM NOTAS DE CAMPO: UM ESTUDIO DEL PENSAMIENTO
BIOLÓGICO EM LOS CURRÍCULOS DE YOUTUBE***



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ABSTRACT: The aim of this article is to analyze the production of the desires of nature in YouTube curricula. Curricula are discursive practices that construct representations about desires, genders, sexualities and bodies, affecting forms of existence marked by abjection and normalization. Using a netnographic approach and discourse analysis inspired by Foucault, I investigate “Nature's Tinder” and the possible matches in this relationship-enhancing network. The biological discourse reinforces coherences and one-dimensional flows of desire, rooted in a cisheteropatriarchal governmental structure or sex-political domination. Heteronormativity is identified in ongoing efforts that portray nature as a technology encompassing only male and female performances, monogamy, competitions, and excessive energy consumption to find a sexual partner. Therefore, it is necessary to think of curricular compositions that transcend the punitive and blaming cisheteronormativity, since the knowledge disseminated in the analyzed videos legitimizes conservative movements, such as the “gender ideology” and the religious discourse.

KEYWORDS: Desires of nature. Queer pedagogy. YouTube curricula. Netnography. Sexopolitics.

RESUMO: O objetivo deste artigo é analisar a produção dos desejos da natureza em currículos do YouTube. Os currículos são práticas discursivas que constroem representações sobre desejos, gêneros, sexualidades e corpos, afetando formas de existência marcadas por abjetificação e normatização. Utilizando abordagem netnográfica e análise do discurso inspirada em Foucault, investigo o “Tinder da Natureza” e os possíveis matches nessa rede intensificadora de relações. O discurso biológico reforça coerências e fluxos unidimensionais de desejo, enraizados em uma estrutura governamental cisheteropatriarcal ou de dominação sexopolítica. A heteronormatividade é identificada nos esforços contínuos que retratam a natureza como uma tecnologia que engloba apenas performances de machos e fêmeas, monogamia, competições e consumo excessivo de energia para encontrar um/a parceiro/a sexual. Portanto, é necessário pensar em composições curriculares que transcendam a cisheteronormatividade punitiva e culpabilizadora, pois os conhecimentos divulgados nos vídeos analisados legitimam movimentos conservadores, como a “ideologia de gênero” e o discurso religioso.

PALAVRAS-CHAVE: Desejos da natureza. Pedagogia queer. Currículos do YouTube. Netnografia. Sexopolítica.

RESUMEN: El objetivo de este artículo es analizar la producción de los deseos de la naturaleza en los currículos de YouTube. Los currículos son prácticas discursivas que construyen representaciones sobre deseos, géneros, sexualidades y cuerpos, afectando a formas de existencia marcadas por la abyección y la normalización. Utilizando un enfoque netnográfico y un análisis del discurso inspirado en Foucault, investigo el “Tinder de la Naturaleza” y las posibles coincidencias en esta red intensificadora de relaciones. El discurso biológico refuerza las coherencias y los flujos unidimensionales del deseo, enraizados en una estructura gubernamental cisheteropatriarcal o en la dominación sexopolítica. La heteronormatividad se identifica en los esfuerzos continuos que retratan la naturaleza como una tecnología que abarca sólo las actuaciones masculinas y femeninas, la monogamia, las competiciones y el consumo excesivo de energía para encontrar una pareja sexual. Por lo tanto, es necesario pensar en composiciones curriculares que trasciendan la cisheteronormatividad punitiva y culpabilizadora, ya que los conocimientos difundidos en los vídeos analizados legitiman movimientos conservadores, como la “ideología de género” y el discurso religioso.

PALABRAS CLAVE: Deseos de la naturaleza. Pedagogía queer. Planes de estudios en YouTube. Netnografía. Sexopolítica.

Introduction

[...] passion has no place in the classroom (HOOKS, 2019, p. 146, our translation).

When we enter the field of education, we are almost inflexibly incited to follow the destiny of annulling our bodies and acting as disembodied, systematic and pseudo-critical spirits in classrooms and/or in academic research. By relegating the potential of eros and eroticism in pedagogical practices to punctual, objective approaches and in formalized environments, we will be opening spaces for rationalities “that allow meticulous control of the body’s operations” (FOUCAULT, 2014, p. 135, our translation) based on “fear that the presence of feelings, of passion, might prevent an objective consideration of the merits of each student” (HOOKS, 2019, p. 154, our translation).

Disciplinary processes (FOUCAULT, 2014) insistently deepen the factorial relations of docility-utility on the school floor, as well as “manufacture ways of experiencing, knowing and understanding relations of gender, body, nudity and sexuality” (SILVA; SALES, 2018, p. 283, our translation), it produces isolations, reinforces colonial values (epistemicide), and stereotypes, as exemplified by the utilitarian view of bodies and genders through biopower (DUTRA *et al.*, 2019). Similarly, disciplinary processes influence the free circulation of cultural curricula with their subtle productive-massifying pedagogies of subjectivities and modes of existence (SILVA; SALES, 2019).

In other words, we constantly reiterate an education whose “purpose of transforming the soul and behavior” comes from disciplining (extra)corporeal/sensory/emotional experiences (FOUCAULT, 2014, p. 122, our translation). The subjectivities produced by the coercive strategies of education implemented daily in schools and other spaces, for the most part, fear feeling desires and passions, even more, they believe that the “new” strange presences in the school context and cyberspaces invalidate and pollute the institutional principles of neutrality, stability, objectivity, and scientific-pedagogical rationality of these same institutions.

However, if there were a curriculum capable of summarizing what we learn in the classroom and the consequences of experimenting (oneself) in the field of schools, a part of it would not only denounce that we have always been far from the repressive hypothesis, that is, that it was economy and the effects of passions, sexes, sexualities, bodies, genders, attractions and desires in our lives are denied, as well as the counter-effect resulting from the interdiction of discourses on differences (PRECIADO, 2011) in the school field, because “censorship [...] constitutes a device to produce discourses on sex, increasingly discourses, capable of

functioning and being the effect of its own economy” (FOUCAULT, 2021, p. 26, our translation).

Therefore, to assume that issues like these – of differences – do not constitute a field of tension for some social sectors and/or those linked to educational policy in Brazil since 2003, is not to be aware of the existence “of an avalanche of reactionary ideas that seek to flood everyone with moralism, naturalized divisions, fixed identities, hierarchical genders, interested silences, destructive hatred, disastrous omissions, unacceptable setbacks” that becomes a centralizing threat gradually popularized under the name “gender ideology” (DINIS; PAMPLONA, 2014; PARAÍSO, 2018, p. 25, our translation). Therefore, we live in a time when “the normative vocation of education is threatened” by the intensification of the challenges in dealing, composing and learning with the “new” practices, with the subjects, with the subjectivities and with the ways of life that enter in classrooms, educational content, chat rooms, comment tabs on social networks and subvert socially established or docilely accepted boundaries (LOURO, 2020, p. 27).

The gradual break with the surveillance tactics meticulously used to ensure the isolation of “dangerous communications” (FOUCAULT, 2014, p. 141, our translation), makes the manifestations of differences – ethnic-racial, gender, sexual, etc. – increasingly reverberant. – thus, promoting several curricular transformations and, in this way, schools undergo inescapable rearrangements of their power-knowledge relations (PRECIADO, 2011; SIBILIA, 2012) which are often expressed through uncomfortable actions (COSTA, 2021) or strangeness of the curricula (UNGER; CARDOSO, 2021). But they can also be manifested by concepts such as the school space as a cultural crossroads (CANDAU, 2008), a political commitment based on transformations away from surveillance and domination procedures (HOOKS, 2013), a germinal space for ruptures with normalization (ROCHA; DIAS, 2022), listening and getting closer to nature (PAGAN, 2018), welcoming (PARAÍSO, 2018), etc.

Milestones such as these modify educational agendas, scripts, curricula and awaken on a daily basis some strange desires³, identities of resistance to cultural uniformity (CANDAU, 2008) or counter-conducts (“in the sense of fighting against the procedures put in place to lead others” (FOUCAULT, 2008)), whether in conventional education environments or in the most

³“Strange desires” is an expression that refers to “ways of life” that were unassimilated by traditional educational and biological processes (SIBILIA, 2012, p. 15, our translation). These strange desires are often hidden from descriptions of nature and reinforce the dominant culture in the quest to reiterate cisgender-heterosexuality as the political regime of bodies, of the sexes (PRECIADO, 2011). These desires are also the “sleeping desires” present in the title of the work, which refers to the performances, transitions, expressions of animals, plants and microorganisms hidden over time by scientists in their field notes.

different spaces that have the purpose of producing subjects and positions, such as YouTube. Therefore, we will discuss some needs that are configured as weapons slowly forged in a specific field of education, which operate in the numbing of passions or desires in their speeches and thus cover up the manifestations of differences in the so-called Natural Stories, thus constituting a “dangerous zone” within the general policy of biological knowledge and the classicist and civilizing ideals of schools (FOUCAULT, 2021; SIBILIA, 2012), thus, we present a very contemporary impasse about the regimes of truth in which abnormalities are surrounded in cyberculture.

Thus, the knowledge arising from the field of biology, especially the discourses related to the study of sexual behavior in nature, are generally produced and based on observations and details in field notes. Many of these field notes demonstrate the fictional character of binary social norms being applied to descriptions of nature, which Preciado (2011) would consider as part of the calculation of sexpolitics. According to Milam (2021), we have a scientific past that ritualizes and uses cover-up tactics to neutralize or keep queer manifestations in nature dormant and thus assume heterosexuality not as a practice, but as a political regime (PRECIADO, 2011).

That said, we also bring the notion of Ferraro (2020) regarding issues of negative instrumentalization and naivety with regard to the discursive understanding of the sciences to problematize a reason, for example, that considers homosexuality, “the drag kings, the *gouines garous*, the women with beards, the *transbichas* without dicks, the disabled cyborgs...” as a degenerative mutation in populations or something that would lead to the disappearance of species (MILAM, 2021; PRECIADO, 2011, p. 16, our translation). Because we understand that such an approach recalls a naturalistic theological past that insists on leaving its marks in contemporaneity, mainly regarding the disqualification of what is most material in nature, biodiversity (FIRMINO; ECHEVERRIA, 2021), in the sense of queer *Pedagogy* (COSTA, 2021), the potentialities of life or differences, we bring the present notion to challenge the device of identity, the binarism and point out the coherences forged in a cisgender-heteropatriarchal governmental fabric, which places sexual and gender differences in codified, spatialized and imposes a certain direction of what, where and how we teach/learn about desires in nature.

All of these concerns gain more potential when we manifest the need to problematize the biological knowledge that is (re)produced in YouTube video curricula from a post-critical perspective and thus compose, incite or imagine ways of being, being and acting far from the punitive, cisheterosexual or guilt dynamics – *queer pedagogy*. In view of this, we consider the

curriculum as political spaces, of agency or “a cultural artifact that produces modes of existence and is capable of multiplying senses, knowledge and creative resistance” (COSTA, 2021; PARAÍSO, 2012; SILVA; SALES, 2019, p. 1480, our translation). Therefore, and living up to the perspective, we understand that curricula that escape educational formalization, this includes YouTube video curricula, are also potentially capable of teaching us ways of living and thinking, often aligned with the regime of cisgender-heterogovernmentality. In other words, knowledge is no longer restricted to traditional classrooms or teaching speeches (SILVA; SALES, 2019), with digital technologies in the so-called cyberculture (LÉVY, 1999), relationships have become more productive and play a central role in today's societies.

Cyberspaces and the experiences arising from them amalgamate with other possible connections to build different subjectivities and ways of life, or as Sibília (2012, p. 127, our translation) assumes, produce bodies that despite being “creative, autonomous and extraordinary” are in force in a *coaching* or training dynamic for “comprehensive training” of the future citizen. With that, we arrive at an important research question: *How are the desires of nature represented in the curriculum of YouTube videos?* To do so, we will use guide authors who, based on their key research problems, seek possibilities of *becoming* in education and biological thinking, in which we can highlight Joan Roughgarden, Catriona Mortimer-Sandilands, Judith Butler, Paul Preciado and Michel Foucault.

When talking about education or the power relations that occur in videos on the YouTube platform, similar to what is done by Silva and Sales (2019), we are guided to understand the dynamics exposed there based on the notion of cultural curriculum, due to the its potential to establish meanings, values and ways of seeing and understanding life that are disjointed, in parts, from school institutions. Therefore, the curricula analyzed in this work also constitute the cultural industry, since in these places the knowledge activated there is constituted by the demands for standardized modes of subjectivation, by favoring certain types of knowledge/cultures and by the authorization of specific conducts and discourses. After noticing that these YouTube curricula are progressively required in society in general, whether with educational interests or not, then we were motivated s/as to question this space and, according to Karat and Giraldi (2019), many of these videos that bring Biology content contributes to reiterate the dominant and uncritical perspectives of science, in addition to not contributing to both theoretical and practical innovations expected for the space in which this information is being disseminated.

Such statements establish a space of possibilities for contact between authors, thoughts and insurgent epistemological currents or a composition that makes itself *queer* for the present moment, in order to make viable or manifest the tactics of hiding differences in the curricula of videos about the biology and to wake up those aberrant life forms, that is, animal, vegetable or microorganism forms of life, which had their existence abjectified⁴ and their possibilities of existence taken over by discourses that cover up the materiality of genders, bodies and sexualities in nature, and this whole path puts us in line with Ferraro's thinking (2020, p. 172, emphasis added, our translation) because “all Biology is queer”.

The biology curricula present in the YouTube videos, based on the queer perspective of Ferraro (2020), are constituted by an operational problem related to the complexity to enter the theme of the construction of gender and sexual identities far from the perspective of a patriarchal society, colonialist, cisgender-heteronormative and binary. Thus, much of the so-called negative instrumentalization and discursive naivety corroborate the abjectification of human and non-human bodies and the discursive proliferation of beliefs based on biological determinism and natural theology. Finally, this proposal is an approach Frankensteinian (MORTON, 2010) and counterproductive (CANDIOTTO, 2021) to claim for a biology curriculum that takes into account the variations that have been hidden in countless field notes and places biological thinking in a queer pedagogical field. In other words, we intend to create a biology curriculum in free circulation that operates in the uninterrupted gears of cisgender-heterocentric normatization.

This article consists of an introductory section, which you have just read, in which we show some of the concatenation of thoughts that led us to research on *Sleeping Desires in Field Notes* and their relationships with cyberculture. Then, in session II, a small methodological approach to netnographic studies will be presented. Section III is dedicated to the development of questions for some YouTube videos, better known as *Nature's Tinder*. To conclude, section IV takes place with the aim of (de)educating through biology curricula, whether on YouTube, in classrooms or anywhere else.

⁴In the queer perspective, the abject refers to everything that is marginalized, excluded or considered socially repugnant due to its divergence from dominant norms and standards of gender, sexuality and identity. This can include non-normative bodies and identities, non-binary gender and sexual expressions and other forms of existence that challenge established norms. The abject is often associated with feelings of disgust, fear or aversion that are socially constructed and perpetuated. This understanding of the abject is essential for the critical analysis of power structures and the struggle for a more inclusive society that respects diversity (BUTLER, 2020; LOURO, 2020).

Methodological Approach

“I consider that the curriculum should be a territory to host differences, affirm life and multiply the encounters that make us desire and expand” (PARAÍSO, 2018, p. 24, our translation), however, how to express such productive forces in traditional terms of search? If “the present time is composed of diverse elements, arising from different matrices, in which the cyberculture produced in cyberspace plays an important role in the constitution of juvenile modes of existence” (SALES, 2012, p. 111, our translation).

In view of this, to carry out this research, we composed our own path of investigation, inspired mainly by the netnographic works of Sales (2012), Silva and Sales (2018, 2019) and the research on curricula of dating sites carried out by Ribeiro and Fonseca (2018). These works are gathered within what is called the “terrain of post-critical research” and its strong tendencies to “transgression of some methodological canons” (SALES, 2012, p. 111, our translation).

Netnography derives directly from modern anthropological methods of investigating human knowledge (culture and communities), ethnography. Netnography emerged as a way to keep up with the speed of human socialization enhanced by the use of technologies and the internet. Subversive since its origin, this methodology considers the social experiences that take place in cyberspace to be significant and enhances our “ability to apply certain instruments and analytical techniques” (KOZINETS, 2014, p. 13, our translation).

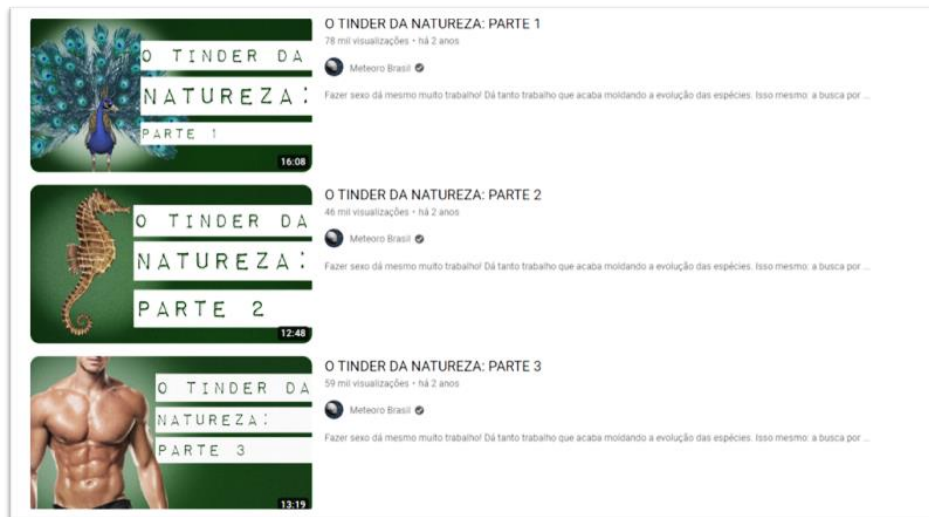
In this way, the present research is a counter-conduct, that is, resistance to governmentality (CANDIOTTO, 2018) in biological thinking and crosses several ethical issues to queerize (OLIVEIRA, 2016) in education research and thus expose a normative character that can emerge on YouTube videos. Three videos were then selected that discuss desires in nature, since this cultural artifact(s)” consists of regimes of truth, discursive orders, constitution of subjects and power relations” (SILVA; SALES, 2018, p. 282, our translation) which makes it possible to analyze how these desires are produced and disseminated in YouTube video curricula.

The investigation is based on watching videos and analyzing speeches and content, this includes images and other resources used to express thoughts, screenshots, reading comments, directions to other related videos and the number of views of three videos called Nature's Tinder (Figure 1), published by Meteoro Brasil channel.

This channel has more than 1.60 million subscribers and an average of 60,000 viewers followed the trilogy of videos about desires in nature. When compared to the access and recurrence rates of Brazilians on the YouTube platform, we are able to understand the potential

that information can reach in times of fluidity like the one we are experiencing. In this scenario, Brazil is one of the countries that stands out in terms of the number of hits to the website on a daily basis, and its public, considered young, is in the age range of 18 to 35 years.

Figure 1 – Set of videos entitled “O Nature’s Tinder” from the Meteoro Brasil channel, which convey information about desires and possible *matches* in natural environments.



Source: Author's screenshot (2023)

The treatment of data collected through netnography involved discursive analysis based on the ideas of Michel Foucault and other thinkers who are related to the objective of the research. Discourse, in turn, is understood as a productive practice that manufactures truths, knowledge and subjectivities. Thus, the analytical and descriptive work of the data intends to “attend to the mechanisms and effects of power in different domains and extensions” (SALES, 2012, p. 126, our translation).

In the research in question, the objective is to describe ⁵the conditions of existence of desires in the curricula of YouTube and to compose possibilities to see other perspectives far from those cisheterocentric present in the descriptions of nature. The treatment of data collected by netnography, therefore, involves a critical and reflective analysis of the discourses present in the YouTube videos to understand how the truths, knowledge and subjectivities that relate to desires in nature are constructed.

⁵Only the main results will be described in a concatenated way with the thought of Michel Foucault and other authors due to the space allowed for publication at the event and the fact that this article is a part of a larger research that started in August 2021 and is in the process finalization (writing).

About Nature's *Tinder*

For you goes this message
And it's not for me
I'm old
And your utopia is for future generations
There are so many children that will be born
with a broken wing
And I want them to fly, mate
that your revolution
Give them a piece of red sky
So that they can fly.
(LEMEBEL, 1986, our translation)

A queer pedagogy (COSTA, 2021) also becomes an *engaged pedagogy* (HOOKS, 2013, p. 15), due to the political commitment that is to think about possibilities for an education far from reinforcing stereotypes, exclusion or the countless forms of domination governmental and biopolitical, in other words, “the teaching and learning experience could be different” and compose other streams of thoughts about desires, bodies, genders and sexualities in nature. Therefore, when we ask ourselves how the data collected from YouTube videos show the points of contribution of biological thinking to the (re)production of cisheteronormativity, we can see that, as a device, its function is far from enabling a mere reiteration of dominant discourses, “but proliferating, innovating, annexing, inventing, penetrating bodies in an increasingly detailed way and controlling populations in an increasingly global way” (FOUCAULT, 2021, p. 116, our translation).

Thus, in the curricula of Nature's *Tinder*, different technologies of control are activated that make us insistently conceive the production of sex, sexualities, genders, desires, bodily differences, sexual reproduction, possibilities of reproduction, monogamy, female behaviors as “given of nature that power is tempted to put it in check” (FOUCAULT, 2021, p. 115, our translation). However, “as in every curriculum, what is taught is learned in different ways, as we constitute ourselves in different ways through the processes of subjectivation” (RIBEIRO; FONSECA, 2018, p. 301, our translation). In this way, we mean that, similar to Jan Zita Grover in “*AIDS and other deforestation*”, we focus on the dimensions of sensations and experiences that make us perceive, even in stories about nature, the application of binary cisheteronormativity, violence, challenges and abjectifications. In this way, it is not only necessary to demonstrate how the individual experiences, however contingent, of a POC⁶ in the Sergipe countryside, students and professors of Science and Biology culminated in a “very

⁶In a street language or based on my regionality as a northeastern person, “POC” means Bicha Pão com Ovo, that is, common and effeminate.

particular type of perceptions about life, death, body and nature”, tries to express and thus manifest a “writing that intensifies the now” (YORK; OLIVEIRA; BENEVIDES, 2020, p. 2, our translation) and what Mortimer- Sandilands (2011, p. 176) calls *queer ecological sensibility*.

Before deepening the discussions about the videos, themselves, we would like to talk about the Meteoro Brasil channel and thus compose ethical and contemporary solutions necessary for Netnographic research. The objective of this text is not to blame the materials produced and disseminated by the channel for producing more normalization alone and leading the forms of subjectivation to a certain end (PRECIADO, 2011), but rather to present a critique of the same materials and to realize that the power emanates from any relational situation (FOUCAULT, 2021). In this sense, our objective is to make known a different type of biological rationality, one that divides opinions, tears apart scientific traditions and makes possible the conditions for the existence of so many children with broken wings, just like I was, in educational and cultural curricula. For this, we seek to analyze what Foucault (2021) considers as discourse:

Discourses, like silences, are neither subjected once and for all to power nor opposed to it. It is necessary to admit a complex and unstable game in which discourse can be, at the same time, an instrument and an effect of power, and also an obstacle, a prop, a point of resistance and the starting point of an opposing strategy. Discourse conveys and produces power; reinforces it but also undermines it, exposes it, weakens it and allows it to be barred” (FOUCAULT, 2021, p. 110, our translation).

So, worry us

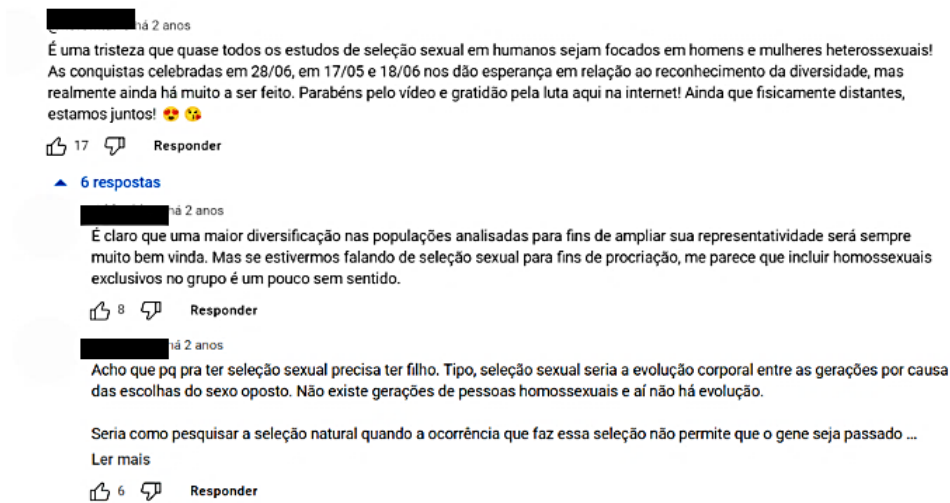
what he admits in things said and hidden, in enunciations required and prohibited; with what it supposes of variants and different effects depending on who speaks, their position of power, the institutional context in which they find themselves; with what it entails of displacements and reuse of identical formulas for opposite objectives” (FOUCAULT, 2021, p. 110, our translation).

Based on the ideas of Joan Roughgarden (2013) and her public challenge or demonstration in 2003 against the theory of sexual selection and its theoretical and practical limitations, we searched in the videos of the *Tinder curriculum* of Nature a diversity of expressions of desire, genders, sexualities and possibilities of connections like those described in *Evolution's Rainbow* and in many other works. As it is also a *Tinder curriculum*, which can be defined as a *website* or application that enables contact based on desire, the establishment of relationships or encounters that currently allows composing different types of connections

within compulsory cisgenderity, a multiple “possibility of escape from the framework, even when they seemed to be enclosed in it”, “a form of experimentation, of breaking with the established, of invention insubordinate to heteronormativity”(RIBEIRO; FONSECA, 2018, p. 320, our translation), however, “norms are disclosed, subject positions are demanded”(p. 300, our translation),”being the 'identity' ensured by stabilizing concepts” that “establish and maintain relations of coherence and continuity between sex, gender, sexual practices and desire”(BUTLER, 2020, p. 43, our translation).

Thus, when we inquire about what the Curricula of Nature's *Tinder* teach us, we can thus understand some of these movements or power relations and know that they led, for example, to homosexuality, lesbianism, intersexuality, transvestitism, transsexuality, sexual and nonperformative behavior. heterosexuals the face of disappearance in reports about nature. The videos, by themselves, offer very valuable data on the perception of the producers about the regime of truth that they establish and reproduce about biological thinking, however, the comments of the subscribers that show how the curriculum is understood and demonstrates which subjects and positioning are constructed from the learning of scientific cases, such as sexual selection and the possibility of reproduction in the Animal Kingdom. In this way, the Nature's *Tinder* curriculum presents ways to resist the sexpolitics employed in the videos' script, not without clashes and confrontations, but also allows expressing that “organisms flow beyond the limits of any category that we build. In biology, nature abhors categories” (ROUGHGARDEN, 2013, p. 32, our translation) (Figure 2).

Figure 2 – Identity claims of recognition trigger technologies of control and moralization over sexual selection to establish a no place for homosexual desires



Source: Author's screenshot (2023)

Control technologies driven by users, based on biological thinking, create a non-place for homosexual performances within what is called Natural History and evolution. In the clash above, one user assumes that it is “sad” that most references to sexual selection are aimed at heterosexual couples. What we call an assimilationist strategy, since it seeks spaces of recognition (LOURO, 2020). However, the technologies of moralization (SILVA; SALES, 2018) are subtly triggered as responses to the first comment, making it clear that although it is important to represent differences in different environments, including YouTube videos, there is no space for homosexuals in social media. evolutionary theories, which is evidenced in the work of Milam (2021). In the case shown, homosexuals or species that practice same-sex intercourse, such as *Tityus serrulatus* (scorpions), cannot reproduce according to the discursive naivety (FERRARO, 2020) of the users that is somehow added to what is passed in the curriculum in question. In view of this, guilt “can be triggered as a technique of power when the prescriptions of morality are not followed by the subject” (SILVA; SALES, 2018, p. 285, our translation).

Thus, the truth about the expressions or effects of desire in Nature's *Tinder* curriculum “is produced precisely by regulatory practices that generate coherent identities via a matrix of coherent gender norms” (BUTLER, 2020, p. 44, our translation). Thus, the desires and behaviors produced and disseminated in the analyzed curriculum led us to believe that heterosexuality is something given. Despite the narrators talking about a focus on multicellular beings, especially vertebrate animals, all portrayed cases demonstrate a limited number of

matches that are possible in nature, as also assumed in Figure 2, contributing to the naturalization of sexual behaviors only in the binary sphere of heterosexuality, since “the category of sex, both male and female, is the product of a diffuse regulatory economy of sexuality” (BUTLER, 2020, p. 45, our translation).

According to Mendenhall *et al.* (2020), there are about 700 known species of vertebrates in nature that transition within the categories of biological sex or gender identity. Thus, it is necessary to restructure the exposed knowledge, bringing cases and openings for performances that flee from the assumptions of cis-hetero- governmentality and manifest *queer* subversion (YORK; OLIVEIRA; BENEVIDES, 2020).

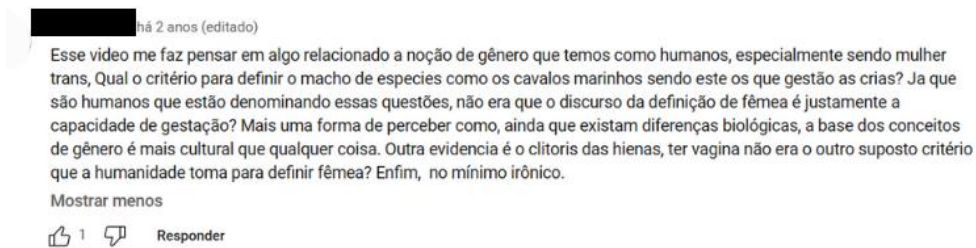
Sexual reproduction, sex and the sexed body in general, according to some writings about Darwin and in Nature's *Tinder curriculum*, were negotiated at very high prices, generating a reference for the regulation of sexuality in humans and especially in female bodies., so that only the monogamous union and the male/female coupling forwarded the species to reproductive and evolutionary success. In this way, Darwin ended up shaping his theory to meet the moral demands of a bourgeois and Victorian society, subjecting those performances far from cisheteronormativeness to a condition of non-place or as “developmental mismatches, reproductive failures and evolutionary sexual setbacks” (BROOKS, 2021, p. 326, our translation).

The reflexes of Darwin's formulations are subtly felt in contemporaneity, for example, when Mendenhall *et al.* (2020) say that in exhibitions in Natural History museums, male animals are shown in prominent positions in relation to females, even presenting natural performances in life that are not consistent with the portrayed behaviors, this demonstrates an intense (re)inscription of the categories of gender and sex in the old formulations of normative heterosexuality and all these positions, in some way, contribute to naturalize violence against women or misogyny. The same authors say that these representations, even within museums and their role in disseminating biodiversity, obscure natural stories about non-binaries and asexualities, for example, dinosaurs (fossils do not retain sexual characteristics).

Formulating hypotheses about why “most societies have been establishing the male and female division as a primordial division” (LOURO, 2020, p. 70, our translation), makes us resort to processes much older than human culture itself. Nature as something primordial and which, nowadays, is considered a reference for social issues, is actually impregnated by what Butler (2020, p. 43, our translation) calls “norms of socially instituted and maintained intelligibility”. Therefore, many people, including those who demonstrate knowledge of

important concepts such as gender, do not realize that even nature is materialized according to contingent and historical rules in different societies (Figure 3).

Figure 3 – Gender is seen as a concept that only presents possibilities of explanation within the cultural sphere, consequently Biology is in charge of producing discourses about sex and explanations about desires in nature



Source: Author's screenshot (2023)

Not that the different living beings cannot be a reference for us humans, however, our proposal is the strategic (dis) identification that allows us to escape from regulatory practices that lead to a matrix of norms not only of gender, as portrayed above, but in make realize the

heterosexualization of desire [...] institutes the production of discriminatory and asymmetrical oppositions between 'feminine' and 'masculine', in which these are understood as expressive attributes of 'male' and 'female'. The cultural matrix through which gender identity becomes intelligible requires that certain types of 'identities' cannot 'exist' (BUTLER, 2020, p. 44, our translation).

In short, the discussion about identification with non-human beings and the possibility of strategic (dis)identification brings to light the importance of questioning the power and regulation relations present in our society. The heterosexualization of desire and the cultural matrix that defines the intelligibility of gender identity are examples of how certain types of identities are repressed and excluded. In this sense, it is essential to seek a critical and reflective understanding of the norms and standards that are imposed on us, in order to promote curricular openings and the proliferation of differences. As argued by Foucault (2014), resistance can manifest itself in different ways, including through strategic (dis)identification, which challenges norms and opens spaces for the expression of other ways of being and existing.

Final remarks

From the analysis in cyberspace of the curricula of Nature's *Tinder* and the theoretical discussions of Joan Roughgarden, Michel Foucault and Judith Butler, it becomes evident the need to open curricular spaces within biological knowledge that are not governed by the punitive and blaming dynamics of nature cisheteronormativity. The knowledge disseminated in the analyzed curricula reinforces the heterosexualization of desire and the cultural matrix that demands that certain types of identities cannot exist. In this way, these curricula end up giving credibility to conservative movements, such as religious discourse and “gender ideology”, which seek to restrict in different ways the possibilities of expression and (dis)identification of gender and sexuality, as well as desires. Therefore, it is important to experience other possibilities of desires in nature, thus awakening those desires that were left to fall asleep in the temporality of field notes and in the fear of what is most material in nature: differences.

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