Multimodal Analysis of the Discourse of Uruguayan Eco-Influencers on Instagram*

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ABSTRACT. The article presents a multimodal analysis of the discourse of Uruguayan eco-influencers active in one of the most popular social networks in the region. From the perspective of environmental communication, attentive to which environmentalism is relevant in the digital public conversation, the environmental discourse of a sample of 200 Instagram posts from 17 influencers, created between June 2021 and June 2022, is analyzed. Environmental challenges and the possible responses are located predominantly in the sphere of individual lifestyle, with consumers as protagonists, and eco-efficiency as the environmentalism that best synthesizes the attitudes and proposed actions. Pollution is the environmental crisis with the most significant presence in these discourses, compared to a limited presence of climate change, and the informative or educational treatment is the one that predominates in the publications.

KEY-WORDS: influencers / multimodal analysis / environmental communication/ environment / climate change / social networks

ANÁLISIS MULTIMODAL DEL DISCURSO DE ECOINFLUENCERS URUGUAYOS EN INSTAGRAM

RESUMEN. El artículo presenta un análisis multimodal del discurso de ecoinfluencers uruguayos con actividad en una de las redes sociales más populares en la región

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(Instagram). Desde la perspectiva de la comunicación ambiental, atenta a qué ecologismos toman relevancia en la conversación pública digital, se analiza el discurso ambiental de una muestra de 200 publicaciones de diecisiete influencers creadas entre junio del 2021 y junio del 2022. Los desafíos ambientales y las respuestas posibles se ubican predominantemente en la esfera del estilo de vida individual, con los consumidores como protagonistas y a la ecoeficiencia como el ecologismo que mejor sintetiza las actitudes y acciones propuestas. La contaminación es la crisis ambiental con más presencia en estos discursos frente a una presencia acotada del cambio climático y el tratamiento informativo o educativo es el que predomina en las publicaciones.

PALABRAS CLAVE: *influencers* / análisis multimodal / comunicación ambiental / medio ambiente / cambio climático / redes sociales

ANÁLISE MULTIMODAL DO DISCURSO DE ECOINFLUENCIADORES URUGUAIOS NO INSTAGRAM

RESUMO. O artigo apresenta uma análise multimodal do discurso de *ecoinfluencers* uruguaios ativos em uma das redes sociais mais populares da região. A partir da perspectiva da comunicação ambiental que foca nos ecologismos relevantes na conversa pública digital, analisa-se o discurso ambiental de uma amostra de 200 postagens no Instagram de 17 *influencers*, criadas entre junho de 2021 e junho de 2022. Desafíos ambientais e as possíveis respostas localizam-se predominantemente na esfera do estilo de vida individual, tendo como protagonistas os consumidores, e a ecoeficiência como o ecologismo que melhor sintetiza as atitudes e ações propostas. A poluição é a crise ambiental com maior presença nesses discursos, em comparação com a presença limitada das mudanças climáticas, bem como o tratamento informativo ou educativo é o que predomina nas publicações.

PALAVRAS-CHAVE: *influencers* / análise multimodal / comunicação ambiental / meio ambiente / mudanças climáticas / redes sociais

INTRODUCTION

The establishment of a new agenda associated with the climate crisis and the preservation of the natural environment is one of the certainties of the first fifth of the twenty-first century (Cannata, 2016). At a global level, it is promoted by institutional agendas such as the Sustainable Development Goals (SDG) or, with a narrower focus, the national policies derived from the Paris Agreement (2015). It is endorsed on the ground by social movements, such as the youth movement that started between 2018 and 2019 around climate change (Han & Ahn, 2020). The public conversation about the triple environmental crisis —climate, biodiversity and pollution (United Nations Environment Program, 2021)— finds a privileged space on social media platforms, where discourses already in circulation through "traditional" media migrate, and new ones are generated, supported by the multimedia and interactive possibilities of digital technology (Pearce et al., 2019).

In this communication scenario, new enunciators of the discourse emerge and become "digital opinion leaders" (Schmuck et al., 2022), especially for the new generations, who are less and less exposed to journalistic media as sources of environmental information (Eddy, 2022). Influencers in social networks can be defined "as a new type of independent social actors, with the ability to influence the attitudes of audiences from competing Internet social media and in coexistence with professional media" (Fresno García et al., 2016, p. 23).

Social media platforms' informational, relational, and experiential functions have been widely used to promote environmental awareness and action (Seelig, 2019; Anderson, 2021), particularly climate discussion and mobilization (Anderson, 2017). The study of this communication has been intense but highly concentrated on Twitter (Pearce et al., 2019). One of the most interesting exceptions is the research by Hautea et al. (2021), who studied the most popular content on climate change on TikTok as a mechanism for self-expression and social activism of the new generations. Their results indicate that the most popular videos correspond to sincere messages that indicate or promote climate or environmental activism, followed by those that use humor to promote or satirize climate awareness. The centrality of humor in climate discourse was also pointed out by a study focused on memes used by influencers on the Instagram social network (Ardèvol et al., 2021). This study also concludes that the memes analyzed "contain a moral assessment, which in some cases becomes normative (imperative)", and the root metaphor on which they are built is the eschatological myth of the end of the world (Ardèvol et al., 2021, p.67). Indirect approaches to environmental issues, such as veganism, are also analyzed in the speeches of influencers on Instagram: studies such as that of Romero-Cantero et al. (2022) discover the potential of these figures to elevate discourses on topics in which they are not experts. However, no traces of activism are found across their online expressions.

The research by San Cornelio, Ardèvol and Martorell (2021) points to the emergence of the eco-influencer, an environmental activist independent from social movements; they seek a change in society by promoting individual behaviors aligned with sustainability, for which they provide a role model. A recent longitudinal study empirically confirms that "following influencers who raise awareness about issues related to causes such as the environment is associated with greater intentions for pro-environmental behavior over time" (Dekoninck & Schmuck, 2022, p. 466).

The present research intends to contribute to this incipient field of scientific inquiry in environmental communication through the analysis of the multimodal discourse of Uruguayan eco-influencers on the social network site Instagram within the framework of the fifth anniversary of the approval of the Uruguayan National Climate Change Policy.

Multimodal discourse analysis considers, as a unit and together, both the textual elements and the multiple visual and audiovisual elements that a platform like Instagram provides to construct discourse and interaction. This theoretical approach, derived from the work of Kress and van Leeuwen (1996), allowed authors such as Jewitt (2016) to describe five concepts that constitute multimodality and that are taken as axes of analysis in this research.

First, the *mode* is "a set of socially and culturally configured resources to give meaning: a 'channel' of representation or communication." (Jewitt, 2016, p. 71). In this case, it is expressed in writing, images, and icons or emoticons (Adami & Jewitt, 2016; Pinto & Barbosa, 2021).

Secondly, the s*emiotic resource* refers to "a means of creating meaning that is simultaneously a material, social and cultural resource" (Jewitt, 2016, p. 72). In the case of Instagram posts, these actions or resources in which the mode is materialized are the words used, the text, the composition of the images and the elements that make up the image.

In the third place, the modal affordance refers to the modes' uses from a cultural, historical and technical capacity perspective, with the meanings that are culturally associated, due to their shared social use, to each of the formats. "Kress (2010) uses the term to refer to the potentialities and limitations of the different modes -what is easily expressed, represented or communicated with the resources of a mode, and what is less simple or even impossible- and this is subject to constant social work" (Jewitt, 2016, p. 72).

In the fourth place, the concept of *multimodal ensembles* provides the whole picture, where the unit of analysis and the distribution of meaning across the modes is explored. Furthermore, it raises "analytical questions, such as which modes have been included or excluded, the function of each *mode*, how the meanings have been distributed between the modes" (Jewitt, 2016, p. 73).

Finally, the *meaning functions*,

> based on Halliday's (1973) systemic functional linguistics, which can also be understood as three major types of meaning (or meta-functions): ideational / representational, which represents patterns of experience (such as process configurations, participants, and circumstances) and relationships logical-semantic between them; the interpersonal/interactive, [which] represents social interactions, relationships, attitudes and values; and the textual/compositional, [which] weaves together ideational and interpersonal meanings into cohesive and coherent units, that is, texts. (Zhao & Djonov, 2018, p. 4)

METHODOLOGY

The process of constructing the analyzed sample, the conceptual framework of applied multimodal discourse analysis and the main variables considered are indicated below.

The sample

A complementarity of operations was used to search for and obtain a sample of eco-influencers. It included reviewing previous reports (Garzón, 2021; Sustainable Social Makers, 2021) and articles in the local press, together with tools external to Instagram: Google Trends, Brandwatch, CreatorIQ, and HypeAuditor. This strategy of multiple sources of information is consistent with previous studies focused on Instagram (Gamir-Ríos et al., 2022; Romero-Cantero et al., 2022).

The approximately 1,300 Instagram accounts obtained through these procedures were filtered to focus on non-traditional influencers at the national level and in recent conversations: accounts of individuals (not organizations, companies, or collectives) of Uruguayan origin, whose audiences on the network were mainly from the same country, with activity between June 1, 2021 and June 1, 2022, intending to analyze the digital conversation five years after the approval of the National Climate Change Policy in Uruguay. Thus, a sample of 345 eco-influencers profiles was obtained, whose publications from the last year were reviewed. This procedure led to the discarding of 328 accounts that had not made publications on environmental problems during the year of the sample. The remaining subgroup of seventeen influencers published 200 *posts* and *story highlights* on environmental problems during that year that were the object of the multimodal analysis.

Central variables and categories

The multimodal discourse analysis of the eco-influencers was organized following the content analysis procedure (Berelson, 1952) around a series of variables and categories built in an iterative process between the theoretical framework and the exploration of the material to be analyzed. The more complex variables are described below.

Environmental Theme

Environmental problems were assessed following the triple emergency addressed in the report of the United Nations Environment Program (2021), *Making Peace with Nature*: climate change, pollution, and biodiversity loss were the possible *Environmental Themes*. Only those posts or story highlights that allude to at least one of these problems are considered environmental publications, thus being the object of the multimodal analysis on which this article is based.

Post Function

Inductively, from the multimedia content of the publications, three significant functions are categorized: when the publication focuses on announcing or presenting an organized event that has taken place or will take place ("Promotion of event or action"); when it focuses on providing information, such as figures, data, explanations or external resources, about a particular phenomenon with an apparent objective of educating the audience ("Information or education"); and when the publication focuses on the use of products or processes that aim at the sustainability of natural resources and environmental care in general ("Promotion of conscious consumption").

Treatment of the Subject

It allows analyzing if the influencer expresses himself or herself about the situation, action or news with a neutral tone (*Descriptive*)*;* if he or she does it with anger, a negative or critical tone (*Critical*); if an action, news or situation is celebrated (*Celebrative*); or a call to action is made (*Imperative*). Although these subcategories are inspired by the work of Eggins and Slade (1997), the labels obey an inductive categorization that starts from the content under scrutiny.

Scope of Action

Following Echegaray et al. (2021), a distinction is made between publications that locate the "solutions" or, at least, the desirable reactions to the environmental crisis in the following areas:

> a. *Individual lifestyle*. It refers to the actions that people can include in their lifestyle, with decisions at the domestic level and consumer decisions that prevent adverse effects on the environment.
>
> b. *Community sphere*. It refers to actions that imply joint work or effort at the social-community level, including companies and NGOs, to promote, put into practice or resist/question an action impacting the environment.

    c. *Political sphere*. It refers to the institutionalized political sphere, decisions at different governmental levels —local, national, or international— regarding environmental impact management and its relationship with citizens.

Attribution of Responsibility

The variable identifies the actors to whom the influencers assign a duty to act in the situation exposed. In line with previous research (Eden, 1993; Bickerstaff et al., 2008; Clarke & Agyeman, 2011; Gómez-Márquez, 2021), the assignment of responsibility considers the following actors: the State, companies, the third sector/non-profits, public figures, citizens/consumers, or the media.

Stream of Environmentalism

This synthesis variable evaluates to which of the three main streams of global environmentalism the analyzed publication belongs. The classification initially proposed by Guha and Martínez Alier in 1997, updated and further developed by the latter in 2004 and 2011, is replicated in categorizing this variable: *Cult to Wilderness*, *Gospel of Eco-Efficiency* and *Mantra of Environmental Justice or Ecology of the Poor*.

    Cult to Wilderness refers to the defence of pure nature. It arises from the love of landscapes rather than material interests (Martínez Alier, 2011, p. 23). The second stream, the *Gospel of Eco-Efficiency,* is concerned with environmental impacts, urbanization, the risks that industrial activities and modern agriculture can entail, and socio-technological solutions to the problem of sustainability with a central concern for the economy (Martínez Alier, 2011, p. 27). Third, the *Ecology of the Poor* is a response to the unequal, unfair impacts of "progress" in the natural environment that conditions the life of communities, predominantly indigenous and peasants, in the global peripheries (Martínez Alier, 2011, p. 34).

    The variables described above were part of the 22 variables analyzed in the 200 publications in the sample (see Table 1).

Table 1

Variables analyzed in the 200 publications

Category	Concept(s) Analyzed in Multimodality	Variables	Subcategories
User Data	Meaning Functions	User	Nominal
		Place of Residence	Nominal
		Profession or Occupation	Nominal
		Gender	Women Man Non-binary Other Does not specify
		Age	Not Determined Under 18 18 Years to 24 Years 25 Years to 34 Years 35 Years to 44 Years 45 Years to 54 Years Over 54
		Number of Followers of the Account	Numerical
Characterization of the Publication	Modal Affordance Meaning Functions	Environmental Theme (UNEP, 2021)	Climate Change Pollution Biodiversity Loss
		Publication Date	Numerical
		Post Type	Post Story Highlights
Environmental Discourse	Multimodal Ensembles Meaning Functions	Issue	Open
		Ecological Stream (Martínez-Alier, 2004)	Cult to Wilderness Gospel of Eco-Efficiency Environmental Justice and Environmentalism of the Poor Not identified

(*continues*)

(*continued*)

Category	Concept(s) Analyzed in Multimodality	Variables	Subcategories
		Attribution of Responsibility (Eden, 1993; Bickerstaff Et Al., 2008; Clarke & Agyeman, 2011; Gómez-Márquez, 2021)	Does not determine Government/Politicians Companies and Private Sector Third Sector (Civil Society) Citizens Public Figures Media Others
		Alliance or Cooperation	No Yes, with a Trademark Yes, with an NGO or Social Movement Yes, with another Influencer Yes, with Brand and NGO Yes, with a Brand, NGO and Other Influencers Yes, with the Public Sector Yes, with the Public Sector and a Brand Yes, with the Public Sector, a Brand and an NGO
Tone and Intention	Multimodal Ensembles Meaning Functions	Post Function	Promotion of Event or Action Information or Education Promotion of Conscious Consumption
		Domain of Topic Development (Echegaray Et Al., 2021)	Community Individual Lifestyle Political
		Treatment of the Subject	Descriptive Critical Celebratory Imperative
		Text Written in Description	Nominal
		Tags pr Hashtags in Description	Nominal
		Emojis in Description	Nominal
		Symbols Alluding to Environmental Problems (Tropes)	Nominal

Regarding Cohen's κ constant, the Recal2 tool yielded κ = 0,978, a 95 % CI [0,973; 0,983], and *p* < 0,005, indicating a 95 % complete agreement among coders. Additionally, the coding of the three variables that showed differences between the coding variables was reviewed and recoded before proceeding to the analysis of the results.

RESULTS

Types of Influencers

Different sources associate seventeen non-traditional Uruguayan influencers with the environmental conversation on social networks and who were active on the Instagram platform in the last year: eleven women and six men. In ten cases, they are young adults for whom there are no elements to specify the age. As for the remaining group, two are in the 18-24-year-old range, one in the 25-34-year-old range, two women in the 35-44-year-old range, and two more people in the 45-54-year-old range. Photographers predominate —a third of the sample—followed by those self-labelled as "communicators". The list is completed with two chefs, two fashion designers and two activists, an "environmental activist", a student "activist for UNICEF" and a social entrepreneur.

The range of followers of the seventeen influencers varies between 140,000 and 1,700 at the time of the study. A deeper look at their profiles reveals that those with the most followers are people publicly recognized for other non-environmental activities. The environmental agenda of this first type of influencer, termed *eco-celebrity* in this research, is generally associated with other actors, such as commercial brands.

There is a wide gap between the more than 140,000 and 70,000 followers of these public figures and the 30 000 to 15 000 followers of the second type of influencer characterized in the study. In this second group are those influencers who have focused their professional work on a close relationship with nature, such as the photographers (5) and the chef in the show. In this group, for which this study proposes the denomination of *eco-professionals*, environmental problems and climate change, in particular, are more present from the perspective of conservation, appreciation of the beauty of nature and its use both for the delight and for human subsistence. The environmental publications of *eco-professionals* are 3,2 % of their activity for the period on average.

With fewer followers, in a range between 15,000 and 1,700, are those influencers who, in addition to referring to environmental, sustainable or ecological practices in their biography, have a higher proportion of publications that address topics environmental or climate change in the total number of their last year publications. On average, 15 % of publications are associated with the fight against climate change and 16,6 % with environmental problems. These five influencers are the source of nearly 80 % of environmental posts. This study identifies them as *eco-activists*.

Environmental Discourse of eco-influencers according to Multimodal Analysis

Mode

All the publications have as their central axis the image (still or moving), according to the characteristics of the Instagram platform, and 98 % are accompanied by other modes such as writing, orality and the use of pictograms (emojis). As for the different types of emoticons, only emojis appear in the analyzed publications. Nearly 48 % use one or more *hashtags*.

Semiotic Resource

The images —still or moving— are accompanied by texts containing the main messages in the description of the publication. All the writings were done in prose and 98 % in Spanish; the length varies between publications with two sentences and those with longer texts, which never exceed three paragraphs. The words used do not respond to technical or scientific language but are easily understandable.

Regarding the types of images, photography prevails over others, such as vector images, screenshots, infographics, tables or graphs. The photographs are not always self-authored, although the influencer creates them in 74 % of cases. Two motifs predominate in the photographs: human-made elements corresponding to the built environment, such as clothing or personal hygiene products —in 29,5 % of the publications, products sponsored by trademarks for which the influencer is *working;* and those alluding to nature with a predominance of landscapes, natural phenomena, farm animals, oceanic fauna, and native fauna —mainly the result of the photographers included in the sample. Another semiotic resource frequently used is the video, in which the influencer as the protagonist prevails as a central element.

The emojis support the statements as emotional markers or highlight specific ideas (see Table 2).

Table 2

Recurring emojis in the analyzed publicationsEmojis recurrentes en las publicaciones analizadas

	Globe: used to refer to the regions, the Earth and international affairs.
	Green heart: represents a feeling of reconciliation or problems in the relationship. They are also used to express that you like nature or health.
	Seedling: used to refer to plant life, springtime, or the representation of various types of new growth.
	Recycling: used to refer to recycling itself or to express that you recycle or reuse something or that something is recycled.
	Drop: used to represent various types of liquid or sadness.
	Biceps: symbolizes strength. Raised Fist: points upwards, used as a symbol of power.

Note. Adapted from WhatsApp Emoticon Dictionary: Meaning of each Emoji, by C. Valero, 2023, ADSLZone. https://www.adslzone.net/essentials/whatsapp/meaning-emojis-whatsapp/

Modal affordance

The publications echo the growing trend towards using video for communication and the predominance of images in Western societies through the audiovisual elements that the platform allows for posts and stories. It is accompanied by a criterion for the duration of the publication since a *post* remains on the profile, while the *stories* have a duration of twenty-four hours, except those that the user marks as *story highlights*. In the analyzed sample, posts are used more than story highlights: 195 posts (97,5 %) and five story highlights (2,5 %).

Multimodal ensembles

The analysis of the multimodal ensembles reveals a tendency for internal repetition in the publications. The oral discourse, in the case of the videos, or the information provided by the fixed image, is ratified in the text written as a description of the publication. In cases

where emoticons are used, they also reinforce the message. No uniformity or trends regarding emojis or hashtags are identified, but rather a random use of them. In the cases in which they are used, they are additional, peripheral and expendable elements concerning the message. In none of the 200 units analyzed, a campaign promoted through *hashtags* was identified.

Variations are found according to the visual formats used when the distribution of meaning through the modes is analyzed. The still images the influencers use tend to illustrate the situation they narrate in the text. When they use moving images (video), this is the gravitational centre of the publication and, generally, has the influencer as the protagonist, directly addressing the audience.

Meaning functions

This research, focused on the enunciator of the message, analyzes the meaning and intention through the multimodal discourse that the eco-influencer displays on Instagram. It privileges the perspective of environmental communication, and, in particular, attention is paid to the alignment of the publications with diverse environmental discourses.

At the ideational or representational meaning level, environmental problems appear mainly associated with the personal use of more sustainable products, the reduction of plastics, waste management, responsible consumption and recycling. That is, in the environmental crisis associated with pollution.

Following the classification of Martínez Alier (2004), there are 103 publications (51,5 %) whose discourse coincides with the *Gospel of Eco-Efficiency*, while the other half of the sample is divided between the *Cult to Wilderness* (51 publications, which represents 25,5 %), *Environmental Justice* or *Ecologism of the Poor* (9 publications, which represents 4,5 %) and publications in which there is no clear evidence of alignment with any of these streams (37 publications, which represents 18,5 % of the sample). The first group comprises publications where the focus on sustainable development prevailed, with concepts such as natural capital or natural resources; also those that referred to technological devices to solve climatic problems and sustainable products or conscious consumption. In the second most recurring group, *Cult to Wilderness*, there were publications whose axis was the philosophy of conservation and the protection of fauna and flora, also those that exalt positive characteristics of nature and the need for its care. Finally, in the *Environmental Justice* category, the units that mentioned the spiritual relationship with nature referring to tribes, populations or social groups were located, and those of a local scope reported resistance or proposals for a local solution.

The meaning of environmental publications regarding social interactions, relationships, attitudes and values can be revealed by surveying a series of multimodal

discourse variables. First, the topic treatment variable accounts for the tone of the communication; thus, the *influencer*'s understanding of the feeling and intention is broadened. Most of the publications analyzed are descriptive, in which the influencer expresses himself with a neutral tone about the environmental problem. It happens in 83 of the 200 (41,5 %) publications. The descriptive tone gives way to a celebratory one in other cases (55, corresponding to 27,5 %): an action, news or situation favorable to environmental sustainability is celebrated. Likewise, a call for action with an imperative tone is expressed in 24 % of the cases, with 48 publications in total; and, to a lesser extent (14 publications, 7 %), a critical treatment is discovered where the angry, negative or questioning tone of the action, news or exposed situation can be identified (see Figure 1).

Figure 1

Treatment of the Subject
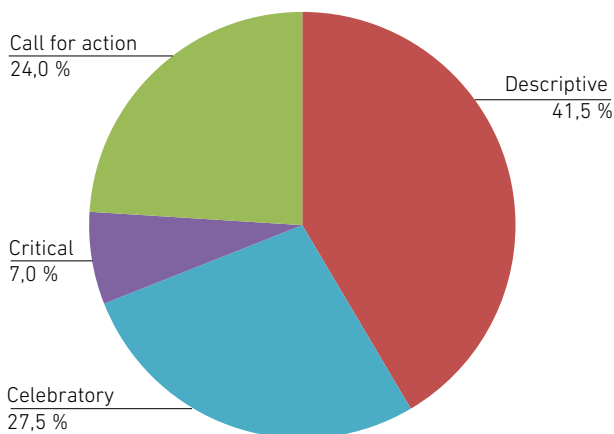
The function of each publication is manifested through the multimodal ensembles that comprise the Instagram story or post. Functions assessment reveals that 110 of the 200 units aim to provide information or educate on environmental issues (55 %), while 65 refer to conscious consumption (34 %) and, in 25 of them (11 %), the focus is on an action or event, past or future, that is promulgated as valuable or exemplary in terms of sustainability (see Figure 2).
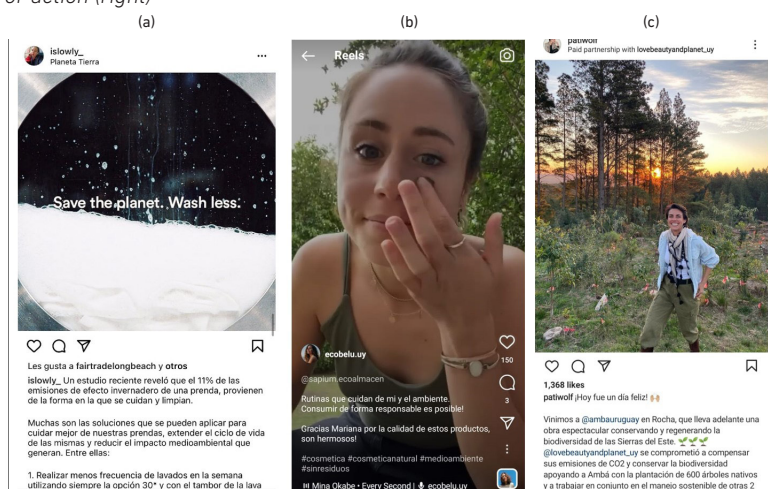
Figure 2

Function of Publications
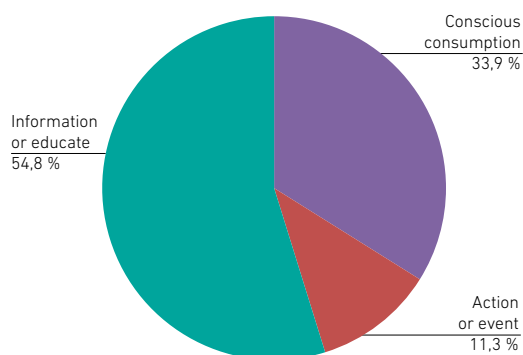
A predominantly formative intention is evident from the influencers to the audiences, even taking a pedagogical tone, which implies the representation of the environmental problem as a challenge associated with a lack of knowledge of the phenomena or how to face it (see Figure 3). Regarding events and actions, in the 25 publications with this function, there were alliances with other actors in 16, especially with commercial brands and one in particular (a hair cosmetics brand belonging to a multinational). To a lesser extent, alliances with NGOs and the public sector were found.

Figure 3

Publications categorized by educational function (left), conscious consumption (centre), and event or action (right)

*Note.* Figure 3a is adapted from *A study revealed that 11 % of a garment's greenhouse emissions come from how it is washed and cared for,* by islowly, 2021, Instagram. Figure 3b is adapted from *Routines that take care of me and the environment. Consuming responsibly is possible!,* by ecobelu.uy, 2021, Instagram. Figure 3c is adapted from *Today was a happy day!,* by patiwolf, 2021, Instagram.

The *Domain of Topic Development* variable reveals that the publications that place the desirable response to the environmental problem in the individual lifestyle predominate widely (160 of 200 publications), poiting to domestic routines and consumption decisions. In the second place, some are set in the community sphere (32 publications), which implies a joint work or effort at a social level to promote, put into practice or resist/ question an action impacting the environment. Finally, on the margins are publications on the response to environmental problems focused on the political domain (8 publications) associated with the institutionalized political sphere (see Figure 4).

Figure 4

Domain of Topic Development
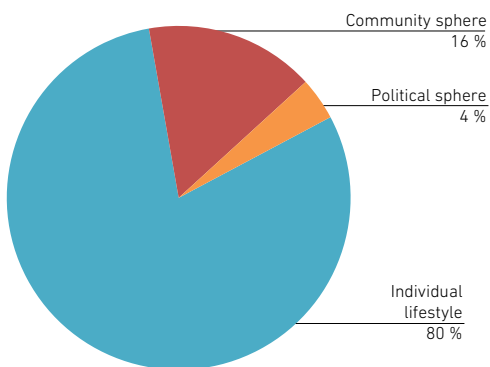
Therefore, the representations and relationships that make up the meaning of the environmental problem for influencers point to individuals. The trend is confirmed when the attributions of responsibility for the environmental crisis are analyzed (see Figure 5). Although influencers do not always saddle identifiable actors or *stakeholders* with some duty to act in the face of the exposed situation, the most frequently referred to are citizens or consumers. In a distant second place are the companies and the State at last.

Figure 5

Attributions of Responsibility
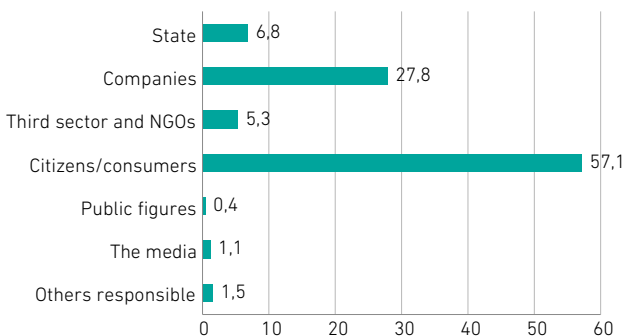
In 152 of the 200 publications (57 %), citizens/consumers were identified as the actors on whom the responsibility falls regarding the duty to act or the possibilities of transformation in the face of environmental problems. They are followed by companies (27,8 %) and the State (6,8 %).

DISCUSSION AND CONCLUSIONS

This first piece of research into Uruguayan eco-influencers reveals an eco-influencer profile not alluded to in previous scholarship. Along with *eco-celebrities* (Brockington, 2009), the authors of publications capable of reaching broader audiences due to their previous activity in the field of media and entertainment; *eco-activists* (Hautea et al., 2021) —the most environmentally engaged and productive in terms of the number of environmental publications—, the *eco-professionals* emerged. Unlike influencers analyzed in previous studies (Romero-Cantero et al., 2022), these associate environmental concerns with expertise: they work with nature or with ecological products, although they share the trait of not openly turning to activism.

In line with previous research on Uruguayan youth and in contrast to those living in the Global North (Gómez-Márquez, 2021), the environmental problems eco-influencers deal with do not frequently include climate change. Instead, their discourse focuses on the other two major planetary crises (United Nations Environment Programme, 2021): pollution from waste and loss of biodiversity, thus challenging the national policy that countries like Uruguay have developed in recent years aimed at complying with the Paris Agreement.

The influencers' discourse on responsible consumption and waste management focuses on the stream of environmentalism known as the *Gospel of Eco-Efficiency* (Martínez-Alier, 2004). It implies that it is feasible to take care of the sustainability of natural resources without cutting radically with the consumption practices of the modern techno-industrial model. New product and process technologies might reduce humanity's environmental impact. The Eco-Efficiency perspective is aligned with the sustainable development paradigm (Martínez-Alier, 2011) as it points to the balance between economic and socio-environmental objectives, and has been mainstream in public discourse at the beginning of the 21st century (Dryzek, 2005; Harring et al., 2011; De Oliveira, 2012). The emphasis on market dynamics as a solution to environmental problems is confirmed by the presence of brands (companies and start-ups), often the generators of the environmental conversation through which influencers express themselves.

However, this "ecological modernization" happens domestically and not necessarily in green public policy, whether from national or international entities such as the United

Nations. Many publications place environmental challenges and possible responses in the domain of individual lifestyles, emphasizing the attribution of responsibility for action to citizens/consumers, as outlined in the research by San Cornelio et al. (2021).

The influencers, public exponents of this highlighted group, thus assume a legacy that is denounced with concern in the face of global environmental risk: "The State, science and the economy are failing to provide security, and they are nominating the conscious citizen as their heir" (Beck, 2009, pp. 45-46). This democratization of responsibilities has been pointed out as typical of the environmental sustainability approach reflected in the Sustainable Development Goals (SDGs), in contrast to the environmental justice perspective that focuses on the right of citizens to a healthy environment guaranteed by the institutions (Agyeman, 2005). Even if only sustainable lifestyles are addressed, infrastructures and institutional facilitators are needed on top of individual attitudes to consistently adopt pro-environmental behaviours (Akenji & Chen, 2016). Therefore, this interpretive framework of the response to the environmental problem or this version of environmentalism would not be functional to the collective goals of ensuring sustainability. Considering the call for a just transition to a low-carbon world, this piece of the conversation is even less hopeful.

Another striking element in the treatment of the subject by Uruguayan eco-influencers is that they do not include humor in their publications or elements such as memes in particular, contrary to what was indicated by previous studies (Ardèvol et al., 2021; Hautea et al. al., 2021), where humor and satire have a significant place in the digital discourse. Notwithstanding, the findings of this research do coincide with Hautea et al. discovery of informing or educating intentions on the side of influencers, as well as the praise of the sublime nature, which Uruguayan eco-professionals mainly contribute to the discourse.

The findings of this research constitute a measurement of the moment of the discourse led by non-traditional eco-influencers around the country's environmental challenges. Although they provide valuable information, it is necessary to consider the limitations of the digital tools available to map these profiles efficiently without consulting the audiences and the dynamism of Instagram in terms of the creation/deletion of profiles and publications, as Pearce et al. (2019) warned. Thus, it is convenient to attend to the multimodal discourse trends identified in the sample rather than to the particular profiles of its creators. The difficulty of accessing "public" information from private platforms to which social dynamics are apparently moving is an important point to consider regarding the challenges of independent research on issues as crucial as the environmental crisis.

On the other hand, beyond the growing relevance of observing this segment of opinion leaders, the environmental conversation on Instagram around Uruguayan accounts also has environmental organizations, the media and some public organizations (i.e. Ministry of the Environment) as actors. Additionally, in a globalized world and with Instagram as a

global social network, it would not be unusual for segments such as the young people of the *centennial generation* in Uruguay to follow influencers from other latitudes instead of, or alternating with, the profiles analyzed.

All in all, the findings on the weight and type of environmental discourse on the platforms that bring together and identify the younger generations shed light on the speculations and myths that propose it as an undisputed environmentalist generation. What environmentalism these digital opinion leaders propose and embody reveals the local challenges to align the population to environmental policies and offers clues about the possibilities of successfully facing the climate, biodiversity and pollution crises. Going deeper into the characterization of profiles, discourses, and even their repercussions requires studies that, like the one done by Dekoninck and Schmuck (2022) in Austria, provide more empirical evidence on the impact of influencers on audiences.

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