

# Unveiling unseen climate practices on Instagram

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**Abstract:** Climate change is often portrayed through stereotypical, extreme or controversial messages, with the role of human agency attached to consumption and demonstrations. Such depictions can be demotivating and cause issue fatigue. There is a need to broaden and elaborate our understanding of human connections to climate change. The aim of this paper is to identify a wide array of climate practices expressed by social media users. An empirical study of 42 Finnish ecological Instagram accounts was conducted. The textual and visual contents of climate-related posts were qualitatively analyzed to identify climate practices and the role visual images play in these representations. Six types of climate practices were identified in the data: detaching, reforming, transilluminating, persevering, caring and consolidating. The visualization of climate practices should be expanded in the media to broaden the understanding of potential human agency in the climate crisis.

**Keywords:** Climate practices; Human connection; Instagram; Visual studies; Photography.

## Revelando práticas climáticas invisíveis no Instagram

**Resumo:** As mudanças climáticas geralmente são retratadas por meio de mensagens estereotipadas, extremas ou controversas, com o papel de agência humana ligado ao consumo e às demonstrações. Tais representações podem ser desmotivadoras e causar fadiga. É necessário ampliar e elaborar nossa compreensão das conexões humanas com as mudanças climáticas. O objetivo deste artigo é identificar uma ampla variedade de práticas climáticas expressas por usuários de mídia social. Foi realizado um estudo empírico de 42 contas ecológicas finlandesas do Instagram. O conteúdo textual e visual dos posts relacionados ao clima foi analisado qualitativamente para identificar práticas climáticas e o papel que as imagens visuais desempenham nessas representações. Seis tipos de práticas climáticas foram identificados nos dados: destacando, reformando, transiluminando, perseverando, cuidando e consolidando. A visualização das práticas climáticas deve ser ampliada na mídia para ampliar o entendimento da potencial agência humana na crise climática.

**Palavras-chave:** Práticas climáticas; Conexão humana; Instagram; Estudos visuais; Fotografia.

## The visibility of climate change

The awareness of a worsening climate crisis has been accentuated in the public eye in recent years as scientific reports, activists and even political leaders have acknowledged the ramifications of global warming. The language of the public discourse around climate change is routinely constructed through catastrophic representations. *The Guardian* changed its language on climate issues in order to more accurately reflect the environmental crises facing the world (O'NEILL, 2019). The past two years have seen a surge in catastrophic images, such as the burning Amazon rainforest and Australian bushfires, in international media coverage. Scientific reports, activists and the Intergovernmental Panel on Climate Change (IPCC) report alike predict a grim future for mankind unless global warming is significantly slowed (IPCC, 2018). This type of media discourse was prevalent even before the latest ecological devastations. The public discourse on global warming uses similar terms, including words such as 'catastrophe', 'terror', 'danger', 'extinction' and 'collapse' (HULME, 2008: 5).

Some of the core visual representations of climate change have been viewed as fear inducing (O'NEILL; NICHOLSON-COLE, 2009), unrelatable and distant. Five visual themes account for most of the existing climate change imagery in the news media: images of climate change impacts and threats, nature imagery, talking heads, graphs and models and, finally, carbon emissions and energy issues (METAG *et al.*, 2016: 199–205). Previous research has shown that climate change imagery is distant, abstract and ineffective at motivating personal engagement with the issue (O'NEILL; NICHOLSON-COLE, 2009; NIEMELÄ-NYRHINEN; SEPPÄNEN, 2019).

There seems to be a problem with connecting climate change imagery to people's everyday lives and practices. One reason may be that imagery on solutions and the reasons behind climate change have been scant (KANGAS, 2016), and mass media imagery on climate change does not provide options for action, at least not through visual communication (METAG *et al.*, 2016). The human connection to the climate crisis has been portrayed through consumerist imagery, offering solutions through green consumption patterns and recycling (NIEMELÄ-NYRHINEN; SEPPÄNEN, 2019). According to Metag *et al.* (2016), the imagery that creates the most self-efficacy – meaning one's ability to act on the issue – are images depicting ways of reducing carbon emissions through consumption and lifestyle choices.

McFarland Taylor (2019: 3) used the term 'ecopiety' to refer to contemporary practices of environmental (or 'green') virtue through daily voluntary works of duty and obligation: recycling, saving energy or purchasing green products. Ecopiety, as represented in contemporary popular culture, refers to cultivating a proper and respectful relationship between individual citizen consumers and the more-than-human earth (*Ibid.*: 4). However, the position of the ecological consumer has been criticized as passive and upholding the capitalist system. The consumer figures prominently in accounts of neoliberal logics and subjectivities; neoliberal discourses address and construct citizens as consumers or purchasers of commodities (DOWLING, 2010: 491).

Combating climate change will require a large-scale change in people's perceptions and social imagination. For instance, Moernaut and Mast (2018) underlined that the dominant framings of climate change have mainly been reproducing hegemonic ideology, but real change will require an ideological transformation to biocentrism. One of the issues seems to be how to reimagine human ways of being and doing in the world. Even though some attempts to renew the 'image problem' have already been instituted – for example, through

portraying real people, climate change impacts and climate change causes at scale (CORNER; WEBSTER; TERIETE, 2015) – achieving a more ecologically sustainable future will require further reimagining at all levels of society (see SOPER, 2008).

A recent change in this imagery was the global climate strikes (i.e., Fridays for Future) started by Swedish teenager Greta Thunberg. The climate strike imagery from mass demonstrations has portrayed human agency connected to the climate crisis on a new scale. However, even this imagery of political participation does not empower or inspire everyone to address climate issues. There has been an uproar from right-wing climate sceptics who proclaim the whole movement and its imagery to be ‘alarmist’ or ‘hysterical’. The human impact on climate change is dismissed by climate denialists, who view climate change as a natural phase in the earth’s evolution. Despite the debate about the causes and effects of greenhouse emissions and atmospheric carbon dioxide concentrations, it is undeniable that humans are connected to the issue in multiple ways.

In this paper, the human connection to climate change is studied through the visibility and visibility of practices. Visibility is a metaphor of knowledge, but it is not simply an image: it is a social process in itself (BRIGHENTI, 2007: 325). Visibility lies at the intersection of the two domains of aesthetics (relations of perception) and politics (relations of power) (*Ibid.*: 324). Making an issue like climate change visible is an epistemic practice of creating a representation of the unseen. Here, visibility includes both textual and visual communication, which play different roles. Visuals are thought to affect people emotionally, whereas textual/verbal material requires more rational, logical and linear pathways of thought (JOFFE, 2008: 84). In their study of the public understanding of global warming, Smith and Joffe (2012) found that the British public’s first thoughts regarding global warming often mirrored the images used by the British press. In creating human connections to climate change, visibility creates possibilities for emotive connections.

### Climate practices as doing and being

This paper suggests that identifying and visualizing unseen climate practices may potentially broaden the scope of human connection to the climate crisis. An integral concept in this paper is *practice*. Practice is some form of human activity that takes place in a *material* context, which defines its boundaries, scopes and means, and in a *social* context, which includes communities of practitioners, networks of peers and sometimes competitors (GRASSEN, 2007: 206). COULDRY (2012: 33–35) writes about practices in the context of media theory and highlights that: 1) practice is concerned with regularity of action, 2) practices are social, 3) practice points to things we do because they relate to human needs, and 4) practice offers a base for thinking normatively about how we should live with media. Couldry also considers that a practice approach of media sociology is interested in actions *directly oriented* to media, actions that *involve* media, and actions whose possibility is *conditioned by* the prior existence, presence of functioning of media. Couldry’s thoughts offer a fruitful base for considering the different ways climate practices on Instagram are media-related. In this study, climate practices definitely involve media and are also conditioned by the prior functioning of media. The actual media practice in question is that of posting texts and images on Instagram. Actual climate practices are not materially present but are represented through media. One can obviously think of the communication of climate issues as a climate practice in itself, but this paper is more interested in what practices are represented through texts and images.

Posting about climate practices on Instagram is a form of everyday politics, and this research is specifically interested in the role photographs play in making everyday political practices visible. The social function of personal photography has been amplified with the advent of online photo sharing and internet-based social networking (VIVIENNE; BURGESS, 2013: 295–296). The digitalized and networked practices around personal images have a politics that extends beyond the individual and his or her domestic context (*Ibid.*: 296). Brabham (2015) encouraged examination of the ways in which individuals engage with political and personal issues as part of everyday social media activity.

Studying Instagram posts of ecologically minded people obviously zones in on the practices of a very specific group or even a community. Grasseni (2007) developed the connections between ways of knowing and communities of practice. Communities of practice can cradle and nurture social and cognitive skills, habits and attitudes, value-laden stances, emotional patterns and ingrained beliefs (*Ibid.*: 204). The community of practice in this study – ecologically inclined Instagram users – thus creates a particular type of epistemological culture, where the ways of knowing about climate change are connected to certain practices, habits, attitudes and emotional patterns. Representations of climate practices are thus epistemologically constructed and hold a community together. In this context, a social media post is an artefact that interacts socially with other artefacts (e.g., photos and posts), and through this interaction influences the formation of significant patterns of meaning and social action (*Ibid.*: 208).

This paper studies representations of everyday climate practices on Instagram. Climate practices refer to material acts that situate individuals in relation to the more-than-human earth, and by doing so, necessarily also resituate them in relation to the logics of global capitalism and market ideology (MCFARLAND TAYLOR, 2019: 3). Through posting on Instagram, users identify practices and communicate them to others. Personal digital photography is a tool to register personal experiences in physical space as well as a currency for communicating in digital space (LEE, 2010). According to van House (2011: 131), online photo-sharing is a way of representing oneself as well as contributing to the ways we enact ourselves individually and collectively and reproduce social formations and norms. To sum up, posting about climate issues on Instagram constructs climate practices both individually and collectively. Through collective sharing of climate practices, possible new forms of human connections to climate change may be created beyond consumerism and political activism.

### Instagram data and qualitative coding

While the frames and ideological representations of climate change in mainstream media have been widely studied (O'NEILL; NICHOLSON-COLE, 2009), there is little research on representations in alternative platforms, such as social media (MOERNAUT; MAST, 2018: 125). Instagram offers an opportunity for studying everyday politics on social media and specifically the role of images in these politics. With the advent of cell phone cameras, people are able to document their everyday lives constantly and easily. Through its ubiquity, Instagram has become a popular digital application and has influenced the cultural logic of the visual (MACDOWALL, 2019: 3). In its annual 2018 report, Instagram highlighted that the platform is used for political causes:

Millions of people used Instagram to make their voices heard in 2018. The year's top advocacy hashtags were #metoo (1.5 million), #timesup (597K), [and] #marchforourlives (562K), demonstrating that Instagram can be a powerful platform for people to speak out and bring light to meaningful causes. (INSTAGRAM, 2018)

However, there has been little research on photography that explores the meanings made through the visual choices construed in social media images (ZAPPAVIGNA, 2016: 272). Previous research of Instagram has concentrated on body image portrayals on the platform (TIGGEMAN; ZACCARDO, 2018) and the dynamics of gendered self-representation (CALDEIRA; DE RIDDER, 2017). Studies on the political and transformative potential of Instagram have been few, and this area deserves further investigation. It is important to consider that on Instagram, the political potential of the image is bound by the technology, cultural frameworks and written cues of the posts.

In this study, the everyday politics of Instagram users is examined by identifying representations of climate practices in posts. The data were collected from Finnish Instagram users who produce ecological content on their accounts. The accounts were identified through a participatory exploration of Instagram in order to gain an insider view on the practices that guide actions in this specific social life-world (see EISEWICHT; KIRSCHNER, 2015: 668). The accounts from which the data were collected were selected through a variety of Instagram's functionalities. Firstly, as part of my research project *Envisioning Climate Change*<sup>1</sup>, I opened my own Instagram account titled *Tunne ilmasto* (translation: Emotional climate or Feel the climate), which concentrates on research, art and photography related to the effect of climate change on emotions. I first started following Finnish accounts explicitly publishing posts on climate change-related issues. I found additional accounts among the followers of the initial accounts, and Instagram's algorithms also recommended accounts. Additionally, accounts were identified among followers of my *Tunne ilmasto* account, some of whom found my account because of recommendations from other Instagram users (through networking with Finnish ecological influencers). Certain accounts were found by following the hashtag *#ilmastonmuutos* (*#climatechange*). I also used the search tool on Instagram to identify accounts with *ilmasto* (climate) in their title.

My participatory involvement in the field led me to zone in on accounts that concentrated on veganism, minimalism, sustainable living, zero waste, nature appreciation and plogging (picking up rubbish from nature), in addition to some accounts solely devoted to climate issues. Together, these accounts represent an array of life-worlds anchored to climate change. Highfield (2016: 14) stated that everyday political talk features occasional contributions by individuals who are loosely connected (if at all) but who have their own personal interests, perspectives and issues of importance. The studied users also posted about personal interests (studies, hobbies, work life and family), but their overall focus was on ecological issues.

The final selection included 42 Instagram accounts concentrating on environmental and ecological issues. All chosen accounts a) posted at least three times during the data collection period, b) featured the users' own photos of their everyday life and c) featured posts connected to climate change issues. All posts made throughout the research period (1.8.2019–30.11.2019) were collected, and climate-related posts (N = 280) were identified from the data. Posts connected to climate change were identified through keywords (e.g., climate change, climate action, carbon sink, carbon neutral and climate friendly) and collected by taking screenshots that included the image, texts and hashtags as well as comments left by other users.<sup>2</sup>

The posts' texts and hashtags were studied to identify representations of doing and being that expressed the human connection to climate change. Climate practices were identified in posts by the textual descriptions of the image content, including what was happening in the image and who was doing or being

<sup>1</sup> *Envisioning Climate Change: Investigating Visual Traces of Climate Change in Media Users' Life-Worlds* is a three-year research and photography post-doctoral project funded by the Kone Foundation.

<sup>2</sup> The data are stored temporarily for the duration of analysis but will not be stored long term.



in the image. This approach is necessary to identify the way users connect images to climate change, as climate change in itself cannot be directly portrayed. As Thompson (2005: 36) wrote, the spoken or written cues that commonly accompany the visual image shape the way in which images are seen and understood. The next section presents six themes of climate practices identified in the data and illuminates how they were textually and visually represented in posts.

### Identifying unseen climate practices

From the images, textual posts and comments, I identified climate practices, which were then grouped into six themes or patterns of expression: detaching, reforming, transilluminating, persevering, caring and consolidating. Each theme contains certain ways of being and doing in relation to climate change.

**Detaching** refers to releasing from something that binds or holds; on a practical level, this can be letting go of certain items and habits. In the data, detaching took the form of different kinds of personal strikes: flight strikes, consumption strikes and even social media strikes. One example of a consumption strike was White Monday, a movement meant to bring awareness to the negative ecological effect of Black Friday, a day of mass consumption originating in the U.S. The zero-waste lifestyle was another example of detaching from wasteful living, such as products, packaging material and other kinds of waste. Detaching included practices of refraining from too much stuff, downsizing living space and reducing stress. Detaching was also expressed as disentangling from ideologies, values and structures: for instance, from the capitalist culture (#fuckconsumptionsociety, #postconsumerism, #dontbuyanythinglife, #degrowth), from the exploitation of workers in third-world factories, from materialism and from frivolous wants. Practices of detaching often used collectively produced campaign material but were mostly expressed through hashtags and textual elements. An interesting exception was a user who visualized bodyweight training in nature as a protest to capitalist society.

**Reforming** means changing to a new and improved condition of living and also amending something that is defective. In the posts, this was expressed as replacing items with more ecological alternatives, and thus it was closely tied to detaching. This sometimes appeared as testimonials by users, who stated that they would reform their previous habits in order to live a more sustainable way of life and promised to make better choices in the future: 'I promise here in public to change my ways'. Examples of reformation included switching from cow's milk to soy milk, buying clothes from flea markets instead of fast fashion, replacing excessive shopping altogether for outdoor activities and travelling by land instead of flying. On a systemic level, reforming meant transitioning from fossil fuels to green alternatives. Reforming of problematic structures was also expressed in hashtags about changing current systems altogether: #systemchangenotclimatechange. Visually, reforming was present in posts representing sustainable consumption, travel and clothes. These types of visualizations of consumer choices fuse well into the overall consumptive visual orders of Instagram.

**Transilluminating** refers to critical examination of the relations between production and consumption. Transilluminating was used to shine a light on naturalized practices and structures with the goal of making others consider the causes of climate change. This was represented through showing what kinds of emissions were created through 'ordinary' practices: 'In Finland the climate impact of households food loss equals the emissions from 100 000 cars'. Transillumination was also present in relating information about climate change

and emissions to individual practices. The hashtag #carbonfootprint was connected to transilluminating through users calculating and posting their own carbon footprint: 'In my weekend post I revealed my carbon footprint, and you can find the link in the bio'. Transillumination was mostly presented in the form of data and numbers pertaining to certain issues but also sometimes through graphs. The possibilities for visualization lay in illuminating systemic relations through personal images: for instance, showing items that had been recycled, fixed or were being used despite having a flaw and tying these images to the critique of production and consumption through textual cues.

**Persevering** refers to persisting steadfastly in pursuit of an undertaking. Persevering was represented in the sample as the ability to stand behind one's values and make choices that were sometimes frowned upon by others. These choices were also seen as showing an example to others. Persevering was also connected to self-sustainability of food and energy production. For instance, the hashtags #globalwarming and #climatechange were often posted alongside #self-sustainability and #foodfrommyownland. These types of posts were accompanied by photos of self-made gardens and vegetable and fruit harvests.

**Caring** is a practice of connecting with the earth, environment and other beings through compassion. Caring means taking an interest in and being concerned about the consequences of climate change for humans and other living beings. Caring is also linked to taking responsibility for one's actions. Posts often used the hashtags #responsibility and #sustainableliving, to refer to the overall attitude of caring for the environment. Caring was connected to emotional expressions, both positive and negative. Positive emotions were expressed in connection to experiences in nature: 'If you never see nature, birds and verdancy, why would you be interested in it or protecting it?' Serene photos of forests and people in nature were used in posts that expressed caring. Caring was also found in negative posts, with users regularly expressing fear, sadness and anxiety towards different news stories, political decisions and scientific data on climate change. One common hashtag was #climateanxiety. However, these negative emotions were rarely coupled with imagery, though sometimes facial expressions in selfies were used to relay these emotions.

**Consolidating** refers to bringing together and making the community or movement stronger. Consolidating practices were attached to positive emotion, encouragement, inspiration and calls to action: #keepgoing, #savetheworld, #grassrootslevel, #dosomething and #doeverything. Consolidating practices were also expressed through uplifting and encouraging comments, such as 'Don't feel despaired. We can still change the world, all we need is a state of aspiration'. Individual choices were affirmed: 'it's great that you have principles and have the courage to stand behind them'. The negative aspects of caring (sorrow and climate anxiety) were often balanced with consolidating messages: 'I've been posting information about the Amazon situation as well as last glimmers of hope for all who have anxiety about the issue'. Consolidating was also expressed in comments and hashtags linking individual practices to larger movements, for instance: #noplasticrevolution, #oneplanetlifestyles, #sustainableliving and #1o5lifestyles, the last one referring to the lifestyles needed to halt global warming at 1.5°C. Consolidating practices were expressed visually through emojis (e.g., heart, raised fist and smiley face) and images from Finnish climate strikes, in which thousands of people took part.

### **Conclusion: Towards new visualizations of climate practices**

The human actions needed to solve climate issues have been presented in the media as changing consumption choices and taking part in demonstrations, thus

connecting human involvement to either consumerism or political activism. These viewpoints are an important part of human involvement in slowing global warming, but the aim of this study was to broaden this view and uncover unseen climate practices. This study shows that there are an array of different climate practices expressed by climate-conscious Instagram users. The six themes of practices presented here – detaching, reforming, transilluminating, persevering, caring and consolidating – form a groundwork for reimagining human connections to the climate crisis. Even though these findings require further conceptual and theoretical work, the identified themes of practice widen the scope of human connections beyond green consumption and political activism.

However, the study also shows that visualizations of climate practices are relatively repetitive and restricted to certain established representations: reforming was visualized through consumption practices (vegan food, biodegradable goods, ethical fashion, etc.) and consolidating through images from climate strikes, both of which link back to the representation of human actions through consumerism and political activism. Caring was visualized through nature photography (Finnish forests and lakes), which is another established visual theme used in the media to portray climate change (METAG *et al.*, 2016: 199–205). Likewise, transilluminating was mainly done on a textual level and through graphs, another established form of visualizations (*Ibid.*).

However, this study of Instagram images did unveil some novel visualizations in comparison to previous studies. Some climate practices were visualized beyond the scope of the consumerist or political viewpoints. One user expressed detaching by posting images of bodyweight training as a critical comment on capitalist consumption society. The idea of modern Western humans being disconnected from nature and unable to move their bodies in a natural way was embodied through images and videos of acrobatic ability. Many users posted images of small-scale farming, which visualized their ability to cultivate the land, produce food self-sustainably and ecologically and thus persevere in the changing climate. One interesting possibility of new visualizations lay in the theme of transilluminating, where users visualized systemic critique of consumption culture through personal images. Images of recycled, fixed or flawed items were tied to ideals of total non-consumption and degrowth. These singular examples show everyday practices as a site of activism and change (PINK, 2012) and they also offer an interesting insight into the way climate practices could be further visualized through photography.

The next goal of my research project is to create photography using the identified themes of climate practices and then post these images to Instagram. Due to the participatory approach to the data collection, the project's Instagram account is connected to the studied ecological accounts and their communities of practice. Through this network, there is a possibility to diversify the visual expressions of climate practices. This, in turn, has the potential to broaden the understanding of potential human agency in the climate crisis. As YUSOFF (2010, 77) argues, aesthetics must be considered as part of the practice of politics; a space where things are made, both materially and semiotically, and a space that configures the realm of what is possible in that politics.

## References

BRABHAM, D. C. Studying normal, everyday social media. *Social Media + Society*, v. 1, n.1, mai/2015. DOI: <https://doi.org/10.1177/2056305115580484>.



BRIGHENTI, A. Visibility: a category for the social sciences. *Current Sociology*, v. 55, n. 3, pp. 323–342, 2007. DOI: <https://doi.org/10.1177/0011392107076079>.

CALDEIRA, S. P.; DE RIDDER, S. Representing diverse femininities on Instagram: a case study of the body-positive @effyourbeautystandards Instagram account. *Catalan Journal of Communication & Cultural Studies*, v. 9, n. 2, pp. 321–337, 2017. DOI: [https://doi.org/10.1386/cjcs.9.2.321\\_1](https://doi.org/10.1386/cjcs.9.2.321_1).

CORNER, A.; WEBSTER, R.; TERIETE, C. *Climate Visuals: Seven principles for visual climate change communication (based on international social research)*. Oxford: Climate Outreach, 2015.

COULDRY, N.; *Media, society, world: Social theory and digital media practice*. Cambridge: Polity Press, 2012.

DOWLING, R. Geographies of identity: climate change, governmentality and activism. *Progress in Human Geography*, v. 34, n. 4, pp. 488–495, 2010. DOI: <https://doi.org/10.1177/0309132509348427>.

EISEWICHT, P.; KIRSCHNER, H. Giving in on the field: localizing life-world analytic ethnography in mediatized fields. *Journal of Contemporary Ethnography*, v. 44, n. 5, pp. 657–673, 2015. DOI: <https://doi.org/10.1177/0891241615595437>.

GRASSEN, C. Communities of practice and forms of life: towards a rehabilitation of vision. In: HARRIS, M. (org.) *Ways of knowing: new approaches in the anthropology of experience and learning*. Oxford: Berghahn, 2007, pp. 203–221.

HULME, M. The conquering of climate: discourses of fear and their dissolution. *The Geographical Journal*, v.174, n.1, pp. 5–16, 2008. DOI: <https://doi.org/10.1111/j.1475-4959.2008.00266.x>.

HIGHFIELD, T. *Social media and everyday politics*. Cambridge: Polity Press, 2016.

INSTAGRAM Year in Review 2018. *Instagram (blog)* 12/dez/2018. Disponível em: <https://about.instagram.com/blog/announcements/instagram-year-in-review-2018>. Acessado em: 20/mai/2020.

JOFFE, H. The power of visual material: persuasion, emotion and identification. *Diogenes*, v. 55, n. 1, pp. 84–93, 2008. DOI: <https://doi.org/10.1177/0392192107087919>.

IPCC. *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate*. IPCC, 2018. Disponível em: <https://www.ipcc.ch/sr15/>. Acessado em 20/mai/2020.

KANGAS, J. Näkymätön ilmasto, näkyviä kuvia: Ilmastoriskin visualisointi ja kuvallinen kehystäminen Helsingin Sanomissa [Visualization of the climate risk and image framing in Helsingin Sanomat]. *Media & Viestintä*, v. 39, n. 4, pp. 209–227, 2016. DOI: <https://doi.org/10.23983/mv.61407>.

LEE, D.-H. Digital cameras, personal photography and the reconfiguration of spatial experiences. *The Information Society: ICT Adoption and User Choices*, v. 26, n. 4, pp. 266–275, 2010. DOI: <https://doi.org/10.1080/01972243.2010.489854>.

MACDOWALL, L. *Instafame: graffiti and street art in the Instagram era*. Bristol: Intellect, 2019.

MCFARLAND TAYLOR, S. *Ecopiety: green media and the dilemma of environmental virtue*. Nova York: New York University Press, 2019.

METAG, J. *et al.* Perceptions of climate change imagery: evoked salience and self-efficacy in Germany, Switzerland, and Austria. *Science Communication*, v. 38, n. 2, pp. 197–227, 2016. DOI: <https://doi.org/10.1177/1075547016635181>.

MOERNAUT, R.; MAST, J. Fighting carbon dioxide or fighting humans? The ideological fault lines underlying two climate change frames. *International Journal of Media & Cultural Politics*, v. 14, n. 2, pp. 123–152, 2018. DOI: [https://doi.org/10.1386/macp.14.2.123\\_1](https://doi.org/10.1386/macp.14.2.123_1).

NIEMELÄ-NYRHINEN, J.; SEPPÄNEN, J. Kuvajournalismi ja eettisen kuluttamisen haaste [Visual journalism and the challenge of ethical consumption]. *Media & viestintä*, v. 42, n. 3, pp. 165–186, 2019. DOI: <https://doi.org/10.23983/mv.85780>.

O'NEILL, S. Z. 'It's a crisis, not a change': the six Guardian language changes on climate matters. *The Guardian* (on-line). 16/out/2019. Disponível em: <https://www.theguardian.com/environment/2019/oct/16/guardian-language-changes-climate-environment>. Acessado em 20/mai/2020.

O'NEILL, S.; NICHOLSON-COLE, S. "Fear won't do it": promoting positive engagement with climate change through visual and iconic representations. *Science Communication*, v. 30, n. 3, pp. 355–379, 2009. DOI: <https://doi.org/10.1177/1075547008329201>.

PINK, S. *Situating everyday life: practices and places*. Londres: Sage, 2012.

SMITH, N.; JOFFE, H. How the public engages with global warming: a social representations approach. *Public Understanding of Science*, v. 22, n. 1, pp. 16–32, 2012. DOI: <https://doi.org/10.1177/0963662512440913>.

SOPER, K. Alternative hedonism, cultural theory and the role of aesthetic revisioning. *Cultural Studies*, v. 22, n. 5, pp. 567–587, 2008. DOI: <https://doi.org/10.1080/09502380802245829>.

THOMPSON, J. B. The new visibility. *Theory, Culture & Society*, v. 22, n. 6, pp. 31–51, 2005. DOI: <https://doi.org/10.1177/0263276405059413>.

TIGGEMAN, M.; ZACCARDO, M. 'Strong is the new skinny': a content analysis of #fitspiration images on Instagram. *Journal of Health Psychology*, v. 23, n. 8, pp. 1003–1011, 2018. DOI: <https://doi.org/10.1177/1359105316639436>.

VAN HOUSE, N. Personal photography, digital technologies and the uses of the visual. *Visual Studies*, v. 26, n. 2, pp. 125–134, 2011. DOI: <https://doi.org/10.1080/1472586X.2011.571888>.

VIVIENNE, S.; BURGESS, J. The remediation of the personal photograph and the politics of self-representation in digital storytelling. *Journal of Material Culture*, v. 18, n. 3, pp. 279–298, 2013. DOI: <https://doi.org/10.1177/1359183513492080>.

YUSOFF, K. Biopolitical economies and the political aesthetics of climate change. *Theory, Culture & Society*, Los Angeles, v. 27, n. 2/3, pp. 73–99, 2010. DOI: <https://doi.org/10.1177/0263276410362090>.

ZAPPAVIGNA, M. Social media photography: construing subjectivity in Instagram images. *Visual Communication*, v. 15, n. 3, pp. 271–292, 2016. DOI: <https://doi.org/10.1177/1470357216643220>.