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Master of Arts (MA) in Communication Studies and Cultural Encounters

The gendered *Zero Waste Movement*

a multimodal social-semiotic study of
gendered participation in Environmental Movements



Supervisor: Remzi Ates Gürsimsek

Rachele Reschiglian
Student Number: 69669
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Abstract

The research work in this thesis was conducted to examine the impact of gender performances and representation within online environmental movement (as the Zero Waste Movement). To be able to study the phenomenon, the research problem chosen was to understand how the content that is produced and circulated by the active participants of the Zero Waste Movement on social media (Instagram) utilise representations of gender as semiotic resources to construct discourses about the movement. The methodological framework is built on social constructivist tradition, and it mainly focuses on the perspective of gender performances/representations, practices and participation, and signs reproduction in the discourses. The research design consists of multimodal social semiotic analysis of the phenomenon on Instagram of the data (201 contents), in order to produce insights about the multimodal discourse and production of gendered representation of environmentalist practices and behaviours within the Zero Waste Movement (*#zerowaste* and *#goingzerowaste*). These multimodal representations were analysed under categories build from theoretical concepts regarding gender stereotypes, gender performativity, and multimodality (practices and gender roles, represented bodies, intertextuality, spaces, objects, and visual composition and aesthetics). The analysis of the findings revealed several patterns of meaning making in which gender and political participation are used as semiotic resources to talk about the movement on Instagram.

Keywords: *gender, personalised politics, multimodal social semiotics, Instagram, Zero Waste Movement*

Introduction

Climate change has been claimed as an important issue for humanity and world survival since the very first environmentalist movement started in the 1970s (Jamison, 2010). From that moment, this concern has been identified as potentially significant for the public matter in diverse occasions and countries around the Globe. Many environmentalist movements were born, based on differentiate ecologists and related social issues and got various solving proposals for this case, for example as the one proposed by the green philosophy behind the Zero Waste Movement (ZWM).

The Earth and humanity survival should be a public general concern, regardless age, gender, power, and position inside the society. According to Hunt (2020) and Wicker (2019), it has been reported an eco-gender gap in dealing with climate change issues, mostly at a societal micro level (individuals). Going green (with all the related pro-environmental behaviour) is linked to a feminine idea, so “a work for women”. But is it true? Are there differences in terms of participation and representation of gender in environmental movements? In which way the online spaces of social media have influenced the representation of those individuals who participate in environmental movements?

Based on the interactive Web 2.0 foundation, social media provide a participatory media ecosystem, being a powerful instrument for motivating individuals to join social movements (Hwang & Kim, 2015). In their study, Hwang and Kim (2015) confirmed the impact of social media in encouraging people to join social movements, in which those who were more active on social media had a stronger intention to participate. Moreover, social media boosted social capital, which moderated the association between social media use and social movement engagement, according to their findings.

Considering the role of social media in the promotion of environmental education and pro-environmental behaviours, in a recent study conducted by Chung et al. (2020), young adults seem to access and obtain information and news about environmentalism through social media as a primary source. Moreover, the scholars understood that “social media are suitable platforms for practitioners and educators to propagandise and teach students and to raise their awareness and consciousness of the importance of environmentally friendly lifestyles and behaviours since environmental information can be spread widely through social networks” (Chung et al., 2020, p. 262). These considerations can be of great importance in the process of advocacy and recruitment useful for the new environmental movements.

Notwithstanding that, there is a debatable perspective about how gender - interpreted as “the socially constructed cultural expectations associated with women and men” (Croteau & Hoynes, 2017, p.267) – and gender roles, namely “a set of social expectations regarding behaviour and attitudes based on a person’s sex” (Croteau & Hoynes, 2017, p. 273) can impact the individual and collective attitude and practical reaction/action towards climate change. The different responses or involvements are the most varied as types of pro-environmentalist behaviours enacted. Not only there are different grades of

involvement in resolving the climate problematics, but also level of knowledges acquired in relation to it, discourses generated about the nature of environmentalist movements and group and their priorities, as just some examples.

Roth and Horan (2001) advocate the view that women in women's movements and in mixed-gender social movements have a very different style of participation than men. In fact, "women have made their own movements or have been part of mixed-gender social movements because women are never just women. They are members of social classes; they are workers; they belong to racial/ethnic/national/sexual communities seeking expression, seeking inclusion, and redress from authority. But it has also been the case that women have found both making their own movements and organizing within mixed-gender groups to be difficult because of their gender. [...] In mixed-gender settings, social movement participation is different for women precisely because of gender role expectations, specifically the responsibilities that women have in reproducing daily life" (Roth & Horan, 2001, p.3). Furthermore, even though social movement communities set borders between themselves and the rest of society, fundamental socioeconomic injustice pervades oppositional communities (Roth 1998 cit. in Roth & Horan, 2001, p.4).

Gender inequality does not disappear just because women participate in social movements alongside men on favour of common interests. This endemic disparity becomes even more problematic when women find their own interests as women while participating in social movement action next to men. Moreover, "even if compatriot men accept women's issues, gender inequality can cause those issues to become compartmentalized. Compartmentalization results from the identification, named above, of common gender interests as just plain "issues" and of women's issues as "women's issues." (Roth & Horan, 2001, p.4)

Problem Formulation

The purpose of this research is to understand how the multimodal representations about gender discourses in content created by active participants in environmental groups such as ZWM on Instagram can enable a specific representation based on a specific gender elements in so-called groups.

Furthermore, it will contribute to the existing knowledge of multimodal social semiotics by comprehending how the social resources and signs can qualify a representation of sustainable behaviours and environmentalists' practices based on the gendered semiotic resources employed by the active participants.

Moreover, considering the above-mentioned studies, the role of social media in these environmental movements might have an impact on the (gender-critical) way of understanding how the participatory culture of social media and how social media might influence environmental movements in their core essence.

Therefore, the main research question is:

How does the content that is produced and circulated by the active participants of the ZWM on social media (Instagram) utilise representations of gender as semiotic resources to construct discourses about the movement?

Social Semiotics (which looks at meaning-making in a social environment, using socially accessible resources for doing it) enable the understanding of Instagram in this specific research. In fact, social semiotic theory and multimodal analysis approach will help answering the research question providing important tools to analyse the compound messages originated and distributed by the Instagram users who engage with the ZWM. The particular multimodal social semiotic theory and methodology will help to understand

that all the meanings and their forms are motivated acts of the sign-makers. Those meaning about the ZWM are created in social environments and through social interactions between the users. The diverse semiotic resources will show how gender comes into play in the discussion about the environmental movement and they are reinforced through their interplay.

To be able to fulfil the main research question, it was necessary to deconstruct it into smaller sub-questions:

1. How do the participants make use of specific affordances of Instagram to produce multimodal representations of their identification with the movement?
2. What are the socially available meaning-making resources in this context?
3. How are these meaning resources being orchestrated by the participants in their posts to imply gender practices or discourses?
4. How do these gendered representations influence the ways in which various discourses about ZWM produced and communicated on Instagram?

A Brief Overview of the Relationship between Gender and Environmental Movements

Several research studies have been conducted regarding the role of gender and its influence over the performance of sustainable practices and the impact of this on the gender identification of environmental practitioners.

Firstly, Hunt (2020), in her article for *The Guardian*, notices that most of the sustainable behaviours and consumption products that are now promoted by brands and organisations are mostly targeted directly to women, since there are specific structured gender role expectations linked to women in relation to consumption and their greater ethic of care in general than men. Hunt recollects also proofs from sustainable/zero-waste brands who plan their strategical communication on gender-neutral advertisement strategies and the specific reason for this circumstance is that they believe in the non-gender binarity of sustainable self-care products.

Secondly, recent research studies, as the sociological work by Connell (1990) and the psychological ones conducted by Swim et al. (2018) and Swim et al. (2020), portray a great distinct separation between feminine and masculine pro-environmental behaviours. They both also enlighten the social stigma that can be pointed out once a person perform gender-bending pro-environmental behaviours or social approval for the same case but with gender-appropriate ones.

In the work of Connell (1990), there is an important account of the role of feminism in the re-definition of masculinity not only in relation to the idea of hegemonic masculinity present in our society, but also in the context of environmentalist movements.

In fact, some individuals, e.g. participating directly in environmental social movement and opting for a vegetarian/plant-based diet, are even seen as a “threat” to the hegemonic-mainstream masculinity (Anshelm & Hultman 2014). Indeed, this is an important interpretation about individual and societal sustainable choices and behaviours might be an alert for the patriarchal system we live in. Additionally, this identifies strong misogyny as a factor in climate denial, since there seems to be found a correlation between “self-reported understanding of global warming and climate change denial among conservative white males, reflecting that climate change denial is a form of identity-protective cognition (McCright and Dunlap, 2011)” (Anshelm & Hultman 2014, p.85).

Moreover, “in recent years, gender-related research in environmental studies has become increasingly important. The lens of gender has revealed different perspectives and demonstrated the need for interdisciplinary analysis, which includes research on identity, bodily interconnectedness and nature-cultures” (Alaimo, 2010). Gender analysis has, for example, dealt with how women are affected by climate change and how mothers engage in environmental activism (Neumayer & Plümper, 2007; Culley & Holly, 2003)” (Anshelm & Hultman 2014, p. 86), but the role of hegemonic masculinity and the patriarchy has been overlooked in dealing with climate change and environmentalism in general.

Consistently, Tindall et al. (2003) show that women in the environmental movement partake in more environmentally sustainable activities than men. This confirms theories and research studies suggesting that everyday conservation issues are more important to women. Though, this result could seem perplexing in finding that women are not more involved in green movements/organisations despite having higher levels of environmentally friendly activities. As a result, women showed a higher level of environmental interest in their environmental attitudes without correspondingly greater advocacy.

To enter the realm of this research project, it has been reported that there is a great emphasis on differentiated gender practices (generally assumed to be “coherent” with a visible person’s gender) that enable or inhibit certain sustainable consumption/lifestyle (Swim et al., 2018) and this is extremely significant for the realm of the Zero Waste Movement.

Wicker (2019) depicts how the philosophy behind Zero Waste Movement has helping to reconsider everyday consumption practices, but it seems keeping reproducing specific traditional gender roles (for example, food management in the household) in the way in which it tries to promote a new greener lifestyle. Moreover, it is taken into account and examined the world of Zero-Waste influencers, bloggers, Instagrammers (called in the article Zero-waste wives), who are held responsible for the wider amount of sustainable lifestyle decision and behaviours in a homely setting.

Contrarily, by its own definition made by the Zero Waste International Alliance, Zero Waste as “the conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health” (Zero Waste Definition, n.d.) does not limit the approach to specific sectors, groups, or individuals. Hereto, considering all these elements, Zero Waste Movement is a great example for the individual (yet collective) accountability towards a greener lifestyle, that should be implemented regardless the gender. With no clear leader to follow, this movement gain its momentum from the experience of Bea Johnson (Zero Waste Home, n.d.) and her book “Zero Waste Home” (in 2013), in which the experience of recycling/reducing/reusing is shared with practical advice to implement in everyday life.

Thesis Synopsis

The case here presented is significant for the empirical study of gendered representation in a communicational/participatory context because it allows to reflect on how this might impact the participation in such environmentalist groups and social movements for people with diverse, non-normative gender and sexual orientations.

The analysis will outline three specific aspects of the research problem by focusing on:

1. The realm of the environmental activism in social network, developed through the concepts of new online social movements, participatory culture and social move-

ments, and personalised politics (main contributions by Bennet, 2012; Loader, 2008; Hills, 2009a-2009b; Thaler, 2012 and Olsson, 2013).

2. Gender in the ZWM: gender stereotypes, differences, and norms in the gender performativity and representation on social media (Butler, 1999; Goffman, 1977; Marwick, 2013; Ellemers, 2018 and Chafetz, 1988).
3. Multimodality and social semiotics: modes, multimodality, and metafunctions (Kress, 2010; Halliday 1976 cit. in Andersen, 2016).

Based on all these speculations, this thesis research project problematizes the gendered representation occurred in certain environmental movements on social media, by a multimodal semiotic analysis of representations of gender in user-generated content and their gender performances in and about the ZWM on Instagram. This will enlighten the possible implication of the multimodal gendered representation, namely the social semiotic construction of discourses, about ZWM and in which way the gendered representation results in how the socially available resources of representation are used to produce meaningful signs with and between the partakers of the movement.

Some of the findings throw light on how self-identity performances and individual participation in online social movements need to be framed in a larger context, of the movement community, sharing some of the goals and objectives of the activist actions through diverse modes (e.g., hashtags). Nevertheless, the individual acts stand out not only as an example for the smaller community which the active participants refer to, but also, they represent their uniqueness. Their self-standing performances and representation of self-identity might be a deterrent for others which do not identify with them or feel not included in the discourse.

In addition to this, the gender performance in the contents of the ZWM active participants on Instagram might reinforce the binary understanding of the division of pro-environmental behaviours, based on the social expectation of gender stereotypes, even if there are some cases that challenge this understanding.

Besides, multimodality and social semiotics are indeed important tools to comprehend the meaning-making process and for making sense of the texts and communicative acts on Instagram. In fact, they both help not to limit the attention to only one modality, since audiences and sign-makers use all the possible resources to decode messages and understand them.

The methodological framework is built on social constructivist tradition, and it mainly focuses on the perspective of gender identity, practices and participation, and signs reproduction in the discourses.

The research design consists of multimodal social semiotic analysis of the phenomenon on Instagram for the data production, in order to generate insights about the multimodal discourse and production of gendered representation of environmentalist practices and behaviours within the Zero Waste Movement (under the hashtags #zerowaste and #goingzerowaste).

The qualitative data was produced from recollecting 201 Instagram contents (post, IGTV, Reels) under the above-mentioned hashtags in the timeframe of April-May 2021.

These multimodal representations are analysed under categories build from theoretical concepts regarding gender stereotypes, gender performativity, and multimodality (practices and gender roles, represented bodies, intertextuality, spaces, objects).

The analysis of the findings revealed several patterns of meaning making in which gender and political participation are used as semiotic resources to talk about the movement on Instagram.

The expected contributions for this thesis project are based on the three theoretical pillars: online social movements, gender studies, and multimodal social semiotics.

Firstly, the social semiotic approach to representation contributes to our knowledge on gender issues in online social movements revealing that gender elements, stereotypes, and expectations are active part of the communicative acts and performances in (environmental) social movements. Gender becomes a meaning-making resource used by involved participants to “make sense” of the world and helps them framing the participatory culture in the specific online social movement.

Secondly, a gender-oriented perspective to online social movements reveals how socially available meaning-making (semiotic) resources are combined with representations of gender and identity as multimodal sign systems by active participants in online environmental movements. Moreover, channels of intertextuality (enabled by Instagram) allow to recognise the function of the singular participant and his/her/their gestures within a bigger group of interest with a predetermined aim to achieve, with a view to personalised politics in new online social movements.

In conclusion, the “online” and “digital” nature of Zero Waste Movement identifies how participants of the environmental group on Instagram make sense of and employ gender as social semiotic resource to develop multimodal discourses about the movement itself. Representations are built by a combination of modes and affordances given by the online space of Instagram. Meaning is made in relation to other individual interests, which are shown throughout the contents created and distributed in the social media platform.

Theoretical framework

To understand the use of representations of gender as semiotic resources in the content produced and distributed by active members of the Zero Waste Movement on Instagram to produce multimodal discourses about the movement itself, this section provides three theoretical lenses which will be discussed and tested through the analysis of the material produced in this context.

Firstly, the nature and features of the new online social movements are discussed referring to the studies of the online participatory culture (Loader, 2008; Hills, 2009b; Poell & van Dijck, 2015) and with Bennett's (2012) understanding of individual Personalised Politics in the collective actions of environmental social movements. To be able to answer the research question, environmental activism, identity formation in online spaces, and personal participation in personalised politics are included as theoretical concepts.

Secondly, an account of gender roles, stereotypes, and expectations is examined in relation to Judith Butler's concept of Gender Performativity (1990) and the realm of social media, not only to provide tools for the understanding of the phenomenon, but it will be useful for the generation of the analytical framework's categories.

Ultimately, multimodality and social semiotics are presented in order to comprehend the important role of these approaches to gain knowledge about the discourses about ZWM on Instagram. Social semiotics includes the analysis and discussion of multiple elements to be able to recognise the signs, representation, and meaning produced in the content presented in the data collection. The process of meaning-making by the active participant of ZWM is analysed, thanks to the tools of modes, multimodality, and metafunctions.

The realm of the environmental activism in social network

In the last years, it is possible to recognise a great shift of perspective and practices about the participation in social movements.

Indeed, from the very first social movements in the 60s-70s to now, the very rigid and structured organisation of social movements is being dissolving, changing shape and connections between activists and participants, keeping the distinctive sense of collective of social movements (Bennett, 2012).

As a matter of fact, the "new school" social movements are diverging from the previous ones on several levels (Saunders, 2013), in terms of:

- Form: the dynamic nature of fluid participatory networks, such as the one of new social movements, emphasises the decentralisation and the non-hierarchical structure of them. There is a direct participation of the individuals, not class based. The movement milieu is open and supported by counter-cultural networks.
- Purpose: the collective interest is protected through symbolic resistance and freedom of communication, expression, and cultural reproduction. Moreover, solidarity and

autonomy are here goals and there is a clear resistance to the “colonization of life-world and manipulation of identity and needs” (Saunders, 2013, p. 123).

The nature of new online social movements: environmental activism in digital spaces

The Zero Waste Movement is part of the new social movements, in which activism is performed not only in physical spaces, but also in digital environments. To understand its structure, it is relevant to comprehend how the new online social movements are creating engagement for their purposes and goals.

Starting from the definition of the new (online) social movements, the online world plays an even greater role in the context of environmentalism.

According to Thaler et al. (2012), digital environmentalism and activism is concentrated on sharing information in the online communities, with the aim of educating the participants and audiences, by gathering, content curation and sharing information. In their work “Digital Environmentalism: Tools and Strategies for the Evolving Online Ecosystem”, the scholars aim to identify some of the most important features of online media/spaces in relation to the essence of environmentalism and green social movements.

Firstly, the online world eliminates a distance between environmentalists and their viewers, allowing for interactions between previously unconnected parts of the community. Over the past decade, blogging and social media sites have evolved to the point that their use is almost universal. Their power lies in their ability to sustain massive, active, well-connected networks that allow for unrestricted knowledge flow. Because of the velocity and versatility of blogs and social networking, digital environmentalists may attract attention to and debate a wide range of environmental issues, building on the experience of academics, politicians, and on-the-ground campaigners inside their networks (Thaler et al., 2012).

Secondly, environmental groups have used these online channels to distribute their views, mobilise their supporters, and engage with potential members. Actually, engagement is critical to the effectiveness of an environmental movement (Thaler et al, 2012).

Thirdly, “Actions online can serve to enhance a group’s reputation or further marginalize it, alienating a more moderate audience. Online environmental groups can highlight the individuals involved as opposed to the organization. Individuals can develop their own conversational style when interacting with an audience—authoritative expertise, casual conversation, humor, and even occasionally sarcasm.” (Thaler et al., 2012, p.371)

This brings attention to the participatory culture that social media allows to environmental activists. The possibility offered by social media to express an individual involvement in the ZWM reinforce the movement itself, combining the singularity with the collective activist aim.

Participatory culture in social media and the connection with social movements

Considering the characteristics of the participation in the ZWM on Instagram, the theoretical framework brings social movements and new media (Loader, 2008), participatory culture (Hills, 2009b), and architecture of participation (Olsson, 2013) perspectives to contribute to the overall research problem.

Social movements and new media

Loader (2008) considers how new media are fundamental in the mobilisation, the networking, and the communication opportunities inside and outside social movements. They provide important tools and strategies not only for shaping structure and the protest of social movements, but also for the identity and opportunities for both activists and the movement. In fact, the implementation of new media does not imply the emergence of completely new virtual social movements, but rather a new way of supplying traditional social movement organizations, local activist networks, and street-level protest with a trans-national capacity to connect, exchange content, and engage with a broader public.

As also mentioned above in the work of Saunders, in Loader's understanding, new social movements are more fluid, where the network structures endeavour to be non-hierarchical, "informal networks of autonomous individuals, groups, and organisations" (Loader, 2008, p.1922). Indeed, there are multiple individual identities which shape the movement with shared beliefs and collective identity: those are created among communicative acts, which are essential also for the networking and proselytising, the mobilisation and protesting. Relevant for the study of the gendered representation of the Zero Waste Movement on Instagram is to grasp the centrality of communication (and representation) for new social movements: "Communication is an essential source of power that enables political contests to take place over the aspirations, values, and imaginations of people (Castells 2007; Mann 1986). It is the means by which competing views of the world and what is possible or not possible is articulated, transmitted, contested, and mediated. Communicative power is therefore at the very interstices of networked social action." (Loader, 2008, p.1922)

These ideas need to be combined not only with the relevance of convergence and pervasiveness of the new network society (Castells 2007, cit. in Loader, 2008), but also with the growth of global information economies and the loss of influence of the nation-state in the globalisation era. New media are giving a space for new social movements to bypass the hegemonic communicative power of traditional mass media and established traditional institutions. Moreover, they augment the amplitude of actions doable worldwide and the purpose for diverse social and global issues, such as climate change, human rights, migration, and security.

Furthermore, "this new media politics can be characterised by social fragmentation and the rise of individualism and its concomitant privileging of what Anthony Giddens has termed the project of the self (Giddens 1991). Increasingly, citizens are required to engage in reflexive processes that foster the management of their personal life plans that are derived from risk assessments and lifestyle choices (Beck 1992)" (Loader, 2008, p.1924).

Hereupon, Loader underlines how there is a great turn on the responsibility upon the singular citizen for their wellness and on the capability to construct their own self-identities, which might be contrasting the ones attributed by the social group and community they live in. For so, identity must be seen as fluid, transient in time and multiple and politics are moulded by discussion about identity, lifestyle, and consumerism, which are constantly playing out through the converging old and new media's networked content and communication networks.

The emergence of new social movements structured around lifestyle issues like environmentalism, ethnicity, sexuality, disability, and human rights is said to be the most important manifestation of such de-institutionalised and non-class-oriented politics.

Participatory culture

Participatory culture (under various aspects) has been studied in Communication Studies through the understanding of the features offered by new social media, modern communicative technologies, and digital culture. To be able to identify the style of participation of the ZWM on Instagram, it is important to comprehend how people can interact and participate within online spaces.

Hills (2009b) recognises mobility, interactivity, and identity as part of the social phenomenon in new media and technologies: in fact, there is a plethora of possibilities offered by the reality of “nomadic” digital media to self-expression and articulation of identities. He states that there is an open possibility for individuals to carry out the ‘private’ self-identity to a more ‘public’ self, engaging in multiple conversations with diverse people, thus extending the pre-existent personal social networks.

Nevertheless, he detects a blurred contrast between the dualism of private and public figure, that a person aims to perform by means of the available resources where “self-identity is not only presented and displayed through the embodied self, and attention needs to be paid to ‘the ways in with individuals present, or construct, their identities [online via] ... the aesthetics and construction methods of... “bricolage” ‘ (Lister et al. 2003: 246)” (Hills, 2009b, p.116).

These options offer a greater variety of ways to present the self-identity within social networking platforms in which there are found spaces of a “digital-cultural emphasis on the presentation of self. Such an emphasis typically hinges on, and reinforces, the use of mobile digital media to capture and image moments of self-expression, identity and play” (Hills, 2009a, p.118).

Expanding the concept from the participation in fan activities and pop-culture to a wider range of bigger or smaller personal events that an individual can experience during the span of life, “posting this type of content reflects on the user’s online identity and bears future imagined audiences’ approval in mind [...] digital mobility appears to be presaging and supporting shifts in cultural activity, partly away from the consumption of media representations and partly towards the conceptualization of the self as a presentational image directed at imagined others, as well as a symbolic entity ‘contained’ and carried in personal digital devices” (Hills, 2009a, p. 120-121).

In here, people who are not able to construct a personal self-identity (desires, needs, hopes, etc.) in the setting of traditional social institutions can find an unconventional space in new social movements to express themselves through shared beliefs and collective meaning (with alternative values, identities than the dominant ones).

These identities are based on what scholars of social movements define as ‘interpretive framing’: namely a “strategic attempts by SM [social movement] actors to shape and transform social phenomena into culturally recognisable problems, the formation of ways to tackle them and the related motivation to act to resolve them. Framing thereby provides meaning for the individual actors to both interpret aspects of their social world in certain ways and the motivation to act collectively with others to change it.” (Hills, 2009b, p. 1925).

Clearly, there is a need for participants in the social movements to “acquire the creative media skills with which to communicate effectively within the global ‘space of flows’ that he believes increasingly characterise the political domain” (Castells, in Loader, 2008, p. 1926). Those creative media skills are in this specific research account the case of determinate modes and symbolic resources. They will be later called out as being part of social semiotic theory of multimodality.

The set of those creative skills are necessary for the active participation within the

movement. Moreover, they are also part of the interpretational tools of the audiences when they later receive the content created and start making sense of the message there presented.

The architecture of participation

Those conceptualisation of the new media and digital culture features in general, linked with the individual communicational acts that can be embodied for participating within movements, are creating the “architecture of participation” (Olsson, 2013), defining who can be part of this process and which requirements are needed for this.

Olsson identifies three possible actors such as corporations, empowered consumers, and participating citizens. Focusing on the last category, the interactivity and connectivity of new media are opening “new possibilities for the production of civic online content (Banaji and Buckingham 2013), fosters new and potentially empowering forms of online communities (Bakardjieva 2013) and creates new spaces for young people’s civic actions (Lund 2013)” (Olsson, 2013, p. 206).

According to Jenkins’ analysis of participatory culture (cit. in Olsson, 2013), the participants (producers and consumers of online content) are engaging with one another under a new set of rules, which transform the participatory online cultures, shaping them into modern civic insights and can empower subjects in different forms.

Personalised politics and online personal participation: how representation signifies political activism

The nature of the participation in the ZWM in online spaces of social media enables a reflection on how active participants make sense of their partaking and create their own personal style, messages, and representations, because of the features of social media.

Some of the concepts here above listed are also present in the analysis of the personalised politics made by Bennett (2012).

Firstly, in his work, Bennett (2012) identifies the awareness and empowerment of individuals through the extensive nature and use of social media and personalised communication technologies as some of the factors that leads to a more connective and rich participation in societal changes, thanks to the acknowledgement of the links between people and the number of participants.

Secondly, the converged nature of the new technologies such as intertextuality, interactivity (Livingstone, 2004) and the “era of personalization” (Bennett, 2012, p. 21) are creating the perfect environment where it is possible to recognise a unique approach to politics and political participation, in which individuals can choose and perform active/passive engagement with multiple realities and problematics at the same time. As a matter of fact, people develop various interests, meanwhile they can be part of numberless movements, tailoring their participation along. Indeed, this has strong relations to how social media are understood for the reason that they are a “social sphere” in its own right (with unique norms, tools, and values utilised), such as in this particular research case Instagram, but also Twitter, Facebook, etc.

Here, the individual mobilisation for the diverse political/economical/consumeristic issues and causes can be performed using diverse platforms and modalities, more appropriate to “allow individuals to activate their loosely tied social networks” (Bennett, 2012, p. 21).

The new face of online movements is based on the idea that “individually expressive personal action frames displace collective action frames in many protest causes.” (Bennett,

2012, p.20), so the single action of the individual has to be put in a wider situation. There is no clear leader, attachment to ideology nor political party, that is taken as a point of reference, but the actions within this movement are based on the individual togetherness. Nevertheless, all the interactions between individual content producers and the potential audience are influenced through the same technologies, creating a sense of “togetherness” which can be “ephemeral, always already on the point of giving way to the next set of trending topics and related sentiments” (Poell & van Dijck, 2015, p.534).

According to van Dijck and Poell (2015) and Zeynep Tufekci in her TED Talk “Online Social Change: Easy to Organize, Hard to Win” (2015), the realm of social-media-driven contemporary activism is indeed largely characterised not only by the speed for circulation and distribution of content of protests as alternative tools from the mainstream mass media, but also by the high level of personalisation of the activist action, but the whole protest/activism is framed and shaped by the social media technology and algorithms implemented in the platforms used.

Actually, the implementation of social media in the activist communication acts can “penetrate deeply into day-to-day personal communication in ways alternative media have never been able to do, activists can reach categories of people who would otherwise not be reached by activist communication. At the same time, the interactions and interests that tie dispersed social media users together to form protest movements, generating instant moments of togetherness, inevitably dissolve when social platforms algorithmically connect users to the next wave of trending topics” (Poell & van Dijck, 2015, p.534).

In addition to this, Poell and van Dijck identify the modern society we live as “platform society”, in which mutuality of the global conglomerate of all platforms is structured by shared set of mechanisms: “public and private communication is reshaped by social media’s commercial mechanisms, transforming the political economy of the media landscape. The impact of globally operating platforms on local and state economies and cultures is immense, as they force all societal actors—including the mass media, civil society organizations, and state institutions—to reconsider and recalibrate their position in public space” (van Dijck & Poell, 2015, p.1).

Online activism and social movements are shaped in these new online-public spaces: a mediation between private and public spaces is present. Moreover, cultural imaginaries, consumer and technical habits, technology structures, and business models are inextricably linked between them.

The semiotic analysis conducted in this research project has to be looked at from the context of political participation through the framework of “personalised politics” (Bennett, 2012). Reframing the statement “individually expressive personal action frames displace collective action frames in many protest causes” (Bennett, 2012, p.20), “Individually expressive” implies the practice of meaning-making and “action frames” indicates participation. This connection between the two frameworks enable to answer to the research question since a semiotic analysis can reveal certain “patterns of meaning-making” and possible principles for the analysis of gendered participation in online social movements.

Gender in the ZWM: a matter of representation and performativity

In the study of culture, the idea of representation has taken on a new and critical role. Consistently, Hall remarks that representation is “one of the central practices which produced culture and a key ‘moment’ in what has been called the ‘circuit of culture’ (see du Gay, Hall et al., 1997)” (Hall, 1997, p.1). Representation is interconnected with reg-

ulation, identity, consumption, and production in order to create an understanding of culture. This strong connection between those components of culture is part of people's daily experience and the reason why it is crucial to understand the role of social media and the representation in the communicative acts in online social movement.

Indeed, this is rather important if you think about the representation of gender in social media and in the context of the ZWM. Not only because "representation is an essential part of the process by which meaning is produced and exchanged between members of a culture. It does involve the use of language, of signs and images which stand for or represent things." (Hall, 1997, p. 15), but also because it helps "'make sense of' the world of people, objects and events and how you are able to express a complex thought about those things to other people, or communicate about them through language in ways which other people are able to understand" (Hall, 1997, p.16-17).

Gender performativity on social media

To start identifying gender as meaningful resource for active participants in the ZWM, it is important to conceptualise gender performativity on social media, also in relation to gender expectation in those digital environments.

Gender representation in media has been for a long time discussed and is still very contingent in these years since it has a great and fundamental impact on phenomenon of inclusivity on several levels (translating to gender categories the work made by Hall, 2003) and various social spheres for normative and non-normative gender identities. Interesting concept to add is that social media enable individuals to claim the position of content producers, in contrast with mass media and mainstream communicative channels. Hence, the gender performance can be actively presented by people by means of new social media's affordances and new communicative modalities.

The purpose of this section is to understand social-media-posting practices as a way in which gender can be performed and how gender can be portrayed through the implementation of specific stereotypes, roles, norms.

Identifying in which ways active participants of the ZWM on Instagram make sense of and use gendered representations as social semiotic resources to build multimodal discourses about the movement through the concept of gender performativity will allow to recognise the role of the individuality and his/her/their gestures within a larger group with a predefined goal to achieve. Therefore, this will enable the study to learn new insights about how people take part in online social movements, through a representational/performative lens.

Hence, an interesting concept to consider within the theoretical framework of this research is the notion of Gender Performativity, coined by Judith Butler in her work "Gender Trouble: Feminism and the Subversion of Identity" (1999). In fact, the idea of gender performativity is based on the idea of reiteration of certain behaviour or embodiment: "Performativity is not a singular act, but a repetition and a ritual, which achieves its effects through its naturalization in the context of a body, understood, in part, as a culturally sustained temporal duration." (Butler, 1999, p.XV).

Nevertheless, the performativity of gender has no sure correlation between one person's gender and the body, and it is an endless process lived during one's life, an act of the individual with not temporarily nor spatial constraint (Salih, 2002, p.46).

Gender as a performance enable to know how gender norms turns into representations in everyday life. Nonetheless, gender performativity covers an extremely wide set of modalities in which is enacted: from communication to social interaction, from identification to participation within specific groups.

Actually, even the performance within social media deals with the way in which individuals can play or enact with their gender identities, but also in the way in which the technologies allow individual to do so. In fact, “Gender is produced and reproduced in social media both by software and the user interaction that takes place online” (Marwick, 2013, p.60).

Examining gendered patterns of online interactions shows patterns in the modes of communication that are promoted and discouraged in specific groups and towards particular gender identities. Understanding how active participants in the ZWM on Instagram use social media to create a gendered identity/activism within the movement will help explaining how social media simultaneously represents and creates gender.

Bearing in mind that extensive research studies in feminist, interactional symbolist, gender and queer studies (Butler, 2004; Butler 2014; Ahmed, 2004; Dvorsky & Hughes, 2008; Haraway, 1985, are just some examples) are deconstructing the binary idea of gender and defining gender and sex as a social construct, it is possible to recognise an important clash with the hegemonic discourses around sex and sexuality that seek to follow a paradigm in which sex and gender are predetermined, unchanging, inextricably tied, and dependent on biology (Marwick, 2013, p.62).

Nevertheless, multiple Communication and Media scholars have drawn attention to the various possibility given from the disembodiment of the subjects for the enactment and playfulness with their gender in the online world in the past (as Turkle, 1995 and 1996, Wynn and Katz, 1997 cit. in Marwick, 2013 and cit. in Slater, 2002). Through the participation in specific online contexts and breaking down the conventional binary understanding and social expectation of gender, individuals seemed to be able to play around with their gender identities and sexual orientations.

According to Marwick, “contemporary gender theorists focus on behavior that is encouraged, discouraged, rewarded, or prohibited and how it maps to ideal understandings of “men,” “women,” “feminine,” and “masculine” and evaluations like “stud,” “slut,” “queer,” “tranny,” and so forth). In other words, in particular environments, certain behavior in women is encouraged while the same behavior in men is discouraged. The meaning of “masculine” or “feminine” is reinforced every time a woman is rewarded for being polite and ladylike—in other words, appropriately hewing to a gender norm—or a man is denigrated for being a pussy or a weakling for not embodying ideal understandings of masculinity appropriately (Lorber, 1994). This happens both online, and off” (Marwick, 2013, p.63).

It is important not to forget that even social media are gendered technologies: in fact, specific social media platforms are strongly targeted to distinctive gender identities, not only for the content, but also for the design and technologies employed, such as Grindr—predominantly male-focused - and Pinterest, for females (Marwick, 2013, p.63). Those elements facilitate or dissuade certain specific individuals to take part in constrained social media participation, interactions, and gender representation/performativity.

Moreover, the activity of social media posting is enabled and promoted by the social platforms, such as Instagram, as an identity statement, in which users upload and share images and messages to manage their impressions, gendering their bodies (Rose et al., 2012).

Social media posting has to be seen as an important part of the performance of the gender, with possible consequences not only in the process of identity formulation in subjects, but also in the possibility for representation and representation of gender in the online realm. In here, “gender display, as a continuous communication loop, is defined by society and expressed by individuals as they interact while shaping evolving societal expect-

tations regarding gender” (Rose et al., 2012, p.589), and role theory helps defying which are the societal expectation and punishments for gender non-conforming representations and behaviours.

Gender roles and pro-environmental behaviours

Along with the performativity of gender, for the purpose of this research, role theory plays an essential part in understanding gender patterns and media representation, since the visual and textual codification of gender roles can be clearly identified besides the data production.

According to role theory and some of Goffman’s works about gender representation and socialisation (e.g., “The arrangement between sexes”, 1977) “people follow unwritten social and cultural rules and norms as they behave “in ways that are different and predictable depending on their respective social identities and the situations they find themselves in” (Biddle, 1986, p. 68). Gender identity and gender roles are a significant part of everyday life and, according to Goffman, are actually constituted through social interaction (1976). Gender shapes how people make sense of themselves and their social relationships.” (Rose et al., 2012, p. 589)

In feminist, LGBT+ and queer studies, those gender roles and predefined gender embodiment and performativity are challenged since gender (together with sex) is defined as a social construct (in the work of Butler, 1999) and does not follow the binary general understanding (Monro, 2005). Therefore, gender must be conceptualised and intended as a spectrum.

Even if multiple studies and research fields are showing the inconsistency of binary understanding of gender, the words of Goffman (1977, p.303-304) echoes with the general conceptualisation in Western societies of gender expectations, still divided into ideals of masculinity and femininity that create determinate expectations towards a subject. In fact, he states that “it seems that beliefs about gender, about masculinity-femininity, and about sexuality are in close interaction with actual gender behavior, and that here popular social science plays a part. Discoveries about gender and about sexuality, whether well or badly grounded, are selectively assimilated to normative understandings regarding masculinity-femininity-sometimes quite rapidly and thus empowered can have a self-fulfilling effect on objective gender behavior” (Goffman, 1977, p.303-304).

The significance of the concept of gender performativity and the social evaluation over specific gendered behaviours in the particular case of social environmental practices can be seen in the afore-mentioned psychological research studies done by Swim et al. (2018), Swim et al.(2020), and Bloodhart & Swim (2020), where certain pro-environmental social patterns and habits were a way in which gender identities can be represented, performed, or reported. In particular, environmentalism may be described as a commitment to care for the earth and those that have been affected by environmental issues (Bloodhart and Swim 2019 cit. in Swim et al. 2020). Since caretaking is a core component of conventional feminine roles and stereotypes, this characterization aligns environmentalism with traditional female gender roles (Diekman and Eagly 2000, cit in Swim et al. 2020).

Even if all the pro-environmental behaviours (PEBs) are part of the caretaking process, there has been assigned a different alignment regarding specific feminine and masculine roles:

“Private sphere PEBs that focus on household behaviors, such as recycling or sustainable food purchasing, align with feminine roles (Hunter et al. 2004). Consistent with gender role conformity predicted by social role theory, across

22 countries, women were more likely than men to engage in three private sphere PEBs examined in this particular study (Hunter et al. 2004). [...] However, other PEBs are consistent with masculine role norms. A nuanced assessment of PEBs reveals that some private sphere behaviors are associated with traditional masculine behaviors (e.g., changing furnace filters or caulking windows; Boudet et al. 2016). Public sphere PEBs that focus on actions outside households, such as being a member of an activist group or protesting, also align with masculine roles (Hunter et al. 2004). In contrast to gender differences in feminine private behaviors, there are no gender differences in willingness to engage in ten PEBs previously identified as being associated with men more women (Dahl et al. 2013) and willingness to engage in three public sphere PEBs (Hunter et al. 2004).” (Swim et al., 2020, p.364)

This can be transposed onto the analysis of the social practices, codes, and norms, which are relevant in the representation and meaning-making processes in our specific case of gender embodiment via modes in the active participants of the ZWM on Instagram. Through the replication and reiteration of specific multimodal gendered codes or images, the active participants start creating signs, which meanings can reflect a strong connotation of stereotypical gender behaviours.

Gender stereotypes, differences, and norms

To make sense of gender elements in the discourses of the active participants about the ZWM on Instagram, an account of gender stereotypes, differences, and norms needs to be made. This will help recognising channels used in the contents for gender performativity in the context of showcasing pro-environmental practices.

Related to the issue of the division of roles between genders, it is important to also consider the prominence of gender stereotypes, namely the expectation about behaviours, roles, practices, representation of bodies related to members of a particular gender group.

Ellemers (2018) investigates how gender stereotypes “not only affect the way we perceive others and the opportunities we afford them, but also impact our conceptions of self, the demeanor we see as desirable, the life ambitions we consider appropriate, and the outcomes we value. These effects may harm our resolve to engage with domains we find personally valuable, undermine our ability to perform well, and impair our life outcomes. Paradoxically, then, the firm belief that gender stereotypes accurately reflect the achievements and priorities of most men and women prevents individuals from displaying their unique abilities and acting in line with their personal preferences” (Ellemers, 2018, p.291).

Those gender stereotypes are built upon the societal perception of the systematic existence of dissimilar basic personality, cognitive skills and style, motivation, task competencies between men and women (Chafetz, 1988, p. 113) called gender differences. The same scholar defines gender norms: “Regardless of the extent to which gender differences are real or stereotypical, the contents of socially expected gender differences are expressed in gender norms. Gender norms delineate the specific behaviour and personal attributes deemed socially desirable for members of each sex” (Chafetz, 1988, p. 113).

According to Hall (2003), stereotyping as a representational and signifying practise is central to the representation of difference; moreover, stereotyping does perform a practice of closure and exclusion. It symbolically fixes boundaries and excluded everything which does not belong in a fixed cultural category. in fact, “is part of the maintenance of social and symbolic order. It sets up a symbolic frontier between the ‘normal’ and the ‘deviant’” (p.258).

For the purpose of this study, all the dimensions/categories of gender stereotypes described below are considered when assessing the modality of a particular content of the ZWM on Instagram.

Practices and gender roles

According Chafetz (1988), gender stratification (and for so, gender inequality) is performed through the mechanism generated by the gender-based division of labour.

This separation “by which women are chiefly responsible for child rearing, familial, and domestic tasks regardless of their work, and men’s main responsibilities are to non-domestic tasks in the economy, polity, and other social and cultural institutions, is seen as the root of gender-based power differences. Stated otherwise, the division of labor assigns to women priority for the family and to men priority to economic and other extradomestic roles regardless of their other commitments. Because the economy and polity (rather than the family) constitute the central institutions of modern societies, this division of labor, priorities, and responsibilities produces power inequities between the genders. In turn, the greater power that accrues to men results in a variety of other differences and inequities as well as reinforces the gender division of labor” (Chafetz, 1988, p.109).

In her research study, she considers gender roles and practices which are shared and uniformed cross-culturally, e.g., child-care, food and house management.

In fact, “primary responsibility for the care of infants and young children is everywhere vested in women. [...] Women Are also chiefly responsible in almost all societies for familiar form the preparation, and usually for other tasks related to the maintenance of the family and the domicile, while men’s contribution to such work is variable. [...] men, on the other hand, are officially always the warriors. They also uniformly participate in the extrafamilial work of the society in the economy, polity, religious, educational and other sociocultural institutions [...] Such work may be monopolised by men, or shared with women, but the fact of male participation is uniform. Given both the uniformities and differences in the gender division of labor cross-culturally, the following general statement can be made. Societies vary on a continuum from almost complete tasks segregation, which has women solely responsible for family-centered labor and men for extra-domestic work, to societies where both genders perform work in both spheres, although women are more responsible for family tasks than are men.” (Chafetz, 1988, p.111-112)

In order to analyse the specific case of practices and gender roles in the ZWM on Instagram, I collected and annotated the behaviours portrayed and performed in the contents through the multiple modes. Based on this theoretical framework, the activities are divided into two categories: feminine and masculine ZWM practices and gender roles (Table 1).

Represented bodies

The presence of a body in a picture on social media can enable a discussion about how gender as a performance, gendered bodies in virtual spaces and gender representations in media are all intertwined.

According to Mills (1984), several researchers have identified sex differences in nonverbal conduct; these variations have been understood not just to differentiate the sexes, but also to declare and support the hierarchical social order in which females are meant to be submissive and males are meant to be dominant. Taking the point of departure from the research made by Ragan (1982), in which, analysing portrays shoots from high school, college year books and university media, females smiled more frequently and expansively

Table 1: Feminine and Masculine ZWM practices and gender roles

Feminine ZWM practices and gender roles	Masculine ZWM practices and gender roles
<ul style="list-style-type: none"> • Shopping (groceries and fashion) • Cooking • Sewing – Knitting • Interior Design • Cleaning: in the house, kitchen, windows, etc. • Self-care: activities like make-up, hair-product consumption, etc. • Food management – Dieting • Child-care: nappies, clothes, games, child food, pushchairs, and relatable child-care tools, etc. • Recycling and upcycling: part of the philosophy of ZWM is to try to upcycle what is normally considered trash, so finding a new way to implement it. • House care: cleaning, design, re-decoration, etc. • Thrifting: cloths, furniture, second-hand objects, etc. 	<ul style="list-style-type: none"> • Environment trash picking (wastepicking): activity in which people clean a specific spot in the city they live in together. • Dumpster diving: activity in which people go close to markets or big food market chains – normally in night hours- and find daily trashed food (but still edible or close-to-due-date) in the dustbins outside the markets to bring home. • Development of green technologies • Public activism (outside the household)

than males, canted their heads much more than men, and wore their glasses much less frequently than males.

For her study, Mills (1984) decided to design the study to understand how people would posture for social photos if not being directed by a photographer. She reports that females provided more subservient low-status actions than males when asked to pose as "average college students," smiling, canting, and directing their heads away from the camera. It was possible to assume that this behaviour is willingly offered by females more than males, even without the influences of photographers, because sex differences were significant exclusively for the smiling variable in an analysis of variance.

In addition to this work, Bell & Milic (2002) decided to revisit the Goffman's work "Gender Advertisements" using content analysis and semiotic analysis. Analysing several advertisements from numerous Australian magazines, the empirical study detailed in this article suggests that commercials involving female participants are often (still) different from those including male participants, especially in interpersonal and textual dimensions and from Goffman's perspective (1979 cit. in Bell & Milic, 2002), such discrepancies are

unavoidable. Some other textual and compositional characteristics did not differ so much between the gender display between male and female subjects in the contents.

Furthermore, Rose et al. (2012) present arguments to emphasise that gender display in self-created digital pictures is managed differently between male and female Facebook users. Active, dominant, and autonomous traits seem to be more prominent in male portraits, whereas attractive and reliant were two of the most popular among female users. Those findings are consistent with previous research made on gender stereotypes, and they expand the study of stereotyped gender features expressed in professional media depictions to self-selected social media displays.

Gendered spaces

Spain's (1993) study illustrates how even spaces have a gendered connotation, mostly related to the power relationship and gender stratification between the two sexes (men and women).

The spatial gender segregation "of women and men also contributes to and perpetuates gender stratification by reducing women's access to socially valued knowledge. In fact, "gendered spaces" in homes, schools, and workplaces reinforce and reproduce prevailing status distinctions that are taken for granted.

"Women's position within society, whether measured as power, prestige, economic position, or social rank, is related to spatial segregation insofar as existing physical arrangements facilitate or inhibit the exchange of knowledge between those with greater and those with lesser status" (Spain, 1993, p.137). Spatial segregation, whether physical or geographic, has the consequence of limiting women's access to socially valued knowledge. In most cases, "masculine information" communicated in schools and workplaces is given more priority than "feminine knowledge" linked with the home. She affirms that even the most feminine of all spaces, the house, contains knowledge in a core masculine space that women do not have access to.

"Women, because of their exclusion from the men's hut, learn less about their heritage and more about cooking and childcare-knowledge that conveys little social status (Bateson 1958). In nineteenth-century America, all-male colleges prepared men for prestigious occupations, while women either stayed home or attended women's colleges with curricula that prepared them primarily for less highly valued women's tasks (Welter 1966)" (Spain, 1993, p.140).

Such knowledge/space is used by men to strengthen their privileged position in comparison to women. Schools and businesses are more likely than homes to have the most socially valued information in today's society, nonetheless, these three spatial institutions work to maintain gender inequality and stratification.

Furthermore, an important account of gendered spaces is portrayed through the autoethnography performed by Petra L. Doan (2010). She presents arguments to emphasise the spatial experience of non-gender-conforming people and the impact of the "tyranny" of binary system of gender norms in spaces. Her aim was to expand what feminist geographers and urban theorists have claimed that space is gendered, and that this gendering has significant implications for women. This enlightens the strong gender connotation of determined spaces inside and outside the household, not only for women but for other genders.

Visual Composition and aesthetics

For Hancock and Tyler (2007), aesthetics in the time of the “aesthetic economy” plays an important role in the performativity since this is a method of influencing people’s perceptions of reality as well as their definitions of reality. In their work, they study the way in which organisations make use of aesthetic of gender through corporate artefacts and their management to create way of un/doing gender in images from recruitment documents. Important to include is the fact that diverse modes (elements of the contents) can be “being aesthetically encoded or ‘made (i.e. simultaneously produced and enforced) to mean’ (Hancock, 2005, p. 32) in particular ways.” (Hancock & Tyler, 2007, p. 515).

Objects

As mentioned in Bridges (1993, p. 193), “a culture’s artifacts can convey information about societal perceptions (e.g., Brabant & Mooney, 1989)”, it is important to consider objects as part of the way in which gender can be reinforced, since they can also influence the way in which gender is perceived. In her study, she tries to understand how gender-stereotypic perception of babies can be performed through the birth congratulations card. She underlines how “cultural artifacts have been employed frequently as a source of information about society’s gender-stereotypic perceptions of children and adults but have not been used in the examination of gender-related perceptions of babies.” (Bridges, 1993, p. 194). She understood that colours (in this particular case pink and blue) are highly gender specific for infants, but also the objects represented are reflecting traditional gender stereotypes (more active toys for boys, more frills and lace for girls).

Moreover, in Pink (2004) an important account is given to the practice of gender performativity through domestic elements in households. She perceives the home as a creative realm, a place where each person interviewed could express her or his particular gendered self when negotiating her or his sensory, emotional, cultural, and material surroundings. Even the same object could be portrayed by two diverse gender people in different way, based on the gender stereotypical expectation of them.

The categories developed for the social semiotic analysis of gender roles and practices shown by data produced in the research will be thoroughly explained in the methodology section (p.27, Table 3), to give the right space and context for the research. The multimodal contents which are here analysed can be understood not simply as representative but as performative in so far as our analysis emphasizes the ways in which they induce particular ways of participating in the ZWM doing gender and specifically in the case of the contents considered here, an idealised, gendered subjectivity.

Multimodality and social semiotics

To start “making sense” of the multimodal representations of gender within the Zero Waste Movement on Instagram, it is relevant to present the analytical toolbox that will be used in the analysis of the communication practices in this case: namely, the social-semiotics theory of multimodality.

People start making sense of the world through multiple and various experiences and their own social context. It is by means of recollecting numerous signs from the social milieu and the interaction between them that every message can be decoded and understood by an audience. Moreover, the sign-maker similarly begins to mould the message/sign from the very same experience.

According to Kress (2010, p.59), “in a social-semiotic multimodal account of meaning, all signs in all modes are meaningful”, in which social semiotics can provide knowledge on the purpose of each mode in this multimodal text, their relationship to one another, and to the major entities in this text.

The possibility given by multimodality, combined with social semiotics, allow to study deeply the role of gender semiotic resources and representation in the ZWM discourses on Instagram and their impact on the movement itself and its portrayal.

Modes

In this instance, meaning is the fulcrum of interest of the whole theoretical framework of social-semiotic (Kress, 2010): this is the social product generated from interaction and human activities, united with form in the sign. As stated in Kress’s work (2010, p. 54), “in a social-semiotic account of meaning, individuals, with their social histories, socially shaped, located in social environments, using socially made, culturally available resources, are agentive and generative in sign-making and communication.”, and it is here that comes the focal point within this research.

In fact, social-semiotic understanding of meaning helps to define the way in which meaning is constructed through the use of available modes, the semiotic resources that are used to construct the messages and the social background of the sign-makers, the decision involved and made by the sign-maker themselves to frame, emphasise, or conceal certain aspects in the sign they produce to imply certain (such as gender, in our case, but also age, social class, culture, lifestyle, ideology,...) (Kress, 2010). In fact, great focus in the analysis will be given “to the interests of the sign-maker (‘distancing’, making her/himself ‘safer’); to the environment in which meaning is made (the relations of power which obtain and the sanctions which exist in not acknowledging power); to meaning and to the semiotic/cultural resources which are available for the realization/materialization of meaning as a motivated sign.” (Kress, 2010, p. 57).

The reality of the virtual, visual, multimodal phenomenon on Instagram called for the multimodal social semiotic perspective, considering how the diverse modes (text, image, emoji, comments), can interact with the meaning production process for the sign-makers and “the relations between modes” (Kress, 2010, p.61). Moreover, some of the characteristics and features of ZWM itself, such as social media used as channel for spreading the mission of the environmentalist activism and the platform affordances, and literacies are also indispensable to consider.

In here, ‘mode’ has come to refer to the systematic use of material capital for the purposes of sense making in the context of multimodality. Modes are defined as a semiotic resource for meaning making which are socially shaped and culturally given. Moreover, they are chosen and used by a group of people who share a similar approach towards a comparable problem (Holsting & Van Leeuwen, 2016).

The sign is in here made, created, moulded by a sign-maker “who brings meaning into an apt conjunction with a form, a selection/choice shaped by the sign-maker’s interest. In the process of representation sign-makers remake concepts and ‘knowledge’ in a constant new shaping of the cultural resources for dealing with the social world” (Kress, 2010, p. 62).

To better understand the process of making a “new” (related to the issue) language in the ZWM on Instagram, it is helpful to understand how in social semiotics there is a preference in the sign-maker to use resources (modes, in Table 2) that the person around him/her/them recognise and understand to be comprehended (Kress, 2010, p.64).

Table 2: Modes and Instagram Affordances

Modes	Description considering Instagram affordances in the research specific case
Image	post, IGTV, Reels
Colours	Bright pastel colours, shades of green, black-and-white pictures, etc.
Intertextuality	All the texts present in the post on Instagram. It can include account tags and hashtags in the content and written texts (in the caption, in the post, in the comments, emojis...)
Framing	The subject in the picture, how it is included and what it is not included.

Multimodality

Multimodality (Kress, 2010 and Poulsen, 2015) studies the semiotic resources which are used to communicate and interact in social situations, as well as it could refer to the social use of semiotic resources in representation, communication, and interaction.

In fact, according to Jewitt (2009, cit. in Poulsen, 2015) there are four basic assumption of social semiotic multimodality theory:

“1) language is always embedded in meaning-making in combination with non-linguistic resources, 2) in a multimodal ensemble (i.e. text), each mode can perform different kinds of communicative work/function in a text depending on the affordances of the modes, 3) people create meaning through the selection and combination of resources from modes available to them, and 4) multimodal meaning-making is shaped by the interests of people as social actors in social contexts.”

It should be noted that embedding social semiotics to multimodality implies that our research will reflect that “all signs in all modes are meaningful” and “Social Semiotics is able to say something about the function of each of the modes in this multimodal text; about the relation of these modes to each other; and about the main entities in this text” (Kress, 2010, p.59).

Kress (2010) benefit and agency, meaning(-making), mechanisms of sign-making in social environments, resources for making meaning and their respective potentials as signifiers in the making of signs-as-metaphors, the meaning potentials of cultural/semiotic types are all explored in social semiotics and the multimodal dimension of the theory.

In addition to this, Kress theorizes the three perspectives in which how multimodal social semiotics speculates about meaning (and form) unified together in the entity of the sign:

- Semiosis: namely meaning making. It has to be applied to all types of representation, communication and media used for the communication.
- Multimodality: this approach addresses problems that are shared between modes as well as the relationships between them.
- The specific mode: the theory here illustrates meaning and forms apt to the particularity of a given mode (with its material affordances, the historical social moulding, and the cultural source of elements of the specific mode).

According to Kress (2010), the proper relationship between material form and cultural meaning satisfies the interest of the sign-maker in two ways: “‘matching’ form and meaning

satisfies the sign-maker's wish for an apt 'realization' of their meaning and that, in turn, is needed crucially in communication as a guide for the recipient in their interpretation. *Convention* points to social agreement and power in sign-use. *Motivation* points to the need for transparency as a means towards shared recognition in the relation of form and meaning in communication" (Kress, 2010, p.64)

Metafunctions

Relevant to consider inside the multimodal approach is the role of metafunctions, namely the organisation of the resources (modes) for a specific purpose that the sign-maker consciously or unconsciously wants to perform through the multimodal texts. According to Andersen (2016), "metafunctions organize the various elements and systems that constitute a mode into three distinct domains of meaning, i.e. the ideational, the interpersonal and the textual metafunction".

Those metafunctions differ from each other in the terms of purpose, but also in relation to the sign-maker, audience, and text there created. Andersen (2016) cites Halliday (1976) trying to describe the various metafunctions:

- Ideational: "organizes the resources we use when we construe our experience of both the inner (mental) and the external (social and physical) world" (Andersen, 2016). This can be divided into two sub-elements, namely the experiential, in which circumstances are framed, and the logical, where the connection between events are depicted. Normally, the latter is performed by means of words, and difficultly enacted with other modes.
- Interpersonal: "concerns the interaction between the producer and the perceiver (of a text). It organizes the resources we use when we take on different, complementary dialogical roles in an exchange of meaning" (Andersen, 2016). It is made from the sign-maker to make sense of the message and to make it effective in relation to his/her/their audiences.
- Textual: "organizes the resources we use to create cohesive and context sensitive texts when we choose to exchange a certain experiential meaning" (Andersen, 2016). The focus is not much on the coherence of the texts used in the multimodal element, but mostly on how the texts are framed and separated from the following one.

These 3 metafunctions will help dissecting the specific case of the ZWM on Instagram and its multimodal discourse. The ideational metafunction will explain how the text represent its main message and purpose about the ZWM; the interpersonal enable the understanding of what type of relationship does the text build between itself and its reader (or the movement and its participants); at the end, the textual enlightens how does the text reflect the socio-technical context in which it is produced (e.g., Instagram)

As stated by van Leeuwen (2015, cit. in Andersen 2016), those metafunctions might be used partially by and across a mode to be constituted, not as was primarily conceptualised by Kress and van Leeuwen (in which modes had to have all the metafunctions in themselves to be created).

The way in which people portray actively (by means of linguistics, visuality, clothes, and more, in any mediatic tool available) the world and their experience of it are made through even an unnoticed, unintentional "ideology" (points of view, perspectives):

"The crucial point is the unnoticed, near invisible social and ideological effects of the signs of the everyday, the signs of ordinary life, of the unremarkable and

banal, in which discourse and genre and with them ideology are potently at work – nearly invisibly – as or more effective than in heightened, clearly visible and therefore resistible instances. The concept of the motivated sign in no way places restrictions on sign-makers; the sign is as open or as restricted as the sign-maker's interest, which shapes the sign; an interest which is an effect and a realization of the histories in social environments of the sign-maker" (Kress, 2010, p. 69)

In this specific case-study, the importance of the sign-making process, literacies, and social resources available for the sign-makers will be considered for the analysis of multimodal contents for the definition of gender roles, practices, and participation in pro-environmental behaviours in the ZWM.

As a matter of fact, the redefinition of cultural resources implemented in representation and communication are a way in which sign-makers negotiate their own identity, history, social position, and their understanding of the social environment they are part of (Kress, 2010).

Methodology

Entering a complex social phenomenon as the representation and performance of pro-environmental behaviours in the Zero Waste Movement on Instagram called for a qualitative methodological approach, to get an extensive and a better understanding of the matter. The main focus will be put on the situations when gender is implemented as part of the overall sign-making process of the active participant for the representation of Zero Waste pro-environmental behaviours which, in turn, influence the overall discourse about the movement itself.

In fact, Creswell (2014, p.4) identifies the qualitative research design and methodologies as an “approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem”. Moreover, this research aims to study this reality, in a constructivist-transformative worldview, to create a fertile ground for a social change in the field of representation. This could be achieved by analysing the varied and multiple meanings of the participation in the movement, and hopefully might help leading towards an improvement in the participation to fight the climate change through adopting individual pro-environmental behaviours. Additionally, qualitative media research has as fundamental concept the idea that meanings are produced in everyday setting and the researcher has an active role as interpretative subject of them (Jensen, 2002). This comes greatly at help for comprehending the process of analysis of the data here produced.

Borrowing diverse concepts and research practices within the socio-cultural, semiotics, and critical tradition of Media and Communication Studies (Griffin, 2009 and Craig, 2007), this research wants to shed light on the power of content creation for the representation of gender multimodal discourses within an online environmental social movement (specifically, the ZWM). Social semiotics is, in fact, largely built on a social constructivist perspective. Griffin (2009) and Craig (2007) categorise separately the ways/traditions in which communication is theorised as a field, but specifically in this thesis the implementation of the multimodal social semiotics as both theoretical and methodological approach combines in itself semiotic, socio-cultural and critical elements.

The aim for the research (using the definitions made by Craig) is to have a “discursive reflection” (Critical) over the “(Re)production of social order” (Socio-cultural) understanding the “Intersubjective mediation by sign” (Semiotic)(Craig, 2007, p.74). In fact, the purpose is to determine how the symbolic use of images and individual resources in social media portrays a specific identity of active participants, leading toward a possible understanding of a gendered representation of individual pro-environmental behaviours. Indeed, not only this issue can create a problem of inclusion/exclusion for determined gender identities, but it can also reflect in the overall representation (thus, effectiveness) of the movement.

Since the beginning of the research, accessing and comprehending the topic and field, the most appropriate methodological approach to use was a multimodal analysis, which studies the semiotic resources that are used to communicate and interact in social situ-

ations, as well as it could refer to the social use of semiotic resources in representation, communication, and interaction (Kress, 2010; Poulsen, 2015).

Research Design

To produce the data to analyse, I decided to indagate the phenomenon approaching the most generic trending hashtags on Instagram (*#zerowaste* and *#goingzerowaste*) for the movement. These hashtags are not explicitly linked to certain social and gender roles¹(or expectations) and relates to and involves only the overall green philosophy of no waste (reduce wasting). This is rather relevant even for the analysis of the movement itself because “hashtags can allow certain types of communities to emerge and form, including ad hoc publics, forming and responding very quickly in relation to a particular event or topical issue” (Bruns and Burgess in Highfield & Leaver, 2015, p.9). Even if in the study made by Highfield and Leaver (2015) it is stated that hashtags (in the case of Instagram) and their affordances are used mostly by researchers as a means of organisations and assessment of data, since recent years (December 2017²) Instagram gave the opportunity to users to follow a hashtag with all its content as it was common to do with user profiles. This simple feature let users engage directly with some of their interests, following the content produced by any other related to the topic.

To gather properly the data from the platform, I opted for collecting the multimodal representation through the mobile application, since in the computer-based website of Instagram does not present all the possible visual modalities based on the affordances offered by Instagram (as Reels and IGTV). The posts were saved on the mobile app and analysed subsequently in the computer-based website.

The qualitative data was produced from recollecting 201 Instagram contents (post, IGTV) under the above-mentioned hashtags in the timeframe of April-May 2021. The data produced are of diverse nature (posts compounded by static pictures, carousels, video, IGTV and Reels, but not stories) agglomerated under the utilise of the hashtags by the users engaged with the theme, also considering the written caption (if present) under the posts. Multiple posts were further undergoing a microanalysis in order to identify the modes used by users and the gendered communication about the movement pursued through the content published.

Analytical framework

Bearing in mind multimodal social semiotics’ tools and concepts and gender stereotypes notions, analytical categories are in here created to better frame the content and the semiotic resources which users are engaging with for the creation of the content on Instagram. To produce the categories, the content of the first images under the hashtags was skimmed to recognise some patterns in the representation of participation within the ZWM. In the following Table 3, the categories will be deeply explained to understand the possibility of expression for the Instagram users.

All these practices can be declined into two types of social behaviours: being a consumer, being a producer (or a re-user). Some of these concepts are also part of the green

¹Such as the case of *#zerowasteliving*, *#zerowastekitchen*, *#zerowasteshopping*, *#zerowastefashion*, *#zerowastebeauty*, which express a direct connection with a structured gender expectation based on role theory.

²<https://www.theverge.com/2017/12/12/16763502/instagram-hashtag-follow-new-feature-announced>, Last retrieved March 28, 2021.

Table 3: Analytical categories

Categories	Meaning and content produced
Practices and Gender Roles	According to the theoretical framework, pro-environmental practices and gender roles will be divided agreeing with the gender division of labours: Feminine ZWM practices and gender roles and Masculine ZWM practices and gender roles (Chafetz, 1988)
Represented Bodies	Relevant to consider is the type and modalities of representation of bodies, illustrated, or avoided through the various modes. (Mills, 1984; Bell and Milic, 2002; Rose et al., 2012)
Intertextuality	The specificity of inserting gender within the whole written part of the contents or in other texts can be performed throughout the language used in the intertextuality offered by the multiple textual Instagram affordances (caption, hashtags, text in the post content, emojis). (Kress, 2010)
Spaces	The illustration of particular spaces (kitchen, living room, garden, indoor/outdoor, etc.) can reflect stereotyped representation of determined gender roles, according to the gender stratification. (Spain, 1993; Doan, 2010)
Objects	The specific context of ZWM can refer to multiple objects associated with specific practices and gender roles. (Bridges, 1993; Pink, 2004)
Visual Composition	Combination of modes (colours, framing,...) that are referred to a specific social construction of gender representation. (Hancock and Tyler, 2007)

philosophy of the ZWM (as you can see Zero Waste Hierarchy³ definition made by the Zero Waste Alliance).

In order to create the sample to analyse in this specific case the phenomenon, some selection criteria were established, based on the theoretical framework above-mentioned.

Firstly, the content needed to have a clear connection to the ZWM, as a clear sign of the act of personal politics, or relation to the movement purpose; an actual statement of participation about the ZWM has to be shown.

Secondly, building up on gender performativity and gender roles in social media, identifiable signs/signification of gender as part of the overall meaning-making process must be visible in the content to be chosen inside the overall population. The gender element of the post needed to contain at least one element referable to one of the categories above listed and explained, to be able to understand how gender comes into play in the formation of discourses about the ZWM. To decide whatever gender element was implied in the discourse construction about the ZWM, it was necessary to determine for each Instagram content if the sign-maker was referring to either female or male gender by first recognizing biological makeup through physical appearance, if appearing in the visual picture. In addition, gender elements in hashtags or emoji were examined to help decide to include

³<https://zwia.org/zwh/> (Last retrieved May 10, 2021)

the content in the analysis.

In case of ambiguity related to the gender signs/signifiers within the multiple modes analysed, the content was not collected in the sampling.

Critical review of the methodological challenges

The chosen methodology excludes several aspects in the moment of creation of the content. Firstly, the purpose that drives the user/content creator to produce the post to participate within the movement. Secondly, there is limited (cultural and temporal) understanding of the motivated sign, since in this situation the analysis the sociological imagination plays an important role and there is no direct contact with the sign makers.

Furthermore, it is substantial to take account of my research positioning towards the study of the representation of gender inside the movement. In order to get a better comprehension of the meaning social practices and representation, literacies need to be included in analytical account, because they “are always social: we learn them by participating in social relationships; their conventional forms evolved historically in particular societies; the meanings we make with them always tie us back into the fabric of meanings made by others.” (Lemke, 1998). As mentioned in his work, these are relevant to the meaning process, because “what matters is knowing how to make meaning like the natives do” (Lemke, 1998).

Because of my active participation within the movement and the great interest in this specific green philosophy, some of the social literacies of the ZWM have been internalised through the acquaintance with the subject within the last two years of my life. Hereto, since this deep personal involvement with the research matter, there is an intellectual urge to position myself, the research design, and the theoretical-methodological-analytical approach, defining the concept of “Situated Knowledges” coined by Donna Haraway (1988).

The physical presence, experiences, and personal interest in the matter (as researcher, but also as individual) are deeply involved into the research processes and these elements could be pointed out as being “biased”. Haraway presents an important research tool to become accountable in the epistemic research process and the production of knowledge: the identification and the act of acknowledgment of the bodily experience, standpoint, and other assumptions become relevant in the process of the research. In fact, Haraway states that it is only through this that the whole research process gains a greater objectivity and accountability, rather than just trying to declare themselves to be “neutral” or even “objective” with no acknowledgement.

In her work, Haraway writes “only partial perspective promises objective vision. [...] Feminist objectivity is about limited location and situated knowledge, not about transcendence and splitting of subject and object. It allows us to become answerable for what we learn how to see” (Haraway, 1988, p.583). In this way, the guarantee of the possibility for pursuing objectivity any research could be performed only through a statement of a “limited” vision, in other words through the conscious bodily epistemological experience of the researcher.

Analysis

Multimodality and social semiotics in the participation in the Zero Waste Movement: how they are used to create gender representations

To be able to answer the research question, the analysis of the findings will be developed in two sections.

Initially, an overview of Instagram affordances is given to comprehend the role of the modes in the multimodal utilise of the socially available meaning-making resources, in light of the social semiotic theory of multimodality.

Secondly, gender performances in the participation in the ZWM are explored through the categories of the analytical framework to identify how they come into play as semiotic resources in the discourses about the movement. The same findings are considered in the terms in which they relate to the personalisation of politics, participation in the environmental movement, and multimodal social semiotics.

Instagram affordances and the socially available meaning-making resources

As a first step into the social semiotic multimodal analysis, the use of modes in the multiple contents are examined.

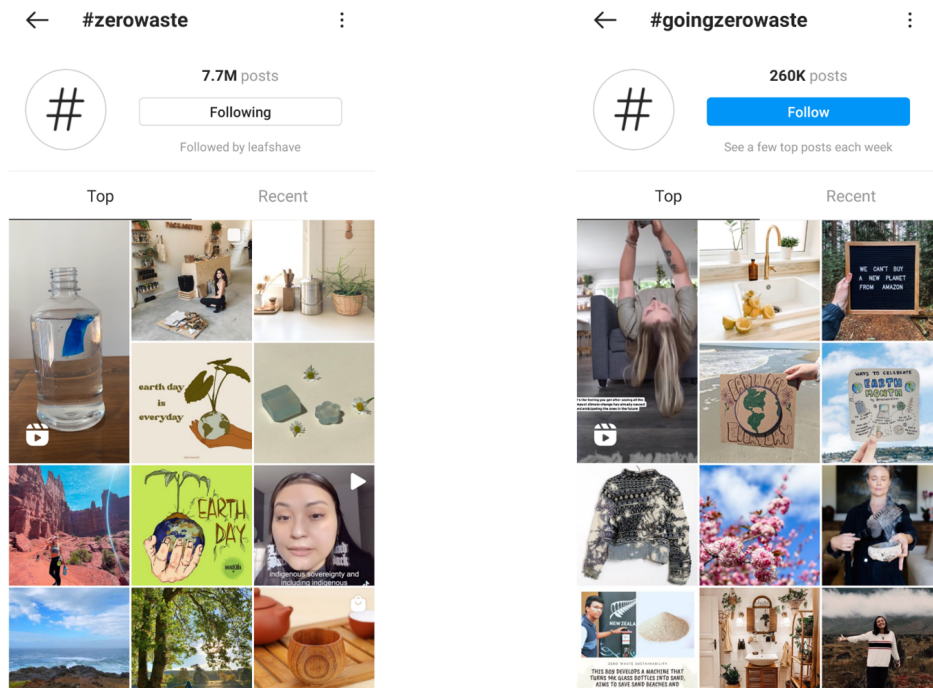
Starting from mode and affordances, several Instagram technical affordances are used by the participants in the Zero Waste Movement taking a look into the posts under both `#zerowaste` and `#goingzerowaste` (Figure 1), containing a clear statement about the participation and belonging to the movement and an identifiable signs/signification of gender as part of the overall meaning-making process.

Nevertheless, it is possible to notice how some are privileged in the creation of the discourse around that. Bearing in mind that the Instagram feature of the recollection of material under a certain hashtag might contain IGTVs (videos longer than 1 minute) but are excluded from the counting Instagram Stories (temporal content shared by the profiles), a greater number of posts containing static contents, than videos, are collected and displayed. With the growing impact of Reels in Instagram (inspired by the contents of TikTok), they often are implemented, collected by the hashtag tool, and they are shown as first element in the content group, but in order to watch others you need to enter the first content and keep scrolling.

Being Instagram unequivocally image led social media, greater emphasis is given to the modes of visuality, which will be also analysed further on in relation to the categories that better frame the content and the social semiotic resources which users are engaging with for the creation of the content on Instagram.

Even if the performance of gender (or shaping of it) is not the first conscious purpose of the sign-maker in this specific case, through these affordances and modes they are still

Figure 1: Screenshots of some results under zero-waste specific hashtags



Results of the search #zerowaste

Results of the search #goingzerowaste

incorporated in the environmentalist action communication.

The collection of posts here studied tends to be compositionally balanced in several aspects as, for example, colours, intertextuality, visual composition and framing.

Reflecting on the mode of colour, it seems to be a significant resource within Instagram in relation to gender and environmentalism.

It appears to be a key parameter for creating a content sharable on the platform, common between the contents of the two hashtags. The palette is mostly compounded by bright pastel colours (mostly beige tones and natural wood colour), green nuances, but also some vivid rainbow colours.

Various posts are inspired by the Nordic minimalist designs, which were decorated in grey and beige. In fact, great focus is given to specific gendered homely spaces and activities, such as the attention given to Scandinavian interior/fashion design (trend of the last years) by women in general.

One more aspect to consider is that the vivid colour palette is interrelated with the concept of high energy, fun, and playfulness.

Even though there are no clear references to Western idealisation of colour nuances conventionally associated with femininity (shades of rose and pinks), the provenance of the palettes derives from “artistic domestic sensibility” normally linked to feminine gendered practices (e.g., interior design). For the most part, the active participants are constructing a gendered style (and for so, expectation of the image produced by other sign-makers and shared via hashtags) through the selection of the colour-palettes. Furthermore, all these colour schemes are deeply connected with the ideal of “social media” environmentalism, an internal coherence is present in all the posts collected, no matter what type of Instagram content is chosen.

In the context of ZWM on Instagram, intertextuality (broadly conceptualised as texts

in the captions, in the post, hashtags and emojis) are constrained yet significant modes for the active participants. In the case of the specific Instagram affordance about textual content, there is a limit for a caption up to 2200 characters – which will be shown after clicking “read more” in the caption - and with a maximum of 30 hashtags in the whole post (also in the comment section). This constraint pushes the sign-maker to design better the textuality, not only in relation to the content itself, but also on the tool utilised within (like emoji and symbols).

Writing becomes here an established social practice, in which the lexical resources are chosen for the specific purpose of either suggest and propose some solution/greener swaps or to collect stories of ordinary/extraordinary sustainability. Even if there are several modalities to produce a textual content on Instagram – mostly as captions of the post published – it could be seen a pattern between the various post collected.

Regarding the hashtags implemented, excluding the ones used to collect the data (#goingzerowaste, #zerowaste), some of the others are used indiscriminately in relation to the content. Sharing the hashtags between diverse posts and diverse modality of the contents can be identify as a unifying element between all the contents shared. Few of them are still related to gendered elements and practices (e.g., #consciouscustomer, #zerowaste-living, #ecoparenting, #ecokids, #sustainableparenting, #lowwastefamily, #ecofashion, #zerowastekitchen, ...), but as all the other they are not always shown within the visible short caption, but moved at the end, almost hidden at the bottom of the written post. Hashtags play a role into the categorisation of the Instagram posts, but they can also be employed by the sign-makers to make the narration of the post wider, to make it relevant to a broader community/group.

Since the multimodal social semiotic account of meaning, all these aspects and Instagram affordances afore mentioned are meaningful. All their meanings and their forms are relevant because they are generated in a social environment and through social interactions. In fact, “the agency of socially formed individuals acting as sign-makers out of socially shaped interest with socially made resources in social interactions in communities” (Kress, 2010, p. 66).

Moreover, as stated in the theoretical framework about multimodality and social semiotics, all the components (colours, intertextuality, framing, etc.) of the contents are part of the process of meaning-making which inform about the connections between the agency and interests of the individual sign-maker, the technologies and cultural/semiotics resources employed, and the cultural environment.

Gender performances in ZWM on Instagram: how they come into play

The gendered style in the ZWM on Instagram is materialised by the participants’ semiotic choices of multimodal resources and the affordances/design of the self-same platform. In here, the gendered representation of support to the movement is constructed on Instagram in a way in which the social media platform and participants’ practices constraint “new” spaces for identity work to reinforce social convention and expectations connected to the sustainable routines and actions.

Practices and Gender Roles

In the multimodal data produced, pro-environmental practices are shown transversely by means of diverse modes and semiotic resources. In those practices, several elements are

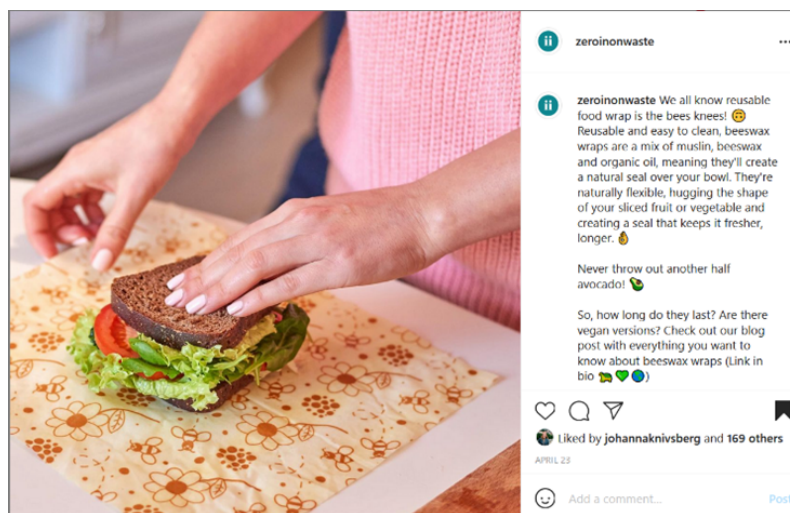
interrelated with the practices and roles of stereotypical gender expectations. The main channels used for representing zero waste practices are “private or domestic vs public”, “individual vs collective”, “consumer vs producer”.

Private or domestic vs public Sustainable practices are performed and shown by the sign-maker into two level of exposure: one is in the private sphere of interaction; the other is in the public/community sphere. The degree of disclosure of the practices can be experimented and modified. In fact, multiple content shown a combination between private and public practices: those are performed in the interior space of business shops (Figure 2).

The activities represented are mostly individual acts, or actions feasible in a domestic space, closed to a micro-level of society (the subject and the close family).

Only few cases portrayed public clearly activist actions, such as trash-picking in outdoor spaces, made in majority by persons identifiable as male.

Figure 2: Examples of private or domestic and public practices



Private or domestic

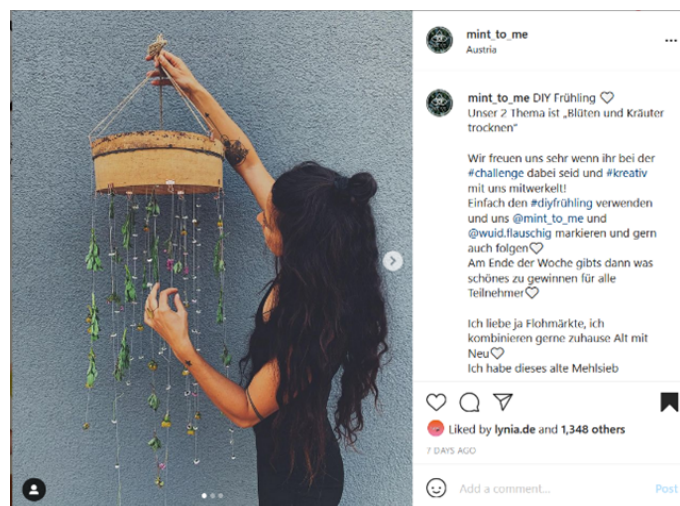


Public

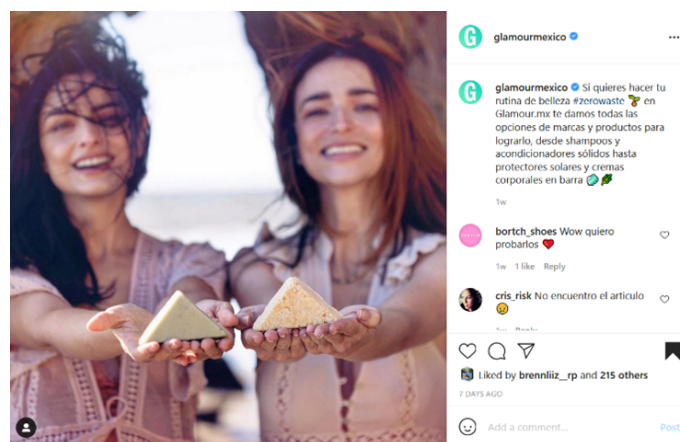
Individual vs collective There is a great focus of the individual responsibility of the action, few images or posts contain more than one person. The collectiveness is represented only in case of co-presence of multiple individuals: they are part of a specific household; few are to be considered “zero waste friends” (Figure 3).

The contents in which more than one person is involved are in most cases advertisements for zero-waste/sustainable fashion or zero-waste products.

Figure 3: Examples of individual vs collective practices



Individual



Collective

Consumer vs producer In here, the sign-makers can be divided into two subcategories: consumers and producer (Figure 4).

As consumers, sign-makers show mainly bought products that are related to zero-waste practices, such as washing-machine powder without plastic containers, as the example below illustrates.

Some of the active participants of the ZWM are portraying practices in which they are active part of the production. Some are showing their artifacts or creations, which follow the ZWM green philosophy of “Refuse, Reduce, Reuse, Recycle, Rot” (Zero Waste Home, n.d.). Some of the artifacts could be handmade soap bars, compost and home-grown fruit and vegetables, and zero-waste quilting.

Women seems to belong to both two subcategories, instead men manly to producer.

Figure 4: Examples of consumer vs producer practices



Producer



Consumer

The most present metafunctions in all the contents with practices represented are the ideational and the interpersonal. In the ideational, the sign-makers clearly state the involvement in the movement through the presentation of the practices. Moreover, the active participants, engaging through their stories about their own practices, suggest to followers how to approach to ZWM and become more sustainable, stating clear the relationship between them and the movement.

Menstruations and Zero Waste: a multimodal example The majority of environmental activities shown by women are orbiting around what are to be considered “feminine ZWM practices”. They are related to what it could be to either purchase or make sustainable fashion, food-management and cooking, house-care and cleaning, self-care, and

recycling and upcycling.

In particular, as part of some practices, menstruation and all the zero-waste practices connected (using menstrual cup or menstrual slips) seems to be related only to women, not only using the body of women in pictures, but also in hashtags and/or emojis implemented in the discourses. In fact, some of the objects shown are presented as feminine hygiene product, and not referred to as generally periods products.

The representations here shown (Figures 5 and 6) do not contemplate the possibility to include people who are menstruating who are not women (that could be indicated as “people with periods”) and stick to the stereotypical understanding that all women should menstruate. In different cases, where the female body is not included in the framing of the image, the presence of other semiotic resources and modes (emoji, text, or hashtags) in the texts and signs induce to attribute the zero-waste practice to just women.

As in the example above mentioned, intertextuality enables the decoding of the message in most cases.

Figure 5: Examples of predominant modes with gender elements in the case of Zero Waste Period practices - Text and Image



Text

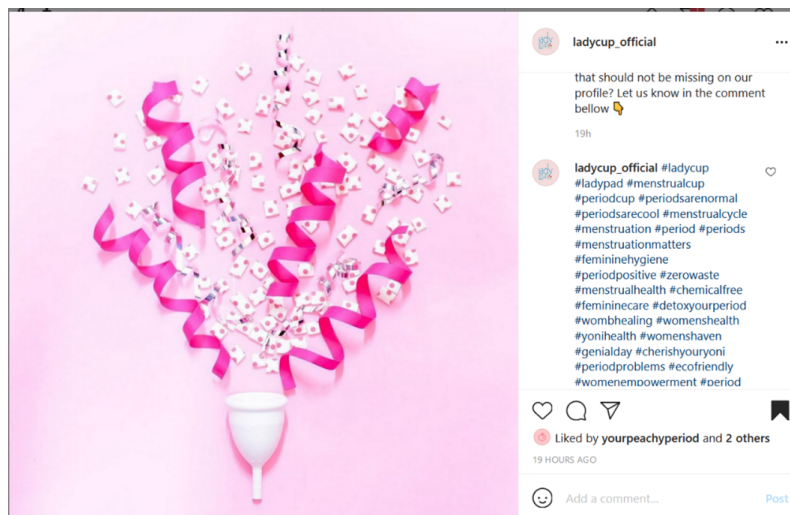


Image

Figure 6: Examples of predominant modes with gender elements in the case of Zero Waste Period practices - Emoji and Hashtags



Emoji



Hashtags

Analysing deeper the figure with the Image as predominant mode for gender (in Figure 5), the specific advertisement for reusable menstrual pads is using a multimodal approach to make and convey the meaning. Almost all analytical categories have been employed. The bodily presence (the girl in the photo) is used both as showcase of the zero-waste object and as identification of the sustainability practitioner. Furthermore, the intertextuality reinforces the discourse about the how the sign-maker and the audience can interact with the movement and between them (as interpersonal and ideational metafunctions). Here one content includes several elements that combined created more meanings to the same element.

Zero-Waste practices are here developed and performed through multiple channels in which gender comes into play in the discussion about the movement itself. To produce meanings, the active participants are showing practices in which there could be producer or consumers, in a more domestic or public scene. Moreover, there are actions made

individually or collectively. In the specific example of zero-waste practices and the combination with gender performance, menstruations are represented by means of several modes and are showing connections with other categories. They imply not only the practice of menstruation, but also bodies, products, intertextuality, visual compositions and aesthetics.

Represented Bodies

In the whole sample, more than half contents is including visual representations of bodies (118 contents out of 201). Multiple bodies are represented, but predominantly belonging to people which physical appearances are related to women or feminine bodies.

Partial vs full bodies Full bodies (containing also the face) are included in content not only to show proudly either their own artifacts (creations, or repurposed objects) but also their sustainable purchases. People seems to include generally in the visual representation the body in connection to the display of determined Zero Waste objects.

Bodies are also included partially in most cases in the images, as hands touching objects or portraits, but they are easily referable to women's bodies (Figure 7).

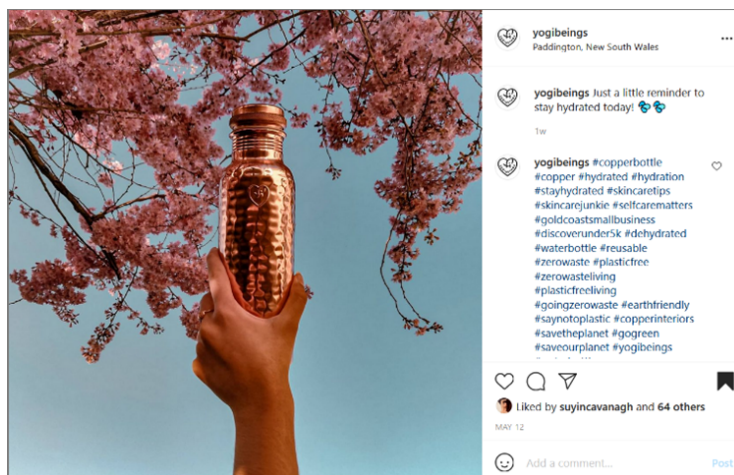
Body as a showcase Bodies are used as a way to become a showcase of the products itself. This practice is displayed not only in advertisement for business, but also in single active ZWM participants' posts (Figure 8).

The men portrayed in the sample collected through the recognition of the physical appearance are exhibiting products created by them considering the Zero Waste principles and philosophy or portraying public pro-environmental behaviour (public trash-picking). In two cases, men are used as visual prompts or models for advertisements for Zero Waste products in the background of the photos (reusable food cotton bags and solid face soap).

Body in action The activities portrayed in the posts (Figure 8) are used according two different modalities: one is performing the action to contextualise a zero-waste objects displayed in everyday sustainable practices; the second is used as a way to show the active participation within the ZWM.

Some males are pictured in the contents, but they are principally portrayed in contents in which green technologies or sustainable findings are presented to the community or in which are present public activist acts (e.g., community trash picking).

Figure 7: Examples of partial and full bodies



Partial bodies



Full bodies

Facial expressions, gestures, and emotions In contents in which facial expressions are recognised, people appear to be smiling in almost the whole totality of the sample. As emotions, happiness and pride seems to be the most performed in the visual of the posts (Figure 9). There are other emotions performed in the emojis and text used in the captions, but there is no homogeneity or tendency in the overall sample.

Virtual bodies: emojis Gendered bodies are not only portrayed in the image of the contents, but also nestled as emojis in the written caption of the posts (Figure 9).

It is indeed relevant to understand that most of the technological devices used to post on Instagram have an emoji keyboard which permit to choose between the gender of the people involved in several activities (female and male singer, female and male farmer, and so on).

The posts are collecting a greater number of emojis with bodies or portrays which can be assigned as symbols standing for women. In four contents (out of 19 having as a

Figure 8: Examples of contents with “Body as a showcase” and “Body in action”



Body as a showcase



Body in action

gendered sign the emoji), there are present emojis which were referring to men's bodies and only half of them were also including women's emojis inside, besides the men's ones. Other posts were also including emojis as part of bodily representation, but they were including "genderless" ones (namely, the yellow smileys).

The representation of gender through images of body and bodily practices in ZWM are performed through several techniques and modes. In terms of metafunctions, as in the previous cases, the interpersonal is performed through the showcase of the bodies and zero waste tips shared in the captions, helping the audience to understand the relationship between the participants and the movement, but also their own.

Some of key semiotic characteristics of this process is the employment of full or partial bodies as showcase of products or in action to perform active participation in the movement. Moreover, happiness seems to be the most performed emotion through the visual

Figure 9: Examples of contents with “Facial expressions, gestures, and emotions” and “Virtual bodies: emojis”



Facial expressions, gestures, and emotions



Virtual bodies: emojis

content, but other emotions are portrayed through the smiley in the caption text. Virtual bodies (emojis) are also part of the multimodal construction of the message, and they help conveying meaning of gender in the ZWM.

Intertextuality

Intertextuality is one possibility offered also by online media and technologies and Instagram implemented this characteristic thanks to hashtags, captions, and other features. The active participants of the ZWM utilise some of these combined to produce messages about the movement itself and their own participation and belonging. Intertextuality helps, through the connection between different texts, to produce meanings, but also to decode and interpret them.

Links to other movements In the content produced, it is possible to notice intertexts used to link the action of participating in the ZWM to other social movements or phenomena.

For instance, some of the findings revealed by means of the text in the caption or hashtags (#feminist) connections to the feminist movement.

As it can be seen in Figure 10, the caption explains the relationship between the sign-maker and the disposable menstrual products and the impact of patriarchy (feminist terminology) on the relationship with menstruations:

“I love telling people how great they [reusable period products] are. I feel like they’re a best keep secret that needs to be shared but some women still think periods are gross or should be kept quiet (thanks patriarchy 🙄). I’m undeterred though so if you wanna chat period products I’m here for you 🙄”

Figure 10: Example of intertextual link to other social movement: period and feminism



Issues about gender gap (other feminist issue) are also included in the caption of the following Figure 11, an advertisement: “Did you know that women’s pockets are 48% smaller than men’s? @simpleishliving combats the gender pocket gap with the Midori crossbody bag made with recycled plastic bottles”.

Figure 11: Example of intertextual link to other social movement: sustainable fashion and feminism



Businesses Hashtags have been used strongly in all the contents collected not only in captions, but also in the first comment created by the sign-maker, and gender signs have been portrayed through them.

A dimension of business and entrepreneurship is present in the discourses about ZWM, but it is strongly correlated with the presence of women around (Figure 12).

Some of the hashtags in connection with the representation of the ZWM are #wom-anownedbusiness, #femaleentrepreneur. In other cases where #ecomum #mamaleben #ecomama. A fusion between the two female identities can be found in the hashtag #momprenneur, a combination of the words mom and entrepreneur.

They can characterise two different sides of the role of women in the movement, either independent, self-standing, and businesswoman, but also restrained in the stereotype of being responsible for child rearing, familial, and domestic tasks.

Gender non-normative identities and groups, men, and women Only in one case it appears a male-related hashtag (#man). In the specific case of the hashtag #man, there is no clear connection with the movement or sustainability in general. The relation with the ZWM could be understood thanks to the multimodal analysis of other elements, in which there is a sign of gendered representation of the movement.

Regarding presence of discourses about gender diverse or non-binary identities, only few contents have hashtags referring to it (#unisex and #nonbinaryfashion, in Figure 12), but other traces of non-normative and LGBTQIA+ gender performances are not included in the overall sample here considered.

As stated also before in the represented bodies, emojis were used to include or reinforce the gender performance within the content and related to the ZWM issue or action. For example, only 4 posts contained male looking person emojis and in one content an emoji with a traditional family (mother-father-two children) was added. In all the other contents, the sign-maker decided consciously to include only the feminine version of the emoji.

In some instances, the intertextuality performed by hashtags represented a well-defined association between gender and the participation in environmental movement. The contained the hashtag #womaninsustainability.

The representation of gender through intertextuality in the content of the ZWM is performed linking the participation to the green movement to other social movements (feminism, in particular) as part of ideational and interpersonal metafunctions. Other important semiotic characteristics are presented with the representation of the role of women in sustainability as business owner and entrepreneur. Substantial intertextual representation of gender non-normative identities and LGBTQIA+ groups are not detected, as also male-related portrayal.

Figure 12: Example of intertextuality used for linking to businesses and gender identities



Businesses



Gender non-normative identities and groups, men, and women

Spaces

The dimension of space plays an important role in framing Zero Waste practices, with a special attention to gender.

Indoor vs outdoor There are differences between the portrayal of indoor spaces and the outdoor ones (Figure 13).

In particular, the interior rooms are in majority homely spaces (kitchens, bathrooms). Most of the pictures and text contains representation of sustainable practices which concern to waste management in the household, specifically collected in rooms such as the kitchen, bathroom, bedrooms (groceries, house cleaning and reorganisation/designing,...). In the same spaces, several objects are often portrayed linked to the idea of self-care (such as hair shampoo, safety razors, make-up, etc.). Other indoor spaces are shops or cafes.

Outdoor spaces are of dissimilar nature. External places in which ZWM practices are performed are gardens and forests, seaside or mountains, urban streets. In here, both

bodies and zero-waste objects are portrayed.

Figure 13: Examples of indoor and outdoor spaces



Indoor spaces



Outdoor spaces

Domestic vs businesses One note has to be made in particular about the indoor spaces. Two different realms are presented in the contents and also there is a diverse way in the use of semiotic resources of gender in those two (Figure 14).

Firstly, domestic spaces are largely portrayed through the contents sampled. Spaces like kitchens, bathrooms, bedrooms, and living rooms are presented and used as background and context for several zero-waste practices. There are two cases in which men are pictured in domestic spaces as close to the bathrooms sink and in the home kitchen.

Secondly, a grand number of businesses are pictured by visual contents and other modes. In particular, Zero Waste shops are displayed in the visual content and in the hashtags used, and they are strongly connoted as woman owned businesses. No male-related content has been detected regarding sustainable shops and businesses, nor intertextuality which could help interpreting that the zero-waste business was owned and operated by men.

Spaces provide the context and environment in which zero-waste actions are performed and enacted. Gender is also performed through the channel provided by indoor and outdoor environments; in addition, domestic spaces and businesses prepare the scene for gendered representation of sustainable activities and enterprise.

Figure 14: Examples of domestic and businesses spaces



Domestic spaces



Businesses

Objects

Whenever it is for a commercial purpose or for showing what the sign-maker produced, objects are actually predominant in the whole content sample. Objects are presented alone in the picture either with the aid of a body part or full body.

Hygiene and self-care Determined zero-waste practices require specific objects to be enacted, such as the ones used for personal hygiene and self-care. Solid Shampoo-bars, reusable menstrual cups, safety razors, solid make-up are just some of the objects which the Zero Waster aims to collect in the first steps towards a greener life.

Some findings reveal that the intertextuality containing women-related words in the hashtags concern mostly feminine menstrual hygiene and Zero Waste swap doable for the it (such as reusable menstrual pads, menstrual cup, or menstrual underwear). Moreover, what could be noticed is that most of the objects portrayed are held or included in the content related to women's bodies.

An example of the representation of gender through objects in the ZWM could be the one about soap-making. The practice of manufacturing solid soap bars starts from the

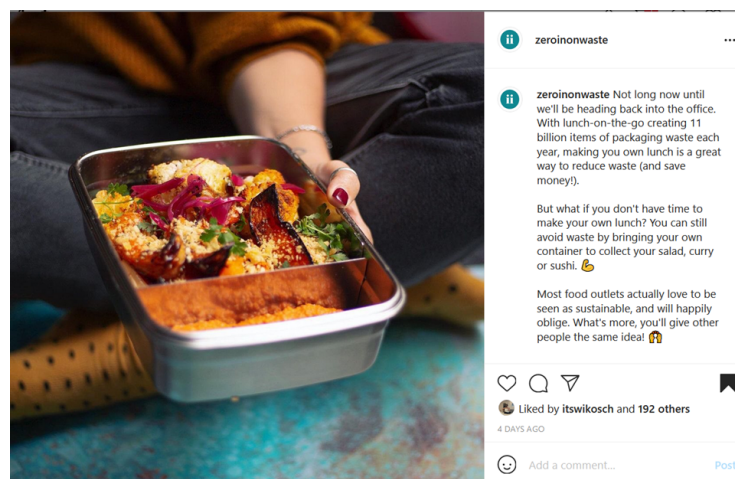
necessity to reduce the impact of plastic in the hygiene and self-care routines. In the case portrayed by Figure 15, the soap bar starts being gendered thanks to the combination with the hashtag #womanownedbuisness (wrongly spelt by the sign-maker). Indeed, there is a strong connection with the idealistic portray of an active participant and the representations of those objects, since the combination of modes in the multimodal representation.

Figure 15: Example of hygiene and self-care object



Food management and to-go objects In the specific case of only objects presented (but attributable to a gender), several are related to food management, composting (Figure 16). The main objects are either reusable cups and boxes, water bottles, bamboo or reusable cutlery and straws, bee-wax wraps, compost and recycling bins.

Figure 16: Example of food management and to-go objects



In the data produced, the majority are ascribable to female gender representation, due to the emojis or hashtags present in the caption and comment or in the visual content created by the sign-maker.

House care The house care has also a fundamental position in ZWM practices, since products and tools used for cleaning are source of plastic and toxic wastes. In the vi-

sual contents, it is possible to recognise several objects as homemade cleaning products, reusable paper towels, and non-toxic compostable dishcloths (Figure 17). Gender is here implemented by intertextuality, or presence of body parts.

Figure 17: Example of house care objects



Gender through its representation with objects in ZWM is performed under different semiotic channels, such as the definition of objects regarding hygiene and self-care, food management and to-go objects, and house care objects.

As well as other cases, in the category of objects interpersonal and ideational meta-functional aspects are shown throughout the modes and intertextuality. The sign-makers produce statements of belonging to the movement and, by either actions or objects portrayed, suggest to the audience possible tips for engaging with the movement.

The combination of modes and all the categories above-mentioned are creating the whole aesthetic surrounding the real of the ZWM on Instagram.

What it is clear from most of the multimodal texts analysed here is that there are not only status-symbol objects within ZWM which recognise the ideal of being a Zero Waster, or the way in which they are represented. Even portrayed practices, bodies, intertextuality, and spaces play an important role in enriching the collective imagination of being an active participant of the ZWM through the creation of an almost stereotypical “perfect Zero Waster”.

Taking into account the 3 metafunctions (ideational, interpersonal, textual) and applying them to the whole multimodal sampling, it is possible to identify:

- **Ideational:** The message of involvement of the singular sign-maker in the ZWM is clearly stated through the combination of several modes, such as hashtags, but also the portray of pro-environmental behaviours and Zero Waste objects. Moreover, the introduction of gendered elements and resources might reinforce in the text the type of involvement that a determined gendered audience may want to achieve in relation to the ZWM.
- **Interpersonal:** The use of Zero Waste specific hashtags, intertextuality, objects, and the bodily presence in the content facilitate the connection and sense of belonging to the environmental movement in the active participants, besides the identification of accepted pro-environmental behaviours. The sign-makers share suggestions and tips with the audience to make them engage and to encourage to begin the Zero Waste

journey. In addition to this, the text build between itself and its reader the desire to participate in the movement through the multimodal representation (text, images) since the content which aim to proselyte the readers.

- **Textual:** the texts use all the affordances that Instagram allows as social media, and they are following a pattern in the employ of the different technical possibilities.

Discussion

In the analytical findings, zero-waste activities are portrayed and implemented here through a variety of channels, with gender playing a relevant role in the discourses about the movement and its participation.

In order to create meaning, the active participants demonstrate practises in which there may be producers or consumers in a more domestic or public setting. Those action might be taken individually or collectively.

Gender is represented in ZWM through representations of the body and physical actions using a variety of techniques and styles. The use of complete or partial bodies as showcases of items or in action to perform active involvement in the movement are some of the most important semiotic resources. Furthermore, while happiness appears to be the most commonly expressed emotion in the visual material, other emotions are depicted through the smiley in the description language.

The contexts and settings in which zero-waste actions are conducted and enacted are provided by spaces. Gender is also expressed through the channels given by indoor and outdoor surroundings; furthermore, home spaces and businesses set the stage for gendered depiction of sustainable activities and entrepreneurship.

Gender is represented with objects in ZWM through a variety of semiotic channels, including the definition of hygiene and self-care objects, food management and to-go objects, and house care objects.

As a transversal example between all analytical categories, the zero-waste practices related to menstruations are produced and employed in the contents. Zero Waste Menstruation practices becomes a gendered performance related to women, implying also semiotic resources related to bodies, objects, visual composition and aesthetics, and intertextuality. Thanks to the relevance of the combination of the different channels to make meaning, multimodality is in here highly performed.

All the contents are representing several metafunctions. For the ideational metafunction, the message of the personal participation of the sign-maker in the ZWM is clearly communicated through the use of a variety of forms, including hashtags, but also by the portrayal of pro-environmental behaviours and Zero Waste products. Furthermore, the inclusion of gendered themes and resources in the text may promote engagement of the audiences with the ZWM.

In addition to identifying recognised pro-environmental behaviours, the employment of Zero Waste specific hashtags and bodily presence in the content facilitates the connection and sense of belonging to the environmental movement in active participants, as example of interpersonal metafunction. Moreover, the text creates a possible desire to join the movement in its reader through multimodal representation (text, visuals) as the material produce aims to spread the word to the readers.

Lastly, textual metafunction is performed through all the affordances and tools Instagram has as social media platform. Texts are following patterns in the use of the technical

elements in the contents.

Zero Waste Movement as an example of highly personalised politic movement

For its own nature, the Zero Waste Movement is formed by collective individual actions, so singular participation acts that have ingrained a certain grade of collective spirit within them. This strong characteristics of highly personalised politics and participation can be seen in some of the content collected. They all share modes, overall themes and thus, a semiotic analysis revealed some “patterns of meaning-making” and possible principles for the analysis of gendered discourses in online social movements, especially environmental ones.

The role of Instagram is indeed fundamental not only in the possibility for mobilisation, networking, and communication opportunities in and out the ZWM. The communicative and personal acts performed by the active participants on Instagram (through the multiple modes – hashtags, images, etc.) shape the identity, structure, and opportunities for both the activists and the green movement itself (Hills, 2009b). The individual acts contained in the posts on Instagram are reinforcing the non-hierarchical and informal network of the movement, but they are shaping beliefs and the collective Zero Waste identity, bypassing the hegemonic communicative power of traditional mass media (as seen in Loader, 2008).

Through the recollection of several contents, it is possible to observe several characteristics of the new online social movements and of the personalised politics.

The fluidity of the social moments and its sense of individual collectivity (Saunders, 2013) is present in the patterns of meaning-making before analysed. Particularly, this is reinforced by the contents which are presenting individual practices, in the contexts of private-interior spaces. Indeed, the ZWM is highly personalised, through the individual performance on Instagram of the active participants, but the collective spirit is still visible by means of the plurality of modes linked to sustainability and the movement in general. The personal expression of the enactment or representation of the pro-environmental behaviour frames the overall collective action.

The combination of solidarity and autonomy (Saunders, 2013) is stated in the vast majority of the contents through the interpersonal metafunctions. The sign-maker collects the personal experience (individual practice) and shares it with the community of followers who might interested on the themes of the movement, through especially intertextuality. In fact, this enlightens their focus on exchanging personal knowledge in online communities with the aim of informing participants and viewers through information collection, curation, and sharing (Thaler, 2012). The promotion of greener practices with the combination of visuality and textuality frames the actions for the audience.

Elements such as intertextuality (and, in particular, hashtags) create the online network for the movements and for its participants (Loader, 2008). The findings, in fact, are not showing any hierarchical structure through participants, but only a sense of collectivity through sharing similar contents/patterns under the same main hashtags #zerowaste and #goingzerowaste. The mobilisation in this specific online social movement is enabled by multimodal contents. A clear statement of participation within the movement (as being part of the ZW community, through the actions portrayed but also the use of Instagram’s intertextuality, as similar hashtags to connect with other or statements in captions) is made. Nevertheless, it seems that it is an individual duty to start and keep pursuing more sustainability in your life (by majority of contents with individual practices).

Thanks to the flexibility of the online channels provided by Instagram, sign-makers

can distribute the contents, mobilise the follower and engage with them, using multimodal suggestions for the change (Bennett, 2012). This happens in the daily social media interactions, reaching even with people who could be not involved in the activist communication through traditional media. Indeed, their style is developed based on the personal experiences, but they follow some patterns in the communication style of the ZWM.

Furthermore, the sense of “togetherness” (Poell & Van Dijck, 2015) of the movement is provided by sharing unique/personal content, but similar in the message construction (by means of semiotic resources in specific modes), exploiting the interactions between content producers and the potential audiences through the social media algorithm and technologies.

Several posts were assimilated to zero-waste practices and actions performed individually. The individual action portrayed underlines the responsibility of the individual within the framework of the movement (Loader, 2008). Moreover, the dimension of Instagram as social network permits the Zero Waster to portray his/her/their own identity directing the communicative act at imagined other, so bearing in mind the future audience of the message (Loader, 2008).

In the content analysed, there was possible to recognise how the private and public dimensions matter in terms of gender performativity and representation of the participation in the ZWM. There is a mixture between private and public identities and actions, in which active participants manage to interrelate the multiple realities in which they belong (as private and domestic dimensions, businesses, and the public activist scene). Active participants are introducing their individuality and identity through a combination of modes which enable to understand the more blurred relationship between the ‘private’ self-identity (as gender) with their more ‘public’ self (Hills, 2009b).

Multimodality (the composition of modes as emojis, intertextuality, visual contents) enabled by the Instagram platform promotes a ‘bricolage’ identity presentation (Hills, 2009b), in which the practice of composing and posting the message becomes in every way an identity performance.

Presenting Zero Waste practices, objects, spaces, bodies on Instagram allows the movement to create an interpretative framing (Hills, 2009b) for all the actions needed to be taken to achieve the goal of the green movement. There is a strategic effort by social movement participants to mould and turn social phenomena into culturally recognised issues, as well as the formulation of solutions and the incentive to act to address them, accordingly with the gender role expectations. Hence, they provide meanings for interpretation, action, and motivation towards the final goal. Individual actors get meaning from framing, which allows them to both understand parts of their social reality in specific ways and motivates them to act collaboratively with others to alter it.

The patterns revealed by the analysis of the findings as semiotics resources are part of the technical skills which the sign-makers have to master in order to be able to communicate effectively with the audience to engage with them on environmental and social issues (Loader, 2008).

All the modes and multimodal messages built on the platform are part of the ZWM “architecture of participation” (Olsson, 2013), helping to identify the requirements needed participating in the movement (showing practices and Zero Waste objects, for example) and who can be part of it (e.g., through the social resources employed in the discourses about gender). Moreover, these interactive and connective contents on shared on Instagram are opening for new forms of empowerment about sustainability for participating individuals, consumers, and corporations (Olsson, 2013). They create new forms of online communities about the ZWM and new space for personal activist actions, a new collec-

tion of rules and tools (as representational channels and semiotic resources found in this research) that turn participatory online communities into current democratic perspectives and can motivate subjects in various ways towards the achievement of ZWM goals.

By means of linking to other movements or personal dimension of the active ZWM participants' identities, such as feminism and entrepreneurship, it is possible to recognise how the ZWM is part of the broad concept of "personalized politics" (Bennett, 2012). Some of the participants, via multimodal representation and metafunctions in the content about the movements and its green philosophy, wants to attract attention and to involve others in debates about multiple environmental issues (as environmental and socially responsible consumption, and feminist issues, e.g., gender gap, etc.).

Through the paradigm of "personalised politics" (Bennett, 2012), the semiotic analysis is linked to the setting of political engagement. Rephrasing the line "individually expressive personal action frames displace collective action frames in many protest cause" (t, 2012, p.20), "individually expressive" denotes meaning-making, while "action frames" suggests participation in the ZWM. The personal willingness to reproduce a determined multimodal pattern, to be able to get recognised inside the (not-so-structured) movement, is a clear example of personalised politics.

Thanks to the semiotic analysis, it was possible to disclose the specific "patterns of meaning-making" of gendered involvement in online social movements, such as the one performed in the ZWM on Instagram.

Gender performativity and the online environmentalism: an open multimodal discourse

Considering gender and its performativity, findings are presenting how these are represented and enacted by active participants in the ZWM on Instagram. Gender, in this way, becomes part of the representation of the environmental social movement on the social media platform.

The reiteration of the representation of patterns and elements (individual vs collective, body in action, hygiene and self-care objects, as just some examples) in multiple contents reinforce the general understanding of gender as a performance (Butler, 1999). The practice of social media posting (Marwick, 2013) of practices about the ZWM is a possibility for the performance of gender in the specific context.

Because of the repetition of determinate modes, the perpetuation of the gendered representation of environmental behaviours makes the active participants feel part of the movements. It is, in fact, a personal active choice to represent gendered elements within the ZWM movement, because performativity has to be intended as intentional act (Butler, 1999).

Gender, since there is no clear correlation to a person's gender or body (Butler, 1999), is not only presented in examples in which a physical body is present, but also through a constellation of other modes, such as emojis, intertextuality, etc., as in the example of the zero-waste practices around menstruations.

Multimodal resources and repertoire create the base for the representation. In fact, the duty to start living a greener life and to engage in the movement as a member of the zero waste community, through the acts depicted and the use of Instagram's intertextuality, is clearly stated throughout the whole sampling collection. Nonetheless, it is an individual responsibility to begin and continue achieving more sustainability in your life and this is mainly performed by women or for women.

One possible interpretation might be that the individual action and deliberate participation within this movement could be seen as a power move for women, towards the consumerist patriarchy (since the ZWM's philosophy can be perceived as anti-consumerist). The personal activity performed by women could be considered as a possible vindication for themselves and women in general, to be accountable for their sustainable actions, and to be in charge for change.

In some cases, the findings represent social media used partially as counteractions to the traditional institutions and practices (Loader, 2008), such as in contents which shared zero-waste businesses owned by women, challenging the stereotypical role of women as self-standing entrepreneur.

As Marwick (2013) claimed that in online social media settings hegemonic discourses about sex and gender follow determined paradigms, also in the representation of the specific pro-environmental behaviours in the ZWM here found are showing a binary understanding of gender. The fewer examples of gender-inclusive practices and representation of men in the movement could be active decision of those people, since the absent representation of their identities, but also a passive option due to the exclusion enacted by the active participants.

According Chafetz (1988), social norms divide gender expectation in two main areas: the domesticity (with all the correlated practices of food management, house care, family-centred actions assigned traditionally to women) and the public action (and technologies, roles ascribed to men). Even in the findings, there is possible to recognise domesticity in spaces and in objects used (hygiene and self-care, food management, and house care) and elements of public actions. Besides, segregation of actions, based on gender expectations, is shown in the division of indoor and outdoor space, as also private/domestic practices and public actions.

Bodies and their representations are performed mostly alone, whatever individual is represented. Women, as opposed to the ones in the studies of Mills (1984) and Bell and Milic (2002) are portrayed in the majority of cases alone and in non-submissive roles.

The representation of specific pro-environmental behaviours connected to gender roles might perpetuate the possibility for phenomenon of inclusion and exclusion of gender non-conforming people's representation in the movement. As a matter of fact, the repeating multimodal patterns for the portrayal of pro-environmental behaviours can encourage or discourage the audience in participating in the movement (Marwick, 2013). Also in Hall (2003), representation plays an important role in defining what is perceived as 'normal' against the 'deviant' identity or behaviours. The emotions pictured (mostly happiness and pride) can reinforce the encouragement or discouragement about determined practices.

The feeling of being represented through specific modes and symbolic resources can be perceived as a social tool to become more engaged and to be pushed more towards a possible change, not only talking about the sustainability, but also in respect to the participation within online environmental social movements.

On the other hand, in the findings it could be possible to perceive a further challenge to the normative notion of gender stereotypical expectation, as in the case of the practice of menstruation. For example, in the presented content (Figure 10) the sign-maker was vindicating the possibility not to be disgusted by a natural bodily action, because of the patriarchal societal understanding, and to embrace the liberty to choose a different, more sustainable, product to live the fact. In this, there is performed a confrontation of gendered stereotypes and expectations.

Gendered online political participation as a social semiotic multimodal phenomenon

In multimodal social semiotics, by its own definition, all signs are meaningful in all the different modalities (Kress, 2010). This approach can be applied in the online spaces because communicative acts are performed also in these digital environments (on Instagram, for instance).

In this particular case, gender and political participation are utilised to make meanings, as semiotic resources for meaning making within the green movement on the social media platform. These elements are part of the sign-makers' social contexts.

The pattern of sense-making seen in the channels collected and analysed (e.g., individual vs collective practices; bodies as showcase; indoor vs outdoor spaces; etc.) shows the systematic use of modes as a way to perform gendered online political participation. The patterns are repeated transversely in multiple contents as an individual decision of the sign-maker.

The implementation and repetition of certain repertoire of behaviour collected through images, bodies, practices, and intertextuality perpetuate a specific example of gender performance connected with gendered images and social expectations about the ZWM. It is an active personal choice to include in the content this representation of bodies, or spaces, reframing and realigning the content in a predominant binary understanding of gender performativity.

As seen in the findings, all contents produce more than one meaning thanks to the application of multimodality. The combination of numerous Instagram affordances (as captions, visual content, etc.) allows multimodality to see the interaction between different modes and semiotic resources (Kress, 2010). In fact, the sole element of either gender or political participation could mean differently if used singularly but employed in the context of the ZWM on Instagram creates a new meaning. For example, emoticons presenting gendered virtual bodies attach to the overall message of participation to the ZWM a gendered connotation to the content. The dimension of meaning is enriched by considering in relation the different modes which compose the message.

Overall, meaning-making practices and participation actions in the ZWM on Instagram have to be seen as an intertextual semiotic practice. This is important to recognise because multimodality, in fact, made possible to deepen the overall understanding of the representations, since sign-makers utilise several different modalities to create the message about the movement.

Reflecting on metafunctions (Halliday, 1976 cit. in Andersen, 2016), these are utilised throughout the whole sample by the employ of different modes and channels.

Specifically, the participation to the ZWM is performed through the (re)presentation of zero-waste practices or objects by the sign-makers in order share the main message and aim of the ZWM. This ideational metafunction, introducing gendered resources, reinforce the gender performance of the participants in the movement.

The contents are displaying also an interpersonal metafunction through which the relationship, connection, and sense of belonging between the movement and the active participants is reinforced by sharing common hashtags, the bodily presence, or practices.

At the end, the textual metafunction informs about in what way does the text reflect the socio-technical context in which it is produced (e.g., Instagram). Hence, the same fact that all the contents employ different Instagram affordances to build and create the meaning makes the textual metafunction the base of the same texts.

The patterns are chosen with the aim to create an apt communication or message

about the ZWM, using gender and political participation as resources of meaning. The individual act (as representation/performance) are part of the platform society we live in (van Dijck & Poell, 2015), in which the use of media might show participation. Since the converged nature of new technologies, multimodality and social semiotics are necessary to understand the role of the individual empowerment (Bennett, 2012) in online social movements. In fact, it is by means of the possibility to summon changes through the connections between multiple individual acts that activate the relations and interactions between people, and multimodality can make this visible.

Limitation

Several limitations of this study should be mentioned. Firstly, the case here chosen is limited to the sphere of Instagram, only one social media platform, not being able to represent or produce data through other online and offline public spaces, in which connections between participants of the movement are being made. Thus, this is not a representative of the universe of worldwide understanding of the Zero Waste Movement.

Secondly, the absence of in-depth interviews with the sign-makers restrains the analysis to a personal interpretation of the sign-makers' meaning process through the multimodal content produced. The absence of interrelation with the producers causes the inability to confront the analytical account here conducted.

Thirdly, being a social semiotic multimodal analysis, only one cultural perspective (feminist European Caucasian woman) has been taken for the interpretation, leaving out diverse understandings of gender identities and roles in different cultures and societies. This creates good opportunities to take this first step into the research field as a starting point for further discussions and studies about gender representation/performances in environmentalist and other social movements in the 21st century.

Possibilities for further directions

For engaging more with the themes and research question here postulated and presented, different theoretical and methodological possibilities might be considered.

Alternative theoretical approaches

In particular, the ecofeminist perspective (Gaard, 2016) enables to approach the role of gender in environmental issues with a more intersectional assessment. Due to the gendered representation of green behaviours on social media platform mostly correlated to the traditional gender role expectations (as shown in Swim et al., 2020), there could be possible to see a segregation of pro-environmental behaviours into genders roles expectation. These can be perpetuated in the social media platform and through the social semiotic resources available to the active participants in the ZWM. The gendered representation, actually, might enact a traditional binary understanding of gender. This might not transcend from the repetition of determinate pattern, which create a sign that is deeply interconnected with the expectation toward a specific gender (as pro-environmental behaviours). Thanks to ecofeminism, the gendered politics of environmental activism can be analysed and challenged, together with the analysis of the linkages between gender and nature that might be manipulated among the environmental activists.

Secondly, approaching the whole theme through the lens of hegemonic masculinity (Connell & Messerschmidt, 2005; Connell, 1990) can help understanding the role of the

societal understanding of the male gender not only on men, but also on women and gender non-normative identities, in the individual participation in environmental movements and the impact of pro-environmental behaviours in the identity formation in activists.

Discussion of alternative methodological approaches

To answer the research question, several qualitative methodologies could be applied as a valid alternative to the multimodal social semiotics.

To begin with, in-depth interviews could be conducted involving directly sign-makers who participate actively to the sustainable movement. In this occasion, it could be analysed not only the means by which different modes are creating gendered discourse about the movement, but it could be examined the social reasons why active participants use them.

Ethnographical accounts, through a participant observation of Zero Waste meetings, open to the identification and examination of the practices and behaviours of the participants in the movement and to understand the movement participants' interpretation of the performed actions, differentiated between genders. Since the online nature of the movement, digital ethnography can also be applied as alternative research method.

Furthermore, focus groups might be a good tool to enable the comprehension of the social context in which active participants of the ZWM operate and draw inspiration from for the sign used and interactions between them. This could enrich the understanding of the role of gender stereotypes in pro-environmental behaviours and their impact in the relationships between the participants and their discourses.

Further possible research paths

The research project here conducted aims to be a step toward the comprehension about the role of gender in the participation in environmental movements and the impact of gender in the performance of pro-environmental behaviours. Several questions might be raised starting from this thesis.

Recalling what Emmers (2018) was mentioning about gender stereotypes, it will be relevant to understand how the multimodal representation and portrayal of diverse pro-environmental behaviours utilising gender specific modes and semiotic resources might create the perpetration of determined the gender stereotypes and expectations within the ZWM movement by the active participants and sympathizers. Indeed, those discourses might have an impact not only the conception of the self within the movement, but also might dissuade individuals to perform the participation in the ZWM in an unconventional way and multimodal language.

Moreover, other semiotic resources and modes (such as IGTV, stories, Reels) and online platforms (e.g., TikTok, since its rise in popularity) might be analysed to identify and enlarge the field about meaning-making by active participants in the online ZWM.

Conclusion

The research interest developed in this thesis derives from framing the whole participation in environmentalist groups and movements within the Sustainable Development Goals outlined by the UN⁴ (in particular, Goals 5,10,11,12,13). Even if there are multiple goals that are particularly directed to the reduction of inequalities, but especially gender inequality (Goal 5), the presence of gender elements in the conversation about sustainability issues and in the participation in specific environmentalist groups and movements results still relevant.

Through the multimodal social semiotic analysis of 201 Instagram contents found, it was possible to understand how the content that is produced and circulated by the active participants of the ZWM on social media (Instagram) utilise gender representations as semiotic resources to construct discourses about the movement. The findings reveal several patterns of meaning making in which gender and political participation are used as semiotic resources to talk about the movement on Instagram.

The research project aimed to show how we make sense of the participation in (environmental) social movements in online spaces, through the employment of several modes and resources in the process of meaning-making. The online participation in social movements engage with identity characteristics, especially gender, to be performed. Not only Zero Waste Movement is an example of highly personalised politic movement, but the findings also gendered online political participation is a social semiotic multimodal phenomenon.

Online social movements, gender studies, and multimodal social semiotics: those are the three theoretical pillars which are used to foundation for the expected contributions offered by this multimodal social perspective to the phenomenon of gendered representation of the ZWM.

To begin, the social semiotic approach to representation adds to our understanding of gender issues in online social movements by exposing that gender aspects, preconceptions, and expectations are active parts of (environmental) social movement communicative actions and performances. Gender is employed by active participants to “make sense” of the world, and it aids them in shaping the participation culture in the specific online social movement.

Secondly, a gender-focused approach to online social movements illustrates how active participants in online environmental movements integrate socially accessible meaning-making (semiotic) resources with representations/performances of gender and identity as multimodal sign systems. Furthermore, intertextuality channels (provided by Instagram) allow the recognition of a single participant’s role and gestures within a larger group of interest with a set aim to attain, with a view to personalised politics in new online social movements.

Finally, the “online” and “digital” aspect of the Zero Waste Movement reveals how members of the environmental group on Instagram make sense of gender as a social semiotic

⁴<https://sdgs.un.org/goals> (Last Retrieved May 30, 2021)

resource and apply it to construct multimodal discourses about the movement. Representations are constructed using a mixture of modes and affordances provided by Instagram's online realm. Meaning is established in connection to other people's interests, which are reflected in the social media platform's content creation and distribution.

Communication article



SOURCE: MARKUS SPISKE/UNSPLASH

A Gendered Zero Waste Movement?

How Your Gender Takes Part in The Green Movement

BY RACHELE RESCHIGLIAN

The fight against climate change has been for a long time (since the 70s) claimed as an important issue for the whole world. Several environmentalist movements have been created and become relevant in our society. For instance, in the last few years, more and more people are joining green movements such as Fridays For Futures, Extinction Rebellion, and the Zero Waste Movement.

What is surprising is that in dealing with environmentalism and climate change there has been found an “[eco-gender gap](#)”, as stated by Elle Hunt in her article for the Guardian in 2020. It seems that sustainable actions, as buying products in bulk without disposal packaging or switching to a more plant-based diet, are considered a “work for women”. What can be the reasons why sustainability is perceived like this? Let us see if social media play an important role in this, focusing on the Zero Waste Movement.

In fact, not only zero waste and sustainable shops are spreading around cities worldwide, but also the Zero Waste Movement is exploding on social media, as Instagram.

With more than 8.2 billion contents shared in total, the Zero Waste Movement can be seen as an online social movement. The trending hashtags [#zerowaste](#) and [#goingzerowaste](#) are recollecting images of aspiring Zero Waster and sympathizers of the movement. Pictures of mason jars, solid shampoos, reusable cups, and much more are produced and shared by user on Instagram.

But have you ever given a look scrolling through those images? Can you find something that pick up your attention?



SOURCE: MARKUS SPISKE/UNSPLASH

The Research

As an aspiring Zero Waster, I try to keep up with different solutions or tips for living a more sustainable life through social media, particularly through Instagram.

Scrolling around the hashtags, I could see that there was some sort of patterns not only about the zero waste practices, but also about gender and the participation in the movement. These elements were pictured in the posts, and they were repeating in a consistent part of what I was looking at.

Therefore, I decided to carry out a research in which I collected numerous Instagram post containing signs that were directly connected to the participation to the green movement and to gender. But what can be seen as gender in here? And what about participation?

The Findings

To dig into the matter, it was important not to leave out the different part which the posts are put together. The visual content (photo/video), caption, hashtags, emojis... nothing excluded from the analysis.

Gathering the images, it was easy to divide the patterns in the contents. Here you can find some of them!

- **Practices**

Different actions connected to the movement were pictured. Some portrayed the people involved in zero waste practices from a more consumeristic perspective (buying zero-waste products).

Other were showing a producer aspect: people were creating new things out from previous, following the philosophy of the movement, the 5R's: Refuse, Reduce, Reuse, Recycle, Rot).

Actions were in homely contexts or more public activist performances, alone or in company.

- **Represented bodies**

Throughout the collection of images, bodies were wholly or partially shown, either as a showcase of products or in action.

A certain type of virtual body was also included in the posts: the one in the emoji! Emotions were also portrayed (mostly happiness).

- **Intertextuality**

Namely the practice of shaping of a text's meaning by another text: hashtags, captions,... All this is part of the posts!

They showed how the contents were linked not only to the green movement, but also to others, such as the feminist movement.

It was possible to see connections to the world of businesses (mostly women owned ones) in some cases. In others, some texts indicated the presence of different gender identities (LGBTQIA+ people, men, and women) in the contents about Zero Waste.

- **Spaces**

Indoor and outdoor environments are present such as more domestic ones against the local shops and businesses places.

- **Objects**

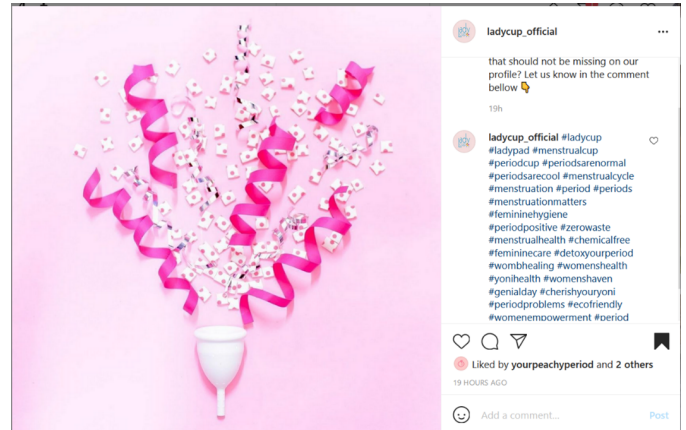
Hygiene and self-care products, objects related to food and its organisation and management, or home care products are portrayed in most of the pictures.

Zero Waste Menstruation... a special example of all this

What it was interesting to see were all the pictures containing something related to the realm of menstruations in the Instagram posts about the Zero Waste Movement. In here, sustainability, gender, and participation come all together!

This is shown in domestic spaces, as an individual-consumeristic hygiene zero waste practice. On the other hand, the suggestions and tips about switching to reusable pad, menstrual cups or period slips seemed to be given only to women. Emojis with faces and bodies of women, hashtags #femininehygiene or #ladycup, pictures only with women's bodies... these are just some of the ways in which sustainable practices about menstruation were shown. All the texts and signs (even if there were not women in the picture) induced to attribute the zero-waste practice to only women.

The posts seemed not to contemplate, for example, to include people who are menstruating who are not women. That is to say that not all women can have periods and not all people who have periods are women, as it is possible to see in the LGBTQIA+ community. Moreover, some of the objects shown are presented as feminine hygiene product, and not referred to as generally periods products, increasing the stereotypical image of it.



What can we learn?

Environmental social movements, as the Zero Waste Movement, are talking about much more than just sustainability.

In other words, they use different elements to portray gender and participation in social movements through the representations, in the world of Instagram in particular. Bodies, texts, images, emojis... everything comes into play to divulge the goals and practices about the movement.

Further questions can be pointed out about this. How do these gendered representations affect the participation in the movement? Are there other ways to talk about sustainability, without using gender as a part of it? For now, there are just hypothesis, but let's see how it will evolve!



SOURCE: LAURA MITULLA/UNSPLASH

Communication article account

The communication article here presented is created with the aim of sharing and disseminate the contents and findings of this thesis research with a wider green community, framed it as a part of the formation for an individual activist action.

Since the length of the content and the importance of the topic for the target audience, I decided to prepare the article to be published on the online blog and net-based magazine Green Matters (<https://www.greenmatters.com/>). Besides, the mission of the magazine is clearly stated in their website:

“*Green Matters* is for people looking to live more sustainably, fight the climate crisis, and learn about environmental justice.

Our coverage brings awareness to issues surrounding the climate crisis — as well as solutions.

We hope to inspire you to make simple changes to your daily habits and lifestyle, and also to empower you to fight for what you believe in. We believe that many **small actions** can collectively make a **big difference** in ensuring a healthy planet for generations to come.” (Green Matters, n.d.)

The assemblage of collective individualities towards sustainability and the aim to learn more about it called out by the online magazine is the perfect environment for the article here proposed.

The target audience, collected by this online media platform, has an important minimal understanding of sustainability and desire to be either involved in environmental social movements or to improve, as an individual aspiration, becoming more sustainable in their daily life. Their passion towards environmental issues might be a good trigger to help them reconsider their approach toward the communicative and participatory aspects of being a Zero Waster or environmentalist.

The space given in the blog to the potential article permits to develop with the right amount of space the thematic, engaging with trustworthy sources. Moreover, having a global spectrum of green and sustainability themes, this blog allows to include an article focused on the communicative aspect of the gendered discourses about the Zero Waste Movement, in order to create a more intersectional approach to the issue.

For the communication style chosen, the content created for the article follows the techniques of SEO (Search Engine Optimisation) writing, not only to be able to apt to “live” inside the digital world of the Search Engine, but also it is useful for make the reading easier to the public.

From the thesis project, several elements were included as part of the body of the content.

Firstly, elements from the introduction are included to help the readers to understand the context and to frame the whole article.

Secondly, the research question is presented helping the reader to understand it without a theme-specific academic background. Breaking down the topic into small elements, the overall problem formulation might be recognised by active and passive participants of online environmental movements, grounding it in potential everyday experiences.

Thirdly, the findings are there presented to understand how gender comes into play in the discourses about the movement. A main example (the case of the representation of zero waste periods on Instagram) is used to make visible the connections between the theoretical approach and the real findings of the research.

Finally, some questions are presented as a provocation for reflecting on the impact of the research findings in everyday situations about the participation in online environmental social movements.

Bibliography

- Ahmed, S. (2004). (Dis)comfort and norms. *The cultural politics of emotion* (pp. 146–155). Edinburg University Press.
- Andersen, T. H. (2016). Metafunctions (N. Nørgaard, Ed.) [Last retrieved March 28, 2021]. https://www.sdu.dk/en/forskning/c_cmc/key+terms/metafunctions
- Anshelm, J., & Hultman, M. (2014). A green fatwā? climate change as a threat to the masculinity of industrial modernity. *NORMA: International Journal for Masculinity Studies*, 9(2), 84–96.
- Bell, P., & Milic, M. (2002). Goffman's gender advertisements revisited: Combining content analysis with semiotic analysis. *Visual communication*, 1(2), 203–222.
- Bennett, W. L. (2012). The personalization of politics: Political identity, social media, and changing patterns of participation. *The annals of the American academy of political and social science*, 644(1), 20–39.
- Bloodhart, B., & Swim, J. K. (2020). Sustainability and consumption: What's gender got to do with it? *Journal of Social Issues*, 76(1), 101–113.
- Bridges, J. S. (1993). Pink or blue: Gender-stereotypic perceptions of infants as conveyed by birth congratulations cards. *Psychology of Women Quarterly*, 17(2), 193–205.
- Butler, J. (1999). *Gender trouble: Feminism and the subversion of identity* (10th anniversary edition.). Routledge.
- Butler, J. (2004). *Undoing gender*. Routledge.
- Butler, J. (2014). *Bodies that matter : On the discursive limits of "sex"*. Routledge.
- Chafetz, J. S. (1988). The gender division of labor and the reproduction of female disadvantage: Toward an integrated theory. *Journal of Family Issues*, 9(1), 108–131.
- Chung, C.-H., Chiu, D. K., Ho, K. K., & Au, C. H. (2020). Applying social media to environmental education: Is it more impactful than traditional media? *Information Discovery and Delivery*, 48(4), 255–266.
- Connell, R. W. (1990). A whole new world: Remaking masculinity in the context of the environmental movement. *Gender & Society*, 4(4), 452–478.
- Connell, R. W., & Messerschmidt, J. W. (2005). Hegemonic masculinity: Rethinking the concept. *Gender & society*, 19(6), 829–859.
- Craig, R. (2007). Communication Theory as a Field. *Theorizing communication: Readings across traditions* (1st ed., pp. 63–98). SAGE Publications, Inc.
- Creswell, J. W. (2014). The selection of a research approach. *Research design: Qualitative, quantitative, and mixed methods approaches*, 3–24.
- Croteau, D., & Hoynes, W. (2017). *Experience sociology* (3rd ed.). McGraw-Hill Higher Education.
- Doan, P. L. (2010). The tyranny of gendered spaces—reflections from beyond the gender dichotomy. *Gender, Place & Culture*, 17(5), 635–654.
- Dvorsky, G., & Hughes, J. (2008). Postgenderism: Beyond the gender binary. *Institute for Ethics and Emerging Technologies*, 20, 44–57.

- Ellemers, N. (2018). Gender stereotypes. *Annual review of psychology*, 69, 275–298.
- Gaard, G. (2016). 21. ecofeminism. *Keywords for environmental studies* (pp. 68–71). New York University Press.
- Goffman, E. (1977). The arrangement between sexes, in «theory and society». 4(3), 301–331.
- Green Matters”. (n.d.). Green Matters: Sustainability, Innovation, Environmental Justice, and More [Last retrieved May 28, 2021]. <https://www.greenmatters.com/>
- Griffin, E. (2009). Talk about Theory and Mapping the Territory. *A first look at communication theory* (7th ed., pp. 8–35). New York: McGraw-hill.
- Hall, S. (1997). Introduction and the work of representation (1st ed.). *Representation: Cultural representations and signifying practices*, 1–74.
- Hall, S. (2003). The spectacle of the ‘other’. *Representation: Cultural representations and signifying practices*, 225–279.
- Hancock, P., & Tyler, M. (2007). Un/doing gender and the aesthetics of organizational performance. *Gender, Work & Organization*, 14(6), 512–533.
- Haraway, D. (1985). A cyborg manifesto: Science, technology, and socialist-feminism in the late 20th century. *Socialist Review*, 80, 65–108.
- Haraway, D. (1988). Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist studies*, 14(3), 575–599.
- Highfield, T., & Leaver, T. (2015). A methodology for mapping instagram hashtags. *First Monday*, 20(1), 1–11.
- Hills, M. (2009a). Case study: Social networking and self-identity. *Digital Cultures: Understanding New Media*, Open University Press, Maidenhead, 117–121.
- Hills, M. (2009b). Participatory culture: Mobility, interactivity and identity. *Digital cultures: Understanding new media* (pp. 107–121). Open University Press.
- Holting, A., & Van Leeuwen, T. (2016). Mode (N. Nørgaard, Ed.) [Last retrieved March 28, 2021]. https://www.sdu.dk/en/forskning/c_cmc/key+terms/mode
- Hunt, E. (2020). The eco gender gap: why is saving the planet seen as women’s work? [Last retrieved February 27, 2021]. <https://www.theguardian.com/environment/2020/feb/06/eco-gender-gap-why-saving-planet-seen-womens-work>
- Hwang, H., & Kim, K.-O. (2015). Social media as a tool for social movements: The effect of social media use and social capital on intention to participate in social movements. *International Journal of Consumer Studies*, 39(5), 478–488.
- Jamison, A. (2010). Climate change knowledge and social movement theory. *Wiley Interdisciplinary Reviews: Climate Change*, 1(6), 811–823.
- Jensen, K. B. (2002). The qualitative research process. *A handbook of media and communication research: Qualitative and quantitative methodologies* (pp. 235–253).
- Kress, G. (2010). *Multimodality: A social semiotic approach to contemporary communication*. Taylor & Francis.
- Lemke, J. L. (1998). Metamedia literacy: Transforming meanings and media. *Handbook of literacy and technology: Transformations in a post-typographic world*, 283301.
- Livingstone, S. (2004). The challenge of changing audiences: Or, what is the audience researcher to do in the age of the internet? <http://eprints.lse.ac.uk/archive/00000412>
- Loader, B. D. (2008). Social movements and new media. *Sociology Compass*, 2(6), 1920–1933.
- Marwick, A. (2013). Gender, sexuality and social media. *The social media handbook*, 67–83.

- Mills, J. (1984). Self-posed behaviors of females and males in photographs. *Sex Roles*, 10(7-8), 633–637.
- Monro, S. (2005). Beyond male and female: Poststructuralism and the spectrum of gender. *International journal of transgenderism*, 8(1), 3–22.
- Olsson, T. (2013). 12 “the architecture of participation”. *Critique, Social Media and the Information Society*, 203.
- Pink, S. (2004). Home truths: Gender, domestic objects and everyday life. berg.
- Poell, T., & Van Dijck, J. (2015). Social media and activist communication. *Poell, Thomas & José van Dijck (2015). Social Media and Activist Communication. In The Routledge Companion to Alternative and Community Media*, 527–537.
- Poulsen, S. V. (2015). Multimodality (N. Nørgaard, Ed.) [Last retrieved March 28, 2021]. *Key Terms in Multimodality: Definitions, Issues, Discussions*. https://www.sdu.dk/en/forskning/c_cmc/key+terms/multimodality
- Rose, J., Mackey-Kallis, S., Shyles, L., Barry, K., Biagini, D., Hart, C., & Jack, L. (2012). Face it: The impact of gender on social media images. *Communication Quarterly*, 60(5), 588–607.
- Roth, B., & Horan, M. (2001). *What are social movements and what is gendered about women’s participation in social movements?* State University of New York.
- Salih, S. (2002). *Judith butler*. Routledge.
- Saunders, C. (2013). *Environmental networks and social movement theory*. London: Bloomsbury Academic.
- Slater, D. (2002). Social relationships and identity online and offline. *Handbook of new media: Social shaping and consequences of ICTs*, 533–546.
- Spain, D. (1993). Gendered spaces and women’s status. *Sociological theory*, 137–151.
- Swim, J. K., Gillis, A. J., & Hamaty, K. J. (2020). Gender bending and gender conformity: The social consequences of engaging in feminine and masculine pro-environmental behaviors. *Sex Roles*, 82(5-6), 363–385.
- Swim, J. K., Vescio, T. K., Dahl, J. L., & Zawadzki, S. J. (2018). Gendered discourse about climate change policies. *Global Environmental Change*, 48, 216–225.
- Thaler, A. D., Zelnio, K. A., Freitag, A., MacPherson, R., Shiffman, D., Bik, H., Goldstein, M. C., & McClain, C. (2012). Digital environmentalism: Tools and strategies for the evolving online ecosystem. *Environmental leadership: a reference handbook*. Sage, Thousand Oaks, California, USA. [http://dx.doi.org/10.4135/9781452218601_2\(39\)](http://dx.doi.org/10.4135/9781452218601_2(39)), 364–373.
- Tindall, D. B., Davies, S., & Mauboules, C. (2003). Activism and conservation behavior in an environmental movement: The contradictory effects of gender. *Society & Natural Resources*, 16(10), 909–932.
- Tufekci, Z. (2015, February 2). Online social change: Easy to organize, hard to win [Last Retrieved February 27, 2021]. https://www.ted.com/talks/zeynep_tufekci_online_social_change_easy_to_organize_hard_to_win?language=ug
- Van Dijck, J., & Poell, T. (2015). Social media and the transformation of public space. *Social Media + Society*, 1(2).
- Wicker, A. (2019, May 9). The complicated gender politics of going zero waste [Last retrieved June 6, 2020].
- Zero Waste Definition [Last retrieved March 17, 2021]. (n.d.). <https://zwia.org/zero-waste-definition/>
- Zero Waste Home [Last retrieved May 28, 2021]. (n.d.). <https://zerowastehome.com/>