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Unveiling Frames for Sustainability: A Cross-Cultural Text Analysis of Circular Economy Content on Social Media in Sweden, Perú, and the Philippines

by

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Abstract

With the rise of serious environmental threats brought about by climate change, governments, organizations, leaders, and academics are constantly seeking ways to address this growing concern, and the development of a circular economy model is seen as a viable solution towards ensuring environmental sustainability alongside economic growth. The concept of circular economy has been defined in a multitude of ways and the extensive discussion on the topic is evidenced by the current extant literature. However, the operationalization of this economic model has yet to be fully implemented in all levels of society.

This study explores how the concept of circular economy is perceived in online public discourse. Through a comparative analysis of social media content generated by content creators in Sweden (high-income), Perú (upper-middle-income), and the Philippines (lower-middle-income), the research examines the thematic frames used to communicate the economic model. Considering social media as a platform for informal learning, the study investigates how content creators frame messages to promote circular economy adoption, raise awareness of sustainability issues, and encourage audience action. The findings reveal that economic conditions and cultural context significantly influence circular economy framing. Differences in thematic approaches highlight the importance of these factors for effective communication towards a sustainable future through a circular economy model.

The research contributes to the understanding of thematic dimensions employed in circular economy messaging by applying economic and cultural lenses. This knowledge can contribute strategies to encourage widespread circular adoption among governments, organizations, and consumers, ultimately addressing the pressing environmental challenges associated with climate change.

Keywords: circular economy, framing, comparative study, social media content creators, qualitative research

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1 Introduction

1.1 Background

The urgency of addressing climate change is undeniable. Future generations will bear the brunt of inaction, and the responsibility to mitigate the impact falls upon citizens today. While the impact of climate change is affecting the whole world, emerging countries in the Americas and Asia face the highest disaster risk. Their high vulnerability and lack of preventive and adaptive capacities make them likely to face severe consequences (Statista, 2022).

According to Beck (1998), we are part of the age of risk when society has become a laboratory with nobody responsible for the outcomes of experiments. In short, nobody is accountable for the consequences of human actions, and policies are needed. However, risk conflicts are not only intracultural conflicts, it is considered a cross-cultural issue that needs to be tackled because climate change is a global problem, and not only a one nation problem. With this argument, a discourse on global perspectives that align measures, solutions and initiatives that create synergies as a whole is needed.

A key strategy to combat climate change is the transition to a circular economy. This economic model prioritizes resource efficiency and minimizing waste by extending product lifespans, closing material loops, and promoting responsible consumption (OECD, 2020). The European Union (EU) has been a leader in this transition since the development of the action plan in 2015 by the European Commission (EC) (European Commission, 2015) as an alternative to the traditional linear economy based on the "take-make-dispose" model. The European Parliament further solidified this commitment by adopting a resolution in 2021 with the new circular economy action plan, aiming to achieve a fully circular economy by 2050 (European Parliament, 2021).

1.1.1 Circular Economy Across Regions

However, progress towards a circular economy is unequal across countries. While the Netherlands is a leading example in the circular economy with the highest performance among other EU countries (Claudio-Quiroga & Poza, 2024), its position is unsurprising given its pioneering role in launching CE initiatives in 2011 (Mazur-Wierzbicka, 2021). Germany, Italy, and Belgium are following its steps towards a more circular economy (Claudio-Quiroga & Poza, 2024).

An interesting contrast emerges when considering Sweden. Despite being an early adopter of an ecological modernization approach to environmental and climate issues (Niskanen et al., 2020), Sweden surprisingly shows a low performance in circularity and a decrease in its Circular Economy Index between 2014 and 2021 (Claudio-Quiroga & Poza, 2024). Moreover, EU countries have a significant improvement in waste management while they have decreased their performance in the production and consumption factor which is a priority as one of the SDG of the United Nations (UN) (Claudio-Quiroga & Poza, 2024).

On the other hand, regions like Latin America and Asia lag behind in terms of Circular Economy. Latin America and Caribbean (LAC) with a Circularity metric below 1%, compared to the global average of 7% (Circle Economy, 2023) and Asia, with a potential for future work.

1.1.2 Social Media for Positive Change

The transition to a global circular economy requires collaboration and a holistic, systemic approach from diverse stakeholders at all levels. This includes governments, the private sector, regulators, service providers, donor agencies, investors, and civil society in its various forms (e.g., citizens, non-governmental organizations, user movements). Effective communication strategies are necessary to raise awareness about circular economy costs, benefits, challenges and opportunities to engage them in the projects and secure their buy-in, trust, and acceptance (OECD, 2015).

In today's digital age, social media platforms have become powerful tools for information dissemination and influencing consumer behavior. Social media users increasingly rely on recommendations from influencers and content creators, who have become trendsetters, driving the power to influence consumer purchasing decisions through endorsements of brands, products, or services. While this trend can perpetuate the unsustainable cycle of consumption, it also presents an opportunity to leverage social media's influence for positive social and environmental change. Promoting sustainable consumption practices and advocating for circular economy principles through social media influencers can be a powerful strategy in this fight and the answer to legitimize new attitudes and behaviors within society.

1.2   Aim and Objectives

Current research on influencer marketing primarily focuses on purchase intentions for eco-friendly products. Content analyses are often geographically limited and targeted at specific sectors like second-hand fashion or recycling.

Our research addresses this gap. We examine how social media influencers utilize these platforms to raise awareness on pro-environmental behaviors, particularly those related to a circular economy (reducing consumption, reusing, and recycling). Unlike previous studies emphasizing sales and potential consumption cycles, our research focuses on the messaging that encourages behavior change towards sustainability.

This research investigates the approaches employed by influencers and content creators from three geographically distinct countries—Sweden (Nordic region), the Philippines (Southeast Asia), and Peru (South America)—in promoting sustainable consumption and circular economy initiatives through the three most widely used social media platforms by users and for social influencer marketing purposes: Facebook, Instagram and TikTok. By analyzing these cases, we aim to capture a diverse range of perspectives on this issue, encompassing high-income (Sweden), upper-middle-income (Perú) and lower-middle-income (Philippines) economies as categorized by the World Bank (World Bank, 2022). Our personal connection to these countries stems from our upbringing in the Philippines and Peru, and our current residence in Sweden during the course of this master's program.

Our research aims to analyze how influencers use social media platforms to promote environmental awareness and responsible consumption, identify how they foster a conscious mindset to encourage sustainable behavior changes and understand how influencers cultivate informed citizens aware of the environmental impact of their choices. An informed citizenry is more likely to make responsible decisions and urge institutions to address environmental challenges. This research aims to contribute to the fields of marketing (specifically digital marketing and social media), consumer behavior, environmental psychology, consumer studies, environmental education, and social marketing.

Climate change demands immediate action. Developed countries often lead the way in sustainability initiatives, particularly regarding the circular economy model. However, global adoption is crucial. By investigating the influence of social media platforms in spreading environmental messages, this research aims to bridge the gap between awareness and action. The findings will provide valuable insights for higher education institutions, environmental institutions, NGOs, social enterprises, policymakers, and marketing professionals.

This study will inform these stakeholders by offering an international perspective on promoting sustainability, developing strategies for circularity promotion, improving curriculum and pedagogical approaches related to sustainability, designing interventions that bridge the intention-behavior gap, and developing targeted marketing strategies for promoting sustainable consumption.

1.3 Research Purpose

The objective of this research is to explore and understand how information on circular economy is presented in social media platforms across varied social and cultural contexts. We have a particular interest in investigating the similarities and differences in the communication of this concept among the three countries identified—considered to be significantly different from each other in terms of culture, lifestyle, and behavior and how these differences influence this communication.

With this in mind, we developed the research question:

> **"How is the concept of circular economy communicated and promoted within social media platforms in Sweden, Perú, and the Philippines?"**

1.4 Delimitations

This study focuses on analyzing content generated for Facebook, Instagram, and TikTok. These platforms are some of the most popular and the favorites globally (DataReportal, 2024), the most used in Sweden (Statista, 2024), Perú (Statista, 2023), and the Philippines (DataReportal,2024), the countries chosen for this research and the most used for influencer campaigns (Klear, 2021). It is important to note that we are considering influencers or content creators whose content is related to sustainability, and social enterprises that promote and educate their audiences in circularity. In this regard, our research will not include the perception of their audiences and their impact on behavior and attitude.

1.5 Outline of the Thesis

After the Introduction section, Chapter 2 will present the literature this study is supported on such as the influence of social media in consumer behavior, social media as an educational tool and as a informal learning platform, social marketing, cross-cultural communication to explain the global approach we are having in the research and finally, circular economy and a more narrow context about the aimed countries. In Chapter 3, the methodology used will be explained by going through the Research Approach, Research Design, Data Collection Method, Data Analysis, Validity and Reliability, Limitations and a Chapter Summary to finish. Our analysis and findings will then be presented in Chapter 4 through three thematic frames: Economic Opportunity, Support for Sustainability and Warns about Environmental Effects that explain the aim of the analyzed content. Finally, Chapter 5 provides the conclusions obtained from the study including the Research Aim and Objectives, the Practical Implications and the suggestions for Future Research.

2   Literature/Theoretical Review

2.1 Influence of Social Media on Behavior

Social media has become a comprehensive source for content seekers (GWI, 2024), encompassing a vast range of topics – from understanding current trends to finding recipes and acquiring design inspiration for office spaces. A staggering 57% of internet users discover new brands and products on social media, with Gen Z and Millennials particularly trusting recommendations from social media influencers, often leading to purchases (GWI, 2024). Undeniably, platform algorithms further influence user behavior by promoting content aligned with their searches and preferences.

The "influencer era" arguably began with the emergence of "fashion bloggers." These ordinary people, writing about fashion online, became trusted references within the fashion and beauty communities. McQuarrie & Phillips (2014) coined this phenomenon the "megaphone effect," describing how individuals leverage online platforms to gain recognition and leadership within their fields. In the case of fashion bloggers, their online presence and growing audience allowed them to accumulate social capital, ultimately leading to increased status within the fashion world.

The exponential growth of highly engaging social media platforms, particularly TikTok, which boasts the highest engagement per post according to Socialinsider (2023), has demonstrably fueled the global influencer market's expansion. Since 2019, the market has tripled in size, reaching an estimated value of USD 24 billion by 2024 (Influencer Marketing Hub, 2024). A growing number of users have found success creating content on diverse topics, such as food, travel, and beauty care, by building engaged audiences on these platforms and creating an economic capital source. Today's influencer is considered a specialist in creating content that resonates with consumers (Campbell & Farrell, 2020). They embody three key marketing functions: access to a potentially highly engaged audience, a cultivated endorser persona, and proficiency in social media management (Campbell et al., 2020) while receiving compensation in exchange for their social media posts (Campbell & Grimm, 2019).

Influencers achieve what traditional marketing campaigns often struggle to accomplish: cultivating a loyal and receptive audience. By presenting themselves as relatable everyday consumers, influencers foster parasocial relationships (PSRs) with their audiences. These audiences trust influencers as if they were friends due to the strong socio-emotional connections that are created. Horton and Wohl (1956) defined parasocial relationships (PSRs) as the "more enduring, long-term, and usually positive, one-sided intimacy at a distance that

users develop toward media performers, based on repeated encounters" (Dibble et al., 2016). In the context of social media, these performers can be influencers or content creators. PSRs can influence audience behavior. For example, a study found that adolescents with strong PSRs with the cast of "Jersey Shore" exhibited sexual attitudes more similar to the cast than those without such relationships (Bond, 2016). This explains what Bond (2016) further suggests that young people are more susceptible to learning from media personas, leading to a higher tendency to imitate their behaviors.

Recent studies by Campbell et al. (2020) categorize influencers based on their level of influence, which is determined by number of followers, engagement metrics, and credibility. These categories include celebrities (individuals with established recognition beyond social media who leverage their platforms to promote their careers and brand partnerships), mega-influencers, macro-influencers, micro-influencers, and nano-influencers (those who gained recognition primarily through social media). Interestingly, research suggests that nano-influencers often exhibit higher engagement rates with their communities (Campbell, 2020) and raise stronger PSRs compared to celebrities, macro-influencers, and even micro-influencers (Lyu & Lehto, 2020). This translates to audiences being more receptive to information from nano-influencers on social media (Su et. al., 2021). The same study highlights the importance of positive influencer comments and two-way communication with audiences for strengthening PSRs, ultimately leading to greater acceptance of influencer-presented information (Su et.al., 2021). This phenomenon likely explains why brands increasingly partner with various types of social media influencers to promote products and generate brand awareness.

The influence of social media influencers on product endorsement and brand awareness is well-established. For instance, According to a survey on social media influencers conducted by Rakuten Insight, 69 percent of respondents from the Philippines stated that they had purchased an item or product because an influencer endorsed it. The same survey revealed they bought the item or product because the influencer's promotion convinced them (Rakuten Insight, 2023). Consequently, companies are allocating increased budgets to influencer marketing, recognizing its ability to achieve results beyond the reach of traditional marketing campaigns (Influencer Marketing Hub, 2024). Conversely, researchers are already investigating the effectiveness of SMI in raising awareness for non-commercial causes. These researchers leverage the SMIs' engaged audiences and communication skills to promote healthy behaviors (Folkvord et al, 2020), political participation (Dekoninck et al, 2022), and environmental concerns (Breves & Liebers, 2022), ultimately influencing their followers to adopt these lifestyles. As an example, Greta Thunberg and her more than 14 million followers on Instagram (Greta Thunberg, n.d) has become a relevant activist in climate change and can mobilize a great number of people to fight offline for this cause in different cities.

Nevertheless, so-called social media influencers as digital opinion leaders (Casaló et.al., 2020; de Veirman et.al., 2017, Dekoninck et.al., 2022) has become questionable, considering that they are not necessarily well-informed about the topics they endorse on their platform and it may be resulting in an opposite effect when giving misinformation. Still, they may raise attention among followers who had not been previously interested in these issues. (Dekoninck et.al., 2022). Dekoninck et.al.'s (2022) research also found that influencers who are not political professionals, but sporadically interweave political topics with other content, may have a mobilizing effect on followers' political participation during an election campaign. Based on these findings, this approach could be transferable to other issues that also require greater societal attention and where influencers can play a significant role. The same research confirms this finding that influencers who raise awareness about cause-related topics such as the environment were associated with higher pro-environmental behavior intentions over time (Dekoninck et.al., 2022).

Zhao et.al. (2024) use the social media influencer distinction of Ren et.al. (2023): "informers" (influencers who offer valuable and practical information to consumers) or "entertainers" (influencers who connect with consumers by providing entertainment and sharing emotions), concluding that consumers are more likely to purchase a green product when it is recommended by an informer rather than an entertainer.

These discoveries showcase a new possibility to enhance the development of influencers within the category of "green-influencers" (Pittman & Abell, 2021) and support their alliances with organizations and NGOs in assuming the role of digital educators, ensuring they are "informed" due to entertainers' popularity does not necessarily enhance green consumption promotion despite their fame (Janssen et al., 2022; Pittman and Abell, 2021; Zhao et al, 2024).

2.2 Informal Education and Social Learning

Since influencers are opinion leaders for their audiences, they have a potential role as digital educators using their communication skills to explain in a simple way complex topics that require the involvement of society, such as climate change, sustainability, and circularity. Moreover, their parasocial relationship with their followers would allow them to have a stronger impact when promoting this pro-environmental behavior to broaden their horizons and draw their attention to unnoticed topics (Dekoninck et al, 2022).

The commercial impact of social media and influencers when endorsing brands, products, and services is undeniable. Platforms such as Facebook, TikTok, and Instagram have emerged as significant sources of information for individuals. As informal learning is associated with

more ad hoc learning, and includes acquisition of attitudes, values, skills, beliefs, and knowledge from sources such as family, friends, work colleagues, and media, among others (Haythornthwaite, 2022), we can say that influencers and content creators have become a source of informal learning itself.

In addition, users are taking advantage of the various formats of content that these platforms offer as communication and learning tools to facilitate knowledge in different areas. For instance, there is existing research focused on the impact of TikTok in education which compares the platform's formats as a form of Nano Learning (Khlaif et al, 2021). Additionally, recent studies from Basch et.al. (2021) and Yang (2019) recognized the potential of TikTok in teaching different topics and sharing values, principles, and skills (Khlaif et.al., 2021).

The evolution of social media platforms is remarkable. Just a few years ago, platforms like Twitter and Reddit primarily facilitated text-based conversations. Today, however, these platforms, along with a wider range of social media formats, have emerged as significant contributors to the democratization of education and knowledge, enabling people without access to formal education to acquire the necessary key competences for an active citizenship (Thaler, 2011).

Furthermore, Collado-Alonso et.al. (2023) explored the extent of informal education in social media revealing that three out of four respondents reported learning from social networks, emphasizing the importance of this learning for their personal and professional development, as opposed to what they learned through formal education. They also highlighted how those who create and disseminate educational and informed content use the term 'influencer' as pejorative and with biased connotations in terms of economic performance and types of content disseminated. Thus, the mentioned study allows differentiating between two profiles: influencers and content creators. The former is characterized by focusing on topics related to fashion and lifestyle and by the high presence of commercial brands in their messages, resulting in a lucrative purpose and a way of earning a living. The second profile disseminates contrasted informative or educational messages, displaying a greater ethical commitment to its audience seeing their role as a hobby or social purpose more than an economic source (Collado-Alonso et.al., 2023). In the words of Ren et.al. (2023), content creators could be the (i) informers, and influencers could be (ii) entertainers regarding the content disseminated.

Alternatively, social media influencers become symbolic models, using the concepts from Bandura's Social Learning Theory (1971) that emphasize learning through direct experience

or by observing the behavior of others, determining its relevance in shaping audience behavior and attitude.

In addition, Siemens (2004; 2005) and Downes (2007) proposed the connectivism theory, where social learning is integrated with social media technologies arguing that learning is not an individualistic activity anymore and that learners gather information from connecting to others' knowledge (Chen et al 2012).

Furthermore, TikTok is one of the platforms that have emerged as creative hubs for educational videos. These videos tackle complex subjects in math, physics, and chemistry, making them more accessible to a general audience (Khlaif et al, 2021). Across various platforms, including YouTube, TikTok, and Instagram, educators, such as language and school teachers, are increasingly utilizing engaging content to facilitate learning (Sajonia, 2024).

While social media influencers can adopt an educational role, it can also have unintended negative consequences for society and themselves. Regardless of the topic, creators transmit their ideas, including social concerns and personal experiences. However, incoherence in this content can damage their image and perpetuate harmful stereotypes, hindering positive social change. Unlike traditional educators, social media creators often lack oversight or accountability about the repercussions of their content. Therefore, it's crucial for these creators to be more conscious about the messages they spread, especially considering the potential for their content to be a learning experience for others.

When examining the power of social media to influence gender perspectives and behaviors, researchers question the true intentions behind influencer support. Do they genuinely aim to help a cause, or are they simply capitalizing on a popular trend to benefit themselves? Arias-Rodriguez & Sánchez-Bello (2022) highlight this concern, and the effects of their influence and viral outreach.

It's important to emphasize that social learning thrives on active interaction. In the digital environment, this translates to continuous and engaged interaction between the influencer and the community. However, without engagement in the posts or shared content, the effectiveness of social learning becomes questionable. In such one-way communication scenarios, knowledge transfer might occur, but the richness and depth associated with true social learning are likely diminished.

2.3   Social Marketing

As discussed previously, social media influencers, through their online presence and communication, possess a significant power to shape social norms. By endorsing brands and leading their communication efforts towards purchases, influencers demonstrably influence how audiences perceive and adopt the behaviors and lifestyles they promote. As previously mentioned, parasocial relationships further strengthen this impact.

Building on traditional marketing tools, social marketing emerges as a distinct field. It recognizes the effectiveness of these tools and adapts them to promote social good, encouraging positive behavior change. Kotler et al. (1971) defined social marketing as "the design, implementation, and control of programs calculated to influence the acceptability of social ideas and involving considerations of product planning, pricing, communication, distribution, and marketing research" (p.3).

Hastings and Saren (2003) argues about how social marketing bridge the gap between public health and commerce with the three benefits they possess: their understanding of marketing and the ability to influence behavior which also needs a quota of realism, their proficiency to help devise solutions when problems are revealed, and the use of marketing to bring beneficial social change (Kotler, 1971).

In essence, the adaptation of marketing techniques to promote social causes are often championed by non-governmental and public institutions. Examples include warnings about tobacco use, drinking and driving, and anti-bullying campaigns. Kotler's work (1971) demonstrates how the 4Ps of the marketing mix can be adapted for social objectives, such as fostering circular economy attitudes in this study. He highlights "place" as a potential challenge and barrier to behavior change when audiences lack information on how to participate or where to find resources. Initially, social marketing was associated with social advertising, with "social marketers" viewed as responsible for increased social cause promotion costs. Nowadays, however, content creators increasingly assume the role of "social marketers" by raising awareness and endorsing social causes.

Nevertheless, Kotler mentions in his research that Lazarsfeld and Merton (1949) attributed the failure in social campaigns to the absence of conditions of monopolization, canalization and supplementation in the social arena and the necessity of creating significantly new behavior patterns and social reconditioning. (Kotler, 1971).

For this research, this concept is relevant as it aligns with the potential role of social media influencers in promoting a circular economy and encouraging circular behaviors.

2.4 Cross-cultural Communication

We see the relevance of briefly tackling cross-cultural communication in this paper, as our research objectives necessitate a look into the different ways that a global concept such as circular economy is communicated across different cultural contexts. Aneas & Sandín (2009) argues for the influence of culture when they said, "Culture is the reason why a given phenomenon, a specific form of behavior can be given a very different meaning according to the origin culture of the person analyzing and interpreting the process."

To define cross-cultural communication, Otten et.al. (2009) draws on Gudykunst's (2000) definition of the term "cross-cultural" as against "intercultural" which most academics use interchangeably: "Cross-cultural research [and communication] involve[s] comparing behavior in two or more cultures…Intercultural research [and communication] involve[s] examining behavior when members of two or more cultures interact…" We take on this definition of cross-cultural communication for the purposes of this paper.

In cross-cultural communication research, it is necessary to also take a look at the concept of culture and how it has been defined in relation to various fields of study. According to academics, Taylor's (1871) definition of the concept of culture is considered the basis for all further definitions of the concept: "[culture is] that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society." In more modern times, a popular definition of culture came from Hofstede (1991) when he said that culture is "collective mental programming that differs one society from another." With numerous variations in meaning and construct, Aneas & Sandín (2009) argues that the concept is constantly evolving across various fields of application, particularly within the context of globalization and the diverse makeup of modern societies.

In addition to defining culture, language is an important aspect of cross-cultural communication, as it is seen as a mediating role in the process (Aneas & Sandín, 2009). Vilà Baños (2005) argues that differences in interpretation can arise in communication between people from different cultural backgrounds because of the variations in verbal styles. Language barrier is seen as one obstacle in cross-cultural communication (Lifintsev & Canhavilhas, 2017), and even non-verbal cues are considered in the process (Hall, 1989).

2.4.1 Cross-cultural communication and digitalization

With the advent of the digital age came important developments in the study of cross-cultural communication, as the advancements in communication technologies allowed for faster and easier interactions across borders and cultures. In the study of Lichy and Stokes (2018), some well-established frameworks on cross-cultural research (Hofstede, 1980, 1984, 1991; Hofstede & Bond, 1988; Hofstede et.al., 1990; Trompenaars & Hampden-Turner, 1993, 1997) were seen as displaying "weakened explanatory power in digital contexts" because of the emergence of converging user trends that blur the lines of national differences.

Be that as it may, research shows that digital tools have dramatically simplified the process of cross-cultural communication (Lifintsev & Wellbrock, 2019). Studies also claim that digitalization was able to facilitate cross-cultural communication with its role as a "helper" in reducing the problem of language barrier (Lifintsev & Wellbrock, 2019), and that there is an increasing attention on the importance of digital communication skills to "drive organizations' competitiveness and innovation capacity." (van Laar et.al., 2017) We see the importance of this particular literature in our study as we try to navigate through the nuanced understanding of various cultures on sustainability concepts such as circular economy in the digital age.

2.5 Circular Economy

Conceptually, the term circular economy is said to have early origins, but from where and when exactly is considered up for debate among researchers. Murray et. al. (2017) provide a good rundown of the different literature that argues for different origins, enumerated below in Table 1.

Table 1. Various arguments of 'circular economy' origin.

Author and Year	Argument for origin
Lancaster (2002)	The concept can be traced back in 1848 when the first President of the Royal Society of Chemistry said that an ideal factory is one that has no waste, and that "the closer it gets to its ideal, the bigger is the profit."
Liu et. al. (2009)	The concept originally came from China, and it was further supported by Yuan et. al. (2006). The latter refers to an unreferenced study by "Zhu" (1998) which talked about closing loops in industrial processes.

Greyson (2007)	Attributes the term to Kenneth Boulding (1966) who said that a cyclical ecological system is needed to continuously reproduce material.
Pearce and Turner (1990)	The term was first used in western literature in the 1980s.
Stahel and Reday-Mulvey (1976)	Used the term 'closed-loop economy' for the first time in a paper for the European Commission, taking inspiration from the work of Boulding (1966).
Robèrt (1991)	Referred to the concept of circular economy, when he said, "Until resources are processed in cycles, either by society or by biogeochemical processes, the global economy and public health will continue to deteriorate."
Mathews and Tan (2011)	Used the term 'circular economy' as synonymous to closed-loop economy.
Yang and Feng (2008)	'Circular economy' is a shortened term for "Closed Materials Cycle Economy or Resources Circulated Economy."

Regardless of its origin, the concept of circular economy has always been linked to Industrial Ecology, in that it shares a similar definition with regards to how both concepts are initiated: through a 'single enterprise', 'inter-firm clusters,' or through 'entire cities or municipalities' that incorporate industrial metabolism (Murray et.al., 2017). Moreover, it is interesting to note that circular economy was initially largely developed by practitioners and not by academics (Korhonen et.al, 2018; Murray et.al., 2017), and after the concept gained traction, researchers began taking notice (Geissdoerfer et.al., 2017).

2.5.1 Defining Circular Economy

To define 'circular economy' is another matter altogether, and researchers have claimed that there is an issue of conceptual clarity and a widely-accepted definition (Yuan et.al., 2006; Lieder & Rashid, 2016; Blomsma & Brennan, 2017). However, there are a few definitions of the concept that stood out from the rest, one of which is that of the Ellen MacArthur Foundation, which defined circular economy as "an industrial economy that is restorative or regenerative by intention and design." (2013)

For the purposes of this paper, we use the definition developed by Geissdoerfer et.al. (2017): "a regenerative system in which resource input and waste, emission, and energy leakage are minimised by slowing, closing, and narrowing material and energy loops. This can be achieved through long-lasting design maintenance, repair, reuse, remanufacturing, refurbishing, and recycling." We find that the use of common language terminologies such as 'repair', 'reuse', 'refurbish', and 'recycle' in the definition fit well with the objective of our paper, which is to gain an understanding of how circular economy is communicated on social media platforms. From a social perspective, these are the same terminologies used by social media users to communicate the concept of circular economy, in an effort to be more relatable and easily understood by their audiences.

Within the extant literature on circular economy, however, researchers often find themselves creating their own definition of the concept based on the frames of their own research objectives. To sift through the clutter, Kirchherr et.al. (2017) analyzed 114 definitions of the concept in an effort to provide transparency on the current understandings of academics and practitioners on the topic. In their analysis, they discovered that "circular economy is most frequently depicted as a combination of reduce, reuse and recycle activities, whereas it is oftentimes not highlighted that CE necessitates a systemic shift." They also discovered that the connection between circular economy and sustainable development is not well-defined in the literature. What is further interesting in their study is that the research stream shows the concept of circular economy as aimed towards economic prosperity rather than environmental quality, and that business models or consumers are not considered as enablers in a circular economy (Kirchherr et.al., 2017).

2.5.2 Operationalizing circular economy

Notwithstanding all the definitions, circular economy is still regarded as a good way to operationalize sustainable development, one that businesses can implement to adhere to legislative and public pressure while still maintaining profit (Ghisellini et.al., 2016). What is unique about circular economy in contrast to other sustainability concepts is its two interconnected ideas of 'closed-loop economy' and 'design to re-design' thinking (Murray et.al., 2017). Moreover, an important part of the concept is its 'restorative' nature in that "circular economy is not merely a preventative approach, reducing pollution, but [it] also aims to repair previous damage by designing better systems within the entity of the industry itself." (Murray et.al., 2017)

Since its inception, Circular Economy has gained significant traction over the years because of the adoption of the concept by a number of national governments into their environment

policies and regulations (Korhonen et.al., 2018). The first country to do so was China, when it created a law for circular economy in 2008 (CIRAIG, 2015), and not too long the governments of Japan, UK, France, Canada, The Netherlands, Sweden, and Finland followed suit (Korhonen et.al., 2018).

For the European Union, the adoption of the circular economy concept began in 2015 when they released "Closing the loop—An EU action plan for the Circular Economy." The action plan details how member states can initiate concrete programs to pursue circularity in managing packaging and food waste, reducing inefficiencies in production processes, and promoting the use of renewable resources (European Commission, 2015). While the initial action plan in 2015 was a concrete step towards circularity, implementation was believed to be limited (McDowall et.al., 2017) and existing literature on circular economy barriers point to technological barriers as the core reason for the impediment to implementation (Ranta et.al., 2018, de Jesus and Mendonça, 2018). This was rebutted by Kirchherr et.al. (2018) when the results of their study showed that the most pressing circular economy barriers are 'Lacking consumer interest and awareness' and 'Hesitant company culture.' This particular insight is relevant to this paper because we want to understand the communication of circular economy at the consumer level, where interest and awareness arise from.

Another action plan was subsequently released by the European Commission in 2020 titled, "A new Circular Economy Action Plan for a cleaner and more competitive Europe." In contrast to the 2015 action plan, the new version is more targeted in scope, mainly focusing on 35 key actions and specific sectors that have high circular economy potential, and provides an outline of how consumers can be empowered to make sustainable choices.

With regard to other regions, understanding the drivers and barriers of circular economy adoption was undertaken by Ranta et.al. (2018) and found that in China, low-level regulation and enforcement are considered institutional environment specific barriers at the regulatory level; whilst in the US, it is the lack of national laws that support circular economy. In terms of specific barriers at the cultural-cognitive level, China has the tradition within the informal sector of collecting valuable recyclables and having food-heavy waste streams, while the US has a low level of source separation for recyclables in residential waste (Ranta, et.al., 2018).

2.5.3 Key activities of circular economy

In recent years, scholars have been in debate as to what are the key activities of circular economy as part of its operationalization process: "While the 3R-imperatives of 'reduce, reuse, recycle' form an accepted notion of CE in theory and practice… there has recently been

emphasis on more nuanced hierarchies with shorter loop options like 'redesign,' 'refurbish,' 'repurpose,' as enabling the highest possible value retention of resources over multiple product life cycles." (Reike et.al., 2018)

To synthesize the different conceptualizations and understandings of the operationalization activities of circular economy, Reike et.al. (2018) devised a 10R typology, categorized according to short loops ("where product remains close to its user and function"), medium long loops ("where products are upgraded and producers are again involved'), and long loops ("where products lose their original function"). The resource value retention options (or ROs, as coined by Reike et.al., 2018) that belong in the short loops category are considered to be the closest to the consumer level, as it involves a direct way of extending a product's life span on the part of consumers: Refuse (or the choice to buy less or use less), Reduce (such as purchasing products less frequently), Re-sell/Re-use (selling and buying second hand), and Repair (extending the life of a product) (Reike, et.al., 2018).

Since the objectives of this paper revolve around an understanding of circular economy across different social and cultural contexts, we will primarily focus on understanding these key activities in the analysis of our data.

2.5.4 Communicating Circular Economy

Green marketing is said to have evolved from early definitions of Ecological Marketing (Hennion & Kinnear, 1976) and Sustainable Marketing (Fuller, 1999), and that its definition has progressed over time in accordance to the growing awareness on environmental sustainability (Dangelico & Vocalelli, 2017).

Regardless of the extant literature on green marketing, there seems to be a considerable gap in the stream on how the concept of circular economy is being communicated to consumers, despite a prevalent discussion of the consumer culture paradigm among academics (Chamberlin & Boks, 2018): "Much of the literature focuses on business and revenue model development, and implications for supply chains and product-service development, but how these circular companies seek to influence their customers' behavior or influence the relationship they have with them through marketing and communications practices, remains mostly undiscussed." (Chamberlin & Boks, 2018)

The lack of extensive literature does not necessarily negate its importance. Promoting the principles of circular economy on a global scale requires concerted efforts from various industries, and the global advertising industry has been encouraged to become the frontrunner

in the campaign (Gould, 2016). Persuasive communication is also seen as having a positive influence in changing consumers' behavior towards circularity (Muranko et.al., 2019).

Within the fashion industry, which ranks the third most polluting industry in the world that accounts for about 10% of total annual carbon footprint (Climate Trade, 2023), there is a move to communicate circular economy fashion in an effort to promote conscientious consumption patterns and move away from retail business models that have a high turnover rate (Han et.al., 2017, Sharma & Hall, 2010). Han et.al. (2017) propose a circular economy fashion communication canvas that can serve as an effective strategy to "nurture relationships between consumers and producers and encourage responsible consumption choices which make use of products designed with long-lasting value and enduring style."

2.5.5 Circular Economy in Sweden, Perú and the Philippines

Sweden

Sweden is considered as one of the frontrunners of addressing environmental issues through technological innovations (Anshelm, 2002). In 2017, the Sveriges Kommuner och Landsting (Sweden's Municipalities and County Councils) released "From Value Chain to Value Cycle—How Sweden Achieves a More Circular Economy" (SOU 2017:22) which supports the direction towards a more circular and resource-efficient economy. The document emphasized the importance of increased reuse and reduced waste, as well as the need for more efficient systems in transportation, construction, housing, and food, among others.

The political landscape of Sweden in the 20th century allowed the discussion of sustainable processes and ecological modernization, as all parties agreed on their importance towards achieving further economic growth (Niskanen et.al., 2020). In spite of this seeming agreement among all political parties regarding environmental issues, there had been much conflict at the local level brought about by the extraction and processing of various primary resources from different parts of the country (Anshelm et.al., 2018; Haikola & Anshelm, 2016; Anshelm & Haikola, 2018; Nyberg, 2019).

In a study in 2020, Niskanen et.al. analyzed press material regarding circular economy from 2012 to 2019 and found three overarching themes on the topic: economic, political, and ecological. As they took a more in-depth look into the data, they found that despite all the local conflicts happening, there was a consensus among all stakeholders on the implementation of circular economy (Niskanen et.al., 2020). This seeming disconnect shows how circular economy was seen as both an 'umbrella concept' (Blomsma & Brennan, 2017), which encompasses common visions and strategies that can lead to sustainability; and a

'floating signifier' (defined by Laclau & Mouffe (2001) as a concept that doesn't have a fixed meaning), which can take on different interpretations to serve the different purposes of various stakeholders (Niskanen et.al., 2020).

Perú

In late 2016, the government of Perú passed the Legislative Decree 1278, approving the Law on the Integral Management of Solid Waste, which is considered to be the first legislation from the country that explicitly discusses the adoption of the principles of circular economy (De-La-Torre-Jave, et.al., 2022). The law emphasizes on the role and responsibility of manufacturers, distributors, importers, and traders to manage product life cycle through all its phases, which includes the post-industrial and post-consumer phases (emgrisa.es, 2017). Another law, enacted in 2018 by the Ministry of the Environment of Perú, aims to regulate single-use plastics and disposable containers. The law requires a progressive reduction of the use of polymer-based bags in the country, and by the end of 2021, the complete prohibition on the manufacture of polymer-based plastic bags, plates and other utensils for domestic consumption, import, and distribution was enforced. Furthermore, the different government agencies in Perú (The Ministry of the Environment, the Ministry of Education, the Ministry of Production, and decentralized governments) were tasked to initiate activities for education and awareness among the general public (Alvarez-Risco et.al., 2020).

Despite the enactment of the different laws, "Perú has not developed coordinated actions for the establishment of circular economy processes" (Chávez et.al., 2023). This has led the researchers to examine the opportunities for circular economy implementation in the country via Neutrosophic Cognitive Maps. The results of their study showed that circular economy experts in Perú believe that the current situation is inadequate, and that investment in research and development, together with political will, are needed to achieve a circular economy (Chávez et.al., 2023).

Philippines

For the Philippines, waste management continues to be a persistent problem (Gue et.al., 2022). According to government data, the country generated an estimated 16.6 MT of waste in 2020, and projected to increase to 23.2 MT in 2025 with further resource consumption (Environmental Management Bureau, 2024). The country's first move towards the circular economy concept was in 2000 when the government enacted the Ecological Solid Waste Management Act, which provided nationwide guidelines on the "segregation, collection, transport, storage, treatment and disposal of solid wastes" (Figueroa, et.al., 2021). Other legislation that promotes sustainable development was likewise put in place (Martinico-Perez

et.al., 2018), however, there seems to be a significant gap between policy and implementation (Romana, 2017).

To stimulate a transition to a circular economy, Gue et.al., (2020) looked into the possible drivers that would motivate certain economic sectors to adopt circular economy initiatives. They found that within the techno-based sector that consist of industry and service sectors, 'economic attractiveness' is seen as a core driver: "The main causal driver for CE in the country, therefore, is in the attribute of attractive financial return in circular business models," and this is closely linked to 'consumer demand' which both sectors consider as another core driver (Gue et.al., 2020).

There has not been any active pursuit of the adoption of circular economy policies in the country according to Gue et.al. (2022), which led them to study possible scenarios of the Philippines' transition to a circular economy. The study takes on a macroeconomic evaluation of the plausible economic and environmental performance of the country should it undertake possible scenarios such as increased consumer demand for circular products; adoption of circular business models; direct government intervention; transition to a service economy; and two unified scenarios (one with government action and one without) (Gue et.al., 2022). The researchers claim that transitioning to a circular economy will decouple economic growth and resource use: "Attaining such [a] state is difficult as infrastructures and operation transformations are its prerequisites. Transformations require stakeholder participation wherein disaggregated participation can hinder the transformation. Incremental changes, such as an 'in-between' state, may be opted as an alternative for a higher success rate." (Gue et.al., 2022).

2.6 Chapter Summary

We started this chapter with an overview of the influence of social media on consumer behavior and the role that social media influencers play in educating their audiences. Whether regarded as an informer or an entertainer (Ren et.al., 2023), influencers are now considered reference leaders among stakeholders and informal educators in digital platforms. This type of informal education and social learning in the digital age have led to the democratization of education, wherein those that do not have access to formal education now have the opportunity to gain knowledge through open access platforms such as social media. Ren et.al. (2023) determines the difference between the influencer and the content creator, and we take on this differentiation for the analysis of our data in this study.

As informal education on social media platforms continues to progress over time, those that are lobbying for particular agendas have taken notice of this phenomenon and have used it to their advantage to communicate their interests. This is where social marketing comes in, particularly with how businesses and organizations have started to use marketing to advance their social goals (Kotler & Zaltman, 1971). These institutions have leveraged on marketing initiatives to send out their message on sustainability, whether their motivation for doing so is purely for social transformation (in combating climate change) or for economic gain (in the promotion of products or services).

Regardless of their motivation, these institutions have pushed for global agendas across different cultural settings, all in an effort to reach a wider audience. We discussed cross-cultural communication as a way to understand how communication is shaped by social and cultural realities, and the increasingly crucial role of digital communication technologies in easily facilitating information across cultures.

Tying all these together with the objectives of this paper, we established the importance of social media influencers in using their influence to educate and promote their audiences towards sustainable activities. Focusing on circular economy as a concept enclosed within the dimensions of sustainability, we want to understand the communication of circularity activities, but within the construct of the influencers' own social and cultural realities.

In discussing circular economy in this chapter, we first investigated how the concept is gaining significant traction among businesses and organizations because of its economic and environmental benefits. While legislation and operationalization of circular economy activities are already in place across different regions, there is still a long way to go in terms of full implementation at the institutional, organizational, and consumer levels. This also holds true when we inquired into the adoption of a circular economy within Sweden, Peru, and the Philippines.

To understand how circular economy is being perceived and adopted at the consumer level, there is a need to explore the communication being put forth within societies. It is in this light that we see the necessity of undertaking a comparative cross-cultural analysis of that communication, as a way to see how cultural differences affect the understanding of global concepts such as circular economy. Using this knowledge, policy makers, organizations, and key opinion leaders can effectively strategize in localizing circular economy communication that will generate greater awareness among different publics, and which can consequently lead to the adoption of its principles and processes in all levels of society.

3   Methodology

3.1   Research Approach

To address the objectives of this paper, we took on a Relativism ontological position, as it seeks to understand the nuances in how circular economy, with its different facets and concepts, is communicated on social media across varied socio-cultural contexts. According to Easterby-Smith, et.al. (2021), Relativism, in relation to ontology, is a position that "scientific laws are created by people who are embedded in a context." This study adopted this definition in that it seeks the different 'truths' from each of the countries in question in relation to circular economy. Consequently, in order to better understand the different truths, we made use of the Social Constructionism paradigm, which is the idea that "many aspects of 'societal reality' are determined by people rather than by objective and external factors" (Easterby-Smith et.al., 2021). In using this paradigm, we determined the different prevailing social and cultural constructs that shape the concept of circular economy across societies and markets.

For this study, we have undertaken a sense-making analysis, which is "the cognitive and communicative processes through which humans understand, describe, and relate to phenomena" (Linnér & Wibeck, 2019), and which is often associated with the Social Constructionism paradigm. Particularly, we made use of "frames" within the context of sense-making analysis (Wibeck & Linnér, 2021) to understand how the concept of circular economy was shaped and given meaning because of the social and cultural influences involved.

The framing analysis, popularized by Goffman (1974), defines a 'frame' as "definitions of the situation (that) are built up in accordance with the principles of organization which govern events—at least social ones—and our subjective involvement in them." Nisbet (2009) builds on the definition of framing when he said that when people are provided with an ambiguous situation to consider (in this case, circular economy as an ambiguous concept), the manner in which the message was framed can elicit a variety of responses because of the language that was used or even the visual cues presented within the message.

Within the extant literature on framing, many of the studies take on sentiment analysis to gain an understanding of how the framed communication was received by the target audience. The use of sentiment analysis to make sense of social media data has gained a special interest among researchers in recent years because of the advances in big data and deep learning technologies (Iglesias & Moreno, 2019).

While a sentiment analysis may be necessary for research objectives relating to the frames' impact and effect on audiences, this study's focus is only on the framing of the communication itself. We are particularly interested to find out how circular economy is being framed in societies that are culturally and socially diverse in terms of values, attitudes, and behavior.

3.2 Research Design

The aim of this study is to unveil the different frames that shape the communication on circular economy, and we took on a netnographic research design that allowed for a deeper dive into the social and cultural nuances that affect the messaging.

Netnography was first coined by Kozinets in 1998 and his seminal work on the topic has evolved in subsequent years (2001, 2002, 2006, 2015, 2019, 2020), but for this paper we take on Kozinets' definition of what netnography is at its core: "social media-related, immersed, technocultural, using common texts, concepts, and procedures." (2020). Furthermore, Kozinets defines a netnographer as someone who "draw[s] from human impressions, from the central conception of the netnographic researcher-as-instrument, to form cultural understandings about language, power, identity, and desire in the worlds where technology and the social interact." (2020).

In contrast from the widely known ethnographic research design, which entails "prolonged participation within a specific culture or sub-culture" (Arnould, 1998), netnography has the following characteristics, as shown in Table 2.

Table 2. Characteristics of Netnography.

Netnography as explained by Kozinets (2002)
- Less time consuming and elaborate   - Capable of being conducted in a manner that is entirely unobtrusive   - Less costly and more timely than focus groups and personal interviews   - Provide opportunity to look into naturally occurring behaviors   - Allows continuing access to informants in a particular online social situation

This particular research method has been used in numerous studies across a variety of fields, but in business research, major knowledge clusters where netnography is utilized include the

understanding of consumer behavior, co-creation in online brand communities, and authenticity (Bansal, et.al., 2024). According to the same study, emerging themes include "sustainable tourism, customer engagement, and sharing economy." (Bansal, et.al., 2024).

We argue that a netnographic research design fits the objectives of this study because we want to understand the phenomena of circular economy as communicated by influencers on social media platforms.

3.3   Data Collection Method

In collecting data for this study, we used purposive sampling to gather content from social media influencers located in Sweden, Perú, and the Philippines. We adapt the definition of Patton (2002) of purposive sampling, which is a "nonrandom sample in which the researcher uses a wide range of methods to locate all possible cases of a highly specific and difficult-to-reach population." Considering the niche topic of circular economy and its related activities, we used a variety of methods to identify the content creators and the content that they generate that would best fit the objectives of this study. We determined a set of characteristics for consideration, listed down in Table 3.

Table 3. Characteristics of social media content creators.

- The content creator must be a local of the three countries identified and currently residing in the country at the time of their posts.
- The content creator uses keywords relating to circular economy, which includes but are not limited to, circularity, recycle, reduce, reuse, remake, secondhand, zero waste, composting, and slow fashion; the use of the term sustainability was done in the context of circular activities.
- The content creator posts regular content about circular activities; and by this we mean 3 or more posts out of every 5 posts on their chosen platform.
- The content creator can either be a nano, micro, or macro influencer in terms of reach.
- The posts of the content creator must have considerable engagement in terms of likes, comments, and views. While the objective of this paper does not consider impact on audiences, engagement is considered as one of the factors in determining the status of influencers.

These characteristics allow us to gain relevant insights into how circularity is being framed, and by using the same characteristics across different geographical locations and cultural

contexts (adapting the quasi-replication logic of Bettis et.al. (2016)), we can compare similarities and contrasts in the framing from the three countries we intended to focus on for this research. This cross-cultural study of their perspective towards circular economy reflects their understanding of the concept, and that comprehension may affect the way they adopt circularity activities within their social realities.

For the Perú and Philippine data, we utilized two methods: first, using keywords to search for content creators adhering to the above mentioned characteristics in social media platforms; and two, crowdsourcing among peers within our network to get recommendations of influencers. For the Sweden data, a specialist that recently handled sustainable branding and communication initiatives in the country provided a list of content creators. We identified a total of 27 influencers from all three countries, 12 from Perú, 8 from Sweden, and 7 from the Philippines. From each of the content creators, we identified three posts based on the richness of the content in relation to circular economy. In total, we were able to collect 81 posts across three social media platforms that the influencers have presence in: Facebook, Instagram, and Tiktok.

In terms of language translation, we translated data from Perú and the Philippines to English based on our own understanding of our language. It is worthy to note, however, that most of the Philippine data is in English and therefore did not need further translation. As for the Sweden data, we made use of the translation services of Instagram to translate the text found in the captions as well as in the visual content of the posts.

Based on our findings, we determined three types of content creators that comprise our niche population: the green-influencers that promote circularity solely on the basis of conveying sustainability; the collaborators that help promote the interests of organizations advancing circularity principles; and social entrepreneurs that promote circularity in relation to the products or services that they provide. The motivations of these actors in communicating circular economy will be discussed in the next chapter.

3.4 Data Analysis

From the data generated through purposive sampling, we used the computer-assisted qualitative data analysis software (CAQDAS) NVivo to analyze the text and classify the data set to different frames. According to Berger et.al. (2020), the text analysis approach, when used as a methodology, "can describe 'what' is being said and 'how' it is said, using both qualitative and quantitative inquiries with various degrees of involvement." In addition, when a text analysis is done within a specific context, it can affect the content through the

limitations of the format and the social contexts about the topic; the background knowledge of both the producer of the text and the receiver; and their past experiences with each other (Berger et.al., 2020).

In this study, the text analysis was done based on what keywords the influencers used and how they used it in the context of their own understanding of the concept. Through a process of desegregating the text and visual content, we established thematic headings or frames that the content can be categorized to. This method, which is also considered topic modeling (Berger et.al., 2020), is especially valuable for this particular research because it generates relevant insights on the topic and interprets their meaning within various social and cultural contexts.

Furthermore, the text analysis was done using a comparative approach, and the objectives of this research necessitates this process. By comparing similarities and differences in the way circular economy activities are communicated across different cultural backgrounds, we gain significant knowledge into nuanced understandings of the concept.

3.5   Validity and Reliability

We would like to argue for the validity and reliability of this research based on several factors. First, in purposefully selecting an information-rich sample set, we used maximum variation sampling (Patton, 2002). This strategy considers a small sample set as a strength because "any common patterns that emerge from great variation are of particular interest and value in capturing the core experiences and central, shared dimensions of a setting or phenomenon." We identified a diverse set of characteristics mentioned above in order to construct our sample.

Second, we used the triangulation technique in classifying our data according to different frames by going through the sample set individually and then together. Chetty & Thakur (2020) argues for the triangulation strategy as a good technique in promoting the validity and reliability of a research. This was further argued by Roig-Terno et.al. (2017) when they said that, "The most common procedure to ensure reliability of the results is the simultaneous implementation of the entire process by two researchers working together using the same data and selections."

Lastly, as mentioned in data analysis, we used NVivo to record the data and identify the overarching and sub-themes of the messaging. The use of CAQDAS, according to Chetty & Thakur (2020), promotes authenticity in the manner of analyzing the data.

3.6 Limitations

With the objectives in mind and with the data gathered for this study, we were subjected to several limitations. For one, this study only focuses on how circular economy is communicated and framed, which means that this does not take into account the sentiments of those that receive the communication and their attitudes, beliefs, and behavior toward the concept. Second, since we collected data unobtrusively, we did not communicate directly to the influencers and therefore do not have first-hand data on their intention and motivation in promoting circularity activities. We interpreted the data based on our own understanding of the text and visual content conveyed in the social media posts and can only provide suggestions as to their motivation based on country-specific data, together with our own understanding of our culture and the culture of Sweden where we have been residing since the beginning of our studies.

Lastly, while we see our sample set as sufficient for the objectives of this research, we understand that other perspectives could have also been included. We did not include social media communication from institutions and organizations that promote circular economy. We consider this as both a limitation of this study and an implication for further research.

3.7 Chapter Summary

The objective of this research is to understand how different cultures and societies influence the perception of global ideas, with particular interest in the role of social media in communicating these ideas to various audiences. This study takes on a qualitative approach as it seeks to bring to light the different frames that circular economy has been put in based on the social contexts that they have been subjected to, and using netnography to provide meaning and a comprehensive perspective from different global viewpoints.

The data was gathered using a third party software and we selected a sample set for a comparative text analysis using purposive sampling. We argue for validity and reliability based on how we collected and analyzed our data, which allows for comprehensiveness, transparency, and clarity in our findings. Limitations are generally viewed as inherent within the research objectives of this study and with the nature of netnography as a research design. The findings and analysis will be delved into further in the next chapter.

4   Analysis and Discussion

Through a systematic examination of the messages conveyed by the selected content creators, we identified three distinct overarching frames: Economic Opportunity, Support for Sustainability, and Warnings about Environmental Effects. We arrived at these themes through an inductive approach of our empirical data and evaluated the information based on our own understanding of the concepts and activities detailed in the communication. It is important to note that some of the data we collected were categorized into several sub-themes, reflecting duplicity in how the message was communicated. Table 4 shows a list of the frames together with the sub-themes that we have determined.

Table 4. Circular economy frames and sub-themes.

Economic Opportunity	Support for Local Circularity
	Upcycling
Support for Sustainability	Waste Management
	Reducing our Footprint
	Call for Change
	Circularity Awareness
Warns about Environmental Effects	Critical Reflection
	Greenwashing
	Unsustainable Consumption
	Unsustainable Production

By exploring these thematic dimensions, we seek to provide a better understanding of the role of these content creators in shaping public discourse on circular economy, and how it can ultimately affect societal attitudes and behaviors in Perú, the Philippines, and Sweden.

4.1   Economic Opportunity

Since its inception, circular economy was regarded as the sustainability concept that allows for economic opportunity (Ghisellini et.al., 2016), as businesses and organizations not only

gain profitability from using resources and assets to their full extent, but also derive better corporate reputation from reducing waste. For this paper, we define the term "economic opportunity" within the dimension of circular economy as any activity or initiative relating to circularity that opens opportunities for economic gain.

Under this general frame, we observed two sub-themes—support for local circularity and upcycling. In this paper's context, 'support for local circularity' is defined as explicitly communicating the promotion and support of local products produced through a sustainable way. Upcycling, meanwhile, which is derived from the combination of the words 'upgrade' and 'recycle,' is defined by Wegener (2016) as "the practice of reassessing waste or trash and transforming it into something valuable."

Support for local circularity

From the data that we have collected in the Philippines, it can be observed that while the intent to promote circularity was evident in the messaging, the underlying motive for creating a community program was still economic gain. In one social media post, a collaborator promoted the establishment of an *"eco-ikot center"* ("eco-circle center") within a local community, as a way of generating livelihood for the women in the community through waste segregation, upcycling activities, and creating products through recycled materials. The collaborator, who runs a nonprofit organization called Community Organized Resource Allocation (CORA), aided in the ideation and implementation of the solid waste management facility. Her motivation for the promotion of the new center can be seen as a way of advancing the interests of her organization, which advocated for a more circular lifestyle for Filipinos, but her approach to do so was to entice community members to take part through the possibility of economic gain.

As for Sweden, promoting support for local circularity was observed as having not just a collective view of the economic gain, but also from a standpoint where circularity is seen as a way of life. In the case of one green-influencer, it was evident in her messaging that she encouraged her followers to discover the different vacation spots in Sweden as a way to help businesses profit from local travelers:

> "*Upptäck Sveriges alla smultronställen, se till att pengarna stannar kvar i regionen och gynna lokala aktörer så att de finns kvar*!" ("Discover all of Sweden's hideouts, make sure that the money stays in the region and benefits local players so that they remain!")

The green-influencer further promoted the sustainable lifestyle of the local hideouts—with houses built from recycled materials and homegrown food from backyard gardens—along

with the value of generating less emissions compared to going on vacation to other countries using air transportation.

Meanwhile in Perú, we have observed content wherein support for local circularity was explicitly mentioned, but they were never more comprehensively explained. This was largely due to the fact that they were mentioned as part of a larger concept that green-influencers wanted to talk more about. In one post, the green-influencer captioned:

> "*Elige opciones sostenibles #sinbasura y de producción local.*" ("Choose sustainable options #withoutwaste and locally produced")

However, the accompanying image of the post shows the text,

> "*Casi el 40% del Perú deposita su basura en ríos, lagos, quebradas y mares. O en los más de 1600 botaderos a nivel nacional. Sinba, por un mundo sin basura. Fuente: RPP (2022)*" ("Nearly 40% of Perú disposes of its waste in rivers, lakes, streams, and seas. Or in the more than 1600 landfills nationwide. Sinba, for a world without waste. Source: RPP (2022)")

This way of framing the concept suggests that green-influencers in Perú give attention to common circularity topics that the general public know about, such as recycling, reusing and waste management, and not particular on a wider view of a circular economy that includes maintaining local production and consumption.

Upcycling

Based on the definition of upcycling previously mentioned here, we have observed how the different countries had similarities and differences with the way they were framing this particular concept. In Sweden, upcycling is framed as a fun and creative process used for turning old clothes into new fashion statements that one can profit from. One particular green-influencer, a fashion designer that has focused on creating upcycled clothes and has dubbed herself as a "Remake Designer and Slow Fashion Stylist," develops regular social media content about creating luxury fashion items using old discarded clothes. She generates income from her designs through rentals or collaborations with personalities. Another green-influencer recently collaborated with fellow green-influencers in creating a circular pop-up shop where people can swap their old clothes, repair and remake them (Figure 1). While economic gain was certainly considered a priority in their circular activities, ultimately, the objective was to promote a more sustainable lifestyle. Sweden is classified as a "high income" society (World Bank, 2022) and clothing items are easily accessible and affordable to the majority of the population. With this in mind, it was observed that among the

green-influencers in Sweden, upcycling clothes is not a necessity but more of an intentional activity to live more sustainably.

Figure 1. Instagram post from Johanna Leymann.

In the Philippines, upcycling is seen as a practical initiative to make old clothes (and sometimes not even clothes) wearable and fashionable. One green-influencer was observed as creating social media content wherein she uses non-clothing materials such as old curtains and pillowcases to make new clothes (Figure 2). Another green-influencer was making use of old clothes from thrift shops, popularly known in the Philippines as "Ukay-Ukay" (derived from the term "halukay" which means to dig into, as one would do with a big pile of clothes), and she would, more often than not, use the term "zero waste" in her captions, as in this case:

> "Zero wasting! Let's Upcycle! Promoting zero waste, instead of throwing your old clothes, I encourage everyone to upcycle! It'll help our mother earth to breathe and it'll lessen the effects of textile waste on landfills!"
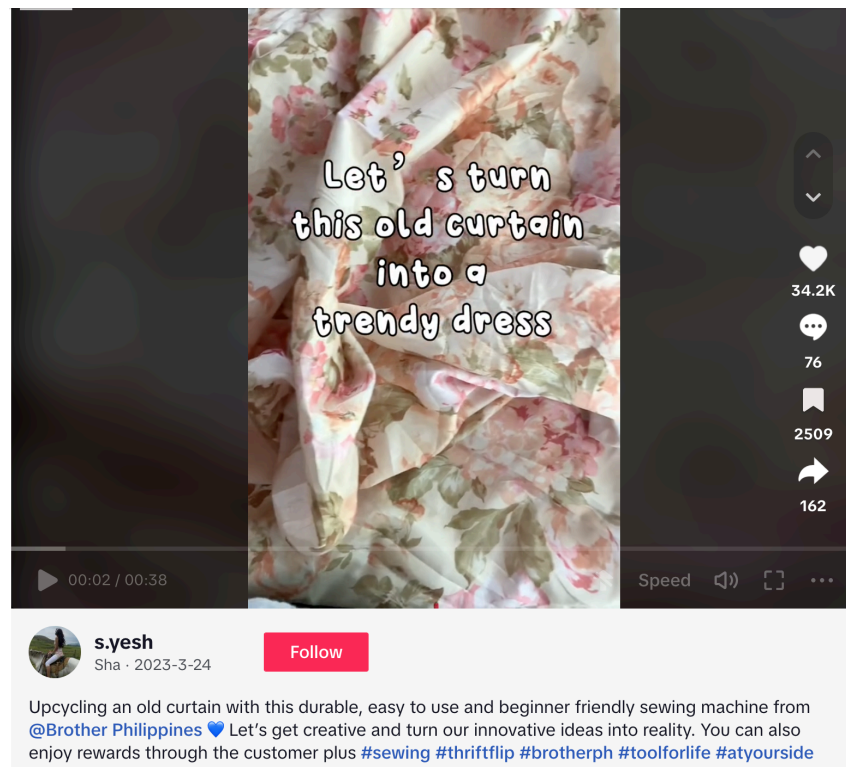
Figure 2. Tiktok post from Sha.

Based on the content we collected, we saw two primary motivations for promoting upcycling in the Philippines: one, the green-influencers can sell the upcycled clothes to earn a profit; and two, they aim to increase their followers and engagement across platforms so they can profit from social media payouts. The Philippines is categorized as belonging in the lower middle income bracket (World Bank, 2022), and this implies that citizens are always looking into economic opportunities to earn a living.

Based on our CAQDAS analysis of the data gathered, we were not able to classify any social media messaging from Perú as a type of upcycling activity. Perhaps this could be considered as one of the limitations of this paper, as we gathered data through purposive sampling to answer our research question. But it is also interesting to note that the data we gathered from Perú was largely populated with content about composting and recycling food scraps, which reflects the gastronomic culture that the Latin American country is well known for. This will be discussed in a different section of this paper.

4.2   Support for Sustainability

Within this frame, we analyze the communication employed to advocate for circular lifestyles and promote a change of behavior or endorsement of eco-friendly purchases or decisions,

with a focus on *Waste Management, Call for Change, Reducing the footprint, and Circularity awareness*.

Waste Management

In this section, we analyze the creators' content in terms of its effectiveness in promoting and educating about waste management through prevention, minimization, or utilization. This also includes actions such as recycling, repairing, remaking, reusing, and reducing.

In Perú, the content primarily focuses on recycling. Influencers often take on an educational role, emphasizing in-home recycling practices (which may be more accurately termed segregation) and providing tips to do it properly. However, they also warn about how recycling itself has disadvantages for the environment and is not a proper solution because it pollutes.

Organizations like Sinba, a social enterprise with extensive educational content in its social networks, play a key role by informing the public about proper waste segregation. They offer valuable information on topics like identifying recyclable materials and the post-segregation recycling process (Figure 3).

Figure 3: Instagram post from Sinba Peru.

A strong emphasis lies on community involvement. The message is clear: keep recycling, do it correctly, and understand the impact to reduce consumption. Palmiro Ocampo, a renowned chef leading Ccori Cocina Óptima, exemplifies this approach. His organization uses educational programs to reduce food waste and fight hunger. Their Instagram showcases creative ways to utilize all food parts, minimizing waste. Palmiro's role as an influencer

extends beyond being a chef. He educates viewers on food waste reduction and recycling, demonstrating how to prepare delicious Perúvian dishes using food scraps typically discarded.

It's evident that the Perúvian sustainability and circularity scene prioritizes recycling, particularly food waste recycling, as a key waste management strategy. Lima Compost, another sustainability-focused social enterprise, utilizes social media to educate the public about home composting. They also offer collection services and provide land for composting needs.

The approach of some macro-influencers like @pierre_cm, who is also a WWF Perú ambassador, leans towards advocacy. His content promotes the HP recycling program, positioning him more as a spokesperson than an educator.

In contrast, Swedish green-influencers were perceived as not putting too much focus on recycling education. Recycling is already a well-established practice integrated into daily life. Waste segregation happens at home, with a supportive system of communal bins and a deposit program where supermarkets incentivize recycling with a 1 krona reward per bottle or can.

Filipino green-influencers prioritize waste reduction as a solution to plastic pollution in the oceans and landfills. They recognize that coastal clean-up efforts, while important for wildlife and environmental health, don't address the root cause of the problem. Antoinette Taus, a prominent influencer, emphasizes this point:

> "NEWS FLASH: Coastal clean-ups do NOT solve the plastic pollution crisis, but they must be done because of all the litter harming wildlife, the environment and human health. More than clean-ups, there is an urgent need to REDUCE waste in the first place, BEFORE they reach our seas and landfills."

> "♻ From improving waste collection to rethinking production & consumption, the best way to manage waste is to generate less or none in the first place."

They actively promote reducing single-use plastics and encourage the use of reusable containers, bottles, and tote bags. One TikTok content creator who promotes sustainable way of living demonstrates this concept in a social media post:

> "Food trip and zero waste, is that possible? Come on, let's go with Tia and our containers to find out. Hello guys, happy new year! We're here in Olongapo City and it's just about to rain. I'm craving for a snack, so we'll try if we can take out using our own container."

> "Hi guys! Someone asked us if it's possible to buy zerowaste at Starbucks. That's why we brought our own container and tried it. Good thing that Starbucks promotes and supports sustainability."

"Because when you bring your own container, they will deduct 10 pesos for the drink that you will buy. And if I don't have a container, you can ask if they have a glass option for dine-in. And kudos to Santa Maria Bulacan Branch because they have available reusable glass."

Wonder Home Naturals, an eco-product brand, uses humor on TikTok to advocate for environmentally friendly products:

"We're sustainable. Of course, we always carry a water bottle that looks like a lamp. Note the plastic bottles. We're sustainable. Of course, I always carry a tote bag to lessen plastic waste. We're sustainable. Of course, I always carry an umbrella to avoid spasms. We're sustainable. I always carry a bike to work to reduce pollution. We're sustainable. Of course, I buy eco-friendly products from Wonderhome Naturals. We're sustainable."

In contrast to the Philippines' emphasis on reducing consumption, Perúvian influencers promote buying high-quality, long-lasting products that can be repaired.

"We hardly ever reuse things, even the clothes we buy at some retailers have a much lower quality that after a few washes, tends to degrade." - Patricio Valderrama

Andrea from @dearweardrobe uses storytelling to illustrate this point. She shares how her grandmother practiced sustainability unconsciously and invites viewers to re-adopt these past traditions:

"The other thing she did that was very important was repairing her clothes. What do I mean by this? If she found a hole in her sock, she would sew it and fix it. Or if a button came off a shirt, she would sew on another one, go buy another identical button, sew it on, and it was good to go. She didn't discard her clothes, she didn't throw them away, she didn't give them away, she sewed them, sewed them, and sewed them, and fixed them, and wore them again."

Marita (@maritamendoza) exemplifies how Perúvian influencers educate viewers on garment care to extend their lifespan. Here are her key tips, emphasizing eco-friendly practices:

"To make your clothes last longer, you have to know how to take care of them. So, if there are drawstrings, they have to be tied, and you have to put the clothes in tied up so that nothing gets pulled. Put the clothes in front from where you used them. If there are buttons, at least fasten 3 so that nothing gets pulled or deformed. If there are zippers, zip them up too, it not only helps preserve the garment but also takes care of the washing machine. Drawstrings and zippers up. Always consider the colors you're putting together. I usually use a pre-soak in the washing machine because hardly any

of our clothes bleed. And this helps the washing come out much better. And obviously, I add an eco-friendly and biodegradable detergent that smells great, and I also add white vinegar for natural softening and baking soda for soaking. I'm VERY aware of my closet and that means learning to take care of and make my clothes last. So here's some simple facts so clothes don't end up stale, deformed, and discolored by putting them in the washing machine.

Additional data:
- My washing machine has energy efficiency label A - Always use it in water saving mode
- Use of eco-friendly detergent from @zimple_y_minimal - White vinegar does not leave a smell in clothes if it dries to the weather
- Bicarbonate helps to deodorize and remove stains"

Similar to Filipino influencers, Perúvians promote alternatives to single-use products. Andrea (@aceitunitaverde.ecoblog) demonstrates how to make reusable makeup remover pads:

"Let's make our own makeup remover pads. Usually I prepare 12 per batch to avoid any contamination. You will only need: 1 cup of water, 1/2 Cup Castile Soap (you can get it at @zimple_y_minimal), 2 scoops of jojoba oil (you can get it at @botanica.lab) Once you use them to reprepare your make-up removers and avoid messing with disposable make-up wipes. Would you dare to make them at home?"

Sweden excels at promoting reuse through a vibrant second-hand market and repair initiatives. Green-influencers encourage clothing swaps, pop-up circular shops, and repair cafes. One green-influencer highlights the environmental benefits of buying children's clothes at flea markets:

"For sustainability reasons, I choose to dress my children in flea, inherited and mended because it fits with the self-image as an environmentally conscious eco-mother in the villa idyll. Never have I felt anxious to be perceived as a poor and inappropriate parent."

In contrast, Perúvian influencers often frame reuse as a way to save money, potentially reaching a broader audience:

"Buy only what's necessary! Reuse what you have at home. That's how you save some money."

Perúvian traditions also play a role. Practices like using last year's backpacks or buying used books were once common in large families due to economics. Influencers like @pordondeempiezo are now reframing these practices within a sustainability context:

> *"Continue using items like backpacks or pens in good condition from last year…buy second-hand books from students older than your children or nephews, pack a sustainable lunchbox, avoid packaged foods and opt for fruits, vegetables, and reusable containers. And lastly, bring your reusable bag when shopping at Open Plaza."*

Recidar, a social enterprise, exemplifies the positive impact of reuse. They collect donations, repair items, and offer them in a second-hand store within a low-income area, promoting sustainability and affordability:

> *"#Actualidad | Only 20% of electronic devices are recycled globally.* ♻️💔
>
> *Nowadays, waste from obsolete or deteriorated appliance continues to increase.* ☝🏽 *For specialists, they are losing their potential to be recycled, to reduce the negative impact on the environment and also the generation of new business models. Swipe to find out more.* ➡️
>
> ⏳ *It's time to act and promote the recycling of electronic waste (REEE) to preserve the environment. Together we can achieve a more sustainable future!* 🌎*…"*

Reducing our footprint

In addition to promoting durable goods, Perúvian influencers address the importance of energy and water conservation to mitigate climate change. They raise awareness about activities that increase our environmental footprint and encourage sustainable practices at home.

Geologist Patricio Valderrama exemplifies this approach. He shares excerpts from his science program, offering "10 tips to be sustainable from home," which include water conservation:

> *"We should not abuse hot water, try to shower as quickly as possible, turn off the tap, use a glass while brushing your teeth. Why? Because water is a scarce resource. Although it is true, our planet, which is called Earth, should be called water because we have the largest amount of our surface covered by water. Freshwater and especially drinking water are very, very scarce and that is why we have to take care of it." - Patricio Valderrama (@patricioov)*

Valderrama also highlights how saving energy reduces our environmental footprint and benefits consumers:

> *"...reducing the consumption of these appliances helps a lot to reduce our energy footprint, which means we pay less for the electricity bill. And second, it helps to contribute to reducing climate change. Why? Because most of our energy in many*

countries comes from burning fossil fuels. So, the less energy we consume, the less the requirement for fossil fuels.” - Patricio Valderrama (@patricioov)

He further contributes data to raise awareness about the impact of using motor vehicles:

“...For every liter of fuel burned, 2.5 kg of CO2 is released into the atmosphere. That means that if we use motor vehicles or public transportation less, we would contribute less to climate change.” - Patricio Valderrama (@patricioov)

While topics like energy and water conservation have been addressed for years, it is worthy to note that new influencers continue to incorporate them into their content. This societal emphasis on sustainability aligns perfectly with Perú's statistics. The country has the highest percentage (64%) of respondents in Latin America, and the 3rd highest globally, who are likely to save energy at home to limit their climate impact (Statista, 2022). Perúvians also demonstrate a strong commitment to water conservation, with 61% of respondents reporting a likelihood to save water at home to reduce their environmental footprint. This statistic positions Perú as the leader in Latin America and the 5th highest globally (Statista, 2022).

Call for Change

Part of the efforts to get more people, businesses, and organizations to participate in a circular economy is the call to change current linear economy practices. We observed this 'call for change' across all the social media content we gathered from all three countries, with some similarities and differences in the frames that they have used. For one, content from all three countries emphasized on change that starts at the individual level through a change in mindset and creating new habits. This includes taking an active part in circularity through daily activities such as waste segregation, reusing old materials, upcycling damaged clothes, and composting, among others.

However, in terms of calling for a more cumulative impact, we noticed that content from Sweden had a sense of activism in their messaging. Several green-influencers from the Scandinavian country explicitly called for a change in the system, with one saying:

“Tryck på politiken för starkare lagstiftning och styrmedel. Som medborgare och röstberättigad. Engagera dig i politiskt parti eller organisation för att driva frågan. Det går att göra mycket inom detta ämne inom såväl EU, nationellt som på kommunnivå.” (“Pressure on policy for stronger legislation and control. As a citizen and entitled to vote. Get involved with a political party or organization to push the issue. Much can be done in this subject within both the EU, nationally and at the municipal level.”)

Another green-influencer shared her experience in joining a rally along with other women to speak out on climate change and creating a better future for their children. We see from these examples that green-influencers in Sweden are vocal in calling for change and are more proactive in demanding for a better system.

For the Philippines, meanwhile, collective action was observed to mean collaborating with government, non-profit organizations, and local communities to create impact:

> *"A zero waste approach can help us create a better future for everyone, everywhere together. Achieving zero waste will require support from all. Member states, business, financial institutions, and individuals can join hands to arrive at this goal."*

The call to conspire with all stakeholders and having an active civil society can be seen as stemming from a cultural sense of togetherness, as evidenced by the proliferation of civic engagement in the country (Bankoff, 2007).

In Perú, it was perceived that the call for change was done through a more urgent tone. One green-influencer emphasized on taking immediate action:

> *"Se habla mucho de crear conciencia y creo que eso ya fue, es momento de hacer acciones puntuales cada uno desde su frente."* ("There's a lot of talk about raising awareness, and I believe that ship has sailed; it's time to take specific actions, each from our own front.")

The urgency in calling for change seems to stem from their belief that their country will experience severe climate change effects in the next ten years, and that the country should do more to fight climate change (IPSOS, 2023).

Circularity Awareness

For the purposes of this paper, we define 'circularity awareness' as having a general understanding of circularity activities done at an individual level, and as we have observed from our research, we see that this definition holds true for most of the social media content, with some variances in how they were framed.

In determining circularity awareness from a Perúvian lens, we discovered that they take on a more narrative approach to the topic, sharing anecdotal stories that their audiences may find relatable and entertaining. One particularly interesting post was about a green-influencer explaining how her grandmother passed on to her three sustainable activities at a time when sustainability was still an unheard concept:

"Obviously, this concept wasn't known before; she simply did it naturally, not because she wanted to be sustainable."

Another green-influencer narrated how she broke the screen of her phone and, in the process of having it repaired because she didn't want to buy a new one, realized that a lot of the features of her phone were already defective. She concluded by saying that,

"*A eso se le llama obsolescencia programada, es cuando los fabricantes crean productos cuya vida útil es cada vez menor, con la intención de que nosotros como consumidores les tengamos que comprar múltiples veces.*" ("That's called planned obsolescence, where manufacturers create products with increasingly shorter lifespans, intending for us as consumers to have to buy from them multiple times.")

This storytelling approach is seen as taking on both an entertainer hat and an informer hat, as categorized by Ren et.al. (2023).

Circularity awareness in the Philippines, on the other hand, takes on a more informative perspective. For one, social media content from a non-profit organization contains scientifically-based facts on waste management trends and technologies. One post explains in detail different waste management technologies that are available in the Philippines such as engineered sanitary landfills, refuse-derived fuel, vernicompost, centralized gravity-driven materials recovery facilities, bulb eater machine, and plastic waste bricks (Figure 4). A young green-influencer, meanwhile, shares her participation in international dialogue on food security as a way of creating awareness on circular economy from the perspective of agricultural supply. These frames reflect how Filipinos see the emerging importance of adapting circular processes, which they understand as interventions in reducing the adverse effects of climate change (Statista, 2022). They also view climate change as "a serious and immediate threat to the well-being of my country." (Statista, 2022)

Figure 4: Facebook post from Waste Watchers.

In Sweden, circularity awareness is framed through an investigative approach. We observed how green-influencers would scrutinize available information on sustainable practices, mentioning "greenwashing" from companies and organizations that claim to have circular processes. They create awareness by debunking commonly-held beliefs, and provide a wider view on circularity through well-investigated facts. One green-influencer showed the benefits of cycling as compared to using a car, with actual figures on how much one can earn and lose from the two modes of transportation. Another showed the incredulous amount of french fries one has to consume, after evaluating the claims of an airline company that they will be using cooking oil to power their airplanes. These messages show how green-influencers in Sweden are taking on the topic with a critical lens, despite the country ranking first on the Global Sustainability Index (2020).

4.3   Warns about Environmental Effects

Finally, we examine how the communication of warnings about environmental effects and their potential consequences are addressed within the sampled content.

At the same time, we added a subcategorization to classify the contents according to the purpose of the message: critical reflection, when the content is questioning a current consumer behavior or consumer bias; greenwashing, when the content exposes brands that have a positive communication and a poor environmental performance (Delmas & Burbano, 2011); unsustainable consumption, when it exposes the effects of consumer's behavior and the perpetuation of an endless consuming cycle that pollutes and affects the environment with serious consequences; and unsustainable production, wherein content creators criticize and expose the negative effect of certain industries which have high volumes of production at expense of the environment.

Furthermore, we analyze the use of visual and narrative resources to convey these environmental issues to impact the audience and engage them.

Critical Reflection

While Perú lacks the sheer number of eco-influencers found in Sweden, some Perúvian creators utilize a refreshingly straightforward approach. Their communication relies on facts to stress how the common consumer claims to tackle environmental issues. This critical lens exposes potential discrepancies, minimizing their common actions and overstating the impact of so-called sustainable acceptable actions. These influencers, besides having a reduced audience as nano-influencers, go beyond the "informer" role, inviting audiences to be conscious consumers and offering critical insights into brands with questionable practices.

One such creator, with an Instagram bio stating "Concerned about the climate crisis," emphasizes her rejection of brand collaborations, potentially bolstering her credibility in the eyes of her followers. The other in her "informer" role used her TikTok account to tell about the landing of SHEIN stores (the chinese fast fashion company & leading brand in TikTok in 2022) to the Latin American market, but at the same time exposing the weaknesses of the company regarding sustainability and questioning the future actions of the new CEO. It's particularly interesting that she uses this social network, coincidentally the same one where SHEIN is the number #1 retailer with more mentions (HypeAuditor, 2023). She even mentioned commenting on CEO Marcelo Claure's LinkedIn update about her concerns. Surprisingly, in our analysis, we could not find the same pattern of content from influencers in the other countries. Perhaps because critical thinking is embedded in the education system and culture, and sustainability is a well-addressed topic by institutions, green-influencers in

Sweden prioritize promoting critical reflection with a different approach. For this reason, we decided to classify it under the next subcategory. In contrast, content from the Philippines does not seem to reflect critical thinking, with influencers avoiding ventures beyond the status quo and refraining from critique.

Greenwashing

Swedish green-influencers demonstrate expertise in exposing non-authentic sustainability claims made by corporations. They readily identify companies with poor environmental performance that engage in green marketing, and they call them out to raise consumer awareness and promote a boycott of these brands.

Johanna Leymann (johannaleymann.se), a Swedish green-influencer and author of the books "Slow Fashion" and "Klä barnen" (Dress the Children), writes in an Instagram post:

> *"Jag har ju tidigare skrivit och pratat om textilsoptippar runtom i världen, och hur exporten av kläderna vi i globala nord inte längre vill ha ständigt förkläs som välgörenhet."* (I have previously written and talked about textile dumps around the world, and how the export of clothing we in the global north no longer want to be constantly disguised as charity.)

While not explicitly calling it greenwashing, she clearly exposes the practice and raises awareness among her followers to be skeptical of such marketing tactics, revealing the villain rather than the hero.

Maria Soxbo (mariasoxbo.se), a journalist, sustainability lecturer, co-founder of Klimatklubben.se, and green influencer, explicitly criticizes airlines, specifically SAS, for greenwashing by promoting the use of used frying oil as a sustainable solution (Figure 5):

> *"Siffran ovan säger precis allt. Använd frityrolja lyfts ofta som en bra lösning (eftersom det är en restprodukt). Men MÄNGDERNA? Ska vi verkligen käka pommes varje dag i 58 år för att sen (med högt kolesterol och blodtryck) kliva på planet till Thailand?"* (The number above says it all. Used frying oil is often considered a good solution (because it is a residue product). But the AMOUNT OF PEOPLE? Are we really supposed to chew French fries every day for 58 years before (high cholesterol and blood pressure) boarding a plane to Thailand?)

Figure 5: Instagram post from Maria Soxbo.

Similar to the previous example, this micro-influencer analyzes the situation and reveals the downside of the green marketing tactic: the impracticality of a seemingly sustainable action that could easily mislead consumers with minimal knowledge.

> *"Jag fattar att desperationen eldar på greenwashingen. Det finns inga lösningar som ens är i närheten av att vara skalbara nog för att vi ska kunna flyga som vi gör idag. Det här skriver även forskaren Björn Forsberg om i boken Fartrusiga. Några exempel:..."* (I understand that desperation is burning in the greenwashing. There are no solutions that even come close to being scalable enough for us to fly as we do today.)

She clearly takes responsibility for her role as an "informer" by going beyond news headlines and presenting facts to expose brands using simple data.

> *"❌ Nej, vi kan inte resa hållbart med flyg idag. Eller i morgon. Eller om fem år. Sluta ljug, @flysas med flera."* (No, we can't travel sustainably by flight today. Or in the morning. Or in five years. Stop the lies @flysas and more)

This analysis showcases the knowledge, responsibility, and coherence of these Swedish green-influencers. They are knowledgeable, able to observe and identify green marketing tactics, and can detect when something is not credible, prompting us to question: Are Perúvian and Filipino societies aware of greenwashing? Do they recognize these tricks from

brands, or do they simply accept everything at face value? Are these societies empowered with access to real information?

As observed, Swedish influencers, compared to their Perúvian and Filipino counterparts, play a more robust role. They are not just "informers"—they act as "activists" and "educators."

Unsustainable Consumption

A common theme in Perúvian content creators' work is addressing and raising awareness in society about unsustainable consumption. They highlight how excessive buying generates waste, which is a daily threat to marine and human life.

Given the importance of gastronomy in Perú, with many national dishes based on fresh seafood, chefs who are also influencers leverage their knowledge and experience to address the issue of overconsumption. They highlight the impact of excessive waste on the oceans, polluting the food chain and threatening human life. Their message also indirectly criticizes the inefficiency of policymakers and regulatory bodies in addressing this issue with comprehensive programs and solutions. However, the influencers' focus is not on criticizing institutions; their primary "call to action" is directed at consumers, promoting individual responsibility rather than relying solely on intervention from authorities.

For example, one influencer with a scientific background in geology presents research on the presence of plastic in marine animals and ultimately within humans (Figure 6). They also provide data on the country's per capita waste production and urge viewers to take action. Furthermore, they emphasize the consumerist society we participate in and encourage viewers to consider not just the amount of waste they generate but also how and what they consume.

Figure 6: Instagram post from Patricio Valderrama.

Philippine green-influencers raise awareness about the importance of mindful consumption habits in reducing plastic waste. They share statistics on global and national waste generation to educate their audiences. Celebrities with environmental consciousness who serve as ambassadors for private institutions or lead non-governmental organizations often capture the most attention on this topic. However, their expertise may not necessarily lie in environmental science. For instance, collaborator Antoinette Taus uses an attention-grabbing approach:

> *"Eek! Did you know that according to a study by the World Bank, every single day, the Philippines discards over 3 MILLION DIAPERS?! This is just one of them!"*

While this quote raises awareness, the messages from Filipino influencers could be more direct, critical, and informative to establish greater credibility and have a stronger impact, particularly considering the country's archipelagic geography and high reliance on seafood consumption.

> *"Gentle reminder that overconsumption is not cute #fyp #foryou #sustainability #wonderhomenaturalsph"*

Using platforms such as TikTok with high engagement, they could leverage this channel more effectively to provide accurate information and build credibility. Currently, some content simply criticizes "overconsumption" without a strong foundation. However, it is important to consider that eco-product brands might have dual motivations: education and sales/brand positioning.

By contrast, Swedish green-influencers focus their interventions on the fashion industry and promoting second-hand consumption to reduce new clothing purchases. However, they also highlight the challenge of excess even within the second-hand market, with Sweden exporting 28,000 tonnes of used clothing annually, as noted by Emma Sundh:

> *"Vi har så mycket secondhand i detta land att vi måste exportera bort 28 000 ton varje år."* ("We have so much second-hand in this country that we have to export 28,000 tonnes every year.")

Maria Soxbo emphasizes the messages about new trends and how they influence consumer desire for new garments. She argues that the concept of "wardrobe renewal" or "donation" often masks the continued cycle of unsustainable consumption, as quoted:

> *För oavsett vad modeföretagen gör, så kan de inte styra hur vi beter oss när vi lämnat butiken. Hur ofta vi köper nytt, hur många gånger vi tvättar (sönder) våra plagg, hur vi beter oss när ett plagg går sönder eller hur snabbt vi tröttnar.* ("Because no matter what the fashion companies do, they can't control how we behave when we leave the store. How often do we buy new, how many times do we wash our garments, how we behave when a garment breaks or how quickly we tire.")

Soxbo further criticizes the constant messaging surrounding new trends and wardrobe updates, which she believes perpetuates the cycle:

> *"Varje säsong matas vi med buskap om nya trender, "investeringar" (haha) vi borde göra till vår garderob och tips för rensning och förnyelse. Så har mönstret sett ut under mina 24 år inom media, och säkerligen långt dessförinnan också."* ("Every season we are fed messages on new trends, "investments" that we should make to our wardrobe and tips for cleaning and renewal. This is what the pattern has looked like during my 24 years in media, and certainly long before that as well.")

> *Men tempot ökar hela tiden – och spås fortsätta uppåt. Snabbare, mer och … sämre. För människor, planet och miljö.* ("But the tempo is increasing all the time – and it is predicted to continue upwards. Faster, more and… worse. For people, planet, and environment.")

Unsustainable Production

Swedish influencers demonstrate a clear understanding of consumer responsibility while also acknowledging the role of private organizations and public institutions. As representatives from a country known for popular fast-fashion brands like H&M, they have a critical perspective on the industry and are not afraid to hold brands and regulatory bodies accountable, as exemplified by Earth Wanderess:

> *"Fast fashion bygger på en arbetsmodell som inte kan vara hållbar. Priset av fast fashion är vår planet och människors liv."* ("Fast fashion is based on a working model that cannot be sustainable. The price of fast fashion is our planet and people's lives.")

They actively expose brands to raise consumer awareness, as demonstrated by Johanna Leymann:

> *"Det GÅR INTE att snacka hållbarhet samtidigt som butikerna är överfulla med plagg som förväntas kasseras om några månader. Det är volymerna som är grundproblemet, och det får vi aldrig glömma bort."* ("You CANNOT talk about sustainability at the same time as the stores are overflowing with garments that are expected to be discarded in a few months. It is the volumes that are the basic problem, and we must never forget that.")

Their criticism extends beyond individual companies. They raise awareness about the collective responsibility for change and the inherent flaws in volume-based business models, even those promoting sustainability initiatives:

> "Exactly everything that is multiplied eventually becomes a problem. And H&M's and many many other companies' business model is all about volumes. So it doesn't matter how much they talk about sustainability, IT WON'T WORK as long as they produce as much as they do…The companies that insist on blatantly lying on TV that it does what they can have to really examine themselves. REDUCE THE QUANTITY YOU PRODUCE!"

Swedish influencers function as proactive activists, not just informing but also promoting change and disrupting consumer autopilot behavior. Theresa Saaxo exemplifies this approach:

> *"The fashion industry is dirty, and our transformation must begin NOW."*

Interestingly, the influencers' messages from these three countries display a strong connection with their respective cultures. Perúvian influencers highlight the impact on natural resources and human health, emphasizing the importance of nutrition and gastronomy, a cornerstone of their culture and a significant industry. Conversely, Swedish influencers create content focused on tackling the fast fashion industry's impacts, a major player in their country's economy. While the Philippines is making progress in developing environmentally-conscious

influencers and a growing awareness of environmental issues, we observed a lack of content addressing unsustainable production practices. This could be related to the country's limited textile industry, despite their high consumption of second-hand clothing.

4.4   Chapter Summary

The results of our research suggest several conclusions. For one, we observed differences in the motivation for promoting circularity based on economic status. We see that this generalization is aligned with the results of the research of Wang et.al. (2019) wherein at the macro level, they found that the practice of sustainable consumption and production varies depending on economic conditions. Furthermore, the research of Kostakis and Tsagarakis (2021) show that recycling and circularity rates within the European Union are positively affected by economic wealth, alongside other social and economic determinants.

Content creators that belong in an advanced economy such as Sweden communicate circular economy as a necessary way of life, and one that must be adapted urgently for the sake of future generations. It can be observed that there is a sense of maturity in the way they view circularity, in that they communicate well-researched information about the dire effects of unsustainable consumption and production, as in the case of fast fashion. This maturity in their approach towards sustainability is seen in developed economies (Wang et.al., 2019).

Meanwhile, the content creators within emerging economies such as Perú and the Philippines portray circular economy as a concept that must be adapted for the sake of practicality (in the efficient use of resources, as in Perú) and economic opportunity (in the ability to earn an income through circularity activities, as in the Philippines). This perspective reflects the same economic motivation of adopting circularity practices among businesses and organizations, as told by Ghisellini et.al. (2016).

In a macro level perspective, adoption of sustainable consumption and production practices within developing economies are considered in its early stages, as governments prioritize economic development over environmental efforts (Wang et.al., 2019). Halog and Anieke (2021) also found that there is relatively little attention given to the concept of circular economy among low-income and middle-income countries. This suggests that an effective approach towards circularity adoption requires generating awareness on the economic viability of circular practices, which businesses and consumers would be interested in.

In addition to the economic aspect of circularity, we perceived within our research the thematic differences in circularity activities among the countries we observed. For Swedish

content creators, there was interest in circularity activities related to fashion. Within Perú, content creators gave attention to composting and recycling food waste. The Filipino content creators, meanwhile, communicated circular economy activities that highlighted economic gain. These varied portrayals of circularity suggest that the materialization of the concept is influenced by socio-cultural lenses within and among civil societies. Taking into context the influence of culture in framing circular economy provides a wider understanding of its construct and further adaptability. This conclusion aligns with the result of the research of de Morais et.al. (2021), where they found that cultural dimensions affect circular economy drivers.

5   Conclusion

5.1   Research Aims and Objectives

The topic of circular economy remains to be a relevant research field, not just among scientists, manufacturers, policymakers, and organizations that constantly seek ways to create efficiency and achieve sustainability, but also among marketers—particularly those that wish to gain a better understanding of consumer behavior and consumption within global markets. The primary aim of this paper is to bring to light how various social and cultural realities affect the way the concept of circular economy is portrayed. By analyzing content on social media platforms from creators that promote circular economy activities, we were also able to observe how they influence public discourse and how they serve as sources of informal learning on the topic of circular economy

For the analysis of our research results, we cite Flyvbjerg's (2006) argument for qualitative case study research, wherein he gives importance to case studies in scientific development: "One can often generalize on the basis of a single case, and the case study may be central to scientific development via generalization as supplement or alternative to other methods." We see the importance of context-dependent knowledge (Flyvbjerg, 2006) to answer the objectives of our study, as social and cultural 'truths' differ from one society to another—and it is in exploring these truths that we seek to understand how societies develop their perceptions towards global concepts.

Through our research, we are contributing to the discussion on circular economy, particularly on the role that economic situation and cultural context plays in advancing circularity, and ultimately, sustainability. The main theoretical contribution of our research is on understanding the different thematic dimensions that the circular economy concept is framed, using economic and cultural lenses in the motivation and formation of its messaging. This, together with other drivers and determinants, can consequently influence a wide scale adoption of circularity activities among governments, organizations, and consumers as a way of addressing the serious environmental effects of climate change.

5.2   Practical Implications and Future Research

While there is already extant literature on circular economy—from manufacturing processes to consumer perception—the framing of the concept has not been well-studied. This study hopes to contribute to the circular economy research and provide relevant insights in

cognizance of several actors: for businesses and organizations that are looking into communicating circularity within their processes; socio-civic institutions that help advance sustainability through education and awareness; and marketers that wish to understand the best strategies to utilize the influence of social media content creators to communicate circularity, among others.

Future research can take a look at case studies from other countries in other regions, and determine the frames that are being used in the context of cultural influences and personal motivations. In addition, researchers can delve further into how these frames are received and how they can effectively inspire circularity adoption among audiences.

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