

Affects in Online Stakeholder Engagement: A Dissensus Perspective

Itziar Castelló

i.castello@surrey.ac.uk
University of Surrey

David Lopez-Berzosa

D.Lopez2@exeter.ac.uk
Exeter University

A predominant assumption in studies of deliberative democracy is that stakeholder engagements will lead to rational consensus and to a common discourse on corporate social and environmental responsibilities. Challenging this assumption, we show that conflict is ineradicable and important, and that affects constitute the dynamics of change of the discourses of responsibilities. Based on an analysis of social media engagements in the context of the grand challenge of plastic pollution, we argue that civil society actors use mobilization strategies with their peers and inclusive-dissensus strategies with corporations to convert them to a new discourse. These strategies use moral affects to blame and shame corporations, and solidarity affects to create feelings of identification with the group and to avoid disengagement and polarization. Our research contributes to the literature on deliberative democracy and stakeholder engagement in social media in the collective constructions of discourses on grand challenges.

Key Words: agonism, deliberative democracy, dissensus, stakeholder engagement, emotions

Deliberative democracy is fundamentally concerned with stakeholder engagement, deliberation and the ethical issue of exclusion of disempowered stakeholders in the articulation of discourses about corporate social and environmental responsibilities (hereafter, discourses of responsibilities) (Donaldson & Preston, 1995; Phillips, 2003). Dissensus approaches to stakeholder engagement (e.g. Barthold & Bloom, 2020; Brand, Blok, & Verweij, 2020; Burchell & Cook 2013a; Couch & Bernacchio, 2020; Dawkins, 2015; Dawkins, 2019; Fougère & Solitander, 2020; Rhodes, Munro, Thanem, & Pullen, 2020; Sorsa & Fougère, 2020; Whelan 2013; Winker, Etter, & Castello, 2020) claim that agonism, rather than the rational consensus advocated by previous literature (e.g. Baur & Palazzo, 2011; Burchell & Cook 2013b; Palazzo & Scherer, 2006; Roloff, 2008; Scherer & Palazzo, 2007), should be the aim of the

engagements. Dissensus approaches argue that rational consensus is merely the temporary result of a provisional hegemony; it is a stabilization of power that always entails some form of exclusion (Brand et al., 2020; Dawkins, 2015; Mouffe, 2005) since every possible discourse is hegemonic in nature and implies an ineradicable violence (Mouffe, 2005). Agonism aims instead at building relations between stakeholders in such a way that the other stakeholders are recognized as legitimate adversaries (Mouffe, 2005). In agonistic relations, conflict is accepted and agency is given to disempowered actors who, through constructive engagements, can attempt to change hegemonic discourses.

Mechanisms such as compromise and arbitration (Brand et al., 2020; Dawkins, 2015) have been proposed as means to reach agonistic closure in stakeholder engagement, since they give agency to the disempowered actor and explain the power dynamics whereby each stakeholder might maintain its original views and ideals. However, these negotiation mechanisms are not “a complete embodiment of agonist ideals” (Dawkins, 2015: 13) since they fall short of accepting dissensus and antagonism as the fundamental nature of the relation between the stakeholders and also cannot explain the dynamics of conflict beyond a temporary closure.

We draw on the agonism theories of Mouffe (1999, 2005) and Connolly (1993) to argue that conflict dynamics have to be understood through the analysis of the “ethics of disharmony”. Ethics of disharmony is not only concerned with the different moral categories that characterize opponent stakeholders, i.e., their different views and ideals, but also with the inherent constitution of conflict between the opponents in an us versus them discrimination that leads to the creation of identities (Mouffe, 2005). Identities are constituted through collective “passion” (Mouffe, 2005: 103). Passion is a certain type of collective affects that constitute identification. Affects are “desires [that] are not reducible to the pursuit of rational interests” (Voronov & Vince, 2012). Affects are malleable and can be agentially oriented to contribute

to the dissemination of counter-hegemonic discourses (Mouffe, 2014). The way in which this agentic re-orientation is achieved is, however, yet to be explored in agonistic studies.

Improving our understanding of how passion can be strategically oriented in dissensus is even more important at the turn of the 21st century, when social media engagements are fundamentally shaping the discourses of responsibility (Castelló, Etter, & Nielsen, 2016; Margetts, John, Hale, & Yasseri, 2015; Whelan, Moon, & Grant, 2013). Engagements in social media and in particular on Twitter, considered a key platform for political and social debates (Grčar, Cherepnalkoski, Mozetič, & Novak, 2017; Howard, 2020; Marichal & Neve, 2020), have been described as irrational (Rogstad, 2016; Wollebæk, Karlsen, Steen-Johnsen, & Enjolras, 2019) with affects polarizing discussions (Berger & Milkman, 2012; Kramer, Guillory, & Hancock, 2014; Quercia, Ellis, Capra, & Crowcroft, 2011) and, as a result, annihilating the possibility of rational consensus or even any form of deliberation (Kramer, Guillory, & Hancock, 2014; Wollebæk, Karlsen, Steen-Johnsen, & Enjolras, 2019). In contrast, the dissensus perspective on social media engagements (Anderson, 2011; Marichal & Neve, 2020; McCosker, 2014; Rahimi, 2011) suggests that constructive engagements and deliberation are possible. Dissensus approaches to social media have explored the configuration of passion online as general affective expressions (Marichal & Neve, 2020; McCosker, 2014). However, there is little knowledge on the strategic manipulation to change hegemonic discourses. Our research question therefore asks: *how can stakeholders mobilize affects to change hegemonic discourses?*

In order to address this issue, we present an inductive-deductive, longitudinal study of the strategic efforts of civil society actors to convince corporations and other peer activists that they should reduce plastic production and consumption rather than recycle it. Through a qualitative and quantitative analysis of Twitter messages, supported and triangulated with semi-structured interviews, naturalistic observations, and archival data, we reveal that civil society

actors employ a mobilization strategy when interacting with their peers and an inclusive-dissensus strategy when trying to convert corporations into their counter-hegemonic discourse. Surprisingly, civil society organizations did not resort to strategies such as compromise and arbitration, which would have required them to negotiate with corporations on the moral position as typically proposed by the literature. On the contrary, civil society actors maintained their moral positions but, in order to avoid disengagement and polarization, used inclusive-dissensus strategies that combined moral affects with solidarity affects to keep their moral positions and make corporations feel included in the community of anti-plastic pollution fighters. We also show that affects contribute to the interactivity of the relation making engagements constructive, rather than destructive, as argued by the literature.

We contribute to the literature in three ways. First, we add to the studies of deliberative democracy and dissensus in stakeholder engagement by pointing at the strategic use of affects in the dynamics of change of hegemonic discourses. Second, we show how passion can be mobilized through inclusive-dissensus strategies, thus contributing to agonistic pluralism theories and to collective action studies on affects. Third, we contribute to the understanding of social media as public agorae for stakeholder engagement and deliberation.

THEORETICAL BACKGROUND

Dissensus in Stakeholder Engagement

One of the major philosophical projects that has confronted modernity is concerned with understanding how to control affects in the construction of public discourse. In the 17th century, philosophers such as Descartes and Thomas Hobbes advocated for rationality in debates to avoid exaggeration and distortion in arguments. The exaltation of reason and the development of scientific knowledge were both aimed at finding consensus and, ultimately, peace. In the 20th century, with the emergence of globalization and the increase of corporate power (Beck, 1992;

Scherer & Palazzo, 2011), the central role of rational argument and consensus orientation was extended to the processes of deliberative democracy and more concretely, stakeholder engagement (Scherer & Palazzo, 2007). Based on liberal-democratic ideals, stakeholder engagement was mostly conceived as the means of achieving rational consensus amongst different stakeholders (Baur & Palazzo, 2011; Burchell & Cook 2013b; Palazzo & Scherer, 2006; Roloff, 2008; Scherer & Palazzo, 2007), which would shape the discourses of responsibilities. These authors claimed that stakeholder engagement should be based in liberal forms of deliberation that should follow the conditions of ideal speech (Habermas, 1984), with all parties acting as free and equal citizens and engaging with mutual respect in communicative action (Habermas, 1998b). The closure of debates draws its validity from the communicative presuppositions that fair processes allow fair arguments to emerge during deliberation (Habermas, 1998a).

Dissensus approaches to stakeholder engagement and deliberation (e.g. Barthold & Bloom, 2020; Brand et al., 2020; Burchell & Cook 2013a; Couch & Bernacchio, 2020; Dawkins, 2015; Dawkins, 2019; Fougère & Solitander, 2020; Rhodes et al., 2020; Sorsa & Fougère, 2020; Whelan 2013; Winker et al., 2020) have emerged as a critique to the rational consensus of liberal-democracy approaches. Dissensus scholars argue that every possible discourse is fundamentally hegemonic by nature, and this implies an ineradicable violence and power because “antagonism is inherent in human relations” (Mouffe, 2005: 101). Hegemonic discourses describe “the [discursive] practices of articulation through which a given order is created and the meaning of social institutions is fixed” (Mouffe, 2013: 2). As a critique to the liberal-democratic perspectives, dissensus approaches argue that rational consensus can exist only as the temporary result of a provisional hegemonic discourse, being a stabilization of power that always entails some form of exclusion (Mouffe, 1999).

Building on the agonistic pluralism theories of Mouffe (1999, 2005) business ethics scholars on deliberative democracy (e.g. Burchell & Cook 2013a; Dawkins, 2015; Dawkins, 2019) propose that “the objective of stakeholder engagement should not be benevolence toward stakeholders, but agonistic processes and structures to contest corporate prerogative such that [disempowered] stakeholders are able to protect their own interests” (Dawkins, 2015: 3). That is, we need to understand how to turn antagonistic relations into agonistic relations instead of striving for a fair but futile deliberation (Brand et al., 2020; Dawkins, 2015; Fougère & Solitander, 2020; Mouffe, 2005). Agonistic relations aim at domesticating conflict, building relations in such a way that the other stakeholders are no longer perceived as “the enemy to be destroyed but as an adversary, that is, somebody whose ideas we combat but whose right to defend those ideas we do not put into question, since they are legitimate opponents” (Mouffe, 2005: 102).

Dissensus perspectives on stakeholder engagement and deliberation have focused on the strategies to domesticate conflict (Brand et al., 2020; Dawkins, 2015; Fougère & Solitander, 2020; Levy, Reinecke, & Manning, 2016). Thus, Brand et al. (2020) present *compromise* as “an agreement in which all sides sacrifice something of value ... to improve on the status quo” (Brand et al., 2020: 20). Dawkins (2015) proposes *arbitration* in which a neutral actor administers the hearing and ultimately renders a decision. Compromise and arbitration are therefore negotiation strategies that allow disempowered stakeholders to reach concrete agreements on particular goals or actions. They explain the power processes in which each stakeholder maintains its original views and ideals yet are able to reach closure.

Compromise and arbitration strategies, however, fall short of explaining the ongoing dynamics of the accommodation of hegemonic discourses. That is, how disempowered stakeholders get to change hegemonic discourses in a manner that goes beyond the simple processes of one-off or temporary negotiation. Furthermore, a fundamental aspect of agonistic

pluralism, dismissed by previous dissensus approaches, is the “ethics of disharmony” (which is present in the agonistic pluralism theories of Mouffe, inspired by Žižek (Žižek, 1992)). The ethics of disharmony makes two claims: first, that the invocation of different moral categories (or “ideas of good”) is what characterizes opponent stakeholders and; second, that deliberative processes “always involve decisions that require making a choice between conflicting alternatives” (Mouffe, 2013: 3). Therefore, the ethics of disharmony is not only concerned with moral decision per se, but also with the nature of the ethical subjectivity and the processes of identity formation around them (Rhodes et al., 2020).

Thus, from the ethics of disharmony perspective, stakeholder engagement dynamics are intrinsically concerned with business ethics for two main reasons. First, because attending to dissensus “bears an obligation to respond to and intervene in the erased conflicts in which victims cannot signify their damages” (Ziarek, 2001: 92). Second, because engagements and deliberation should be analyzed in a context of conflict and diversity of subjectivities in a non-rationalistic way. To this last point, Mouffe (2005) argues that conflict closure is concerned with the creation of an “us” by the determination of a “them”. That is, identities are created that confirm the establishment of us versus them discrimination, promoting the eventual transition from enemy to adversary. Closure should be viewed as being more akin to conversion than as a process of rational persuasion. “Compromises are, of course, possible... but they should be seen as temporary respites in an ongoing confrontation” (Mouffe, 2005: 102). The process of conversion requires that the participants have come to understand the identities of the others and “to engage with its difference, however this engagement happens in violence and exclusion” (Mouffe, 2005: 134) and through the expression of collective “passion” (Mouffe, 2005: 103).

Passion as Constitutive of Dissensus

Passion is defined as “a certain type of common affects, those that are mobilized ... in the formation of the we/they forms of identification” (Mouffe, 2014: 155). Passion helps to underline the relation between the collective and partisan character of stakeholder engagement and form the basis of struggles against other groups (Connolly, 1993).

Affects are malleable and susceptible of being agentially oriented in different directions; the task of disempowered stakeholders is to foster affective attachments that contribute to the dissemination of counter-hegemonic discourses (Mouffe, 2014). However, agonistic pluralism studies say little about how affects are nurtured and promoted beyond claiming that a moral affect can be displaced by a contrary affect that is stronger than the original (Mouffe, 2005). In focusing on moral affects, Mouffe dismisses the creation of collective identities. Further research needs to explore how passion can be agentially oriented to promote counter-hegemonic discourses and eventually lead to an adversary’s conversion. Collective action scholars have analyzed how affects can be agentially managed to shape collective identities by the leadership of social movements (Levy et al., 2016; Snow, 2001) or social entrepreneurs (Barberá-Tomás, Castelló, De Bakker, & Zietsma, 2019). They use the word “emotions” to describe what Mouffe calls affects. We retain Mouffe’s terminology for consistency and use affects as synonymous of emotions and affective as emotional. For collective action scholars, affects are “desires [that] are not reducible to the pursuit of rational interests” (Voronov & Vince, 2012). They are also indicators of what is salient to people (Goodwin, Jasper, & Polletta, 2001; Jasper, 2011; Voronov & Vince, 2012) and can be used as mechanisms of power (Creed, Hudson, Okhuysen, & Smith-Crowe, 2014). As such, affects can be agentially shaped to reflect negative or positive self-evaluations and can also influence the evaluations of others (Creed et al., 2014). The resulting internalized unconscious representation of what is good/bad help to impose or generate self-imposed limitations on behavior (Voronov

& Vince, 2012), while also signaling identification with the norms, practices, and beliefs of the surrounding environment (Wright, Zammuto, & Liesch, 2017).

Hence, there are two types of affects in collective action: first, the affects that create the sense of what is good or bad (moral affects), and second, the affects that nurture a sense of identification (solidarity affects). *Moral affects* involve “feelings of approval or disapproval based on moral intuitions and cultural principles as well as the satisfaction we feel when we do and feel the right (or wrong) thing” (Jasper, 2011: 287). People violating socially accepted rituals have been observed to suffer from moral affects such as anxiety and embarrassment (Collins, 1990), guilt, and shame (Stets & Carter, 2012), while anger and disgust are responses to the other’s violation of the social order (Rozin, Lowery, Imada, & Haidt, 1999). Moral affects have also been described as being strategically elicited by leaders or entrepreneurs by, for example, promoting ‘moral shock’ (Barberá-Tomás et al., 2019; Jasper & Poulsen, 1995). Moral shock is “the vertiginous feeling that results when an event or information shows that the world is not what one had expected, which can sometimes lead to articulation or rethinking of moral principles” (Jasper, 2011: 287). Moral affects-based strategies may have paradoxical effects (Reger, 2004). For example, studies of discourses of climate change showed how the strategic use of moral affects caused denial, apathy, and avoidance for people to cope with the unpleasant feelings evoked (O’Neill & Nicholson-Cole, 2009). This is particularly likely to be the case when the moral cause induces guilt that requires potential stakeholders to face the error of their ways (Barberá-Tomás et al., 2019).

Solidarity affects: Solidarity affects make “individuals feel a desire to defend and honor the group” (Collins, 1990: 33). They are feelings of status provoked by group membership and express the social density of the interaction (Collins, 1990). Strategic uses of solidarity affects create a sense of shared membership based on common achievements (Taylor, Kimport, Van Dyke, & Andersen, 2009) and a sense of affinity and positive affects about the group (Jasper,

2011). Solidarity affects provide the idea of social affection or “affective loyalties”. These are affects such as love, liking, respect, or trust relating to attachment or aversion to others in the definition or redefinition of oneself towards said others (Jasper, 2011). Solidarity affects also incorporate an emotional bonding kindled by a shared purpose. When used strategically, such bonding can act as a reminder of the common objectives related to collective action (Jasper, 2011).

On the one hand, despite of the deep understanding of affects by collective action studies, they fail to explain stakeholder engagement processes. This is because, studies of collective action stress the importance of affects in building moral resonance between the leader and the targets (Giorgi, 2017; Schrock, Holden, & Reid, 2004; Snow & Benford, 1988). That is, leaders and targets have a degree of agreement about fundamental moral principles. However, moral resonance is rare in stakeholder engagements amongst corporations and civil society (Arenas, Albareda, & Goodman, 2020). Thus, collective action theories do not explain how affects can be elicited if ineradicable conflict is assumed to be inherent. On the other hand, despite studies on dissensus on stakeholder engagement have pointed at the importance of conflict as ineradicable, they have dismissed the dynamics of conflict, constituted by affects. Our research addresses this gap by looking at how stakeholders can mobilize affects to change hegemonic discourses of responsibilities when conflict is ineradicable.

METHODOLOGY

Context: From Recycling to Refuse Single-Use Plastic

Plastic pollution is one of the most important grand challenges of the 21st century (DG_Environment, 2011). Since the mid-1990s, when Captain Charles Moore discovered a vast area of floating plastic debris in the Pacific (which he termed the ‘Great Pacific Garbage

Patch'), marine scientists and environmental activists began to actively denounce plastic pollution in the USA and UK. By 2008, Algalita, founded by Captain Moore, and other organizations, such as 5Gyres, Heal the Bay, Plastic Pollution Coalition, Greenpeace, etc. (see Table 1 for more examples of actors) followed, forming an emergent institutional infrastructure (Waddock, 2008) of civil society advocating for a change in the public understanding of plastic pollution (Moore, 2012). These organizations claimed that the issue of plastic pollution had been faked by corporations. They argued that the most cogent solution to the issue of plastic pollution was to refuse single-use plastics (rather than to *recycle* them, which was the main thrust of corporations). As noted by one of our informants, "recycling is the big Trojan horse – it is the main lie – the biggest mistake" since "a plastic bag takes thousands of years to biodegrade in nature" (Colin, 2010). In the 2000's, the idea that one might refuse or reduce single-use plastic to "live a plastic free life" was perceived as radical and contentious (Terry, 2012), not only by corporate actors but also by most citizens in the USA and UK.

By 2020, however, the importance of plastic reduction had permeated corporate discourses. Big corporations, such as Unilever, Starbucks, Nestlé, etc., have integrated the reduction of plastic in their corporate social responsibility policies (Castello et al., 2019). Also, governments and corporations in the USA and UK have developed multi-stakeholder initiatives, such as the UK Plastics Pact (signed in 2018), and The Alliance to End Plastic Waste. These include terms related to the elimination and eradication of plastics, advocating for circular economy solutions that favor plastic elimination.

Social media platforms have been hosting debates on the issue of plastic pollution between civil society actors and corporations. More specifically, Twitter has for the last 10 years been the social media platform preferred by corporations and civil society actors to voice their activities (Lee, Oh, & Kim, 2013; Rybalko & Seltzer, 2010). Studies of political theory and business ethics have shown the influence of Twitter on social and political discourses. For

example, the 2016 US presidential elections and the 2016 UK Brexit Referendum (Grčar et al., 2017; Howard, 2020; Marichal & Neve, 2020). The frequent use of Twitter by social figures such as Sir David Attenborough and Greta Thunberg, makes the platform one of the key spaces for deliberation on grand challenges such as climate change and plastic pollution (Bennett, 2003; Dahlgren, 2005; Marichal & Neve, 2020).

For the purposes of our research, we analyze these debates going back to 2008, when the first specialized NGOs on plastic pollution, including Plastic Pollution Coalition and 5Gyres, joined Twitter, to gain understanding about their strategies for changing the hegemonic discourse on plastic pollution.

Data Sources and Collection

To address our research question, we mobilized a rich set of data and studied the evolution of the discourses on plastic pollution over 12 years (from 2008 to 2020). Since 2010, we have been building expertise on the issue of plastic pollution through semi-structured interviews, naturalistic observations, and the collection of archival data. This data has been partially used in an article published by the authors (Authors a, 2019). Unique to the current article, we gathered social media data, specifically from Twitter. Looking at the social media data with expert eyes allowed us to develop a novel methodology that combines artificial intelligence techniques with qualitative interpretation. Table 1 summarizes the data and its uses.

== Insert Table 1 about here ==

Semi-structured Interviews

From 2010 to 2018, we conducted 50 semi-structured interviews using a snowball sampling approach. Interviews, lasting fifteen minutes to two hours, were recorded and transcribed with interviewees' consent (1,789 minutes transcribed). We conducted 20 interviews with the

founders, employees, and advisors of one of the major USA NGOs dedicated to plastic pollution. We carried out 14 interviews with leaders of other well-established NGOs and 16 interviews with individual activists and leaders of small anti-plastic organizations. Of the 50 people interviewed, 45 were active in social media, especially Twitter, and 4 of them were social media managers. Interview data helped us to better understand the key actors in the plastic pollution debates, their moral positions, and their strategies.

Naturalistic Observations

Since 2010 we have been gathering observational data from various events: five talks with industry associations, lobbyists, and consultants specializing in plastic; seven civil society organization events in California from August 2010 to March 2011 and June to September 2013; three workshops with civil society organizations, scientists, and lobbyists (in USA, UK). This data provided a better understanding of the different moral positions and strategies in the discourses on plastic pollution.

Archival Data

We collected information from the websites and sustainability reports for 12 of the corporations that are most active on the issue of plastic pollution. The outcome of this data was published in an industry report (Authors b, 2019). To increase the internal and external reliability of our analysis and further understand the issue of plastic pollution, we used media articles, websites, emails, newsletters, academic articles, and two books by key actors (Moore, 2012; Terry, 2012). The archival data helped us to better understand the evolution of the discourse of the different key actors, as well as the relationships between these actors, including the corporations.

Social Media Data

Social media platforms enable unobtrusive data gathering (Vesa & Vaara, 2014: 293) from “naturally situated behaviours” (Kozinets, 2002: 63) and interactions. We collected data from 48 Twitter accounts, using the Twitter API to harvest the tweets, and developed our own code to process and curate the dataset. The selection of the sample was based on a coding performed from the interviews, observations, and archival data. The database spans 126K records and contains most of the tweets generated by the key actors from January 2008 to June 2020. We found a total of 26285 tweets containing the words “plastic, recycling, recycle” conforming our final sample.

== Insert Table 2 about here ==

Data Analysis

To be able to analyze the large amount of data, specifically the tweets, while being able to answer our research question, we followed four main analytical steps in an explorative and inductive-deductive method of theory generation:

Step 1: Open Coding on Actors and Discourses

We first performed open coding to identify key actors and the main features of their discourses. Based on the data from the interviews, observations, and archives we developed a list of 48 key actors participating in Twitter on the issue of plastic pollution. We validated this list with the founder of one of the key NGOs. The list contained NGOs, key activists, scientists, associations, and corporations. We took a community-based approach (Kozinets, 2015) to the analysis of social media. Knowing who the actors are, what they think, and how they talk allowed us to interpret quantitative results in context (Beninger, 2017). It also helped to create two categories of actors that we designated as either civil society (including NGOs, activists,

scientists, and associations) or corporations according to their opposed discourses on plastic pollution in 2008. The corporate/civil society segregation is often used in business ethics research (Arenas, Albareda, & Goodman, 2020; Brand et al., 2020).

Step 2: Explorative Approach to the Online Deliberation

We took an explorative approach to understand key features of the online deliberation (Steenbergen, Bächtiger, Spörndli, & Steiner, 2003) defining three key features: (1) constructiveness; (2) conversational themes and actors; and (3) measures of interactivity (reference, endorsement, and amplification).

Constructiveness. Constructiveness suggests a low level of emotional toxicity in the messages constituting the engagements. A very high level of destructive messaging means that deliberation is not possible as actors with polarized views are not willing to recognize other actors as adversaries (Mouffe, 2005). We developed a natural language processing (NLP) engine that departs from the conventional, dictionary-based, algorithmic approaches to the analysis of text (e.g. Illia, Sonpar, & Bauer, 2014; Short, Broberg, Cogliser, & Brigham, 2010) and uses artificial intelligence techniques to achieve significant improvements in text classification tasks (Young, Hazarika, Poria, & Cambria, 2018). We trained our engine to compute a set of basic affects (Crowston, Allen, & Heckman, 2012). We further validated the performance of the engine using best practices in artificial intelligence (Devlin, Chang, Lee, & Toutanova, 2018) and Google's technical support and found the engine's precision levels to be above 85%. Assisted by the engine, we classified tweets on the basis of their level of "toxicity" as basic affect, on a scale from 0 to 1. We further validated the result of the measure of constructiveness with another sample of 20K tweets based on the discourse of climate change activist Greta Thunberg. We selected Greta's case given that mass media articles have found

her to be the recipient of hate speech (Shrimpsley, 2019); we therefore expected significant levels of destructive messages. In fact, we found low levels of destructive messages against this activist (0.5%), which supports our claims that conversations in Twitter can be constructive and not only destructive and polarized. Table 3 provides examples of constructive and destructive messages from our data sample on plastic pollution.

-----Insert Table 3 about here-----

Conversational Themes and Actors. We took an exploratory look at the hashtags (represented by #) and main actors (represented by @) referenced in the tweets. Hashtags provide a first understanding of the central themes in the discourses (Rogstad, 2016) and references define who is willing to talk with whom (Boyd, Golder, & Lotan, 2010). We coded the database to map the hashtags and @ symbols over time to assess their weight in the sample. We concluded two phases that defined the evolution of the conversations: a first phase (2008 to 2016) and a second phase (from 2017 to 2020), as explained in the findings section. Table 4 shows the most frequent hashtags and @ per stakeholder per phase.

-----Insert Table 4 about here-----

Measures of Interactivity (reference, endorsement, and amplification): We also performed a quantitative analysis of the interactivity of messages as a measure of engagement (Castelló et al., 2016; Marichal & Neve, 2020). Interactivity measures define the capacity of the tweet to be part of a broader conversation, whether this is because it mentions another user in the conversation (using the symbol @), or because it is supported by other users (indicated by ‘likes’) or because it is retweeted (a retweet is when the user forwards to her network a message that was not written by her). Retweets have been defined as elements in which key users or influencers are able to have their voices echoed (Rogstad, 2016; Wu, Mason, Hofman,

& Watts, 2011). Based on the above literature, we define three main measures of interactivity: reference, endorsement, and amplification. Reference is a discrete categorical measure with 3 categories: Category 0 (tweets with no @); Category 1 (tweets referring to other users by @); and Category 2 (tweets directly responding to previous tweets). Endorsement is a discrete ordinal measure with 3 levels: Level 0 (tweets with 0 likes); Level 1 (tweets with 1-10 likes in the 75% quantile); and Level 2 (tweets with more than 10 likes above the 75% quantile). Amplification is a discrete ordinal measure with 3 levels: Level 0 (tweets with 0 retweets); Level 1 (tweets with 1-12 retweets in the 75% quantile); and Level 2 (tweets with more than 12 retweets above the 75% quantile). With these measurement instruments in place, we analyzed the level of interactivity of the constructive and destructive tweets. Given the categorical nature of reference, we did not include this in the comparison. From these measures we concluded that, in our sample: 1) most of the tweets had a constructive intent; and 2) constructive tweets had higher levels of interactivity. Table 5 describes the measures of reference, endorsement, and amplification in constructive vs destructive tweets.

-----Insert Table 5 about here-----

Encouraged by these results, we continued analyzing the sample to answer our research question about the use of affects in the strategies of civil society actors to change hegemonic discourses.

Step 3: Data Coding

We performed an inductive-deductive process of open coding to identify the discursive strategies of civil society. Two researchers looked at 10% of the constructive tweets of the civil society sample to seek out initial patterns. Upon looking at the data, we first noticed the importance of affective expressions such as “shameful!”, “shame”, “horrific”. We also observed that users asked questions, such as “Does microplastic make us sick?” Users

expressed joy and excitement about their arguments (e.g., “This is great news!”) Based on the diversity of the affective content and the literature, we coded the data with our engine to produce a first quantitative understanding of the emotional content of the data. We defined two emotional signals: moral affects (as a composite of anger, fear, and sadness) and solidarity affects (a composite of love, joy, and trust). It took us several cycles of iterations, involving reading tweets and classifying them both manually and assisted by the natural language processing engine, to create a codification of the tweets that reflected the qualitative understanding of the engagement activities based on a high percentage of tweets. We complemented the codification of affective signals (moral affects and solidarity affects) with other key codes like “?” and, interactivity signals such as @, retweets, and links that allowed us to better define groups with complete meaning. We ended up with 4 coding categories: (a) High moral affects (composed of high moral affects, low solidarity affects, question mark), (b) Moral but not affective (composed of low moral affects, low solidarity affects, question mark, reference high, has a link or is a retweet), (c) Medium solidarity with interactivity (composed of low moral affects, medium solidarity affects, reference high, is a direct response) and, (d) High solidarity affects (composed by low moral affects, high solidarity affects). In this process, the authors visually inspected a random sample (30% of each category) to compute accuracy levels. A total of 85.3% of all the tweets inspected were classified with false positive rates ranging from 1.2% to 5.6%, (refer to Table 6), which we considered a good result.

-----Insert Table 6 about here-----

Step 4: Aggregate Dimensions and Model Development

After the initial coding, we sought out particularities in the two different phases previously identified and in relation to conversations with peers or corporations. We cross-checked our emergent understandings by returning to the data, inspecting the data per phase and returning to

the interview data to ensure our interpretations were consistent. We then developed a model that refined our first ‘by phase’ coding and created eight first order categories, aggregating them in four second order themes and two aggregate dimensions. Table 7 describes the data structure and provides data exemplars. We then analyzed levels of affective signals (moral and solidarity) and the interactivity measures for each of the first order categories and we depict the means in Table 8. To segregate by type of actor, we add to the engine the tag “mentions a corporation or not”.

----- Insert tables 7 and 8 about here ---

FINDINGS

We describe the social media strategies used by the civil society actors to transform the hegemonic discourse of plastic pollution from one that fixates on recycling to one that acknowledges the importance of reducing plastic. We first show how that constructive engagements happen in social media. Second, we describe the strategies.

On the constructiveness of the engagements, we found that only 1.4% of the Tweets were destructive (given toxicity threshold of 0.65) (see Table 3 for examples of constructive vs unconstructive tweets). We also found that constructive messages had higher levels of interactivity (as evidenced by basic statistics such as the difference in the means and standard deviations, see Table 5). The difference is also statistically significant in the two ordinal variables considered: endorsement and amplification, (MANOVA Test $F(2;26066) = 48.02$, $p < 0.001$). Furthermore, we found that affective tweets had higher levels of interactivity than the less affective ones (see Table 8, also explained below). We therefore argue that, despite stakeholder engagement occurring between stakeholders with opposed views, Twitter was a space of constructive engagements. Affects were used to drive change in audience’s discourses. Affective messages had higher level of interactivity than the less affective ones.

We observed two strategies carried out by civil society actors that we cluster in two phases: a first phase from 2008 and 2016 in which civil society actors mainly performed a “mobilization” strategy and; a second phase, from 2017 and 2020 in which civil society actors maintained the mobilization strategy with peers while embarking on an “inclusive-dissensus” strategy with corporations. In the mobilization strategy, civil society actors promoted a moral position that focused on the importance of reducing plastic consumption. They also worked on creating a sense of collective identity by including their peers in the conversation and creating collective excitement. Surprisingly, in the inclusive-dissensus strategy civil society actors did not negotiate a common perspective with corporations. They maintained their moral position, shaming and blaming corporations for the pollution. At the same time, they recognized the legitimacy of corporations, including them in their conversations and celebrating a common approach when it occurred. Key to these two strategies was the use of moral and solidarity affects. Moral affects were used to enhance the moral position while solidarity affects avoided disengagement and polarization. Recognizing the legitimacy of corporations in the debate helped the corporations to convert to some of the key features of the civil society discourse, such as the importance of reducing plastics and the principles of a circular economy. Figure 1 represents the two strategies and its relation to affects.

-----Insert Figure 1 about here-----

Phase 1 (2008-2016): Mobilization Strategy

Since their foundation around 2008, most civil society organizations such as Plastic Pollution Coalition, Algalita, and 5Gyres used Twitter to promote the counter hegemonic discourse of plastic pollution. Twitter was the preferred tool, as Grant, founder of a lead NGO, explained: “I learn every day how to connect with people. Twitter has helped a lot with that. Twitter is awesome, is incredible. Because you can only use 140 characters you have to be concise.

People notice yourself [sic].” (Grant, 2009). The mobilization strategy consisted of promoting the new moral position amongst other peer activists (with emphasis on the importance of reducing plastic), while making them feel part of a growing collective.

Promoting a New Moral Position

A new moral position based on the idea of reducing plastic was promoted by first, questioning the previous moral position. Second, stimulating moral affects about the cause of plastic pollution which made peer activists feel overwhelmed about the issue of plastic pollution, it also made them feel affectively attached to it.

Questioning Previous Moral Position and Disseminating Information on the New One. A common way of disarticulating the discourse of recycling in tweets and rearticulating the discourse of refusing was to state the problems about recycling and support the importance of reducing plastics with new information. This was communicated via the sharing of links to scientific reports or other information about the impacts of plastic pollution. The links to scientific reports or reputable mass media articles helped civil society actors to not only present their new moral position, but also to legitimize their arguments and bolster their positions as knowledge providers. For example, in the following tweet, Algalita questioned the recycling principles and provided a link to a recent report issued in the GreenBride Guide. “How many of those shiny plastic sippy cups will still be here in 30 years? Let's hope none.

@GreenBrideGuide <http://t.co/t3WHvsNpAA>” (Algalita, 2013-11-19). Greenpeace, in the following tweet, pointed at the problem of plastic consumption and the fact that plastic is not recycled. To support this view, they shared a scientific map of plastic pollution: “5 trillion pieces of plastic floating in our oceans. This map shows you where. <http://grnpc.org/IgNMi>” (Greenpeace, 2016-05-29).

Civil society actors also used Twitter hashtags such as: #plasticpollutes, #plasticpollution, #Refuse, #plasticfree. They created new vocabularies for rearticulating the discourse about plastic, which enabled people to communicate differently. As argued by Colin, the co-founder of one of the lead NGOs: “We started to create a kind of collective intelligence; a crowdsourcing of ideas... It was really helpful... There is an increasing whole market of alternatives to plastic and suddenly somebody was finding something new and sharing it...” (Colin, 2018). Promoting the new moral position by sharing ideas is shown in the following tweet by Manuel Maqueda, co-founder of Plastic Pollution Coalition: “@realrawlive <http://twitpic.com/7f9f9> - How do I buy these zero-plastic bottles?” (ManuelMaqueda, 2009-06-15). In line with the sharing of fresh knowledge while promoting the new vocabulary of the plastic-free life and plastic pollution refusal, some of the civil society actors organized public debates that helped them to question previous moral positions and position themselves as experts in the cause, as exemplified by lead activist, Beth Terry, in the following tweet: “In the mood to chat with me and <http://t.co/CFPz8vz4cq> about the chemicals in plastic? Join us on Twitter in about 30 minutes. #LTKH” (PlasticfreeBeth, 2014-11-18).

Stimulating Moral Affects About the Cause. Pointing out the impossibility of recycling and sharing links and tips for how to live a plastic-free life was not enough to disarticulate the discourse of recycling. Refusing plastic required an enormous effort to change every day behaviors. Civil society actors used messages with strong moral affects (e.g., horror and anger) to spark moral shock. As argued by Will, a lead activist: “It began with emotional connection that people have with beautiful places and animals learning that this places and animals are being harmed by our pollution. That was the entry point. Simple explanation. This is how people get engaged” (Will, 2010). The strategic use of affects is shown in the following tweet by Greenpeace: “Terrible—8m tons of #plastic waste are dumped into the ocean each year, and

it's growing <http://grnpc.org/IgtzX>" (Greenpeace, 2015-07-22), and the following: "Horrible. Our #oceans could contain more #plastic than fish by 2050. <http://grnpc.org/IgSZD>" (Greenpeace, 2016-01-20). The repetition of moral affective expressions such as "horror" or "terrible", combined with images of baby albatrosses, whales, and sea otters dying from ingesting colorful plastic objects (bags, lids, toys) helped to promote the moral shock needed to shake behaviors, as in the following tweet: "The Plastic You Use Is Killing Animals the World's Most Remote Islands [#plasticpollution](http://ow.ly/PlwUf)" (5gyres, 2015-07-08). These images were intended to viscerally connect people to the problem, and promote engagement, as evidenced by high levels of moral affects (1.4), amplification (0.9), endorsement (0.82), and reference (0.8), compared with the less affective tweets (see Table 8).

Create a Sense of Collective Identity

In the mobilization strategy, civil society actors also worked at creating a sense of collective identity by including peers in the conversations, and creating collective excitement with highly affective tweets.

Including Peers in the Conversation. Civil society actors strategically worked on connecting with other peers, as Grant, founder of a lead NGO, explains: "I've chosen to support some people: J. Nichols, Manuel Maqueda ... It is all very tactical. They have their own networks. It is about the influencers. It is also [a] reciprocate [sic] [strategy]" (Grant, 2009). Civil society actors were, for example, retweeting others' messages: "RT @1Child1Planet: @PlasticfreeBeth Agree, saving money is an occasional bonus of going plastic free, but shouldn't be primary motivator" (Bridget M Llewellyn, 2014-04-17), which indicated a willingness to include others in the conversation. The above tweet is also an example of connecting with other people via a direct call, such as by using the @ symbol (i.e., @PlasticfreeBeth and @1Child1Planet) in

conjunction with expressions such as “agree”. This strategy helped civil society actors to not only include more people in the debate, but to also to promote moral rightness about the importance of reducing plastic consumption. There is a similar dynamic, in the willingness to connect with other actors via @ and expression of moral rightness, in the following tweet that concerns the problem of wrapping food: “Totally agree with @tomsfeast via @guardian - no need to smother fruit and veg in plastic wrapping...” (AnnaTurns, 2017-06-28).

Most of the messages issued by civil society actors in this strategy were aimed at relating to peer organizations or key activists such as Plastic Pollution Coalition (@PlasticPollutes), Beth Terry (@PlasticfreeBeth), 5Gyres (@5gyres), J. Wallace Nichols (@wallacejnichols), etc. (see Table 4). As argued by Janette, a lead activist, hashtags and @ symbols were used to connect with others: “Through social media, the use of hashtags has been fantastic to connect up with other people. There is a real online community of people ... Also, it fosters a sense of that collective identity.” (Janette, 2018).

Creating Collective Excitement Amongst Peers. As a fundamental part of their strategy, civil society actors issued highly emotional tweets aimed at creating a sense of collective excitement and endorsement. Tweets contained expressions of joy but also of trust. These intended to create solidarity affects, helping activists feel part of a collective and creating a sense of belonging to a community. As argued by one of the founders of a lead NGO, the creation of a sense of collective identity was a premeditated strategy: “I wanted to highlight always that we were together in this... we are learning together... was my way to apply compassion” (Colin, 2018).

In the following tweet, Daniela Russo, co-founder of one of the major NGOs, expressed her support for a new organization (KUMU) in which she created solidarity affects with the expression (awesome!): “RT @KUMUlab: Awesome wording! "retro innovation" meaning

going back to things that worked. Dan Imhoff says at #beyond_plastic event” (Daniella Russo, 2013-06-14). Other expressions of solidarity affects (such as “nice work!”) were used by the civil society actors to promote a sense of achievement and a sense of collectivity: “Nice work! @SeaWorld Says Goodbye to Plastic Bags | <http://bit.ly/IeqKGt>” (5Gyres, 2012-04-27). Greenpeace, in the following tweet, expressed happiness and joy about people’s intention to stop using plastic bags: “Happy International Plastic-Bag Free Day! Try not using plastic bags today...and why not tomorrow? and the next day?” (Greenpeace, 2012-07-03). Collective excitement tweets had higher level of interactivity than less affective tweets in the “including the peers” category: amplification (0,60 compared to 0.46); endorsement (0,77 compared to 0.57) (see Table 8).

Corporate Discourse in Twitter

From 2008 to 2016, corporations were still reluctant to use Twitter to engage in plastic-related conversations. Only 3,180 related tweets were issued by corporations (by way of comparison, NGOs posted 11,090 tweets in the same period). Corporate hashtags mainly presented their position as regards recycling and sustainability: #recycling, #EarthDay, #recycle, #greenresolutions, #SustLiving. Their @ symbols signaled other companies or private initiatives e.g., @PepsiCo, @ekocycle, @iamwill (see Table 4 for more examples). The silence of corporations was confirmed by Grant: “We are independently jumping. BP [British Petroleum as example of a corporation] is missing an opportunity, it helps. They cannot convert the masses. [What we do is] what drives a global transformation.” (Grant, 2009).

Phase 2 (2017-2020): Inclusive-dissensus Strategy

Around 2017, the engagement scene in Twitter started to change. Corporations increased their involvement in the debate and civil society actors modified their engagement strategies to

connect with corporate actors in the conversations. But civil society actors did not negotiate a new moral position with corporations. They maintained their moral position, focused on reducing plastic production and consumption, while including corporations in the conversations by identifying them as partly responsible for the problem and inviting them to join the cause by converting to the moral position of reducing plastic. This was done with an inclusive-dissensus strategy. The inclusive-dissensus strategy consisted of maintaining the dissensus in the moral position while being inclusive with the adversary to create a certain sense of collective identity and avoid disengagement and polarization.

Maintaining the Dissensus in the Moral Position.

The first step in maintaining the dissensus in the moral position was to reinforce in the messages the importance of reducing plastic and to stimulate moral affects by shaming and blaming the corporations.

Reinforcing the Moral Position. The importance of plastic reduction was maintained as a key message in the new tweets. The hashtags continued to reinforce the moral position on plastic pollution (e.g., #BreakFreeFromPlastic, #noplasticstraws, see Table 4 for more examples).

Tweets were also strategically used to reinforce the reduce/refuse message, as shown in the following tweet by Greenpeace: “Would you rather — have oceans full of fish, or full of plastic? It’s time to #BreakFreeFromPlastic! Here’s what you can do: <https://act.gp/2qNp6q5>” (Greenpeace, 2018-04-20). In the following tweet, the Plastic Pollution Coalition (PPC) quotes Diana Cohen, a lead activist and founder of PPC, who criticizes the throwaway culture implicit in the recycling discourse:

“I’m hoping people wake up to the beauty of reusables and disengage from all of these throwaway to-go cups and this whole throwaway mentality that we’ve become acclimatized to, because it’s completely unsustainable,” said Dianna Cohen @implicitweet <https://t.co/ZZrPf3FYar>” (Plastic Pollution Coalition, 2018-08-28).

Some of these tweets also pointed at companies and their recycling policies or, as in this tweet, the claim of biodegradability:

“Many companies claim to be "biodegradable" but can they back their claims? We recently did a study to be released next year on the biodegradability of many products and have found that most of them are greenwashing. After all, it's still plastic.” (5Gyres, 2017-12-18).

Other tweets targeted specific corporations, such as CocaCola or Nestlé, and their recycling strategies:

“Companies like @cocacola, @nestle and @pepsi are increasing the amount of single-use plastic. Recycling can't manage this. Ask companies to stop #plasticpollution they helped to create: <https://act.gp/2EDGFSQ> #BreakFreeFromPlastic” (Greenpeace, 2018-10-23).

Stimulating Moral Affects by Shaming and Blaming the Adversary. Reinforcing the moral position was complemented with highly affective tweets. In the inclusive-dissensus strategy, rather than focusing the the problem of plastic pollution (as in the mobilization strategy), the tweets directed blame at the corporations with the aim of making them feel ashamed. Specific corporations were identified as responsible for the production of plastic and also blamed for their adherence to the discourse of recycling. The following tweet from Plastic Pollution Coalition shamed supermarkets for pollution and their recycling strategies, using expressions such as “Shelves of shame”: “Shelves of Shame: Are These the Worst Recycling Offenders in the Supermarkets? #plasticpollutes <https://t.co/XMltPtwXhU> <https://t.co/g2i8YdCwCE>” (PlasticPollutes, 2019-05-17). 5Gyres directly blamed CocaCola for polluting the oceans, arguing that the company had “choked the oceans”: “Hey #CocaCola: Stop choking our oceans with plastic! #BreakFreeFromPlastic <http://thndr.me/caBWwW>” <https://fb.me/9raYdW130>” (5gyres, 2018-01-02). In this tweet, Greenpeace used the expression “we have had enough!” to express its anger when blaming Nestlé for the problem: “Single-use plastic pollutes our environment and destroys communities. @Nestle produced 1.7 million tonnes of plastic last year, and has no plans to stop. Tell @Nestle we have had enough! <https://act.gp/2HKAJbu> #BreakFreeFromPlastic” (Greenpeace, 2019-03-28).

Blaming and shaming corporations was conceived as not so much a way of attacking corporate reputations but as a way of activating solutions, as evidenced by the Greenpeace tweet that calls for Nestlé to reduce the production of plastic. This is also explained by Helena, a lead activist:

“We use that [tweets with images of dead animals and strong affects] to activate solutions... for example, in California there’s a bill called connect the caps that would require that Nestlé and Coca-Cola and others, who are producing single use bottles, have the cap connected to the bottle... So that was a great example of how we activate those solutions... If it’s a ladder of engagement, if you will, it’s all about moving them from that first step of seeing the symbol, seeing the photo... and then going all the way to that step of getting educated and getting activated” (Helena, 2018).

Be Inclusive to Create a Sense of Collective Identity.

To create a sense of collective identity, civil society actors created tweets that included the adversary in the conversation and celebrated a common approach.

Including the Adversary in the Conversation. The shaming and blaming tweets were complemented with tweets that aimed at including the corporations in the conversations with the intent of taking them up “the ladder of engagement” (as argued by Helena in the above quote). These tweets were less emotional, containing low signals of moral affects and solidarity affects, (0.4 and 0.63 respectively, refer to Table 8). The intention of these tweets and hashtags was to develop links between the civil society and the companies, and create direct conversations. For example, civil society used some hashtags for initiatives the corporations were also promoting (e.g., #reuse, #recycle, #EarthDay, #circulareconomy, #DidYouKnow) (see Table 4 for more examples). This connection with corporate conversations was also reflected in the strategic use of the @ symbol as a sign of inclusion. Civil society actors connected through the @ symbols with corporations such as Nestlé, CocaCola, Unilever, Pepsico (see Table 4 for more examples). This strategy was reflected in the following tweet by Greenpeace directed at CocaCola: “Hey @CocaCola, you hope no one notices all the plastic

bottles floating in the ocean. But we did <http://act.gp/2nD5NQB>” (Greenpeace, 2017-04-18).

This tweet, like many others, is confrontational and ironic but other tweets were more inclusive, as exemplified by the following tweet that uses the first-person plural (“Let’s”) to signal Greenpeace involvement: “@CocaCola produces over 100 billion plastic bottles every year. Let's do something about it. <http://act.gp/2oQPQ9I> #EndOceanPlastics” (Greenpeace, 2017-04-10). The following tweet, by 5Gyres, shows a will to directly engage with a corporation, in this case, Starbucks:

“@Starbucks serves 4 BILLION+ plastic-lined cups, lids & straws each year, most aren’t recyclable. Demand they address #StarbucksTrash TODAY at the shareholder meeting at 10am! 🗨️ <https://www.stand.earth/starbucks-problem> #breakfreefromplastic #sneakystyrene Check our FB for Live vid!” (5gyres, 2018-03-21).

Celebrating a Common Approach. Civil society actors complemented the inclusion tweets with tweets with high solidarity affects. Civil society actors celebrated in their tweets a common approach with companies, as in the following tweet by Plastic Pollution Coalition:

“Happy #EarthDay! We are excited to announce the launch of #BYOBottle, a music industry effort to turn the tide on plastic pollution! 🗨️ Click to commit to #BYOBottle & join the movement to reduce #plasticpollution in the music industry. @BYO_Bottle <https://t.co/H01LaeuojO> <https://t.co/SRWzApgMNq>” (PlasticPollutionCoalition, 2019-04-22). In the following tweet, National Geographic celebrates IKEA and HP joining a new plastic

reduction initiative: “❤️🗨️ #SocialGoodSpotlight: We’re so happy to see @HP and

@IKEAUSA joining @nxtwaveplastics in their commitment to “turn off the tap” of plastic entering the ocean #planetorplastic” (National Geographic, 2018-11-04). Civil society also

issued tweets with high solidarity affects when celebrating changes in the companies’

discourses and strategies, as in the following tweet by Greenpeace: “The UK supermarket chain

@IcelandFoods is going plastic free! They've committed to eliminate plastic packaging in all their own-brand products within 5 years 🙌🙌🙌🙌 Who's next? <http://act.gp/2FJdiey>

#PlasticFree” (Greenpeace, 2018-01-16). The following tweet by Heal the Bay is also highly

affective (using the heart symbol and expressions such as “going green!”) when celebrating the

company Yelp becoming greener and therefore converting to some of the new discourse of reducing plastic:

“What's for dinner? @Yelp is going green! Now, when you check-in to a restaurant, Yelp will ask about plastic usage and plastic-free options. All the collected data will help inform customers about sustainable restaurants by next year 🌱❤ <https://t.co/d7RE1K5VsJ> (HealTheBay, 2019-05-03).

Celebratory tweets had higher level of interactivity than less affective tweets in the “including the adversary” category: amplification (0,62 compared to 0.32); endorsement (0,73 compared to 0.37) (see Table 8).

Corporate Discourse in Twitter

From 2017 onwards, corporations significantly increased their presence in Twitter’s plastics debate, posting five times the number of tweets they had posted in the previous period (2,639 versus 520), (refer to Table 4). Corporate discourse in Twitter continued to be mainly concerned with the importance of recycling, as in this example from Unilever: “We’re pleased to announce a new partnership with @Veolia to improve waste collection and recycling infrastructure, starting in India and Indonesia. Our joint ambition is to help create a #circulareconomy for plastic waste <https://t.co/JqH8C9sEHu>” (Unilever, 2018-10-24).

Although their moral position on the importance of recycling had not changed, corporations had introduced into their discourse some elements of the counter hegemonic discourse of reducing plastic. For example, corporate hashtags signaled a slightly new moral position that called for “beating plastic pollution” or they cited the principles of the circular economy, a central concept of which is to reduce the amount of polluting materials in the design of products (e.g., #BeatPlasticPollution, #CircularEconomy). Other hashtags signaled campaigns and events that were shared by the civil society organizations (e.g., #ScaleforGood, #EarthDay, #DidYouKnow) (see more in Table 4).

Furthermore, tweets from some corporations, such as Starbucks, signaled some conversion to the new discourse of reducing plastic: “We plan to eliminate single-use plastic straws globally by 2020 (Starbucks, 2018-07-09).

Summing up, we show how from 2017 onwards, civil society actors began to recognize the legitimacy of corporations in their engagements on plastic pollution. The inclusive-dissensus strategy allowed them to maintain a strong moral position, shaming and blaming corporations, but at the same time, to include the corporations and make them feel part of the community of people working on reducing plastic pollution avoiding disengagement and polarization. We also observed that from 2017 onwards, corporations joined the debate. Even if they did not radically change their discourse, some companies began to adopt some of the elements of the discourse of the civil society.

DISCUSSION

This article described the strategies of civil society actors in their efforts to change the hegemonic discourses led by corporations. Surprisingly, and contrary to the negotiation strategies presented by the literature, civil society actors did not negotiate their moral position. On the contrary, they maintained a strong moral position, which they supported with highly affective shaming and blaming messages. Yet, to avoid disengagement and polarization, they used solidarity affects to make the adversary feel part of the group of anti-plastic pollution fighters. We call this an inclusive-dissensus strategy. We revealed the importance of affects in the engagement processes, since they enabled the inclusive-dissensus strategy. They also lead to more interactivity than the less affective ones.

We contribute to the literature in three ways. Our first contribution is to the studies of deliberative democracy that take a dissensus approach to stakeholder engagement by revealing the use of affects to drive change in hegemonic discourses. Second, we show how passion can

be mobilized through inclusive-dissensus strategies; this contributes to the agonistic pluralism theories and also to collective action studies of affects. Third, we contribute to the debate about social media platforms operating as public spaces for stakeholder engagement and deliberation.

Deliberative Democracy and the Dissensus Perspective to Stakeholder Engagement

We first argue that, by attending to the ethical underpinnings deliberative democracy and the emerging dissensus approaches to stakeholder engagement and deliberation (Barthold & Bloom, 2020; Brand et al., 2020; Burchell & Cook 2013a; Couch & Bernacchio, 2020; Dawkins, 2015; Dawkins, 2019; Fougère & Solitander, 2020; Rhodes et al., 2020; Sorsa & Fougère, 2020; Whelan 2013; Winker et al., 2020), we are able to challenge the rationalist orientation of previous studies of stakeholder engagement and deliberation in general. Through the ethics of disharmony (Mouffe, 2005), we analyzed engagement processes not only by reference to ideas of the good (as seen in liberal deliberative approaches to deliberation and also in most dissensus perspectives) (Couch & Bernacchio, 2020; Mouffe, 2004) but by taking in to account the dynamic processes in which antagonism and violence are ineradicable and in which affects constitute the relations between actors. We therefore contribute to the re-orientation of the debates of deliberative democracy by moving away from moral plurality discussions to looking at the ways in which plurality is constituted.

The rationalist approach to stakeholder engagement and deliberation has also been criticized by ethical theories such as the ethics of care (Manning, 1992) and the work of other feminist scholars (e.g. Gilligan, 1993; Held, 1993) which point out the inseparability of nature and reason, and the importance of understanding judgements as made by “embodied persons with feelings for others and for themselves” (Held, 1993: 36). By looking at the role of affects in engagement, we are able to expand the understanding of how identity is constituted in contestation between actors (Arenas et al., 2020; Dawkins, 2019) even when they have different logics of governance (Dawkins, 2019; Sorsa & Fougère, 2020). We also shed light on

the processes of recognition and acceptance of legitimacy, which are fundamental to the power that resides in difference (Rancière, 2006).

Attention to affects can also help us to look beyond negotiation mechanisms such as compromise and arbitration (Brand et al., 2020; Dawkins, 2015; Dawkins, 2019; Whelan 2013) that are, by nature, transient, and look instead at the dynamics of the construction of the hegemonic discourses. These dynamics have been explained theoretically in aspirational talk discourses that examine the paradoxes generated amongst stakeholders (Winker et al., 2020); however they have not been sufficiently analyzed empirically and in relation to passion. Through an empirical case, we show that these dynamics are constituted by the agentic use of moral affects coupled with solidarity affects.

We also respond to recent calls to examine how the processes of stakeholder engagement contribute to understanding conflict and pluralism in the development of discourses of responsibility in grand challenges (Burchell & Cook 2013a; Ferraro, Etzion, & Gehman, 2015; George, Howard-Grenville, Joshi, & Tihanyi, 2016). We argue that many conflicts between stakeholders and corporations seem to be not so much existential (Dawkins, 2015) as centered around collective identification. We contribute to this literature by proposing an agonistic framework that normalizes conflict.

The Role of Affects in Changing Hegemonic Discourses

We contribute to the understanding of passion and its role in steering change of hegemonic discourses. We explain how identities are constituted by going beyond displacing a moral affect with one that is stronger (Mouffe, 2005) and argue for the importance of considering moral affects in combination with solidarity affects. Inclusive-dissensus shows the importance of the constitution, through affects, of the identities of opposed parties and of understanding how different affects work to compensate or enhance each other.

Our work also sheds new light on the role played by affects in the dynamics of change in sustainability issues (Barberá-Tomás et al., 2019; Fan & Zietsma, 2017). Whereas prior work has focused on the role of affects in identification processes (Creed et al., 2014), in the social structures that accommodate reflexive and dis/embedding arguments (Ruebottom & Auster, 2018), or in framing processes (Giorgi, 2017), we propose a dissensus approach that looks at the ethical-political dynamics of stakeholders in conflict. Inclusive-dissensus shows that change of counter-hegemonic discourses goes beyond the resonance with moral affects defining new frames (Giorgi, 2017) or the use of moral shock through images (Barberá-Tomás et al., 2019). A subtle strategy of compensation of moral and solidarity affects is needed to keep the promotion of the new moral frame while creating a sense of identification that avoids polarization.

Stakeholder Engagement Online and Social Media as New Public Agora

Our article presents the case of a vibrant online debate between civil society actors and corporations. Attending to online and offline information, we show the evolution of hegemonic discourses and some mechanisms that enabled change. Using a mixed-methods approach and triangulating different sources of information, we reveal the importance of understanding online engagements as culturally and contextually located (McCosker, 2014). We find that online engagements can be constructive rather than just polarized and destructive. We also show how affects can promote engagements. We therefore contribute to the understanding of the constructive nature of online stakeholder engagements and deliberation (Anderson, 2011; McCosker, 2014; Rahimi, 2011; Schultz, Castelló, & Morsing, 2013) rather than the destructive nature that has been presented by previous literature (Kramer et al., 2014; Wollebæk et al., 2019).

We go beyond a political analysis of agonism and online dissensus (Rahimi, 2011) to explain how identification is created and to highlight the role played by affects in the

development of hegemonic discourses. We contribute to the understanding of the configuration of passion online (Marichal & Neve, 2020; McCosker, 2014). Yet, our article goes beyond the consideration of passion as comprising general affective expressions such as grief and pride (McCosker, 2014) or moral affects such as resentment (Marichal & Neve, 2020), to consider passion in the constitution of identity through the combination of solidarity and moral effects. We present inclusive-dissensus as an agentic form of passion to deal with opposed stakeholders.

Our case contributes to the conceptualization of social media platforms as a public sphere or agora for deliberation (Bennett, 2003; Castells, 2007; Papacharissi, 2010). Social media platforms have been described as a venue to “fight” against irresponsible business conduct (Lyon & Montgomery, 2013), as a catalyst for social movement ideas (Bennett, Segerberg, & Walker, 2014; van Den Broek et al., 2017), and as a primary outlet for citizens wishing to express their concerns and voice their opinions (Barberá, 2015; Russell Neuman, Guggenheim, Mo Jang, & Bae, 2014). Our case reveals the importance of understanding the inherent conflict in the deliberation processes and the importance of managing affects to change discourses.

Limitations and Further Research

Our research has several limitations. First, there are limitations to the reproducibility of passion. There may be grand challenges in which inclusive-dissensus strategies might work; there may be others in which the logics of different parts and the importance of other factors might be so irreconcilable that agonist dialogues might never occur. Furthermore, building deliberative capacity, such as inclusive-dissensus, might not be possible for less powerful stakeholders who are unable to adequately represent their interests (Ehrnström-Fuentes, 2016; Soundararajan, Brown, & Wicks, 2019). We claim that inclusive-dissensus has to be

understood in context of the futility and fragility of political agreements and the temporary nature of any social discourse (Mouffe, 2005).

Second, social media data features brief exchanges that occur without the benefit of nonverbal cues. This can cause difficulty in distinguishing power dynamics and affects. Yet the inclusion of highly affective words and other signs in our natural language processing (NLP) techniques improves the identification of these affects. In addition, Twitter, as public and naturalistic digital data, has significant advantages since it provides digital traces of interactions not mediated by the researcher (Balogun, Jacobs, Jarzabkowski, Mantere, & Vaara, 2014). Supplementing social media data with other data sources, including interviews, archives, and observational data, enabled us to ameliorate this limitation.

Third, we focus on social media interactions and therefore we may not go far enough “in terms of concretely tying discourse to physical and material arrangements of force” (Hook, 2001) in (Hardy & Thomas, 2014: 345). The observation of online engagements might not explain other factors (e.g., the exploitative, regulatory, market, etc., conditions) that might trigger conversion to the counter-hegemonic discourse. Although studies of social media engagements have been criticized for not addressing the role of materiality in interpretation (Stigliani & Ravasi, 2012), our triangulation of data sources and methods (social media, interviews and naturalistic observations) provides good evidence of our results.

We finally acknowledge the limitations of the study deliberations that arise from our exclusive reliance on Twitter. Twitter has been criticized for its anonymity and asynchronous nature, which can encourage quick affective responses to issues rather than reflective talk (Yardi & Boyd, 2010). Anonymity allows for a mix of context-dependent “identity negation” and “identity creation” that can lead to both inclusive and exclusive discourses, promoting honesty and deception alike (Asenbaum, 2018). To avoid this limitation, we followed a community-based approach (Kozinets, 2015) to data collection. Thus, rather than collecting the

whole spectrum of tweets mentioning plastic pollution, we selected a limited sample of relevant actors. We checked their offline identities by interviewing most of them or complementing their Twitter information with secondary data from websites and mass media sources. We believe that by capturing the most important stakeholders in the debate we can better understand the dynamics of stakeholder engagement. However, future researchers could create databases of the entire spectrum of tweets and actors in a particular debate, and such creation of identity discourses can help to improve understanding of the dynamics of the engagements. For example, a closer analysis of chains of reactions could shed light on the nuances of passion strategies that combine moral and solidarity affects. Further research could also explore how social discourses of responsibility are created and evolve (Barthold & Bloom, 2020) through a multiplicity of actors, that include not only the central actors in the community but also peripheral actors, even bots and actors with fake identities. The different ways in which passion is constituted by these actors could improve understanding about how different moral positions confront and evolve, and how we might overcome processes that put forward the value of “conquest” (Barthold & Bloom, 2020) or are related to fake news (Howard, 2020) to promote the values of care (Manning, 1992) and the construction of a better society.

CONCLUSIONS

Our case illustrated the use of affects in social media to change of collective discourses around corporate responsibilities. We showed how affects can be used to domesticate hostility.

Understanding how to domesticate hostility is an important ethical problem since, as argued by Mouffe (2005:82) “when antagonisms are not able to find agonistic, i.e. legitimate, forms of expression” they “take extreme forms, putting into question the very basis of the existing order”. The use of affects has implications for managers who are willing to engage in the collective management of grand challenges.

REFERENCES

- Anderson, C. W. 2011. Deliberative, agonistic, and algorithmic audiences: Journalism's vision of its public in an age of audience transparency. *International Journal of Communication*, 5(19): 529–547.
- Arenas, D., Albareda, L., & Goodman, J. 2020. Contestation in multi-stakeholder initiatives: Enhancing the democratic quality of transnational governance. *Business Ethics Quarterly*, Online first.
- Asenbaum, H. 2018. Anonymity and democracy: Absence as presence in the public sphere. *American Political Science Review*, 112(3): 459-472.
- Balogun, J., Jacobs, C., Jarzabkowski, P., Mantere, S., & Vaara, E. 2014. Placing strategy discourse in context: Sociomateriality, sensemaking and power. *Journal of Management Studies*, 51(2): 175-201.
- Barberá-Tomás, D., Castelló, I., De Bakker, F., & Zietsma, C. 2019. Energizing through visuals: How social entrepreneurs use emotion-symbolic work for social change. *Academy of Management Journal*, 62(6): 1789–1817.
- Barthold, C., & Bloom, P. 2020. Denaturalizing the environment: Dissensus and the possibility of radically democratizing discourses of environmental sustainability. *Journal of Business Ethics*, 164: 671-681.
- Baur, D., & Palazzo, G. 2011. The moral legitimacy of ngos as partners of corporations. *Business Ethics Quarterly*, 21(4): 579–604.
- Beck, U. 1992. *What is globalization?* Cambridge: Polity Press.
- Beninger, K. 2017. Social media user's views on the ethics of social media research. In L. Sloan, & A. Quan-Haase (Eds.), *The sage handbook of social media research methods*: 57-73. London: SAGE Publications Ltd.

- Bennett, W. L. 2003. *New media power: The internet and global activism*. Oxford: Rowman & Littlefield.
- Boyd, D., Golder, S., & Lotan, G. 2010. Tweet, tweet, retweet: Conversational aspects of retweeting on twitter, *Hawaii International Conference on System Sciences*: 1-10.
- Brand, T., Blok, V., & Verweij, M. 2020. Stakeholder dialogue as agonistic delieration: Exploring the role of conflict and self-interest in business-ngo interaction. *Business Ethics Quarterly*, 30(1): 3-30.
- Burchell , J., & Cook , J. 2013a. Csr, co-optation and resistance: The emergence of new agonistic relations between business and civil society. *Journal of Business Ethics*, 115(4): 741 – 754.
- Burchell , J., & Cook , J. 2013b. Sleeping with the enemy? Strategic transformations in business-ngo relationships through stakeholder dialogue. *Journal of Business Ethics* 113(3): 505-518.
- Castelló, I., Etter, M., & Nielsen, F. A. 2016. Strategies of legitimacy through social media: The networked strategy. *Journal of Management Studies*, 53(3): 402-432.
- Castello, I., Malcom, R., Murphy, R., O'Meara, N., Peacock, M., & Wyles, K. 2019. Recycle, reuse, renew: Food packaging pledges and promises in the fight against plastic pollution. Guilford, UK: University of Surrey.
- Castells, M. 2007. Communication, power and counter-power in the network society. *International Journal of Communication*, 1: 238-266.
- Collins, R. 1990. Stratification, emotional energy, and the transient emotions. In T. D. Kemper (Ed.), *Research agendas in the sociology of emotions*: 27-57. Albany: State University New York Press.
- Connolly, W. E. 1993. *The terms of political discourse*. Princeton, New Jersey: Princeton University Press.

- Couch, R., & Bernacchio, C. 2020. The virtues of equality and dissensus: Macintyre in a dialogue with Rancière and Mouffe. *Journal of Business Ethics*, 164: 633-642.
- Creed, W. D. E., Hudson, B. A., Okhuysen, G. A., & Smith-Crowe, K. 2014. Swimming in a sea of shame: Incorporating emotion into explanations of institutional reproduction and change. *Academy of Management Review*, 39(3): 275-301.
- Crowston, K., Allen, E. E., & Heckman, R. 2012. Using natural language processing technology for qualitative data analysis. *International Journal of Social Research Methodology*, 15(6): 523-543.
- Dahlgren, P. 2005. The internet, public spheres, and political communication: Dispersion and deliberation. *Political Communication*, 22(2): 147-162.
- Dawkins, C. E. 2015. Agonistic pluralism and stakeholder engagement. *Business Ethics Quarterly*, 25(1): 1-28.
- Dawkins, C. E. 2019. An agonistic notion of political csr: Melding activism and deliberation. *Journal of Business Ethics* Online first.
- Devlin, J., Chang, M. W., Lee, K., & Toutanova, K. 2018. Bert: Pre-training of deep bidirectional transformers for language understanding. *arXiv preprint arXiv:1810.04805*.
- DG_Environment. 2011. Plastic waste: Ecological and human health impacts. In S. f. E. Policy (Ed.), *News Alert Service, In-depth Report: European Commission' Directorate-General Environment*.
- Donaldson, T., & Preston, L. E. 1995. The stakeholder theory of the corporation: Concepts, evidence and implications. *Academy of Management Review*, 20(1): 65-91.
- Ehrnström-Fuentes, M. 2016. Delinking legitimacies: A pluriversal perspective on political CSR. *Journal of Management Studies*, 53(3): 433-462.

- Fan, G. H., & Zietsma, C. 2017. Constructing a shared governance logic: The role of emotions in enabling dually embedded agency. *Academy of Management Journal*, 60(6): 2321-2351.
- Ferraro, F., Etzion, D., & Gehman, J. 2015. Tackling grand challenges pragmatically: Robust action revisited. *Organization Studies*, 36: 363-390.
- Fougère, M., & Solitander, N. 2020. Dissent in consensusland: An agonistic problematization of multi-stakeholder governance. *Journal of Business Ethics*, 164: 683-699.
- George, G., Howard-Grenville, J., Joshi, A., & Tihanyi, L. 2016. Understanding and tackling societal grand challenges through management research. *Academy of Management Journal*, 59(6): 1880-1895.
- Gilligan, C. 1993. *A different voice*. Cambridge, MA: Harvard University Press.
- Giorgi, S. 2017. The mind and heart of resonance: The role of cognition and emotions in frame effectiveness. *Journal of Management Studies*, 54(5): 712-738.
- Goodwin, J., Jasper, J. M., & Polletta, F. 2001. Introduction: Why emotions matter. In J. Goodwin, J. M. Jasper, & F. Polletta (Eds.), *Passionate politics: Emotions and social movements*: 1-24. Chicago: University Chicago Press.
- Grčar, M., Cherepnalkoski, D., Mozetič, I., & Novak, P. K. 2017. Stance and influence of Twitter users regarding the Brexit referendum. *Computational social networks*, 4(1): 6.
- Habermas, J. 1984. *The theory of communicative action: Vol. 1. Reasons and the rationalization of society*. Boston, MA: Bacon Press.
- Habermas, J. 1998a. *The inclusion of the other*. Cambridge, MA: MIT Press.
- Habermas, J. 1998b. The normative models of democracy. In J. Habermas (Ed.), *The inclusion of the other. Studies in political theory*: 239-252. Massachusetts: MIT Press.
- Hardy, C., & Thomas, R. 2014. Strategy, discourse and practice: The intensification of power. *Journal of Management Studies*, 51(2): 320-348.

- Held, V. 1993. *Feminist morality, transforming culture, society, and politics*. Chicago, USA: The University of Chicago Press.
- Hook, D. 2001. Discourse, knowledge, materiality, history: Foucault and discourse. *Theory & Psychology*, 11: 521-547.
- Howard, P. N. 2020. *Lie machines: How to save democracy from troll armies, deceitful robots, junk news operations, and political operatives*. London: Yale University Press.
- Illia, L., Sonpar, K., & Bauer, M. W. 2014. Applying co-occurrence text analysis with alceste to studies of impression management. *British Journal of Management*, 25: 352–372.
- Jasper, J. M. 2011. Emotions and social movements: Twenty years of theory and research. *Annual Review of Sociology*, 37: 285-303.
- Jasper, J. M., & Poulsen, J. D. 1995. Recruiting strangers and friends: Moral shocks and social networks in animal rights and anti-nuclear protests. *Social Problems*, 42: 493-551.
- Kozinets, R. 2002. The field behind the screen: Using netnography for marketing research in online communities. *Journal of Marketing Research*, 39: 61 - 72.
- Kozinets, R. V. 2015. *Netnography*: Wiley Online Library.
- Kramer, A. D. I., Guillory, J. E., & Hancock, J. T. 2014. Experimental evidence of massive-scale emotional contagion through social networks. *Proceedings of the National Academy of Sciences*, 111(24): 8788–8790.
- Lee, K., Oh, W., & Kim, N. 2013. Social media for socially responsible firms: Analysis of fortune 500's twitter profiles and their csr/csir ratings. *Journal of Business Ethics*, 118(1): 791-806.
- Levy, D., Reinecke, J., & Manning, S. 2016. The political dynamics of sustainable coffee: Contested value regimes and the transformation of sustainability. *Journal of Management Studies*, 53(3): 364–401.

- Manning, R. C. 1992. *Speaking from the heart: A feminist perspective on ethics*. Maryland, USA: Rowman & Littlefield Publishers, Inc.
- Margetts, H., John, P., Hale, S., & Yasseri, T. 2015. *Political turbulence: How social media shape collective action*. New York, NY: Princeton University Press.
- Marichal, J., & Neve, J. 2020. Antagonistic bias: Developing a typology of agonistic talk on twitter using gun control networks. *Online Information Review*, 44(2): 343-363.
- McCosker, A. 2014. Trolling as provocation: Youtube's agonistic publics. *Convergence: The International Journal of Research into New Media Technologies*, 20(2): 201-217.
- Moore, C. 2012. *Plastic ocean: How a sea captain's chance discovery launched a determined quest to save the oceans*. New York, USA: Penguin Group.
- Mouffe, C. 1999. Deliberative democracy or agonistic pluralism? . *Social Research*, 66(4): 745–758.
- Mouffe, C. 2004. Pluralism, dissensus and democratic citizenship. In F. Inglis (Ed.), *Education and the good society*. London, UK: Palgrave Macmillan.
- Mouffe, C. 2005. *The democratic paradox*. London: Verso.
- Mouffe, C. 2013. *Agonistics, thinking the world politically*. London, United Kingdom: Verso.
- Mouffe, C. 2014. By way of a postscript. *Parallax*, 20(2): 149-157.
- O'Neill, S. J., & Nicholson-Cole, S. 2009. Fear won't do it": Promoting positive engagement with climate change through visual and iconic representations. *Science Communication*, 30: 355-379.
- Palazzo, G., & Scherer, A. 2006. Corporative legitimacy as deliberation: A communicative framework. *Journal of Business Ethics*, 66: 71-88.
- Papacharissi, Z. 2010. *A private sphere, democracy in a digital age*. Malden, MA: Polity Press.
- Phillips, R. 2003. *Stakeholder theory and organizational ethics*. San Francisco, CA: Barrett-Koehler Publishers, Inc.

- Rahimi, B. 2011. The agonistic social media: Cyberspace in the formation of dissent and consolidation of state power in post-election iran. *The Communication Review*, 14(3): 158-178.
- Rancière, J. 2006. The ethical turn of aesthetics and politics. *Critical Horizons*, 7(1): 1-20.
- Reger, J. 2004. Organizational “emotion work” through consciousness-raising: An analysis of a feminist organization. *Qualitative Sociology*, 27: 205-222.
- Rhodes, C., Munro, I., Thanem, T., & Pullen, A. 2020. Dissensus! Radical democracy and business ethics. *Journal of Business Ethics*, 164: 627-632.
- Rogstad, I. 2016. Is twitter just rehashing? Intermedia agenda setting between twitter and mainstream media. *Journal of information Technology & Politics*, 13(2): 142-158.
- Roloff, J. 2008. Learning from multi-stakeholder networks: Issue-focussed stakeholder management. *Journal of Business Ethics*, 82: 233-250.
- Rozin, P., Lowery, L., Imada, S., & Haidt, J. 1999. The cad triad hypothesis: A mapping between three moral emotions (contempt, anger, disgust) and three moral codes (community, autonomy, divinity). *Journal of Personality and Social Psychology Quarterly*, 76: 574-586.
- Ruebottom, T., & Auster, E. R. 2018. Reflexive dis/embedding: Personal narratives, empowerment and the emotional dynamics of interstitial events. *Organization Studies*, 39(4): 467–490.
- Rybalko, S., & Seltzer, T. 2010. Dialogic communication in 140 characters or less: How fortune 500 companies engage stakeholders using twitter. *Public Relations Review* 36(4): 336-341.
- Scherer, A., & Palazzo, G. 2007. Toward a political conception of corporate responsibility: Business and society seen from a habermasian perspective. *Academy of Management Review*, 32(4): 1096-1120.

- Scherer, A. G., & Palazzo, G. 2011. The new political role of business in a globalized world - a review of a new perspective on CSR and its implications for the firm, governance, and democracy. *Journal of Management Studies*, 48(4): 889-931.
- Schrock, D., Holden, D., & Reid, L. 2004. Creating emotional resonance: Interpersonal emotion work and motivational framing in a transgender community. *Social Problems*, 51(1): 61-81.
- Schultz, F., Castelló, I., & Morsing, M. 2013. The communicative construction of CSR: A mediation perspective. *Journal of Business Ethics*, 15(4): 681-692.
- Short, J. C., Broberg, J. C., Coglisier, C. C., & Brigham, K. C. 2010. Construct validation using computer-aided text analysis (cata): An illustration using entrepreneurial orientation. *Organizational Research Methods*, 13: 320–347.
- Shrimpsley, R. 2019. Why middle-aged men hate Greta Thunberg?, *Financial Times*. London, UK.
- Snow, D., & Benford, R. 1988. Ideology, frame resonance, and participant mobilization. *International Social Movement Research*, 1: 197-217.
- Snow, D. A. 2001. Collective identity and expressive forms. In N. J. Smelser, & J. B. Baltes (Eds.), *International encyclopedia of the social and behavioral sciences*: 2212-2219. Oxford, UK: Pergamon Press.
- Sorsa, V., & Fougère, M. 2020. Toward political explanation of change in corporate responsibility: Political scholarship on csr and the case of palm oil biofuels. *Business & Society*, online first: 1-29.
- Soundararajan, V., Brown, J. A., & Wicks, A. C. 2019. Can multi-stakeholder initiatives improve global supply chains? Improving deliberative capacity with a stakeholder orientation. *Business Ethics Quarterly*, 29(3): 385-412.

- Steenbergen, M. R., Bächtiger, A., Spörndli, M., & Steiner, J. 2003. Measuring political deliberation: A discourse quality index. *Comparative European Politics*, 1(1): 21-48.
- Stets, J. E., & Carter, M. J. 2012. A theory of the self for the sociology of morality. *American Sociological Review*, 77(1): 120-140.
- Stigliani, I., & Ravasi, D. 2012. Organizing thoughts and connecting brains: Material practices and the transition from individual to group-level prospective sensemaking. *Academy of Management Journal*, 55: 1232-1259.
- Taylor, V., Kimport, K., Van Dyke, N., & Andersen, E. A. 2009. Culture and mobilization: Tactical repertoires, same-sex weddings, and the impact on gay activism. *American Sociological Review*, 74(6): 865-890.
- Terry, B. 2012. *Plastic free: How I kicked the plastic habit and how you can too*. San Francisco: Skyhorse Publishing.
- Vesa, M., & Vaara, E. 2014. Strategic ethnography 2.0: Four methods for advancing strategy process and practice research. *Strategic Organization*, 12(4): 288-298.
- Voronov, M., & Vince, R. 2012. Integrating emotions into the analysis of institutional work. *Academy of Management Review*, 37(1): 58-81.
- Waddock, S. A. 2008. Building a new institutional infrastructure for corporate responsibility. *Academy of Management Perspectives*, 22(3): 87-108.
- Whelan, G. 2013. Corporate constructed and dissent enabling public spheres: Differentiating dissensual from consensual corporate social responsibility. *Journal of Business Ethics*, 115(4): 755 – 769.
- Whelan, G., Moon, J., & Grant, B. 2013. Corporations and citizenship arenas in the age of social media. *Journal of Business Ethics*, 118(1): 777-790.
- Winker, P., Etter, M., & Castello, I. 2020. Vicious and virtuous circles of aspirational talk: From self-persuasive to agonistic CSR rhetoric. *Business and Society*, 59(1): 98-128.

- Wollebæk, D., Karlsen, R., Steen-Johnsen, K., & Enjolras, B. 2019. Anger, fear, and echo chambers: The emotional basis for online behavior. *Social Media+ Society*, 5(2).
- Wright, A. L., Zammuto, R. F., & Liesch, P. W. 2017. Maintaining the values of a profession: Institutional work and moral emotions in the emergency department. *Academy of Management Journal*, 60(1): 200-237.
- Wu, S., Mason, W. A., Hofman, J. M., & Watts, D. J. 2011. *Who says what to whom on Twitter*. Paper presented at the World Wide Web Conference, Hyderabad, India.
- Yardi, S., & Boyd, D. 2010. Dynamic debates: An analysis of group polarization over time on twitter. *Bulletin of Science, Technology & Society*, 30(5): 316-327.
- Young, T., Hazarika, D., Poria, S., & Cambria, E. 2018. Recent trends in deep learning based natural language processing. *IEEE Computational Intelligence Magazine*, 13(3): 55-75.
- Ziarek, E. P. 2001. *Postmodernity, feminism and the politics of radical democracy*. Stanford, CA: Stanford University Press.
- Žižek, S. 1992. *Looking awry: An introduction to Jacques Lacan through popular culture*. MIT Press.

•••

ITZIAR CASTELLÓ (i.castello@surrey.ac.uk, corresponding author) is associate professor in Digital Economy at Surrey Business School, University of Surrey. She holds an executive MBA and a PhD from ESADE, Ramon Llull University. Her research uses institutional theory, corporate social responsibility, social movement studies and entrepreneurship theories to analyze social change in digital contexts.

DAVID LOPEZ is associate professor in Digital Economy at Exeter Business School, University of Exeter. He holds an executive MBA and PhD from IE Business School and Technical University of Madrid respectively. He is interested in the opportunities and challenges emerging from the uses of Artificial Intelligence in business and society.

TABLES AND FIGURES

Table 1: Summary of Data Sources and Analysis

Data Source	Type of Data	Use in the Analysis
<i>Semi-structured Interviews</i>	08- 2010- 09-2018 (Total 1,789 minutes transcribed) - Founders, employees, and advisors of a major NGO (20 interviews) - Managers of other big NGOs and scientific organizations (14 interviews) - Activist, scientist and journalists (16 interviews)	- Development of a historical account, the evolution of the development of the historical account (key actors, key organizations and main discourses) - Detailed understanding of discourses of civil society - Characterization of the strategies
<i>Naturalistic Observation</i>	08-2010 to 04-2011 & 06-2013 to 9-2013 in California, 7 social gatherings and art exhibitions (28h) and 2 workshops (6h). Since 2017: workshop in UK with lobbyist and scientist (5h). Conversations with scientist, lobbyist, and industry associations	- Development of the historical account (key actors, key organizations, and main discourses) - Detailed understanding of discourses of civil society - Characterization of the strategies - Triangulation to identify inconsistencies
<i>Archives</i>	- 44 strategic plans, websites, press articles - 2 Books (Moore, 2012; Terry, 2012) - 12 corporations, including sustainability reports and websites	- Development of the historical account - Detailed understanding of discourses of civil society and the corporate discourse and activities - Triangulation to identify inconsistencies
<i>Twitter</i>	126K tweets from 48 accounts from January 2008 to June 2020	- Characterization of discursive strategies - Understanding constructiveness - Characterization of measures of interactivity

Table 2: Key Stakeholders and its Twitter Identification

Typology of actors	Actors Names	Identification in Social Media (Twitter)	Tweet Count
<i>Mayor NGO's</i>	Plastic Pollution Coalition, Green Peace, 5 Gyres, Bag Monster, The dailyOcean, The Last Plastic Straw, National Geographic, MyPlasticFreeLife, Heal the Bay, Non Toxic Revolution, Bahamas Plastic Movement, Future Frogmen, Captain Planet Foundation, WRAP	@PlasticPollutes, @Greenpeace, @5gyres, @PlasticfreeBeth, @HealTheBay, @NonToxicRev, @bahaplasmvmnt, @FutureFrogmen, @captainplanetfd, @NatGeo, @BigBagProblem, @thedailyocean, @NoPlasticStraws	29,129
<i>Scientist, scientific orgs</i>	Algalita, Adventurers and Scientists for Conservation, Wade Graham, Wallace J Nichols, Abigail Barrows, Center for Environmental Security, ASU Biodesign Institute, Scripps Institution of Oceanography, Chief Scientist of Environmental Health Sciences, Charles Rolsky, Tierney Thys, Janette Wallis	@Algalita, @AdvScientists, @wallacejnichols, @AbiBarrows, @ASUBiodesign, @Scripps_Ocean, @EnvirHealthNews, @PlasticOceansUS, @tierneythys, @janettewallis	24,755
<i>Lobbyists</i>	Leslie Tamminen, Seventh Generation Advisors	@LeslieTamminen, @7thgenadvisors	251
<i>Key activist, Journalists</i>	Marcus Ericson, Anna Cummins, Anna Turns, Arlene Blum, Beth Terry, Charles Moore, Daniella Russo, Elizabeth Royte, Celine Cousteau, Gordon Millar, Johanna Macy, Julia Cohen, Manuel Mansylla, Manuel Maqueda, Emily DiFrisco, Julianne Waite, David Attemborough, David DeRothschild, Jackson Browne, Alice Waters	@Anna_Cummins, @AnnaTurns, @PlasticfreeBeth, @CapnMoore, @DRussoInnovate, @Maqueda, @ElizabethRoyte; @celinecousteau @GordonJMillar @DRexplore @SongsofJBrowne, @AliceWaters	23,309
<i>Institutions</i>	UK Plastic Pact, Alliance to End Plastic Waste	@WRAP_UK, @EndPlasticWaste	3,538
<i>Key companies</i>	Starbucks, CocaCola, Marks & Spencer; Amazon, Nestlé, PepsiCo, Unilever, McDonald's, Waitrose	@Starbucks, @CocaColaCo, @marksandspencer, @amazon, @Nestle, @PepsiCo, @Unilever, @McDonalds; @waitrose	45,635

Table 3: Destructive vs Constructive Tweets

Category	Codification	Exemplars
<i>Constructive messages</i>	Levels of toxicity lower than 0.65 (on a scale from 0 to 1)	RT @WasteCounter: Only 4.4% of plastic is recycled in US in 2018 - see story on @PlasticPollutes https://t.co/VflgDfVGCR via @usatoday (@PlasticPollutes, 2018-12-19) It is time for companies to follow and deliver the real solution—reuse. (Greenpeace, 2019-10-16)
<i>Destructive messages</i>	Levels of toxicity larger than 0.65 (on a scale from 0 to 1)	Hey Starbucks! Your plastic straws suck! #HowardSchultz could you please #stopsucking? https://t.co/zQ3XqIGUGL (5Gyres, 2017-09-25) RT @implicitweet: These scientists think plastics are shrinking penises https://t.co/PO3foeiKqi via .@smh .@plasticpollutes (@NoPlasticStraws, 2018-08-05)

Table 4: Main Hashtag and Correspondent Actors (@) by Phase and Actor Category

Civil Society				
Phase 1: 2008-2016		Phase 2: 2017-2020		
Total tweets:	16205	Total tweets:	6921	
Percentage of tweets with hashtags:	39%	Percentage of tweets with hashtags:	54%	
Top hashtags	#plastic	10.11%	#plasticpollutes	10.6%
	#plasticpollutes	4.42%	#BreakFreeFromPlastic	5.51%
	#pollution	1.63%	#plastic	2.88%
	#recycling	1.37%	#recycling	1.54%
	#ocean	0.99%	#noplacticstraws	1.04%
Number of tweets with mentions:	54%	Number of tweets with mentions:	45%	
Top references	@PlasticPollutes	2.76%	@NoPlasticStraws	1.54%
	@PlasticfreeBeth	1.47%	@PlasticPollutes	1.18%
	@5gyres	1.41%	@WRAP_UK	1.02
	@Beyond_Plastic	1.33%	@Nestle	1.02
			@CocaCola	0.85%
		@Unilever	0.31%	
Percent of tweets providing evidence:	76%	Percent of tweets providing evidence:	67%	

Corporations				
Phase 1: 2008-2016		Phase 2: 2017-2020		
Total tweets:	520	Total tweets:	2639	
Number of tweets with hashtags:	50%	Number of tweets with hashtags:	57%	
Top hashtags	#recycling	6.73%	#ScaleforGood	37.51%
	# DreamMachine	4.71%	#WorldWithoutWaste	1.99%
	#Sustainability	3.20%	#BeatPlasticPollution	0.86%
	#EarthDay	2.69%	#sustainability	0.75%
Number of tweets with mentions:	64%	Number of tweets with mentions:	25%	
Top references	@PepsiCo	3.50%	@RECYPartnership	0.39%
	@ekocycle	1.75%	@Purina	0.17%
	@iamwill	0.97%	@CirculateCap	0.17%
	@CocaColaCo	0.78%	@EndPlasticWaste	0.15%
	@McDonalds	0.58%	@Danone	0.13%
Percent of tweets providing evidence:	52%	Percent of tweets providing evidence:	53%	

Table 5: Measures of Interactivity: Constructive vs Destructive

	Amplification Retweet Counts		Endorsement Likes Counts	
	Destructive	Constructive	Destructive	Constructive
Observations	219	26066	219	26066
Mean	8.2	38	3.1	18.3
Std.	16.1	960	7.6	157.6
25%	0	1	0	0
50%	3	3	0	1
75%	6	14	2	12
Max.	90	143887	44	12814

Note. The difference is also statistically significant in the two ordinal variables considered: Endorsement and Amplification, (MANOVA Test $F(2;26066) = 48.02, p < 0.001$). We did not include the interactivity measure of reference because is a categorical measure and the others are ordinal measures, as explained in the methods.

Table 6: Natural Language Process (NLP) Codes

NLP Codes	Description of Category in NLP Engine	Tweet count (%)	False positives rate
<i>Moral but not affective</i>	Low moral affect, low solidarity affect, question mark, reference high, has a link or is a retweet	24.5%	6.8%
<i>High moral affects</i>	High moral affect, low solidarity affect, question mark)	12.2%	1.8%
<i>Medium solidarity with interactivity</i>	Low moral affect, medium solidarity affect, reference high, is a direct response	35.2%	5,0%
<i>High solidarity affects</i>	Low moral affect, high solidarity affect	13.8%	4.1%
<i>Non-classified</i>		14.3%	
<i>Total</i>		100% (26285)	

Note. The following table provides information on the number of tweets classified across stakeholders. 85 % of the tweets have been classified.

Table 7: Engagement Strategies (First Order Categories, Second Order Themes, Aggregate Dimensions and Data Exemplars)

2 nd Order Theme	1 st Order Category	Data Exemplars
Aggregate Dimension 1: Mobilization Strategy		
<i>Promote a new moral position (low conflict with peers, focus on the cause)</i>	<i>Questioning previous moral position</i>	It can take up to 1,000 years for plastic bottles to break up in the ocean. More ocean facts here: http://act.gp/RH9CLY #SaveOurSeas (@Greenpeace, 2012-11-17) China poisoned by plastic "recycling" Via @GreenerChina http://bit.ly/cfZB3Y (@PlasticPollutes, 2010-03-18)
	<i>Stimulating moral affects about the cause</i>	A quarter of fish sold in markets have plastic in their gut http://grnpc.org/Ig2TC #pollution #marinelife (Greenpeace, 2015-09-27) Plastic pollution is literally entering the food chain... We need to change our disposable habits now. @edbegleyjr (@PlasticPollutes, 2015-05-29)
<i>Create a sense of collective identity</i>	<i>Including peers in the conversation</i>	3 days left to help make @TheOceanCleanup a reality! An amazing project to clean the plastic from the world's oceans: http://grnpc.org/IgHSS (@Greenpeace, 2014-09-10) @kristinrome: @5Gyres See How It Feels to Be an Ocean Animal Stuck in a Plastic Bag http://video.nationalgeographic.com/video/160608-world-oceans-day-plastic-bag-campaign-via @NatGeo " (@5gyres, 2016-06-08)
	<i>Creating collective excitement amongst peers</i>	Plastic in the oceans already described in 1972! Let's stop plastic NOW http://bit.ly/9ZINPY Via @WallaceJNichols (@PlasticPollutes, 2010-04-16) Great ocean news! California just banned #plastic microbeads in personal care products by 2020 http://grnpc.org/Ig2Ll (@Greenpeace, 2015-09-06)
Aggregate Dimension 2: Inclusive-Dissensus Strategy		
<i>Maintain the dissensus in the moral position (in conflict with the adversary)</i>	<i>Reinforcing the moral position</i>	Many companies claim to be "biodegradable" but can they back their claims? We recently did a study to be released next year on the biodegradability of many products and have found that most of them are greenwashing. After all, it's still plastic. (5Gyres, 2017-12-18) @CocaCola, @Pepsi, and @Nestle attempt to water down new plastic laws, leaked letter reveals. #plasticpollutes https://goo.gl/7uvRwt (@PlasticPollutes, 2018-10-27)
	<i>Stimulating moral affect by shaming and blaming the adversary</i>	This is shameful @CarnivalCruise and @MickyArison. Get it together. 'Carnival to pay \$20 million for continued ocean pollution by its ships.' https://t.co/VsIlyHR71 https://t.co/BhhHmlADbb (Plastic Pollution Coalition, 2019-06-07) BREAKING: @cocacola, @Nestle, @PepsiCo, @MDLZ and @Unilever are the top 5 corporate plastic polluters of 2019. It's time for them to be held accountable. #BrandAudit2019 #BreakFreeFromPlastic https://t.co/kufQUxVEV7 https://t.co/0N0A8B16HV (@PlasticPollutes, 2019-10-23)
<i>Include the adversary to create a sense of collective identity</i>	<i>Including the adversary in the conversation</i>	In just one hour, more than 900 metric tons of plastic waste enter our oceans #WorldWithoutWaste #sponsored @CocaColaCo(@NatGeo, 2018-01-21) @Pepsi to launch range of 100% recycled plastic packaging by 2020 after named by @Greenpeace as one of largest corporate polluters in the world. #plasticpollutes #breakfreefromplastic (@PlasticPollutes, 2018-10-16)
	<i>Celebrating a common approach with the adversary</i>	We're proud to partner with Natracare whose wipes "are made from 100 per cent paper tissue and are plastic free, marine friendly and compostable." https://t.co/U2hzv7yYJe (5Gyres, 2019-04-10) 💚👉 Excited to see @McDonalds joining the campaign to curb plastic use! #SocialGoodSpotlight #PlanetOrPlastic (@NatGeo, 2018-06-20)

Table 8: Affective Signals and Interactivity per Strategy

2 nd Order Theme	1 st Order Category	Affective Signals		Measures of Interactivity		
		Moral Affect [0:2] scale (mean)	Solidarity Affect [0:2] scale (mean)	Amplification 0,1,2 (mean)	Endorsement 0,1,2 (mean)	Reference 0,1,2 (mean)
Mobilization Strategy						
<i>Promote a new moral position</i>	<i>Questioning previous moral position</i>	0.60	0.45	0.85	0.46	0.77
	<i>Stimulating moral affects about the cause</i>	1.4	0.11	0.90	0.82	0.80
<i>Create a sense of collective identity</i>	<i>Including peers in the conversation</i>	0.40	0.93	0.46	0.57	1.4
	<i>Creating collective excitement amongst peers</i>	0.20	1.30	0.60	0.77	0.80
Inclusive-dissensus Strategy						
<i>Maintain the dissensus in the moral position</i>	<i>Reinforcing the moral position</i>	0.73	0.40	0.78	0.5	0.72
	<i>Stimulating moral affect by shaming and blaming</i>	1.50	0.08	0.9	0.5	0.8
<i>Include the adversary to create a sense of collective identity</i>	<i>Including the adversary</i>	0.4	0.63	0.33	0.37	1.40
	<i>Celebrating a common approach with the adversary</i>	0.18	1.28	0.62	0.73	0.78

FIGURES

Figure 1: Model of Strategies of Stakeholder Engagement