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CONFLICTING DISCOURSES OVER PLASTIC POLLUTION The EC's *Plastic Strategy* vs. the Greenpeace *Plastic Radar*'s report

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Abstract – In an effort to tackle the issue of plastic pollution, on January 16th, 2018, the European Commission released the first *European Strategy for Plastics in a Circular Economy*, a key document presenting an action plan at the EU level aimed at changing the way in which plastics are "produced, used and discarded" (EC 2018). Despite suggesting a new standard for environmental sustainability, however, no reduction in the production of plastics is proposed in the *Strategy*, as both the EC and European plastic producers insist on recycling as the best option to reduce pollution by plastic waste (PlasticsEurope 2018). NGOs, on the other hand, claim that reducing production is the only effective solution to the plastic crisis. In order to raise awareness on the issue, during summer 2018, Greenpeace Italy launched the *Plastic Radar* initiative; the campaign invited all citizens to signal the presence of plastic waste on Italian beaches through a mobile app. In the subsequent *Plastic Radar*'s report (Greenpeace Italia 2018), Greenpeace openly confronted major plastic companies by presenting percentages of beach plastic waste classified per brand, with the ultimate intention of increasing pressure on producers – and not consumers.

Drawing from ecolinguistics, this paper offers a critical discourse analysis of the two documents to the purpose of observing how language features are chosen and used to build an ideological conflict encompassing economic interests, political choices, and ethical implications.

Keywords: critical discourse analysis; ecolinguistics; environmental discourse analysis; institutional discourse; NGOs discourse.

1. Introduction

In 2018, the issue of marine pollution by plastics received major attention by EU institutions: on January 16th the European Commission released A European Strategy for Plastics in a Circular Economy (also known as the Plastic Strategy), a landmark document outlining "key commitments for action at EU level" (EC 2018, p. 1) to the purpose of tackling plastic pollution in the (marine) environment. The document followed the previous An EU action plan for the Circular Economy, adopted in December 2015, and anticipated a legislative proposal banning some single-use plastic items on the EU territory in May 2018 (Reduction of the impact of certain plastic products on the environment). The proposal – focusing particularly on design innovation and product recycling - was later approved and transformed into an EU directive on October 24th, marking a historic decision in the field of environmental law. Already in the 2015 Action Plan, the EC envisioned a transition towards a circular economic model "where the value of products, materials and resources is maintained in the economy for as long as possible, and the generation of waste minimised" (EC 2015, p. 2). In particular, changes were anticipated in terms of product design, production processes, consumption and waste management. Plastics were identified as one of the priority areas of intervention, with initiatives including "a more ambitious target for the recycling of plastic packaging" (EC



2015, p. 14). As a consequence, especially since 2018, the topic soon became the centre of media discourse, with significant increase in the quality and quantity of information offered to laypeople. Numerous media initiatives have been addressing this problem more or less directly – for example, through advertisements, newspaper and online articles, TV programmes and social media feeds. International advertising campaigns are also focusing more and more on corporate sustainability, with renewed attention on topics such as recyclability, sustainable packaging, and products' end-of-life policies.

In this context, non-governmental organisations (NGOs) have had the chance to spread awareness on this urgent matter by bringing further knowledge to the general public regarding the current state of the issue, its main stakeholders, as well as future perspectives and possible solutions. One of the initiatives launched by Greenpeace Italy was the *Plastic Radar*, a project available for all smartphone users via the instant messaging service *WhatsApp*. The primary aim of the project was to collect pictures of branded plastic waste found on Italian beaches in order to raise consciousness among consumers and classify the most polluting companies. The results of the *Plastic Radar*'s report claim that reducing the amount of plastic produced every year is the only effective solution to the plastic pollution problem, and point out the inefficacy of other proposed strategies, such as the use of recycled plastics or bioplastics.

As this paper tries to highlight, the linguistic and communicative choices in the *Plastic Strategy* as opposed to the *Plastic Radar*'s report are based on substantially divergent ideologies. Consequently, the issue of marine litter and plastic pollution becomes the territory for conflicting discourses on the global environmental crisis, opening to (eco)critical perspectives in linguistic and discourse analyses. In light of these considerations, the following section introduces a literature review in the field of ecolinguistics so as to provide the theoretical grounding of the paper; in a subsequent section, the methodological approach of critical discourse analysis is presented. The remaining sections are devoted to the analysis of the abovementioned texts, and to some concluding remarks.

2. Literature Review

The field of ecolinguistics has been gaining more and more relevance in interdisciplinary studies about the environment and its composite issues. In a critical perspective, the "ecological analysis of discourse" (Alexander, Stibbe 2014, p. 104) mainly aims to assess the impact of language "on human behaviour and hence on real ecosystems" (Alexander, Stibbe 2014, p. 104); a vast part of ecolinguistic research indeed examines those elements of language that "conspire [...] to construe reality" (Halliday 1990, p. 25), or shape environment-related ideologies and social behaviours. More specifically, studies on greenspeak (Harré et al. 1999; Bevitori 2011; Stibbe 2014; Mühlhaüsler 2020) have outlined the features of the language used to talk about the environment, including its communicative possibilities and applications. Relevant studies have focused primarily on grammatical choices and language patterning (Goatly 1996; Gilquin, Jacobs 2006; Wild et al. 2013), as well as metaphor use in the construction of environmental discourses (Atanasova, Koteyko 2017; Li, Ye 2018; Deignan et al. 2019). Such studies also have points of contact with the field of media communication, hence opening to numerous research approaches. For example, several publications have explored media representation of environmental issues such as climate change and pollution (Grundman, Krishnamurthy 2010; Bednarek, Caple 2010; Wild et al. 2013), often emphasising the



risks of public misperception of these issues (Carvalho 2007; Alexander 2010), and the overall impact on popular knowledge and social behaviour (Hansen, Cox 2015; Hansen 2018). These contributions are particularly valuable when exploring the perception of environmental problems by policy-makers and the general public.

The suggested relationship between discourse communities and their social behaviour goes back to a functional and systemic view of language as part of the complex systems of social organization – as proposed by Halliday's social semiotics already in the 1970s (Halliday 1978). The idea that language can influence and drive people's beliefs and behaviour is a basic operational principle in most types of communications – including institutional ones. Regarding this point, several studies have analysed the features of institutional discourse from an ecolinguistic perspective (Hajer, Versteeg 2005; Feindt, Oels 2005; Fløttum, Dahl 2012), in some cases with a focus on the European Union (Machin 2019; Colombo *et al.* 2019). Similarly, the environmental discourse of NGOs has been the object of various investigations (Joutsenvirta 2009). Case studies in the field of CDA have explored different textual genres and domains, particularly politics (Hajer, Versteeg 2005; Leipold *et al.* 2019), law (Gellers 2015), and media communication (Peeples 2015); among them, we take inspiration from Richard Alexander's analysis (2017) of the environmental discourse carried out by Coca-Cola in partnership with WWF on Coca-Cola's corporate website.

In general, it could be noticed that the language domain of environment has crossed the boundaries of specialised discourse, and part of its terminology has entered a number of non-expert domains, including the general language. According to Campo (2008, p. 930), this is due partly to the popularization of knowledge, and partly to the fact that environment as a scientific field and knowledge domain is highly dynamic and multifaceted. With reference to the present paper, ecolinguistics provides the ideological framework to critically discuss linguistic choices in the construction of the plastic pollution issue as presented by two different addressors (the European Commission and Greenpeace) in two different types of texts (normative and informative). Eventually, the proposed analysis highlights the elements of an ideological conflict between the two parties as concerns effective pro-environment policies and decisions.

3. Methodology

In light of what observed so far, we have chosen to adopt CDA as the privileged methodology of analysis. In the two texts chosen for investigation, ideological standpoints regarding business ethics and corporate values, corporate social responsibility, politics, and social and environmental justice, among others, are constructed through contrasting language choices and communicative strategies. This provides fertile ground for CDA, a "research movement [...] [with] a shared interest in the semiotic dimensions of power, injustice, abuse, and political-economic or cultural change in society" (Fairclough *et al.* 2011, p. 357). Since CDA "operates by exposing how common-sense assumptions built into the prevailing discourses of a society are 'common sense assumptions in the service of sustaining unequal relations of power'" (Stibbe 2014, p. 119), the related research process seeks to unveil those sometimes-implicit relations of power by analysing, among other elements, the linguistic choices within a discourse. Within discourse analysis, certain linguistic features, such as verbs, adjectives, and metaphors, have traditionally received attention; however, the objects of CDA can include ideological elements, as well as more or less material traits of discourse. In Fairclough's words (2013, p. 14), the analysis can be



performed "between orders of discourse and other elements of social practices, between texts and other elements of events". After selecting texts "and points of focus and categories", it is thus possible to look at "both interdiscursive analysis and linguistic/semiotic analysis" (Fairclough 2013, p. 14).

In this paper, a qualitative approach for lexical-grammatical observations draws from eminent sources in the field of discourse analysis, including Fill and Mühlhaüsler's *The Ecolinguistics Reader* (2001), Martin and White's *The Language of Evaluation* (2005), and Van Dijk's *Critical Discourse Analysis* (2020), among others. Studies on metaphors such as those by Lakoff and Johnson (1980), Goatly (1996), and Burgers *et al.* (2016) further reinforce the methodology of this paper.

As for text selection, the EC's *Plastic Strategy* and the Greenpeace's *Plastic Radar* report constitute the linguistic material chosen for a critical analysis of the plastic pollution discourse. While the comparison between two texts may seem limited, the two samples respond well to the criteria of quality, relevance, and authoritativeness. The EC's document, in particular, marks a historic achievement in the context of the European Union, and it is relevant both in terms of normative content and media resonance; in 2018, the text received widespread attention by stakeholders and laypeople, thus constituting the point of departure for related publications in a number of different fields, including the *Plastic Radar* report. Concerning the latter text, it is safely assumed as one of the main publications by Greenpeace Italy in 2018, as this year marked the first research peak for the keyword "plastic" and the topic of plastic-related pollution in Italy and worldwide in a time span comprised between 2016 and 2021 (Google Trends).

In the proposed comparative analysis, we seek to highlight the ideological differences between the two texts as regards the presentation and description of the plastic pollution issue – which is basically the core topic of both documents. Specific parts of the texts are considered for investigation, from short paragraphs to phrases, single words, and multi-word expressions. More in detail, we focus on the choice and use of nouns and adjectives, as well as verbs and verbal expressions; metaphor analysis accompanies the comparison between the propositional and evoked meaning concerning all the above elements. In this sense, the critical observation of discourse intends to underline how language features manage to convey conceptual differences on the same subject. In addition, we hope to show how such differences contribute to delivering and spreading information on plastic pollution, as well as shaping people's opinion, and driving social behaviour.

4. Discussion

4.1 The EC's Plastic Strategy

In January 2018, the adoption of the *Plastic Strategy* was celebrated as an unprecedented success in the history of environmental protection at the EU level. As previously mentioned, this text outlines the initiatives to be undertaken in order to implement the indications as per the *Action Plan*; the strategy already boosted lively discussion on the role of plastics in Europe among all plastics stakeholders, leading to the 2018 directive banning several single-use plastic items. In the first sections, the document presents key facts and data on plastics in Europe and on the increasing plastic waste crisis, highlighting that, only in the EU, 150,000 to 500,000 tonnes of plastic waste enter the oceans every year. The strategy also acknowledges that the potential for recycling plastic materials



remains largely unexploited, with less than 30% of waste collected for recycling, and that the demand for recycled plastics is still limited (EC 2018, p. 4). However, from the very first lines, the text suggests that what is harmful for the environment is not plastic itself, but rather the way it is used:

Plastic is an important and ubiquitous material in our economy and daily lives.... However, too often the way plastics are currently produced, used and discarded fails to capture the economic benefits of a more 'circular' approach and harms the environment. There is an urgent need to tackle the environmental problems that today cast a long shadow over the production, use and consumption of plastics. (EC 2018, p. 1)

Here, the ideological standpoint of the European Commission and its vision for the future of plastics is briefly summarized by contrasting positive and negative terms concerning the critical aspects of plastic production and consumption. The negative verbs "fails" and "harms" are used to foreground the mismanagement of plastic products, which, conversely, are described with the positive adjectives "important" and "ubiquitous". As suggested, among others, by Martin and White, negation is "a resource for introducing the alternative positive position into the dialogue, and hence acknowledging it, so as to reject it" (2005, p. 118). The positive-negative semantic contrast is further reinforced by the metaphor "long shadow": this expression refers to the frequent criticism received by the plastic industry, therefore the use of figurative language performs a mitigating function, as already noted by Lakoff and Johnson (1980).

Later on, it is correctly pointed out that solving the plastic pollution issue will require common efforts and cooperation by all plastics stakeholders (plastics producers, recyclers, retailers, and consumers). The proposed "shared vision" will be directed "to drive investment in the right direction", as underlined by the claim: "increasing [...] sustainability can bring new opportunities for innovation, competitiveness and job creation" (EC 2018, p. 1). Here, the adjective "right" underlines a positive view of the plastics industry in the European economy. As a matter of fact, the *Plastic Strategy* was also welcomed by the plastics industry, as stated in a press statement by *PlasticsEurope*, a European association representing plastics manufacturers:

PlasticsEurope welcomes the publication by the European Commission of "A European Strategy for Plastics in a Circular Economy". PlasticsEurope supports the creation of a joint vision for a truly circular and resource efficient Europe, the promotion of actions aimed at tackling plastics leakage into the environment, increasing recycling and re-use and boosting innovation. (PlasticsEurope 2018b, p. 1)

The main point of the EC's document is essentially the future of the plastics industry in Europe, with EU countries leading a transition to "a new plastics economy, where the design and production of plastics and plastic products fully respect reuse, repair and recycling needs and more sustainable materials are developed and promoted" (EC 2018, p. 1). It could be observed that the above statement mentions three R's (reuse, repair, recycle), and yet not *the* three R's of environmentalism: reduce, reuse, recycle. Such reference might be offered with the specific intent to build a positive image of the plastic industry in the eyes of the public. Similarly, the *reduce* objective will be achieved, in the document's implicit aims, through the envisioned improvements, which will "curb plastic pollution and its adverse impact on our lives and the environment" (EC 2018, p. 1).



¹ See: Plastic Pollution Coalition 2021.

As for the changes to be made in the EU area, the key actions presented in the document include "[m]oving [...] towards a more prosperous and sustainable plastics economy" (EC 2018, p. 4) by implementing circularity practices in the near future. Again, the positive adjectives "prosperous" and "sustainable" used to describe the new plastics economy are semantically incompatible: following the principles of environmentalism, sustainability can only be fulfilled through a total rethinking of old habits and lifestyles and by reducing shopping for new material goods.

Further on, the future of new plastics economy is presented through the powerful metaphor of a *vision*: this semantically powerful word recalls an ambitious dream for the future, and yet the practical details on how to achieve it remain somehow vague. Following this image, improved design and production of plastic products in order to increase reusing, repairing and recycling rates are offered as the solutions for the plastic crisis. Although some figures are given – "By 2030, more than half of plastics waste generated in Europe is recycled" and "By 2030, sorting and recycling capacity has increased fourfold since 2015, leading to the creation of 200.000 new jobs, spread all across Europe" (EC 2018, p. 5) – it is left to national government and international stakeholders to implement the envisioned changes: "While the EU will propose concrete measures to achieve this vision, making it a reality will require action from all players in the plastic value chain" (EC 2018, p. 5). Here, the collocate "making it a reality" adds to the general optimistic view of policy-making in the EU area; this idea resonates with the prevailing anthropocentrism in most discourses about the environment noted by Mühlhaüsler (2020, p. 15).

The strategy also implies that "[p]lastic waste is decoupled from growth... The leakage of plastics into the environment decreases drastically" (EC 2018, pp. 5-6). In this case, the activity verbs "decoupling", "decreasing", and "dropping" – usually coming with negative connotation – are used to imply desirable outcomes. Similarly, it is claimed that the demand for (recycled) plastics in Europe will "grow", "rise", and "increase". While the abovementioned groups of verbs show semantically opposite meanings, the word "growth" is always associated with positive values, especially in the domain of economics. To solve this semantic dilemma, Alexander and Stibbe (2014, p. 111) propose that "rather than trying to alter the grammar of the English language by changing the marking of the term "growth", it is far easier just to stop talking about growth, because it is not a measure of anything important, and instead start talking about something like wellbeing". Following Wu (2018, p. 648), "the idea that the economy must shrink, or that 'economic shrinkage is good' is unlikely to be accepted".

The document also insists on the crucial role that all plastics stakeholders will have to play in order to achieve the proposed objectives. To this end, the EC firstly invites the industry to pledge for improved design and recyclability: "[o]ver the past months, the Commission facilitated a cross-industry dialogue and now calls on the industries involved to swiftly come forward with an ambitious and concrete set of voluntary commitments to back this strategy and its vision for 2030" (EC 2018, pp. 5-6). The phrasal verbs "call on" and "come forward", as well as the verb "to back" aim at building commitment and a strong sense of community. The adjectives "ambitious" and "concrete" are used both to inspire and define the scope of the required commitment. Teun Van Dijk, among others, has written extensively on the dynamics of power and persuasion within institutional discourses, highlighting that "public discourse and communication is an important symbolic resource" to persuade and influence others (2020, p. 310). As a matter of fact, *PlasticsEurope* answered the EC's invitation by agreeing on a Voluntary Commitment (*Plastics 2030*) "to increase recycling of plastics packaging by 2030" (PlasticsEurope



2018a). For what concerns public authorities, these shall play an important role at the national, regional and local level "in raising public awareness and ensure high-quality separate collection" (EC 2018, p. 10), since poor waste separate collection and sorting may be one of the reason for low recycling rates.

The document then introduces the Commission's efforts towards amending the current obligations for national authorities concerning the presence of plastic waste in the environment. On this particular subject, the addressed target shifts from governments and producers to consumers. While it is acknowledged that food packaging constitutes a serious concern for the massive application of single-use plastics, it is suggested that this issue is a matter of shared responsibilities: "[c]urbing plastic waste and pollution is a complex problem, given its diffuse nature and the link with social trends and individual behaviour" (EC 2018, p. 11). In this case, the adjectives "complex" and "diffuse", as well as the generic expressions "curbing plastic waste", "social trends", and "individual behaviour" are employed to avoid direct framing.

As regards the use of direct language, the 2018 report by *PlasticsEurope* can be useful to compare linguistic and stylistic choices. When dealing with the issue of single-use plastics employed in food packaging, plastic corporations tend to be dismissive:

[a]n emerging zero-risk approach [which] has led to discrimination against chemicals because of their misperceived hazardous properties. While public concerns about plastics should be taken very seriously, proper evaluation of the risk that they actually pose in given applications must not be overlooked. (PlasticsEurope 2018a, p. 18)

In this corporate report, the socially-based noun "discrimination", and the strongly emotive adjectives "misperceived" and "proper" openly mark the ideological confrontation with opposing groups, such as part of the scientific community. While this text insists on the fact that "[c]onsumers must continue to enjoy the many benefits of plastics while reassured about their safety" (PlasticsEurope 2018a, p. 21), the *Plastic Strategy* is in line with the specific communicative needs of expressive cautiousness and objectiveness – required by the official-normative textual typology –, as exemplified by the following point: "assess whether safe use of other recycled plastic materials could be envisaged, for instance through better characterisation of contaminants" (EC 2018, p. 9). Similarly, the text concedes that "[i]t is important to ensure that consumers are provided with clear and correct information, and to make sure that biodegradable plastics are not put forward as a solution to littering" (EC 2018, p. 12).

In the final sections, the *Plastic Strategy* introduces specialised terminology from the domains of chemistry and marine ecology when it describes microplastics as "[plastics] intentionally added to certain product categories (such as cosmetics, detergents, paints), dispersed during the production, transport and use of plastic pellets", and as "generated through wear and tear of products such as tyres, paints and synthetic clothes" (EC 2018, p. 13). For the sake of brevity, we shall not introduce any terminological debates here, and yet it could be interesting to notice that the conceptual notion of (primary and secondary) microplastics includes plastic waste originated not only from tyres or synthetic clothes, but from virtually all kinds of plastics lost in the environment through fragmentation.³ Such simplification in the EC's text could respond to a communicative need of transferring expert knowledge to the general readership.

³ For a definition of fragmentation, see, for example: Moore 2008; Kershaw 2015; Lusher 2015.



² As a matter of fact, scientific research has provided evidence on the risks of certain plastics for food applications. See, for example: Groh *et al.* 2019; Suman (ed.) 2019.

The words "innovation", "transformation", and "modernization" positively characterise the closing paragraphs of the text; here, the use of positive nouns reinforces the EC's promise to support all efforts towards the proposed objectives both by funding research, financing priority measures, and by developing "smarter and more recyclable plastics materials" (EC 2018, p. 14). In this example, the inanimate noun "plastics" follows the comparative adjective for animate subjects "smarter", thus playing with co-occurrence restrictions suggested, among others, by Baker (2018, p. 13). This opens to further observations in material ecocriticism: Alaimo (2014, p. 19), for instance, insists on the "weirdly malevolent" nature of daily plastic objects.

Finally, the document concludes: "[c]hallenges linked to the production, consumption and end-of-life of plastics can be turned into an opportunity for the EU and the competitiveness of the European industry. Tackling them through an ambitious strategic vision, covering the entire value chain, can spur growth, jobs and innovation" (EC 2018, p. 17). In this last example, the couple "challenges"/"opportunity", and the semantic chain "competitiveness"-"ambitious"-"spur" all cooperate to build the overall cohesion of the text, and mark the focus on economic growth.

4.2. Greenpeace's Plastic Radar report

During the summer of 2018, Greenpeace Italy launched the *Plastic Radar* initiative within the context of a large Brand Audit launched by the #BreakFreeFromPlastic movement (2018, 2020); the international association of environmental organisations works "to stop the plastic pollution problem at its source – the corporations that have created it and the governments that are failing to regulate it" (Greenpeace International 2021, p. 3). The *Plastic Radar* initiative was open to the public from June to late August 2018. During this period, people were able to send pictures of branded plastic waste stranded on Italian beaches via the popular messaging app *WhatsApp*, providing indication of exact location of items, type of waste, and name of the brand. According to the report, around 3,200 people participated in the project, with 8967 pictures (of which 6,798 valid for research purposes) of single-use plastic waste (91% of total waste reported) from all Italian coasts. ⁴

One of the reference tools for the Italian initiative was the toolkit A Million Acts of Blue: A Toolkit for a Plastic-Free Future by Greenpeace International. The opening letter of the Toolkit provides the ideological framework for the Plastic Radar, one of its main aims being "[t]urning the tide on plastic pollution by taking action to stop single-use plastic from being created in the first place" (Greenpeace International 2021, p. 3). The idea behind the Plastic Radar is similar: involving people in a "crowdsourced investigation" (Greenpeace Italia 2018, p. 3) not only to make individuals more aware of the plastics epidemic, but also as a way of putting pressure on big plastics producers. The Italian text of the Plastic Radar's report explains that:

the Plastic Radar is not a scientific analysis tool, as reports are collected not following a strict sampling protocol. Rather it is a tool for active participation, awareness raising (encouraging sea lovers to remove and sort waste, once reported), investigation and denunciation. Asking to contribute to the mapping of plastic pollution, Greenpeace Italy has set itself the objective of

⁴ Regarding the composition of reported waste, among others, 25% were plastic bottles, 9% food packaging, 4% plastic bags, 3% cups, containers, lids and nets. As for the provenience of reports, around 35% came from the Adriatic Sea, 22% from the Ionian Sea, 21% from the Tyrrhenian Sea, and a total of 22% from the seas of Liguria, Sicily and Sardinia.



involving more and more people, making them an active part of the solution to this serious environmental crisis, and laying the foundations for a necessary change of direction in the attribution of responsibility. (Greenpeace Italia 2018, p. 3)⁵

The focus on people/citizens and on the environment is central in the *Plastic Radar*'s report: the plastics industry is no longer the addressee of the communication, while "people" are here presented as individuals rather than "consumers" (as in the *Plastic Strategy*). From the very beginning, it is assumed that people are only partially responsible for the plastics crisis: although the *Plastic Radar*'s report acknowledges that people should be "an active part of the solution", it also makes clear that small, individual actions alone will not be enough to curb the problem. In the above passage, four action nouns characterise the project's objectives: "participation", "awareness raising", "investigation", and "denunciation"; the call to action is reinforced by the expressions: "contribute to mapping", "involving more and more people", and "laying the foundations". More in general, the whole text is marked by the extensive use of possessive adjectives ("our seas"), friendly and informal expressions ("sea lovers"), and also emotionally powerful speech to communicate the urgency of the plastics issue ("environmental crisis" and "saving the world's seas").

The abovementioned discourse on microplastics – dismissed in the *Plastic Strategy* as the result of industrial spillage or the byproduct of certain plastic materials – is here linked to all single-use plastic items, in particular containers and packaging which, "if accidentally released into the sea, can fragment into tiny pieces (microplastics) and remain there for centuries" (Greenpeace Italia 2018, p. 8). The language employed in the report is informal and simple, as exemplified by the adjective "tiny"; all scientific or technical definitions provided for non-expert readers are structured so as to simplify complex terminology: here, the verb "fragment" replaces the technical term "fragmentation" already observed in the *Plastic Strategy*. As regards individual vs corporate responsibility, the text specifies that:

if in fact it is true that in many cases the presence of a plastic container or packaging in the sea can be attributed to individual misbehaviour, [...] the large food and beverage multinationals [...] which continue to make enormous profits from the use of this material, very often do not offer any alternative to traditional plastics. (Greenpeace Italia 2018, p. 10)⁶

In this example, the word "profits" assumes a negative connotation – compared to the positive one entailed in the *Plastic Strategy* – and it is perceived as an ugly effect rather than an appealing perspective. Surprisingly, the expression "individual misbehavior" is also strongly disapproving, whereas the EC's institutional text reported the more neutral expression "individual behaviour" (2018, p. 11). Concerning the use of simple

Author's translation from the Italian: "Se infatti è vero che in molti casi la presenza di un contenitore o imballaggio di plastica in mare può essere attribuita a uno scorretto comportamento individuale, ... le grandi multinazionali degli alimenti e delle bevande, che immettono sul mercato i maggiori quantitativi di plastica monouso e che continuano a fare enormi profitti con l'uso di questo materiale, molto spesso non offrono alcuna alternativa alla plastica tradizionale".



Author's translation from the Italian: "PLASTIC RADAR non è uno strumento di analisi scientifica, in quanto colleziona segnalazioni non raccolte seguendo un rigido protocollo di campionamento. Piuttosto è uno strumento di partecipazione attiva, sensibilizzazione (incoraggiando gli amanti del mare a rimuovere e differenziare i rifiuti, una volta segnalati), investigazione e denuncia. Chiedendo di contribuire alla mappatura dell'inquinamento da plastica, Greenpeace Italia si è posta l'obiettivo di coinvolgere sempre più persone, rendendole parte attiva nella soluzione di questa grave crisi ambientale e ponendo le basi per un cambio di direzione necessario nell'attribuzione della responsabilità".

terminology, the term "alternative to traditional plastics" replaces the more technical "alternative feedstocks" used in the EC's institutional text (EC 2018, p. 3). The adjective "traditional" is always negatively marked in the text, as in the passage: "the large multinationals and beverages, and often governments too [...] pass the blame [...] on citizens, and continue with the traditional business, based on the massive use of disposable plastic" (Greenpeace Italia 2018, p. 10). In this case, the adjective can be read in opposition with the word "innovation" proposed in the *Plastic Strategy*. Finally, the communicative node "pass the blame" symbolically represents the will of NGOs to give voice to consumers, by denouncing that "often plastic straws, bags, bottles, and packaging are pushed on us before we have a chance to refuse, or we need products that are only offered packaged in plastic" (Greenpeace International 2021, p. 3).

The report insists that companies should take on the responsibility for the amount of plastics dispersed in the environment, by offering concrete alternatives and by avoiding false solutions: "[a]mong the necessary interventions, it is essential to avoid a mere replacement of any type of plastic product with biodegradable and compostable bioplastics which, in addition to requiring the use of valuable natural resources, would not lead to any reduction in waste" (Greenpeace Italia 2018, p. 10). The message is built through the use of emotionally charged adjectives ("necessary", "essential", "mere") and a polarised negative judgement ("would not lead to any reduction"). Biodegradable plastics and bioplastics are often indicated as "false solutions" in the discourse brought forward by NGOs, as all strategies focusing on recycling or correct disposal of plastic waste are deemed insufficient and not effective in bringing a change in the dominant throwaway culture. The opposition recycling (*Plastic Strategy*) vs. reducing (*Plastic Radar*) also appears in the final part of the report: "[t]he solutions adopted so far such as recycling are weak and, in the medium term, anything but decisive, and not at all able to effectively contrasting the serious environmental crisis of our seas" (Greenpeace Italia 2018, p. 10).

The results section of the *Plastic Radar*'s report reads: "And the polluter is..." (Greenpeace Italia 2018, p. 7). This slogan is of course a provocative reference to the more famous formula "And the winner is..." used for awards winners announcements. In this case, the general context of denunciation is made lighter and ironic, following recurrent framing choices of NGOs discourse. As noted by Burgers *et al.* (2016, p. 411), metaphors, hyperboles, and irony "work as framing devices (by serving as linguistic packaging cues) and as reasoning devices (by containing important conceptual content)." Therefore, such stylistic choices are part of an accurate communication strategy aiming at impressing, informing, and then influencing the reader. It is also pointed out that big plastics producers (both in Italy and abroad) are the major polluters of the Italian seas. It is perhaps surprising that the word *polluters* is totally absent in the *Plastic Strategy*'s text: despite the well-

⁹ Author's translation from the Italian: "Le soluzioni adottate finora come il riciclo sono deboli e, nel medio periodo, tutt'altro che risolutive e per nulla in grado di contrastare efficacemente la grave crisi ambientale in cui si trovano i nostri mari".



Author's translation from the Italian: "le grandi multinazionali degli alimenti e delle bevande, e spesso anche i governi, di fatto scaricano la responsabilità dell'inquinamento da plastica sui cittadini, e continuano col business tradizionale, basato sul massiccio utilizzo di plastica monouso".

Author's translation from the Italian: "Tra gli interventi necessari, è fondamentale evitare una mera sostituzione di ogni tipologia di prodotto in plastica tradizionale con le bioplastiche biodegradabili e compostabili che, oltre a richiedere l'impiego di preziose risorse naturali, non porterebbe ad alcuna riduzione dei rifiuti".

known Polluter Pays Principle (PPP), 10 now incorporated in the Extended Producer Responsibility (EPR) policy, this word is missing from the EC's text.

5. Conclusions

Comparing two texts such as the EC's *Plastic Strategy* and Greenpeace's *Plastic Radar* report in a contrastive way is an experimental research task; the risk of falling into misinterpretation and wrong judgement as a result of biased discourse analysis invites to be careful. However, when observing ideological and linguistic conflict, it is necessary to look for subtle and sometimes ambiguous elements. This is also in line with the practical methods of CDA, in which language and discourse are observed in their communicative functions and implied power relationships, rather than their factual aspects alone; in this sense, this approach is particularly effective when trying to unearth minor or hidden ideological aspects.

The present study has some limitations of methodological nature, because the two texts chosen for investigation share similar, yet not identical genre features: the *Plastic Strategy* is conceived as an official-normative publication, whereas the *Plastic Radar*'s report is genuinely informative. In the first case, the language is more formal, neutral, and less direct; given the presence of mostly-generic indications in the text, grasping univocal concepts could be less easy, leading to multiple interpretations as regards reception of specific guidelines and national targets. Conversely, the second genre typically uses a more informal and direct language, as its main objective is to inform non-expert readers on specialised or technical topics. Moreover, informative texts like the Greenpeace report – and, in general, informative texts issued by NGOs – are mostly agenda-driven, and are hence less impartial in terms of language and communicative intent. While the language choices in each of the two texts serve specific, perhaps divergent purposes, the ideological conflict is rarely explicit. However, it is interesting to notice how relevant topics – and even issues whose resolution is obviously of common interest – can be dealt with from contrasting perspectives.

The topic of environmental pollution by plastic waste makes no exception. As national and supra-national authorities become increasingly concerned with the environmental crisis, the public debate – in the European territory, but also globally – is shaped by a number of different interests and standpoints. On the one hand, economic and financial concerns drive the discourse brought forward by governments and the plastics industry, including manufactures, designers, and companies in production, distribution and recycling; on the other hand, ecological, health, and safety reasons fuel the action of research groups and environmental organisations devoted to the protection of our planet. In this context, the conflicting discourse on plastic pollution appears to be not specifically the consequence of contrasting principles (assuming the ideological bona fide of the plastics industry), but definitely the result of opposed priorities.

Future studies could further expand the scope of this paper to observe how the message coming from either party is received and perceived by the public, considering the incredible power of media to influence all stakeholders, and especially citizens/consumers for whom, after all, plastics are made. Sociolinguistic research, in particular, may be helpful to evaluate the effects of environmental communication on consumer behaviour.



¹⁰ See: European Commission 2012.

Similarly, possible applications of this study may include didactic activities designed to help students increase their awareness of how environmental topics are dealt with and communicated, especially by sharping their discourse analysis skills. Indeed, while sustainability and quality education are two of the seventeen Sustainable Development Goals identified by the United Nations for the 2030 Agenda, it is pivotal to empower younger generations – by developing their language and interpreting abilities, as well as their critical thinking – in order to implement effective solutions for the protection of the environment.

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References

- Alaimo S. 2014, Thinking as the Stuff of the World, Punctum Books, Santa Barbara, CA.
- Alexander R. 2010, Framing discourse on the environment: A critical discourse approach. Routledge, London.
- Alexander R. and Stibbe A. 2014, From the analysis of ecological discourse to the ecological analysis of discourse, in "Language sciences" 41, pp. 104-110.
- Alexander R. 2017, Investigating texts about environmental degradation using critical discourse analysis and corpus linguistic techniques, in Fill A.F. and Penz H. (eds.), The Routledge Handbook of Ecolinguistics, Routledge, London, pp. 196-210.
- Atanasova D. and Koteyko N. 2017, Metaphors in Guardian Online and Mail Online opinion-page content on climate change: War, religion, and politics, in "Environmental Communication" 11 [4], pp. 452-469
- Baker M. 2018, In other words: A coursebook on translation, Routledge, London.
- Bednarek M. and Caple H. 2010, *Playing with environmental stories in the news—good or bad practice?*, in "Discourse & Communication" 4 [1], pp. 5-31.
- Bevitori C. 2011, 'Jumping on the green bandwagon': The discursive construction of GREEN across 'old'and 'new'media genres at the intersection between corpora and discourse, in "Proceedings of the Corpus Linguistics Conference 2011-Discourse and Corpus Linguistics", University of Birmingham Press, Birmingham, pp. 1-19.
- Break Free From Plastic 2018, *The Brand Audit Report*. https://www.breakfreefromplastic.org/globalbrandauditreport2018/ (24.07.2021).
- Break Free From Plastic 2020, *Brand Audit Toolkit*. https://www.breakfreefromplastic.org/brandaudittoolkit/ (24.07.2021).
- Burgers C., Konijn E.A. and Steen G.J. 2016, Figurative framing: Shaping public discourse through metaphor, hyperbole, and irony, in "Communication theory" 26 [4], pp. 410-430.
- Campo A.A. 2008, Environmental Terminology in General Dictionaries, in "Proceedings of the XIII EURALEX International Congress (Barcelona, 15-19 July 2008)". https://www.euralex.org/elx_proceedings/Euralex2008/087_Euralex_2008_Araceli%20Alonso%20C_ampo_Environmental%20Terminology%20in%20General%20Dictionaries.pdf (24.07.2021).
- Carvalho A. 2007, *Ideological Cultures and Media Discourses on Scientific Knowledge: Re-Reading News on Climate Change*, in "Public Understanding of Science" 16 [2], pp. 223-243.
- Colombo L.A., Pansera M. and Owen R. 2019, *The discourse of eco-innovation in the European Union: An analysis of the Eco-Innovation Action Plan and Horizon 2020*, in "Journal of Cleaner Production" 214, pp. 653-665.
- Deignan A., Semino E. and Paul S. 2019, *Metaphors of Climate Science in Three Genres: Research Articles, Educational Texts, and Secondary School Student Talk,* in "Applied Linguistics" 40 [2], pp. 379-403.
- European Commission 2015, Closing The Loop An Eu Action Plan For The Circular Economy: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM (2015) 614 final, 02.12.2015, European Commission, Brussels.
- European Commission 2018, A European Strategy For Plastics In A Circular Economy: Communication From The Commission To The European Parliament, The Council, The European Economic And Social Committee And The Committee Of The Regions, COM (2018) 28 final, 16.01.2018, Brussels: European Commission, Brussels.
- European Parliament 2018, Reduction of the impact of certain plastic products on the environment ***I:

 Amendments adopted by the European Parliament on 24 October 2018 on the proposal for a directive of the European Parliament and of the Council on the reduction of the impact of certain plastic products on the environment, COM(2018)0340 C8-0218/2018 2018/0172(COD), European Parliament, Brussels.
- Fairclough N. 2013, *Critical Discourse Analysis*, in Gee J.P. and Handford M. (eds.), *The Routledge handbook of discourse analysis*, Routledge, London, pp. 9-20.
- Fairclough N., Mulderrig J. and Wodak R. 2011, *Critical Discourse Analysis*, in Van Dijk T.A. (ed.), *Discourse studies: A multidisciplinary introduction*, SAGE Publications Limited, London, pp. 357-378.



Feindt P.H. and Oels A. 2005, *Does discourse matter? Discourse analysis in environmental policy making*, in "Journal of Environmental Policy & Planning" 7 [3], pp. 161-173.

- Fill A.F. and Mühlhäusler P. 2001, The Ecolinguistics Reader, Continuum, London & New York.
- Fløttum K. and Dahl T. 2012, Different contexts, different "stories"? A linguistic comparison of two development reports on climate change, in "Language & Communication" 32 [1], pp. 14-23.
- Gellers J.C. 2015, *Greening Critical Discourse Analysis: applications to the study of environmental law*, in "Critical Discourse Studies" 12 [4], pp. 482-493.
- Gilquin G. and Jacobs G.M. 2006, Elephants who marry mice are very unusual: the use of the relative pronoun who with nonhuman animals, in "Society & Animals" 14, pp. 79-105.
- Goatly A. 1996, Green grammar and grammatical metaphor, or language and the myth of power, or metaphors we die by, in "Journal of Pragmatics" 25, pp. 537-560.
- Google Trends. https://trends.google.com/trends/explore?date=today%205-y&q=%2Fm%2F0n54621 (4.11.2021).
- Greenpeace International 2021, *Million Acts of Blue: A Toolkit for a Plastic-free Future*. https://www.greenpeace.org/international/act/lets-end-the-age-of-plastic/ (24.07.2021).
- Greenpeace Italia 2018, *Plastic Radar*, Report, Greenpeace Italia. https://www.greenpeace.org/italy/rapporto/440/plastic-radar/ (24.07.2021).
- Groh K.J., Backhaus T., Carney-Almroth B., Geueke B., Inostroza P.A., Lennquist A., Leslie H.A., Maffini M., Slunge D., Trasande L., Warhurst A.M. and Muncke J. 2019, *Overview of known plastic packaging-associated chemicals and their hazards*, in "Science of The Total Environment" 651 [2], pp. 3253-3268.
- Grundmann R. and Krishnamurthy R. 2010, *The discourse of climate change: A corpus-based approach*, in "Critical approaches to discourse analysis across disciplines" 4 [2], pp. 125-146.
- Hajer M. and Versteeg W. 2005, A decade of discourse analysis of environmental politics: Achievements, challenges, perspectives, in "Journal of environmental policy & planning" 7 [3], pp. 175-184.
- Halliday M.A.K. 1978, Language as social semiotics: The Social Interpretation of Language and Meaning, Arnold, London.
- Halliday M.A.K. 1990, *New ways of analysing meaning: A challenge to applied linguistics*, in "Journal of Applied Linguistics" 6, pp. 7-36.
- Hansen A. 2018, Environment, Media and Communication, Routledge, London.
- Hansen A. and Cox J.R. (eds.) 2015, *The Routledge Handbook of Environment and Communication*, Routledge, London.
- Harré R., Brockmeier J. and Mühlhäusler P. 1999, *Greenspeak: A study of environmental discourse*, Sage Publications, Thousand Oaks, CA.
- Joutsenvirta M. 2009, A language perspective to environmental management and corporate responsibility, in "Business Strategy and the Environment" 18 [4], pp. 240-253.
- Kershaw P.J. 2015, Sources, fate and effects of microplastics in the marine environment: a global assessment, GESAMP Report 90.
- Lakoff G. and Johnson M. 1980, *Conceptual metaphor in everyday language*, in "The journal of Philosophy" 77 [8], pp. 453-486.
- Leipold S., Feindt P.H., Winkel G. and Keller R. 2019, Discourse analysis of environmental policy revisited: traditions, trends, perspectives, in "Journal of Environmental Policy and Planning" 21 [5], pp. 445-463
- Li L. and Ye M. 2018, *Greenspeak: A corpus-based comparative study on the word Green and environmentalism*, in "Linguistics and the Human Sciences" 13 [3], pp. 221-240.
- Lusher A. 2015, *Microplastics in the Marine Environment: Distribution, Interactions and Effects*, in Bergmann M., Gutow L. and Klages M. (eds.), *Marine Anthropogenic Litter*, Springer International Publishing, New York.
- Machin A. 2019, Changing the story? The discourse of ecological modernisation in the European Union, in "Environmental Politics" 28 [2], pp. 208-227.
- Martin J.R. and White P.R. 2005, The Language of Evaluation 2, Palgrave Macmillan, London.
- Moore C.J. 2008, *Synthetic Polymers in the Marine Environment*, in "Environmental Research" 108 [2], pp. 131-139.
- Mühlhäusler P. 2020, *Quo vadis Ecolinguistics*, in "Ecolinguística: Revista Brasileira de Ecologia e Linguagem" 06 [1], pp. 05-23.
- Peeples J. 2015, Discourse/rhetorical analysis approaches to environment, media, and communication, in Hansen A. and Cox R. (eds.), The Routledge Handbook of Environment and Communication, Routledge, London, pp. 59-68.
- Plastic Pollution Coalition 2021, Take the 4 Rs Pledge. https://www.plasticpollutioncoalition.org/pledge



(24.07.2021).

- PlasticsEurope 2018a, *Annual Review 2017-2018*, PlasticsEurope, Brussels. https://www.plasticseurope.org/en/resources/publications/498-plasticseurope-annual-review-2017-2018 (24.07.2021).
- PlasticsEurope 2018b, *PlasticsEurope's reaction to the Strategy for Plastics: PlasticsEurope welcomes EC's Plastics Strategy*, Press statement, 16.01.2018, PlasticsEurope, Brussels.
- Stibbe A. 2014, *An ecolinguistic approach to critical discourse studies*, in "Critical discourse studies" 11 [1], pp. 117-128.
- Suman M. (ed.) 2019, Food Contact Materials Analysis: Mass Spectrometry Techniques, Royal Society of Chemistry, London, pp. 163-191.
- Van Dijk T.A 2020, Critical Discourse Analysis, in Järvinen M. and Mik-Meyer N. (eds.), Qualitative Analysis: Eight Approaches for the Social Sciences, SAGE Publications Limited, London, pp. 305-326
- Wild K., Church A., McCarthy D. and Burgess J. 2013, *Quantifying lexical usage: Vocabulary pertaining to ecosystems and the environment*, in "Corpora" 8 [1], pp. 53-79.
- Wu Y. 2018, *Ecological Discourse Analysis*, in "Advances in Social Science, Education and Humanities Research (ASSEHR)" 181, pp. 646-649.

