This is the pre-print version of the following article:
Investigating how the Involvement in Corporate Social Irresponsibility Affects the Linguistic Features of Corporate Social Responsibility Reports

Irresponsible business conducts and the linguistic of CSR reports

**Keywords:** Corporate social responsibility (CSR) reporting; Corporate social irresponsibility (CSIR); Internationalisation; Linguistic of reporting.

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Abstract

Corporate social responsibility (CSR) reports are published by firms to inform stakeholders of companies’ CSR efforts. However, the literature has noted how these reports can be used to offset companies’ involvement in corporate social irresponsibility (CSIR). By relying on a cognitive-linguistic perspective, in this paper we investigate whether firms react to their irresponsible business conduct by changing the linguistic features of their CSR report, and if so, how. Using a sample of 135 large corporations with headquarters in developed countries, covered from 1995–2014, we analyse their CSR reports and determine if their involvement in CSIR has a negative effect on either the usage of an analytical language or the usage of an authentic language. Moreover, we show that these effects are even more significant for highly internationalised firms.

Keywords: Corporate social responsibility (CSR) reporting; Corporate social irresponsibility (CSIR); Internationalisation; Linguistic of reporting.
1. INTRODUCTION

In recent years, anecdotal, case-study evidence from all over the world has shown how companies can communicate their engagement in corporate social responsibility (CSR) policies yet simultaneously be involved in corporate social irresponsibility (CSIR). Companies like H&M, Abercrombie & Fitch, or Apple, with their known labour rights violations, are just a few examples of companies involved in CSIR despite their CSR communication activities. Prior research on the relationship between the adoption of CSR policies and the involvement in CSIR has suggested that companies may engage in CSR to offset past irresponsible conduct (e.g. Heal, 2005; Kotchen & Moon, 2012), or that they may adopt CSR policies to build a strong legitimacy in order to attenuate negative reactions in case of future CSIR (e.g. Flammer, 2013; Godfrey et al., 2009). However, research on this topic has been scant so far (Riera & Iborra, 2017), and even less attention has been paid to analyse how firms’ involvement in CSIR may affect their CSR communication, especially with regard to CSR reports.

CSR reports are an increasingly popular means used by companies to keep stakeholders informed about companies’ social and environmental activities (Alniacik et al., 2011; Hooghiemstra, 2000; Tschopp & Huefner, 2015). They are key instrumental tools (Seele & Lock, 2015) through which companies can establish and defend their position in the marketplace (e.g. Holder-Webb et al., 2009). Indeed, these reports are sometimes criticised for allowing firms to only show the good side of their activities (Morsing, 2017) in a bid to gain and maintain external legitimacy (Bansal & Kistruck, 2006; Dhaliwal et al., 2011; Nikolaeva & Bicho, 2011). According to some research, CSR reports may purposely be employed in reaction to companies’ involvement in CSIR, in order ‘to apologise, explain, justify, or blame others for its actions, thereby helping to maintain legitimacy’ (Bansal & Kistruck, 2006, p. 167).

In this paper, we contribute to the literature by investigating whether and how firms react to their irresponsible business conduct by analysing the linguistic features of their CSR reports. In order to do this, we take a cognitive-linguistic perspective, which is an approach that, by looking at subtle choices in grammar use, provides key insights into how individuals really construe the world around them (Langacker

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1 For the purpose of our analysis, we do not consider CSIR and CSR as ‘opposite ends of a continuum’ (Jones et al., 2009, p. 305). Rather, we believe that failure to respect a negative duty (i.e. doing no harm) cannot be compensated by a positive duty or action in favour of the affected (or other) constituencies (i.e. doing good). Following prior research (e.g. Fiaschi et al., 2015, 2017; Strike et al., 2006; Surroca et al., 2013; Wu, 2014), we treat CSIR and CSR as two conceptually and empirically distinct constructs.
We made this decision for two important reasons. First, the literature has observed how focusing on the grammar and linguistic style of a text (such as a CSR report) can be more revealing than analysing its content (Crilly et al., 2016; Ludwig et al., 2013; Tenbrink & Freksa, 2009). In fact, while previous contributions have investigated the topics discussed in CSR reports (Holder-Webb et al., 2009; Vuontisja, 2006), it has becoming increasingly apparent, especially after the introduction of international standards to report CSR initiatives (Behnam & MacLean, 2011), that the content of CSR reports tends to be quite similar across companies (Crilly et al., 2016). Hence, focusing on the grammar and linguistic style of CSR statements is essential in order to more fully assess corporate communication and to reveal the ways in which actors really categorise their phenomena of interest. Second, scholars who have examined the linguistics of texts suggest that, while the content of the communication may be deliberately controlled by actors, differences in how they structure and express their thoughts from a linguistic point of view may, more subtly, reveal their distinct cognitive processes (Crilly et al., 2016; Ireland & Pennebaker, 2010).

We believe that paying attention to the cognitive-linguistic aspects of CSR reports becomes even more important when companies are involved in irresponsible behaviours. When a company is involved in CSIR, its stakeholders may start reducing their level of trust while increasing their level of scepticism (Flammer, 2013; Zavyalova et al., 2012), provoking the deterioration of its legitimacy (Nieto, 2008). We therefore aim to verify whether firms change their CSR communication after being involved in a threatening situation, such as an irresponsible event. That is, does the involvement of a company in CSIR affect the linguistic features of its CSR reports? And if yes, how?

We examined this possibility by focusing on two distinct sets of constructs that are commonly considered in linguistic analyses: the level of analytical (vs. narrative) language and the level of authentic (vs. deceptive) language. According to Pennebaker et al. (2014), a language style can be considered analytical when it is particularly formal, logical, and hierarchical, while it becomes more narrative when it is more dynamic and informal. An authentic style is instead conceptualised as a more personal, sincere, and humble type of language, while a deceptive style tends to be more impersonal and distanced (Barrett et al., 2002; Newman et al., 2003).

We relied on a sample of 135 large, publicly-listed firms selected from Forbes Global 2000, with headquarters in developed countries, to analyse their CSR reports from 1995–2014. We found that CSIR has
a negative effect on both the usage of an analytical language and an authentic language. In fact, a less analytical (and thus more narrative) language may be seen as more effective in cases of CSIR as long as it gives the impression of offering simple solutions to difficult situations by using a more personal and informal language (Boyd & Pennebaker, 2015; Jordan & Pennebaker, 2017). Moreover, a less authentic (and thus more deceptive) language can be used as in attempt to justify corporate actions and behaviours (Wang et al., 2016). Although companies are not necessarily aware of these underlying, psychological processes, we argue that the language style they use may reveal their real intentions (see also Crilly et al., 2016). Importantly, we found that the two effects we briefly described above are more significant for highly internationalised firms. In case of CSIR, in fact, internationalised firms face more substantial threats to their legitimacy, which may render the above mechanisms even more noticeable.

The contribution of this paper is, therefore, twofold. Firstly, we contribute to the literature that analyses the relationship between CSIR and CSR (e.g. Kang et al., 2016; Kotchen & Moon, 2012; McMahon, 1999; Muller & Kraussl, 2011) with particular reference to international firms (e.g. Marano & Kostova, 2016). In detail, we show that CSIR negatively affects the usage of both an analytical and an authentic language in CSR reports and that these effects are particularly relevant for highly internationalised firms. Secondly, we contribute to previous works that adopted a cognitive-linguistic perspective (e.g. Crilly & Ioannou, 2017) by integrating their approach. Specifically, while earlier research has mainly focused on the potential outcomes of language choices (e.g. how adopting different language styles may lead a company to achieving different performances), we identify CSIR as an important antecedent that considerably affects the writing style adopted in CSR reports.

2. THEORETICAL BACKGROUND AND HYPOTHESES

Experts on linguistic analyses have illustrated how every text is composed of some type of content, which is then filtered through a unique writing style. According to Tausczik and Pennebaker (2010), for instance, ‘content words are generally nouns, regular verbs, and many adjectives and adverbs. They convey the content of a communication.’ Then, ‘intertwined through these content words are style words, often referred to as function words. Style or function words are made up of pronouns, prepositions, articles, conjunctions, auxiliary verbs, and a few other esoteric categories’ (p. 29). The choice of specific style and function words
is a subconscious dimension that cannot be easily manipulated by actors (Crilly & Ioannou, 2017).

Therefore, the writing style often becomes the object of interest for researchers, who aim to discover what writers really intended to convey through their words (Ludwig et al., 2013). A cognitive-linguistic perspective is particularly insightful in this regard, as it helps identify the relationships between the language style adopted by writers and their mental representations (Hart, 2014).

As anticipated above, two constructs that are often investigated in linguistic analyses are the level of analytical (vs. narrative) style and the level of authentic (vs. deceptive) style in a text. The first concept is especially important because it provides information about whether writers are trying to convey specific details about their subject of interest or if they are just trying to tell a story in a more narrative and informal way (Crilly & Ioannou, 2017; Pennebaker et al., 2015a). The second concept is considered informative because it clarifies whether an actor is speaking in a personal, authentic or distanced, deceptive way (Crilly et al., 2016). Below, we introduce our hypotheses on how CSIR may affect the adoption of both an analytical and an authentic language in CSR reports and how these effects are moderated by the companies’ level of internationalisation.

2.1. The Effect of CSIR on the Usage of an Analytical Language in CSR Reports

The seminal work of Pennebaker et al. (2014) suggest that any type of text may reflect a continuum that goes from a high level of analytical style toward a high level of narrative style. In the first case, the language tends to be more formal, logical, and hierarchical and implies a higher level of cognitive complexity, shown by a frequent use of articles and prepositions. The following extract from a company’s report provides an example of this writing style (articles and prepositions in italics):

*In 2008, 34 lost-time accidents and 27 accidents without lost time were reported involving Essilor employees in France, together with 5 lost-time accidents and 3 accidents without lost time involving temporary staff. We also supply optical equipment to employees, according to specific rules, and pay the cost of long-service awards and optical industry long-service awards, adding a further bonus determined according to a set scale. Lastly, the Company pays days off granted to mothers or fathers to take care of a sick child, according to specific rules.*

(Essilor, Annual Report 2008, p. 228)
The use of these types of words is generally interpreted as a writer’s attempt to classify objects, people, and events in hierarchical ways, as is typical of more analytical thinkers (Boyd & Pennebaker, 2015). Oppositely, when the language is mainly associated with the report of stories (i.e. it is more narrative), it generally includes a larger use of auxiliary verbs, adverbs, conjunctions, impersonal pronouns, negations, and personal pronouns (Biber, 1991; Faasse et al., 2016). The following is a good example of this type of language (narrative words in italics):

*We are continuously* improving the ways we monitor training effectiveness. *We recognize that* the working conditions in the factories *we have* audited *have* improved. The number of participating suppliers *and* factory management *has* increased. *However, we need* to ensure that the improved working conditions are a direct result of an increase in the participations of managers *who can* influence positive change. (WalMart, CSR report 2005, p. 9)

This means that people who use a narrative style tend to live more in the here-and-now, like to tell stories, and are more focused on social matters than analytical thinkers (Boyd & Pennebaker, 2015). Notably, a more analytical style has been associated with decreased positive emotion expressions, while a more narrative style has been considered to be more emotionally involved (Boyd & Pennebaker, 2015; Pennebaker et al., 2014).

To that end, when a company is involved in CSIR, its stakeholders may start reducing their related level of trust and increasing their level of scepticism toward the firm (Flammer, 2013; Zavyalova et al., 2012), which in turn could provoke a deterioration of legitimacy (Nieto, 2008). Hence, we believe that, when faced with such a threatening situation, the company may adopt a narrative language, which, as demonstrated by the literature (e.g. Boyd & Pennebaker, 2015; Jordan & Pennebaker, 2017), could be more effective in comparison to an analytical language as long as it gives the impression of offering simple solutions to a difficult situation. Moreover, we expect that a company could develop a more narrative language, which the literature associates with more positive emotions (Boyd & Pennebaker, 2015; Fetterman & Robinson, 2013), following a negative event, such as an irresponsible act. These arguments led us to think that, when the number of CSIR events increases, the company’s CSR reporting may become less analytical and more narrative. Put more formally, we hypothesise that:
2.2 The Effect of CSIR on the Usage of Authentic Language in CSR Reports

The level of authenticity is generally measured as a continuum between a high level of authentic style and a high level of deceptive style (Newman et al., 2003). Compared to a deceptive language, using an authentic style means employing higher cognitive complexity (more exclusive words, such as *but*, *while*, *whereas*), more self-and-other references, and less negative emotion words (Newman et al., 2003). This seems to happen in the following example (exclusive words and self-and-other references in italics):

For L’Oréal, the strategic challenge is *not* to arbitrate between the three spheres of sustainable development—economics, environment and society—*but* to create a model capable of sustainably ensuring *its* economic and social balance, which is *not* only equitable *but* also creates value added for all stakeholders. (L’Oréal, Annual Report 2009, p. 19)

A deceptive style, instead, requires the creation of a story about an experience or attitude that is different from reality. Therefore, while an authentic style tends to be more personal and humber, a deceptive style implies more psychological distance (Barrett et al., 2002; Newman et al., 2003). As the next example shows, this may mean employing a more abstract language, which results in lower cognitive complexity (e.g. less exclusive words) and fewer self-and-other references:

A key objective in serving the community is protection of water resources and during the year a major project was launched after many months of detailed discussion and preparation…Under the partnership, an extensive range of activities is being implemented to promote awareness of and support for conversation projects. (Coca-Cola, Annual Report 2005, p. 45)

Notably, the literature shows that when individuals face threatening information, they tend to discuss it in a more defensive way, which implies using a less authentic tone (Barrett et al., 2002). That is, they tend to distance themselves from the stories they create in an effort to refuse direct responsibility for their behaviours, as in the case presented above in which there is a lack of self-references and exclusive words which may provide a more detailed description.
Other studies have more directly considered corporate communications and, for instance, shown that when faced with severe devaluations, firms tend to more significantly craft responses that could justify their actions and behaviours (Wang et al., 2016). Consistent with the work of Newman et al. (2003), these responses seem to be less complex than those implemented by firms that practice what they actually communicate (Crilly et al., 2016; DePaulo et al., 2003). We thus believe that, because firms involved in CSIR face very significant threats to their reputation (Flammer, 2013; Zavyalova et al., 2012), they sometimes respond by communicating in a more defensive way. Since previous studies have shown that being in a defensive position causes a decrease of authenticity in the language (Akpinar & Berger, 2017; Barrett et al., 2002; Newman et al., 2003), we expect that the more a company is involved in CSIR, the more it is likely to adopt a deceptive (and less authentic) language in its CSR reporting. Accordingly:

**H2. The more a company is involved in CSIR, the less (more) the CSR report will include an authentic (deceptive) language.**

### 2.3 The Role of Internationalisation on the Effect of CSIR on the Linguistics of CSR Reports

The degree of firm internationalisation is likely to affect the relationship between CSIR and the language style used in the CSR reporting. The degree of internationalisation reflects the relative importance, and therefore the amount, of business activities conducted abroad through foreign direct investments. Therefore, compared to less internationalised companies, highly internationalised ones should face more significant threats if they become involved in CSIR. Indeed, higher levels of internationalisation may increase a firm’s exposure to relevant host country stakeholders and, therefore, ‘the potential for those stakeholders to engage in adverse institutional attribution in assessing these firms’ (Marano et al., 2017, p. 401). In turn, this could translate to a higher risk of losing the stakeholders’ trust (Flammer, 2013; Yannopoulou et al., 2011) after being involved in irresponsible business conduct. Moreover, internationalisation also increases a firm’s exposure to legitimating actors (Kostova et al., 2008), such as international and non-governmental organisations (e.g. the United Nations), as well as local and global media, which scrutinise their impact on social and environmental issues, especially when they globalise (Marano & Kostova, 2016).

Therefore, among the most irresponsible firms, those that are highly internationalised could feel a more urgent need to use a lower level of analytical language (which will be more narrative) and a lower level
of authentic language (which will be more deceptive) the more they are involved in irresponsible behaviour.

Put more formally, we hypothesise that:

Hypothesis 3. The higher a firm’s level of internationalisation, the stronger the negative (positive) effect of their involvement in CSIR is on the adoption of an analytical (narrative) language in CSR reporting.

Hypothesis 4. The higher a firm’s level of internationalisation, the stronger the negative (positive) effect of their involvement in CSIR is on the adoption of an authentic (deceptive) language in CSR reporting.

Our conceptual model is presented in Figure 1.

[Figure 1 about here]

3. DATA AND METHOD

3.1 Sample

To test our hypotheses, we focused on a sample of 135 large, publicly-listed firms selected from the Forbes Global 2000 ranking across 27 sectors. We adopted a stratified random sampling approach with equal allocation by randomly selecting five firms in each of the selected sectors from the Forbes list. This sample included firms from the United States and Canada (52%), Europe (40%), and Asia (Japan and South Korea) (8%). We selected large corporations because they are more powerful and visible than smaller firms. Their operations are also more frequently monitored by stakeholders, and they have more resources to invest in CSR as well as manage irresponsible business conduct.

3.2 Variables

3.2.1 Dependent variables. For each of our sample firms, we downloaded their CSR reports or the specific CSR section included in the Annual Reports from the corporate websites. In total, we collected 1,259 reports from 1995–2014, which we then analysed by carrying out an automated text analysis, following recent advances in text analytics to systematically analyse large quantities of data (Pennebaker et al., 2014). Thanks to this method, language style elements of texts can be analysed to more thoroughly
investigate the strategies used to communicate the topics discussed in a text. In our case, we determined our dependent variables in order to explore the writing style of the CSR reports we collected.

In order to do this, we used Linguistic Inquiry and Word Count (LIWC) 2015, which is software that relies on underlying linguistic scales that have frequently been used in psychology, marketing, and language research, among others (Akpinar et al., 2018; Aleti, Pallant, Tuan & van Laer, 2019; Barasch & Berger, 2014; Humphreys & Wang, 2018; Ludwig et al., 2013; Tausczik & Pennebaker, 2010). There are approximately 90 variables or combinations of variables included in LIWC, which can be employed to measure several important aspects of texts. For instance, if a researcher is interested in measuring the different frequencies through which various texts use ‘articles,’ they can select the ‘articles’ variable from LIWC. Then, after uploading a text onto LIWC, the software will count the number of articles used and will divide this number (e.g. 17) by the total number of words contained in the text (e.g. 90). Thereafter, it will multiply the result by 100 in order to provide the researcher with the percentage of words that refer to the specific theme ([17/90] * 100 = 18.89%).

Consistent with our theoretical framework, we used two variables available on LIWC to measure the level of Analytical language and the level of Authentic language in CSR reports. Following the results obtained in several contributions (Pennebaker et al., 2014, 2015b), both these variables were calculated by LIWC through specific, proprietary algorithms, which included function or closed class words, establishing grammatical relations among various content (e.g. articles, pronouns, prepositions, adverbs). These types of words are the smallest yet most common words in the English language and have been considered more reliable markers of psychological states than content words, such as nouns (Pennebaker et al., 2014). The analytical language variable is a summary variable that combines eight function words, namely: articles and prepositions with a positive loading, personal and impersonal pronouns, auxiliary verbs, adverbs, conjunctions, and negation words with a negative loading. As demonstrated by Pennebaker et al. (2014), this formula can precisely capture the degree to which people use words that suggest analytical (i.e. formal, logical, and hierarchical) thinking patterns, as opposed to words that suggest a more narrative style.

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2 The variable ‘analytical thinking’ from LIWC was used to measure Analytical language, and the variable ‘authentic’ was used to measure Authentic language.
Similarly, the algorithm for authentic language was derived from a series of studies in which the language adopted by people who were distinctively induced to be more authentic or deceptive was then analysed (e.g. Newman et al., 2003). The resulting authentic language variable is a summary variable that combines the positive loading of first and third singular pronouns, third plural pronouns, and exclusive words (e.g. *but, except, without*) with the negative loading of negative emotions and motion verbs (e.g. *arrive, drive, go*). In this way, high scores of this variable have been associated with people who reveal themselves authentically or honestly and are more personal, humble, and vulnerable. Conversely, low scores on this variable have been related to more distance from the self and a more deceptive language (Barrett et al., 2002; Newman et al., 2003). Notably, for both *Analytical language* and *Authentic language*, LIWC gives standardised scores that are converted into percentiles (based on the area under a normal curve) ranging from 0–100.

### 3.2.2. Independent variables

In line with prior research (Fiaschi et al., 2015, 2017; Ruggie, 2008; Wettstein et al., 2019; Whiteman & Cooper, 2016), we conceptualised CSIR as the business-related human rights infringements the sample firms were involved in. According to the 1948 Universal Declaration of Human Rights and subsequent treaties, human rights are defined as inalienable fundamental rights to which a person is inherently entitled because they are a human being (Ruggie, 2008), for instance, labour rights, local indigenous communities’ rights to land and to life, and customers’ right to health. The conceptualisation of CSIR as firm’s involvement in human rights infringements is particularly relevant in the context of international companies, given the global scope of their operations, which calls for a universal framework that overcomes concerns about international differences in legal and cultural systems in order to define what is ‘irresponsible’ and what is not (see also Donaldson, 1996; Wettstein, 2009).

We retrieved this information directly from the Business and Human Rights Resource Centre (BHRRC),

For more details, see BHHRC at [https://www.business-humanrights.org/](https://www.business-humanrights.org/), which we last accessed on 26 November 2018.
have occurred up to 2014. For each year, we coded the number of events of abuse a firm was reported to be involved in. Our CSIR variable was then calculated as the cumulative number of the firm’s irresponsible events, $i$, up to time, $t-1$.

In order to test Hypothesis 3 and 4, we also included the interaction term between CSIR and firm internationalisation. We relied on FDIMarkets for data on greenfield and brownfield investments, as well as Zephyr (Bureau van Dijk) and SDC Platinum (Thomson Reuters) for data on mergers and acquisitions, to determine the number of countries in which the firm has invested, up to $t-1$ (Internationalisation).

3.2.3. Control variables. In our models, we controlled for firm size ($Size$) based on the logarithm of the number of workers in each year, as well as firm age ($Age$), or the number of years since the firm’s foundation. We also included firm performance, measured as a firm’s Return on asset, and firm Slack resources, measured as the ratio between total debt and equity. Then, we controlled for Standalone CSR report, which is a dummy variable, taking value 1 if the firm has published a CSR report on its website and 0 otherwise, as well as for Experience CSR report, which indicates the years since the firm’s first publication of a CSR report. Finally, we included the Time dummies in the analysis.

3.3 Models

To test the hypotheses, we used an unbalanced panel of observations with Fixed Effects (FE)\(^4\) models to control for the effects of unobservable time-invariant firm and industry characteristics, as well as macroeconomic trends (Wooldridge, 2010). We use one-year lag for all independent, moderating, and control variables to improve the inference of causality (Meyer et al., 2017).\(^5\) We checked the potential multicollinearity by calculating the variance inflation factors (VIF) for the independent variables, moderators, and control variables specified in each of the models. As a general rule of thumb, all VIF were smaller than 10, indicating no high correlation. In all the estimates, given the presence of serial and cross-sectional correlation (we tested for this following Wooldridge, 2010, p. 320), as well as heteroscedasticity (see Wooldridge, 2010, p. 172), $p$-values were calculated on the basis of robust standard errors.

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\(^4\) The use of FE instead of a Random Effects (RE) model was supported empirically since the Hausman Test was rejected for all our models, suggesting that FE is more appropriate for our analysis than RE (Wooldridge, 2010).

\(^5\) Exceptions are Standalone CSR report and Experience CSR report, which are considered at time $t$. 
4. RESULTS

Table 1 presents descriptive statistics for our variables and the correlation matrix.

Table 1 about here

Table 2 provides the results of the econometric estimations. Model 1 tests the results for the baseline relationship between CSIR and Analytical language, suggesting a negative and statistically significant effect ($\beta = -0.258$, $p < 0.001$), which supports our Hypothesis 1. This means that, when a firm is involved in a new irresponsible event that leads to human right infringement, the language style used in the CSR report will be more narrative instead of analytical. That is, rather than reporting a more technical and detailed analysis, it will probably tell a story about its actions in a more narrative way.

Model 2 shows a negative and statistically significant effect of CSIR on Authentic language ($\beta = -0.047$, $p < 0.001$), supporting our Hypothesis 2. This result suggests that the involvement in a new irresponsible event leads to a more deceptive language style in the CSR report, implying that companies are reacting to CSIR by using a less authentic tone.

Model 3 tests our Hypothesis 3 by predicting a negative moderating role for Internationalisation on the relationship between CSIR and Analytical language. Since the coefficient of the interaction term is negative and statistically significant ($\beta = -0.128$, $p < 0.05$), the (negative) effect of CSIR on Analytical language is especially significant among the most internationalised firms, supporting our Hypothesis 3. Figure 2 graphically demonstrates this result, which is also confirmed by the marginal effect analysis that shows that, unlike firms with a low ($ME = 0.096$, $p > 0.05$) or medium ($ME = -0.077$, $p > 0.05$) level of internationalisation, highly internationalised firms ($ME = -0.246$, $p < 0.001$) have a less analytical language the more they are involved in CSIR (see Table 3).\footnote{We used the mean value of Internationalisation and one standard deviation above and below the mean value to denote high and low levels, respectively.}

Figure 2 about here
Similarly, Model 4 illustrates the results of the moderating role of Internationalisation on the relationship between CSIR and Authentic language. Our Hypothesis 4 is supported since the coefficient of the interaction term is negative and statistically significant ($\beta = -0.025, p < 0.05$). Figure 3 reveals that CSIR has a negative effect on the authentic language used in the CSR reports of highly internationalised firms ($ME = -0.045, p < 0.001$), while there are no statistically significant effects for moderately ($ME = -0.012, p > 0.05$) or less ($ME = 0.021, p > 0.05$) internationalised firms (see Table 3).

[Figure 3 about here]

Regarding the control variables, we also found that in the models with Authentic language as the dependent variable, Return on assets is positive and statistically significant ($\beta = 6.906, p < 0.05$ in Model 2; $\beta = 6.744, p < 0.05$ in Model 4). Moreover, Standalone CSR report and Experience CSR report are positive and statistically significant across all models.

[Table 2 about here]

[Table 3 about here]

5. DISCUSSION AND CONCLUSIONS

In this study, we adopted a cognitive-linguistic perspective to analyse CSR reports and to understand how the related language varies the more a company is involved in CSIR. In line with previous literature (e.g. Crilly et al., 2016), we found that although the content of CSR reports can be similar across companies and conditions, linguistic features and grammar style are not necessarily homogenous. In fact, differences in how individuals make grammatical choices to connect different content tends to be a subconscious activity, which may effectively signal how they really relate to their social and environmental policies (Hart, 2014; Langacker & Langacker, 2008). Therefore, differences in how actors write instead of what they write are particularly informative about the ways they conceive important phenomena and represent them. These
differences, notably, may reveal information about cognitions that are otherwise difficult to elicit by conventional content analysis (Crilly & Ioannou, 2017).

To this end, our work provides new insights about how managers address the challenge of CSIR. In particular, we showed that the more a company is involved in CSIR, the more its CSR report will adopt both a more narrative (less analytical) and a more deceptive (less authentic) language style as a reaction to the critical situation. Moreover, we demonstrated that these trends are particularly evident for highly internationalised firms, which have more exposure to influential stakeholders and, therefore, face more pressure. In this way, we extended the results obtained by Crilly and Ioannou (2017), who showed how the adoption of a particular language style (e.g. a conjunctive and analytical language) may predict relevant outcomes for the company, such as social performance. In our case, we showed how negative outcomes, such as those related to CSIR, may become inputs that predict a significant change in the language adopted in CSR reports. In other words, we established not only that implementing a specific language can enable the company to achieve certain results (e.g. social performance) but the company itself may also employ a particular language style because of past irresponsible conduct.

Accordingly, stakeholders (e.g. investors, media, non-governmental organisations) should pay keen attention not only to what CSR reports say but how they say it. We recommend stakeholders to be more cautious when they read a CSR report, particularly one that seems to use a more narrative language and, therefore, systematically refuses to engage in in-depth analyses. Similarly, CSR reports with a more distanced style that look highly impersonal should also be examined with a critical eye. In both these cases—and especially if companies are highly internationalised—stakeholders should carefully evaluate the companies’ related activities because they may be potentially involved in CSIR.

We encourage other scholars to proceed in this promising direction in order to better clarify the connections between language and mental models, which several other studies have deemed to be of key importance (e.g. Cornelissen & Durand, 2012). This is particularly significant considering that our study is not without limitations. For instance, we only analysed companies in developed countries whose CSR reports are written entirely in English. Future research could, then, focus on the analysis of CSR reports from developing countries and look at different styles that are used in alternative languages and cultures. Moreover, other types of CSR communication tools can also be investigated: CSR strategy papers, websites,
and social media are just some examples of instrumental and deliberative tools (Seele & Lock, 2015) that can be analysed from a cognitive-linguistic perspective.

In addition, we only focused on two characteristics of the language (i.e. the level of analytical vs. narrative style and the level of authentic vs. deceptive style), while other dimensions, such as the level of confidence (Kacewicz et al., 2014) or the emotional tone (Cohn et al., 2004) of the writer, could also be investigated. Additionally, while we focused on human rights infringements as a form of CSIR, further research could analyse how different types of irresponsible business conduct (e.g. financial fraud, corruption, environmental crime) may affect the linguistic features of companies’ CSR communication strategies. Finally, future studies could replicate our analysis in other contexts as well as use further empirical methodologies to triangulate results. For instance, in-depth interviews with managers or other important actors in the field could be a relevant integration of our results. In this sense, experimental methods could also be employed to disclose the psychological mechanisms that guide the language style modifications, which subconsciously take place as a result of the critical situations faced by companies. We leave these questions to future researchers.
REFERENCES


### Table 1. Descriptive statistics and correlation matrix

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Sd</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Analytical language</td>
<td>53.24</td>
<td>47.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2  Authentic language</td>
<td>8.60</td>
<td>8.78</td>
<td>0.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3  CSIR</td>
<td>8.81</td>
<td>20.73</td>
<td>0.27</td>
<td>0.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4  Internationalisation</td>
<td>13.48</td>
<td>13.27</td>
<td>0.52</td>
<td>0.49</td>
<td>0.38</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5  Age</td>
<td>80.70</td>
<td>51.57</td>
<td>0.23</td>
<td>0.25</td>
<td>0.34</td>
<td>0.39</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6  Size</td>
<td>1.97e+22</td>
<td>8.83e+23</td>
<td>0.05</td>
<td>0.03</td>
<td>0.14</td>
<td>0.07</td>
<td>-0.01</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>7  Return on assets</td>
<td>0.57</td>
<td>0.06</td>
<td>-0.05</td>
<td>-0.04</td>
<td>-0.02</td>
<td>-0.03</td>
<td>0.01</td>
<td>-0.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8  Slack resources</td>
<td>6.42e+0</td>
<td>7.52e+10</td>
<td>0.12</td>
<td>0.14</td>
<td>0.06</td>
<td>0.16</td>
<td>0.11</td>
<td>0.05</td>
<td>-0.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9  Standalone CSR report</td>
<td>0.39</td>
<td>0.49</td>
<td>0.74</td>
<td>0.58</td>
<td>0.31</td>
<td>0.52</td>
<td>0.25</td>
<td>0.03</td>
<td>-0.03</td>
<td>0.10</td>
<td></td>
</tr>
<tr>
<td>10 Experience CSR report</td>
<td>3.19</td>
<td>4.46</td>
<td>0.69</td>
<td>0.61</td>
<td>0.40</td>
<td>0.66</td>
<td>0.24</td>
<td>0.01</td>
<td>-0.04</td>
<td>0.16</td>
<td>0.59</td>
</tr>
</tbody>
</table>

Note: To calculate the mean and sd, we used the original data without any transformation.
### Table 2. Results

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1) Analytical language</th>
<th>(2) Authentic language</th>
<th>(3) Analytical language</th>
<th>(4) Authentic language</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSIR</td>
<td>-0.258***</td>
<td>-0.047***</td>
<td>0.096</td>
<td>0.021</td>
</tr>
<tr>
<td></td>
<td>(0.053)</td>
<td>(0.011)</td>
<td>(0.130)</td>
<td>(0.027)</td>
</tr>
<tr>
<td>Internationalisation</td>
<td>-1.181</td>
<td>0.111</td>
<td>1.196</td>
<td>0.570</td>
</tr>
<tr>
<td></td>
<td>(1.694)</td>
<td>(0.334)</td>
<td>(1.916)</td>
<td>(0.365)</td>
</tr>
<tr>
<td>CSIR*Internationalisation</td>
<td></td>
<td></td>
<td>-0.128*</td>
<td>-0.025*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.055)</td>
<td>(0.011)</td>
</tr>
<tr>
<td>Size</td>
<td>2.906</td>
<td>0.655</td>
<td>2.887</td>
<td>0.652</td>
</tr>
<tr>
<td></td>
<td>(2.073)</td>
<td>(0.356)</td>
<td>(2.048)</td>
<td>(0.356)</td>
</tr>
<tr>
<td>Return on assets</td>
<td>16.089</td>
<td>6.906*</td>
<td>15.247</td>
<td>6.744*</td>
</tr>
<tr>
<td></td>
<td>(18.940)</td>
<td>(3.325)</td>
<td>(18.671)</td>
<td>(3.334)</td>
</tr>
<tr>
<td>Slack resources</td>
<td>-0.006</td>
<td>0.001</td>
<td>-0.006</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>(0.008)</td>
<td>(0.001)</td>
<td>(0.008)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Age</td>
<td>-3.104</td>
<td>-1.778</td>
<td>-4.416</td>
<td>-2.031</td>
</tr>
<tr>
<td></td>
<td>(5.854)</td>
<td>(1.229)</td>
<td>(5.873)</td>
<td>(1.242)</td>
</tr>
<tr>
<td>Standalone CSR report</td>
<td>57.062***</td>
<td>7.228***</td>
<td>56.687***</td>
<td>7.156***</td>
</tr>
<tr>
<td></td>
<td>(3.662)</td>
<td>(0.759)</td>
<td>(3.684)</td>
<td>(0.756)</td>
</tr>
<tr>
<td>Experience CSR report</td>
<td>1.749**</td>
<td>0.265*</td>
<td>1.635**</td>
<td>0.243*</td>
</tr>
<tr>
<td></td>
<td>(0.572)</td>
<td>(0.115)</td>
<td>(0.568)</td>
<td>(0.115)</td>
</tr>
<tr>
<td>Firm Fixed Effect</td>
<td>Included</td>
<td>Included</td>
<td>Included</td>
<td>Included</td>
</tr>
<tr>
<td>Year Fixed Effect</td>
<td>Included</td>
<td>Included</td>
<td>Included</td>
<td>Included</td>
</tr>
<tr>
<td>Observations</td>
<td>2,298</td>
<td>2,298</td>
<td>2,298</td>
<td>2,298</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.630</td>
<td>0.420</td>
<td>0.633</td>
<td>0.423</td>
</tr>
</tbody>
</table>

Robust standard errors in parentheses.
* p<0.05, ** p<0.01, *** p<0.001.
Table 3. Marginal effects of the moderating role of Internationalisation on the baseline relationships.

<table>
<thead>
<tr>
<th></th>
<th>Analytical language</th>
<th></th>
<th>Authentic language</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Marginal effect</td>
<td>p-value</td>
<td>Marginal effect</td>
<td>p-value</td>
</tr>
<tr>
<td>Low Internationalisation (mean – 1sd)</td>
<td>0.096</td>
<td>0.464</td>
<td>0.021</td>
<td>0.445</td>
</tr>
<tr>
<td>Average Internationalisation (mean)</td>
<td>-0.077</td>
<td>0.252</td>
<td>-0.012</td>
<td>0.408</td>
</tr>
<tr>
<td>High Internationalisation (mean + 1sd)</td>
<td>-0.246</td>
<td>0.000</td>
<td>-0.045</td>
<td>0.000</td>
</tr>
</tbody>
</table>
FIGURES

Figure 1. Conceptual model

Figure 2. The moderating role of *Internationalisation* on the relationship between *CSIR* and *Analytical language*

*Source: Authors’ own elaboration based on Model 3 from Table 3 (with 95% confidence intervals).*

Figure 3. The moderating role of *Internationalisation* on the relationship between *CSIR* and *Authentic language*

*Source: Authors’ own elaboration based on Model 4 from Table 3 (with 95% confidence intervals).*