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# Sustainability reporting and interactive storytelling: a genre approach for humanising business

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## Introduction

*“Little Red Riding Hood, her grandmother having been eaten by a bad wolf, was freed by a hunter, and both lived happily ever after”.*

If the story of Little Red Riding Hood were told as a shallow summary of the events leading up to an all-important end, it would probably read something like the quote above. It is a succinct telling of events, but what is the moral of the story? How can we be sure of what is good and bad? More to the point, how can we determine whether the end truly justifies the means? This is the current state-of-play in accounting. Investors want results. Managers want to disclose what investors want to read. And stakeholders are grappling to find information from alternative sources because it is clear that no one is talking to them sincerely. Stakeholders are simply passive witnesses to a monologue, whose opinions are only and rarely considered once a report is published.

Freeman et al. (2018, p.14) argue that “Our accounting systems are targeted to investors and how managers can create value for them, not other stakeholders. If we put stakeholder theory at the centre of the narrative about business, how should we think about accounting for stakeholders?”. This proposition pinpoints one of the critical debates in accounting today – the opposition between, and benefits of, narratives versus succinctness in corporate disclosures. For the prosecution, we have those who emphasise narratives, explanations and disclosures of salient information to a diverse range of stakeholders (Dumay, Frost, and Beck 2015; Czarniawska 2017, 2008, 2004). Arguing for the defense, we have investors, financial capital providers, regulators, and the European Commission, who are increasingly promoting policies that reward succinct reporting.

In this chapter, we set out a case for the prosecution. We support Zyphur and Pierides’s (2019) claim that publishing only results creates a false myth of numerical reductionism. We argue that sustainability reporting can become a foundational instrument in a polyphonic dialogue between companies and stakeholders. At its extreme, it can become a tool for representing a multi-faceted reality; for collecting the voices of the excluded and underrepresented; and for challenging the status quo (Dillard and Vinnari 2017; Dillard and Yuthas 2013; Dillard, Yuthas, and Baudot 2016; Brown and Dillard 2014).

At the same time, we are fully aware that sustainability reports can also be used to tell fairy tales (O’Dochartaigh 2019). Known as greenwashing or window-dressing (Bhatia 2012; Diouf and Boiral 2017), these red herrings are designed to build an organisational façade as a way to recover from a situation that threatens the organisation’s legitimacy (Deegan 2002; Guthrie and Parker 1989; Lindblom

1994; Blanc et al. 2019). While reprehensible, the fact that so many companies engage in this behaviour during scandals demonstrates there is a risk in storytelling of being abused and misused. By disregarding narratives instead, managers can strictly control what is disclosed, privileging managerial interests first, then shareholder interests, and finally, the information needed by stakeholders (Dumay, La Torre, and Farneti 2019). And stakeholders can only gain a limited understanding of how the company operates to achieve sustainable results because narratives keep stakeholders informed about business operations through facts, values, and decision-making (Freeman, Phillips, and Sisodia 2018; Freeman 2018).

A humanistic approach to business should foster interactions with and between stakeholders using the report as a conduit. Challenging the monologue of a report means to directly involve the reader as an active co-creator of the story or embracing a story from other viewpoints. For instance, interaction in a static report could happen by adding boxes of content to the report written by NGOs and partners providing their point of view on specific projects. Another interesting approach could be to give readers the option to select their preferred content through a non-linear story. Through the use of examples and the rich and diverse voices of stakeholders, interactive storytelling can be a way for everyone involved in an enterprise to develop moral reasoning (Werhane 1998, 1999). Storytelling is a specific kind of narrative that can help people to make sense of events. It is composed of a range of devices, such as structures, plot, viewpoint, character, and rhetorical devices (Beattie and Davison 2015).

Communicating problems means coping with the complexity surrounding sustainable development (Weber and Khademian 2008). Researchers around the world agree that traditional measures are not sufficient to capture progress toward the United Nations Sustainable Development Goals (SDGs) and that new and non-traditional methods are required, such as citizen-scientist opinions (Fritz et al. 2019). Thus, now is the time to seize the opportunity and narrow the divide between practising and preaching with a more stakeholder-oriented and interactive form of sustainability reporting.

A background on state-of-the-art practice in sustainability reporting and the current trend toward excessive numerical reductionism follows. *“Sustainability reporting and humanism: a critique”* discusses the existing literature on accounting and humanism. Our case is set out in *“Defining a genre in sustainability reporting”* beginning with the general context followed by the specific context of sustainability reporting standards. The *“Discussions and conclusions”* and *“Implications for humanising business”* sections end the chapter.

## **Background**

Today, the landscape of corporate sustainability reporting is a maze. Among the dozens of reporting standards and frameworks, at least six are well-established – the Global Reporting Initiative (GRI), the Carbon Disclosure Project (CDP), the Climate Disclosure Standard Board (CDSB), the Integrated Reporting Framework (IRF), the Sustainability Accounting Standards Board (SASB), and the Task Force on Climate-related Financial Disclosure (TCFD). Moreover, these frameworks are now being joined by roundtables, such as those offered by the Corporate Reporting Dialogue (2019) or Accountancy Europe (2019), and hundreds of other initiatives designed to help companies account for sustainability in all types of organisations, from for-profits to social enterprises (Grieco, Michelini, and Iasevoli 2014). What is common to almost all guidance is a trend towards numeric reductionism.

This trend is also evident in public policy. For example, the European Commission’s Green Deal pushes the debate on the credibility of data on climate change, asking companies to prove their

calculations using science-driven indicators. Science is wonderful, but it meets the information needs of markets and investors more so than citizens, NGOs, politicians, and local actors. With its Directive on non-financial disclosures (2014/95/EU), the European Commission has perpetuated numeric reductionism to such an extent that researchers are arguing that a result of its implementation has reduced the primitive communicative intention of sustainability reports with indicators (Farneti, De Villiers, and Dumay 2018). Such is the emphasis on data-driven disclosure that many data analysts do not even consult the sustainability report; they simply determine whether a company is making efforts toward sustainability by reading a table or chart (Seele 2016). This explains why the sustainability scores and ranking systems created by Bloomberg and DataStream to replace narratives are attracting so much attention from researchers (Cubas-Díaz and Martinez Sedano 2018).

What is surprising is that this reductionism is in contrast to the narrative turn of accounting explained in several works by Czarniawska (2017). For narrative turn, it is intended the progressive increase affecting the traditional accounting documents, with information regarding corporate's risks, business model descriptions, corporate's strategy overview, management approaches and descriptive elements of the business and the market served. According to Czarniawska (2017), a narrative, intended as an increase of amount of information about the business, delivered in the written form with qualitative descriptions, can help an organisation to collectively construct meaning, and circulating a narrative is a form of education that can help people understand the world's complexity. This is why we argue that restoring narrative to reporting is important, and why sustainability reporting – more than other forms of reporting – is the place where stakeholders should be able to find information about people, actions, procedures, values, and beliefs (Gray and Milne 2015, 2018).

Unfortunately, the mess of standards and frameworks is creating a situation where sustainability reporting is increasingly becoming just another tool to fulfil the expectations of shareholders. Rather, sustainability reports should be educating all stakeholders on how companies are working toward sustainable development (Bebbington and Unerman 2018; Buhr, Gray, and Milne 2014). For instance, the GRI largely provides principles based on stakeholder inclusiveness to guide the quality and content of reports, but how exactly this guides reports to shareholders not stakeholders still remain an evident gap. In contrast, the galloping IRF boldly and proudly makes succinctness its bastion because its audience is financial capital providers. However, a problem can also emerge in the first scenario (Milne and Gray 2013).

Current solutions to regulate or simply guide companies in providing narratives are simplistic and, most of the time, unsatisfactory. The GRI dedicates an entire standard to the disclosure of management approaches with advice on how to manage words, facts, and actions (GRI 103), but all other standards are either silent or, worse, they support a counterproductive, self-celebrative form of reporting. The narrative sections of a report are also less likely to be subject to audit and review and this, coupled with the lack of adequate guidance, has unfortunately given companies excessive freedom to use this space to execute impression management strategies, as evidenced in a host of studies on corporate disclosure following disasters and scandals (Blanc et al. 2019; Cho et al. 2015).

Further, a last reflection can be made about a possible risk related to narrative, because they are less comparable than quantitative data. Proponents of pluralism and polyphonic debate find it extremely acceptable to have different perspectives on the same story (Dillard, Yuthas, and Baudot 2016; Brown and Dillard 2015; Dillard and Vinnari 2018). Manager and investors might have a different opinion. The opposition between numerical reductionism and narrative needs in traditional accounting is also affecting sustainability accounting and reporting. Further discussions are needed to simplify and

provide solutions, and this chapter wants to contribute to this, offering a genre-based approach applied to sustainability reporting, providing a critique to remind us that data are senseless without a story, and stories have morals.

### **Sustainability reporting and humanism: a critique**

Unlike mainstream accounting studies on annual reports, studies on narratives in sustainability reports are scarce. Of the few there are, Beattie et al.'s (2004) analysis and evaluation of narratives in annual reports was motivated by the heightened awareness markets and investors were developing on the importance of narrative as a way to enhance corporate transparency and accountability. Rutherford (2005) subsequently found that following a genre-based approach is essential to understand what preparers intend to communicate and to let the reader able to grasp information not only through numbers, but also reading the narratives. One of the future avenues of future accounting research Rutherford called for was to compare and contrast the characteristics of different genres of writing, including regulated and unregulated narratives. Genres of writing is intended as non-fictional business writing that can represent a separate literary genre by itself, for instance, focusing on the form of writing, it seems to recognise that an annual report is not the same of a sustainability report, a consolidated financial statements, or an ethical code. The implicit assumption here, which we support, is that there *are* different writing styles and genres for both regulated and voluntary sustainability reports.

Drawing parallels with previous research on financial reporting, we found that there are several commonalities in the work of Rutherford (2013) that can be applied in sustainability reporting, intended as a new literary non-fictional business genre. The elements of applying the perspective on writing genres to sustainability reporting include: (a) a model that incorporates all stages of a report's development in a systematic, comprehensive and integrated way; (b) the need to embrace both technical and social dimensions; (c) the importance of the interrelationships between the expectations of users and preparers; (d) recognition by the company reporters that composition is a challenging process; (e) greater importance of context and dynamism; and (f) a new perspective on complex social problems. According to this elements, we think that a genre-based approach to sustainability reporting can empower stakeholders. According to Lehman (2017), this empowerment involves a change in reporting, that is deprioritising investors and financial capital providers and creating a richer, more encompassing narrative that another type of public that is represented by the stakeholders at large.

More recently, Beattie (2014) has argued that the influence of sustainability accounting over the narrative turn of accounting deserves more study. A quite contradictory aspect is that in her work she explicitly mentions the IIRC's Integrated Reporting Framework (the <IRF>) as a possible reformer of disclosures on business models and corporate strategies, but unfortunately this has never happened. In fact Flower (2017) has demonstrated that this increase in the narrative has not happened to the sake of sustainability issues, but on the contrary, the information on business models, corporate risks, corporate strategy have been increased to the sake of investors' knowledge. Despite in Beattie and Davison (2015), we can find a well discussed application of genres in reporting, however, even that work does not go into the merits of sustainability reporting that remains a relatively neglected area of accounting research (under a narrative perspective).

Only in the last few years have researchers begun to apply a humanistic perspective to understanding the communications in sustainability reports (Nazari, Hrazdil, and Mahmoudian 2017; Lin 2020; Yang and Liu 2017; Yu and Bondi 2019). Hossain et al. (2019), for example, draw on symbolic convergence

theory to demonstrate that fantasy and rhetorical visions are a common thread in corporate sustainability reporting. O'Dochartaigh (2019) also refers to rhetorical fairy tales, while Dion (2017) claims that sustainability reporting cannot be intended as a narrative if the author does not recognise the importance of the plot and, hence, the plot should bring more meaning to the continuum between the past, present and future.

Yet the full potential of sustainability reporting could be realised with effort on three fronts. First, a sustainability report, as a format, has always been perceived as monodirectional; even the GRI ask for an explicit involvement of stakeholders in defining the material assessment of the topic included in the report. Unfortunately, managers and investors can manipulate the materiality matrix, that is the output of the material assessment, towards the topic that the company wants to disclose, playing the game of changing the priority assigned quite easily, also considering that auditors do not check that part (Dumay, Frost, and Beck 2015). Second, guidelines offer little to no control over who receives the message or how the message is interpreted once received, exception due to requesting a feedback to a specific stakeholders, but this is usually on the generic aim of the report, and not on specific messages (Herremans, Nazari, and Mahmoudian 2016; Unerman 2007). Third, there is a tension between practice and preaching. Control over the reader on the accountability duty provided by the sender of the message is like water in the desert. These days, it is tough to find a sustainability report that includes statements or declarations to supplement disclosures by NGOs. Instead, the credibility of the content relies on the auditor's report.

### **Defining genres in sustainability reporting**

A genre or genres? Sustainability reports are a type of "literary" work in the sense that, in them, we can find a story – a flow. There is a protagonist (the company), a detailed description of the set (the market) and an end (the annual results). Antagonists (competitors) may try to thwart the company's endeavours, market conditions may have been treacherous, but the company triumphs in the end. All these elements are part of storytelling. The narrative form of storytelling in a sustainability report is notable because stories are crafted by authors to help readers make sense of events. Here, the author is a workgroup pseudonymed under an institutional umbrella, and the readers are stakeholders (Beattie and Davison 2015).

From this perspective, sustainability reporting is, in general, a new genre that can be analysed. Literary studies are rarely seen as relevant outside the humanities, but there is a secure historical interconnection with the content industry, an umbrella concept that refers to companies providing mass media and media metadata. On the one hand, the study of literary expression and response sheds light on the different anatomies of literary works and their impact on readers. On the other hand, the content industry innovates by stressing existing practices and incorporating the lessons learned from a direct relationship with readers. Over the last decade, the humanities approach, critical studies and studies on communications mediums have substantively addressed some of the contemporary challenges emerging from socio-technological systems. A significant example is the influence of feminist theories, and critical theories in general, in the design of digital technologies (Bardzell, Bardzell, and Blythe 2018). Another significant example is represented by the birth of disciplines and literary genres like ecolinguistic intended as the science of studying the language representations of natural phenomena (i.e. climate change), and it focuses on the relationships between the language and how the linguistic

can potentially influence the ecosystem (A. Fill and Muhlhausler 2006; A. F. Fill and Penz 2017; Stibbe 2015).

Similar to any literary work, sustainability reporting is the result of a tension between the practice and standards emerging from organisations and a cultural discourse that reflects on the scope and role of sustainability reporting. While sustainability reports are the result of regulations, standards, and organisational practices concerning communication and engagement with stakeholders and the public, scholars and researchers are providing new indications concerning best practices, emerging issues, and societal challenges surrounding the relevance of sustainability reporting. Here, genre studies can contribute by providing a general framework for sustainability accounting that highlights the relationships between content, audience, channel and production.

As we already clarified, currently, most of the content of sustainability reports predominantly consist of an established set of data represented through numerical tables and diagrams. Preparing this type of content requires little effort by the author, but filling the gap between data and the underlying narrative requires a great deal of effort on the part of the reader. While narratives are a linear reading experience (where different lines/stories can be designed), graphic representations of data are usually fixed. To communicate better information using data, it needs that such data should be displayed with a free, unstructured exploration to the reader. Consequently, each reader can reconstruct his/her information in an unstructured way, if compared to a linear narrative where it is clear where the story begins and where it ends. This unstructured exploration of data amplifies the semantic gap between the data and its meaning, resulting in the need for prior knowledge and skill from the reader to interpret them properly.

It is worth highlighting that ambiguity between narrative and data is not accidental but rather a deliberate stylistic choice. Establishing the right amount of narrative and data is an essential aspect of the reading experience, a gap filled by readers' experiences and expectations (Eco 1979; Gerrig 1993). On first impression, data convey a sense of objectivity; data are factual and rational. The semantic gap in data-driven communications concerns precisely the rationale behind the author's selection of what to include and exclude, which units and aggregations to use, and what it is worthy to be explained or what is left to the reader's interpretation. Thus, the first issue we highlight concerns the balance between the commitment of the author to influence the reader's experience giving a narrative containing the writer's explanation versus a greater effort required by the reader to interpret the story by itself.

In this regard, the overamount of data is called a data-driven communication, that can be supported by the introduction of elements of storytelling. Storytelling in data-driven communication matches the narrative of a story with data and data visualisations encoded and tightly linked to the story (Kosara and Mackinlay 2013). Similar to charts and graphs, storytelling allows the author to express a rationale, supporting the reader interpreting the content by using standard and clear identifiable elements of the narration. These elements are the essence, the actors, the roles and the events, that in turn, are bound by temporal and causal relations (i.e., a narrative).

One of our first proposition involves extending sustainability reporting by introducing elements of storytelling. Although storytelling can be an essential tool for steering the interpretation of data, the introduction of a narrative is not without consequences for the author. It requires a commitment beyond selecting and preparing data to developing a standpoint about the data. The choice of a specific narrative is a double-edged sword because storytelling shifts part of the responsibility for interpreting the content to the author by reducing ambiguity, but increasing the risk of misinterpretation. One way to reduce ambiguity is to make assumptions about who and what is of interest to readers based on one's

understanding of the audience. In the case of sustainability reporting, the assumed audience should be a complex body of stakeholders with a wide range of needs and goals. Framing the audience highlights the second issue of this genre: the selection of a narrative and, therefore, of an audience.

Finally, the message conveyed using a sustainability report presents two levels of complexity. First, sustainability reports have complex structures and should have complex narratives that reflect how an organisation operates within a socio-technical ecosystem. Specifically, narratives should exemplify complex organisational structures, protocols, and practices, decisions and actions for reacting to a dynamic multi-scalar environment (i.e., from the international to the local). Further, they should explain the interweavings between short-, medium-, and long-term strategies.

Consequently, one of the most crucial aspects for the editing phase of a report is to match properly, the content with the story with a logical flow of topics, that it is not always obvious in our society characterised by a plethora of data to be translated into new knowledge (Katifori et al. 2018). More specifically, who write a sustainability report should keep in mind that through interactive storytelling, the reader can find interesting information aggregating/disaggregating data using its point of view (Davis 2007). Let the data open to the public, and letting the reading experience self-decided, is a dramatic shift. First, it requires a greater variety of skills and a team of experts with a deep understanding of narrative and audiences. Second, it forces the need to build a consensus around a vision and then a narrative. Not committing to an interpretation means not committing to building a coherent shared view. This scenario highlights a third issue concerning the very existence of the message behind the report.

Even combining data and data visualisation can be a first step in building up a genre in reporting, unfortunately this is not sufficient. The introduction of storytelling can be a solution in line with the current trend in data visualisation (e.g., data journalism is born as a trend in journalism where different data sources are statistically elaborated by the journalist, finding new knowledge and a news to be communicated). In the same way, the data interaction should include first the need to select an audience and further to assume the relevance and use of the report.

Concerning the plurality of audiences, a solution can be found in interactive storytelling. Interactive storytelling provides a non-linear experience based on decision points presented to readers. It transforms the communication from a unilateral explanation into a dialogue. In this way, interactive storytelling is not a single work, but a collection of interwoven versions of a work. Readers then use the decision points to navigate the collection of works towards the specific version to meet their information needs. Interactivity also provides the opportunity to collect feedback from readers on what they think and how they use the report. Hence, interactivity provides the opportunity to re-frame the report as a live document that can be revised and extended at the convenience of the reader.

Live interactive storytelling mitigates the issues concerning: 1) the commitment to a specific narrative; 2) the commitment to a specific audience; and 3) the challenge of complexity (van Enschoot et al. 2019). First, live interactive storytelling configures an open narrative field in which the content (like the length of a story) can be expanded and reduced as a result of an ongoing interaction (dialogue) between author and reader. Second, a narrative field offers the flexibility of providing multiple narratives, each designed for a different audience. Further, combining storytelling and a plurality of narrative strands also broadens the accessibility of sustainability reports to non-expert audiences (Boy, Detienne, and Fekete 2015). Third, the combination of narrative and interactivity provides the opportunity for authors to represent complexity in their work, and for readers to explore that complexity through their own eyes, interests and sensibilities. Finally, an interactive report of stories should



mitigate the risks of letting someone apart, with a generalised inclusion of all stakeholders in the narrative.

A last remark must be made about the goals, aims, and, therefore, the uses of reporting. Sustainability reports are generally published annually as part of an organisation's communication and sustainability strategy. From an organisational perspective, the report is a due-diligence activity. However, its underlying goal is of strategic relevance for steering the management of sustainability strategy. In this scenario, sustainability reports must support: 1) intra-organisation comparability (year by year), and 2) inter-organisation comparability (with similar organisations). The need for comparability is a crucial requirement in the argument for data-driven reports. Therefore, interactive storytelling reports must be grounded on an analytical framework for the comparison of different narratives.

In this regard, a narrative can be confused with non-structured content, providing a degree of freedom to authors that will eventually impede report analysis. Indeed, a narrative can be instantiated in a wide variety of ways, ranging, for instance, from novels, romances, and poetry to comics and drawings. On the other hand, a narrative implies a specific set of elements that can be articulated freely, but that is also recognisable regardless of the result. A narrative must include actors and their roles, actions, and events, all articulated in a timeline and including causal relationships. The common elements of narratives have been highlighted by works on archetypes, prototypical stories, and narrative functions and characters (Booker 2004; Propp 1984).

In conclusion, a narrative provides a flexible but structured framework for sustainability reports that could be effectively employed regardless of the complexity of the organisation. Further, an interactive storytelling approach provides the opportunity to: 1) establish a dialogue with the different audiences and collect feedback; 2) express the right message for each type of audience; and 3) explore a field of mutually supporting narrative streams on the reader's terms.

## **Discussion and conclusions**

What happens when we apply interactive storytelling as a framework for codifying sustainability reporting as a literary genre? First, we should address the question of whether sustainability reports represents a stand alone genre, reflecting upon the differences that exist between a sustainability report and other forms of sustainability disclosure (or pseudo-sustainability disclosure like reports that should be developed on sustainability concerns but at the end are tools to communicate to investors). We should reflect, in fact, that as a result of the application of different guideline/standards/framework, the writer will obtain completely different narratives and editorial output. Consequently, we cannot affirm that a sustainability report is the same literary genre as an integrated report because the plots, stories, messages and audiences are different.

With the exception of the GRI and CDP, which explicitly mention stakeholders as the target audience, all other standards and frameworks have been developed to suit the needs of investors and financial capital providers. It should be noted that, in the case of CDP, the user can choose whether to access to their guidelines as a company or as an investor. The CDSB and the TCFD were developed to communicate the impact of climate change on financial statements to investors along with the possible implications to risk and opportunity. The SASB standards were developed to inform investors about industry-specific sustainability problems with potential financial effects. Last, the Integrated Reporting Framework, published by IIRC, explicitly states that its interlocutors are financial capital providers. Therefore, data-driven narratives prioritise an investor audience.

Second, there is prose. The GRI emphasises the need to explain a company's management approach to material sustainability issues, but all other standards and frameworks encourage conciseness and minimal narrative (e.g., SASB, TCFD, CDSB). The IIRC's treatment of this issue is unusual. Despite it promotes to disclose data on risk management and business modelling, on the other side it requires to be concise as a general reporting principle. However, this is done not for the sake of stakeholders, but rather for the benefit of investors. Last, the CDP's internal structure specifically focuses on accounting for forests, water and climate change with the goal of companies, but its structure does not require to create a stand alone report because CDP is elaborated as a questionnaire.

Third, there is the content. Most of the standards, frameworks and guidelines adopt the materiality principle, derived by financial accounting standards, but in a different way. To draw a parallel with literature, materiality should represent the voice of the reader. Unfortunately, standard-setters recognise that materiality is not unique and, in the case of SASB and the European Commission, the trend of identifying double materiality is growing. Traditional materiality is company-directed; it emphasises what a company can do for society and the environment, whereas double materiality deals with how external social and environmental changes affect business performance and how organisations can exploit or cope with those changes. It is difficult to believe that, instead of putting stakeholders' information needs at the core of reporting practices, future trends are moving in the opposite direction. Today, only the GRI explicitly involves stakeholders in the definition of materiality.

Data-driven storytelling can be a solution independent of the standard or framework used to tell it that makes information more accessible to users. With interactive storytelling, the reader becomes part of the story, and the problem of comparability is overcome by developing a new definition of comparability itself. That is, the problem is not how to compare different standards, but to recognise herein the narrative part, like the comments of tables and all the introductory sections a structured discourse. This involves identifying the actors, the message, the actions, inside the narrative. Then, the author can offer to the reader specific reading paths. A reading path can be described as the way that the text, or text plus other interactive actions (like interacting with tables and data, enter in the table, select specific data to be analyse disregarding others, etc.), can determine or order the way that the reader will use. In turn, the reader will compare the different discourses provided in a sustainability report or in different sustainability reports, no matter the standards used to develop them. Narratives, in particular, become a powerful tool for developing a moral imagination around complex sustainability issues including from different viewpoints and interactivity can bring the reader inside the data obtaining new interpretation of the data.

Of course, there will be barriers to adopting narratives as a sustainability reporting norm. Companies should accept that they must deliver information with an exact entry point. A book starts from the first page, and there is a clear identifiable flow of actions, whereas with interactive storytelling, the story is developed following the reader's need of information, where the reader (that is a stakeholder) can enter in the story starting from different section. For instance, this can be exemplified into developing the discourse in narrative blocks, where actions/reactions, values/beliefs/actions and actors/actions are easily recognisable. Reshaping the logical process of writing a sustainability report can be costly but would yield benefits for more and different stakeholders – especially if creating a plot to explain how a story about the company efforts indealing wih sustainability issues and grand challenges has evolved across the years and the impacts derived. Digital interactive storytelling can be beneficial for bringing stakeholders back to their roles as gatekeepers and activists and to break down the walls of inscrutable companies. By providing data to non-expert readers and broadening knowledge of a company's

sustainability efforts, the process of preparing a sustainability report should change. For instance, it will be necessary to include representative of stakeholders in the editing phase, to understand a reasonable amount of reading paths. Investors will not be compromised; they can choose to read the data they want, but delivering the information they want will not come at the expense of other stakeholders needs. Of course, this process requires a radical shift towards open information and stakeholder engagement, that is juxtaposed to select information at the beginning applying a material legitimacy (Dumay, Frost, and Beck 2015). Conversely, the involvement of stakeholders in the editing phase can represent a first attempt to empower them and learn from them, starting an internal moral reasoning on critical issues such as poverty, hungry, inequalities, discrimination, etc. using different viewpoints (Werhane 1999, 1998).

The views we present here are the first step towards a more sophisticated critique that applies approaches from genre theory, the social sciences, and the humanities to sustainability reporting. As such, our analysis suffers from a lack of concrete examples and applications. What it does offer, however, is a critique of the alarming signals coming from those who set worldwide standards for sustainability reporting. These trends are becoming embedded in public policy but run counter to the aim of rediscovering the human dimension of businesses.

### **Implications for humanising business**

Although accounting researchers have made countless efforts to restore the dialogic importance of reporting, the truth is that their efforts are vain. This does not mean that all is lost. But we should be aware that numerical reductionism is perpetuating a tendency to provide succinct information for people who have little time to waste on an in-depth understanding of the information being presented. Yet it is precisely through reading and making one's own personal interpretation of what has been read, through empathy and one's own experiences, that stories take on meaning. Different meanings. Because sustainability is a complex phenomenon, only through a different point of view can a reader gain a slight idea of the bigger picture. Therefore, from the perspective of humanising business, interactive storytelling can serve to help reporting flourish as a tool for exposing different points of view and for establishing a dialogue with the reader as a co-creator of the story.

Reading a specific sustainability report, with the freedom of jumping from one data to another, exploring a story can stimulate imagination and critical thinking, which also benefits the business. From such different viewpoints, companies receive comments, can make observations about how their business is perceived and benefit from diverse opinions. Although reducing complexity is a business prerogative, interactive storytelling increases complexity. Readers can create their own different stories as they move through the content provided, which is not a terrible thing. For instance, some companies, like Nestlè and Heineken, are publishing reports types of interactive storytelling where the reader finds performance indicators alongside testimonials and the voices of partners, suppliers, collaborators telling their version of the story with external links to NGOs website etc.

With interactive storytelling users can gain a deeper understanding of the content (Zhang and Lugmayr 2019). For instance, in sustainability reports of the company there are published data pollution, poverty, energy consumption, that can have a use that goes beyond the mere financial market and investors' information need. These data are collected by the organisation can be fruitful as a snapshot of specific problems affecting territories. For instance, explaining the quality of life of remote rural villages where the company has started philanthropic projects, or explaining the difficulties of reducing

Co2 emissions in a specific business fields, or it can be used to show problems affecting all similar companies, like the glass ceiling problem in academia. Such access to data can allow all the readers in creating moral awareness on specific problems. Let's make a conclusive example. Who is interested in know more about the problem of glass ceiling can enter in the table of the report, sees the data for the organisation itself, the yearly trend, but at the same time, he can be redirected to an external link where the university dean explains the future politics about how to manage that issue (maybe a video), or again, the reader can explore data about other universities, data at an european level, or data on other countries.

Here, the use of technology is grounded on user-design aspects, that it is to say, readers are placed at the centre of the discourse. Interactivity establishes personal engagement by encouraging the reader to explore data and discover information for themselves. Today, sustainability reporting is exclusively a passive reading, whilst with these type of interaction the reader is place at the centre for humanising business communication. Managers and investors will always find a short-cut to the results – but know that this at the stakeholders' expense.. In this sense, humanising a business must involve a change in reporting that increases its dialogic importance going beyond the mere financial legitimacy.

Future directions of research must consider lights and shadows of such increase in interactivity. For instance, interactions can annoying, the design of reading paths requires people with specific skills in humanities and ICT to define storylines and the use of para-textual tools. Identifying best practices among reporters for creating a catalogue of examples and best practices can be a starting point to test the validity of specific technological choices, such as for instance, technical features (explore data, consolidate data), fonts, charts, mostly used to accounting for poverty, climate change, water consumption, etc. This can help sustainability reporting editors and programmers in designing the usability of those technologies from a stakeholder perspective.

The reality is that, today, stakeholders are finding alternative sources information about companies because reporting is too boring, too succinct and too censored to meet their needs. So, if we want to say "*The sustainability report is dead, long live the sustainability report!*", maybe we need to start criticising what is happening. This chapter is a first tentative step in this direction.

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