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Responsibility and Accountability for the Implementation of Sustainable Development in an Indonesian Mining Company

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Abstract

This paper investigated the use of written language as a representation of the concept of responsibility and accountability. These concepts are considered core concepts in sustainability practice. This study focused on the actors involved and actions taken by a mining company in implementing sustainable development. This study adopted discourse analysis as text from Fairclough's (1995) Critical Discourse Analysis (CDA) framework. The study's data was textual disclosures published on the company websites. The analysis focused on the presence and absence of actors and the types of actions presented in the disclosures. The investigation of actions was based on textual processes for

further examination. The procedure was derived from Halliday's (1985) ^[39] 'experiential meaning' that portrays how texts represent the reality of actions. The results suggested the company was represented as the actor of actions in the concrete and abstract dimension of actions. The practice of sustainability was represented through the textual presentation of actions related to social and environmental issues. The findings also revealed numerous instances of disclosing information on awards obtained by the company. This information demonstrated public recognition of the company's sustainability practices and was valuable information to present.

Keywords: Responsibility, Accountability, Sustainable Development, Critical Discourse Analysis

Introduction

The World Commission on Environment and Development (WCED) published *Our Common Future* (known as the Brundtland Report) in 1987. They defined sustainable development as the process of 'meeting the needs of the present without compromising the ability of future generations to meet their needs' (WCED 1987, p. 43) ^[65]. It also incorporated two ideas: Priority for the need of the poor and the limitation of the environment despite the technology available (ibid). The Brundtland definition of sustainable development emphasizes the well-being of those in the present while also acknowledging how current development significantly influences the future. Moreover, there are priorities to be concerned about: The needs of the less fortunate people and the limitations of the environment to sustainable development. It is expected that implementing the concept of sustainable development would balance the role of people, the environment, and the economy in development. Thus, the idea of sustainable development has brought a perspective of living in harmony with nature and society (Mebratu 1998, p. 498) ^[56].

Governments, organizations, and private sector institutions are required to integrate sustainable development as part of the imperative (WCED, 1987) ^[65]. They are later responsible and accountable for adopting sustainable development to achieve economic and ecological sustainability (ibid p. 312). Further, United Nations Conference on Sustainable Development (UNCSD, 2002, p. 15) ^[64] accentuated corporate environmental and social responsibility and accountability. The UN also advocated corporate responsibility and accountability as part of business practices (UNCSD 2002) ^[64]. Sustainable development practices necessitate responsibility and accountability to act sustainably (The UN Secretary General's High-Level Panel on Global Sustainability (2012) ^[63]. However, responsibility and accountability are considered distinct but related concepts. Due to a widespread misconception that they are synonymous, responsibility and accountability are frequently used interchangeably (Bivins, 2006) ^[10]. Consequently, the significance of the two concepts is not acknowledged. Therefore, as recommended, it is essential to understand responsibility and accountability as key components of sustainable development. Since all organizations, including those in the private sector, are expected to implement sustainable development, it has been regarded as an essential component of corporate action. Additionally, firms adopted the concept and idea of sustainable

development in their business and operating practices (Bendell & Kearins 2005; Adams & Frost 2008; Andrew & Cortese 2013) ^[9, 3, 6]. Consequently, firms are expected to operate and organize within the sustainable development framework. Moreover, there is a need for information on how companies move to adopt sustainable development (Gray 1992; Bendell & Kearins 2005; Bebbington, Higgins & Frame 2009) ^[37, 9, 8]. Therefore, corporate disclosures on sustainable development have become a part of sustainability practice.

Various studies suggest that websites are a rich data source on disclosure practices, specifically concerning sustainable development (Campbell & Beck 2004 ^[16]; Cormier & Magnan 2004 ^[24]; Khadaroo 2005 ^[45]; Lodhia 2005 ^[49]; Adams Carol A & Frost Geoffrey R 2006 ^[1, 2]; Joshi & Gao 2009 ^[44]; Prado-Lorenzo *et al.* 2009 ^[58]; Tagesson Torbjörn *et al.* 2009 ^[60]; Lodhia 2010). Web-based disclosures are of particular interest because they are readily accessible to many stakeholders and may facilitate interaction with them (Lodhia 2005) ^[49]. Accordingly, this study collected data from a company website about the significance of the information provided through company websites. This study focused on textual disclosure. This study offered an alternative perspective to understanding sustainability practice based on the textual analysis from Fairclough's (1995) Critical Discourse Analysis (CDA) framework. It explored corporate actors and their actions concerning sustainability practices. Therefore, this study investigated how the ideas of responsibility and accountability as essential components of sustainable development were represented in web-based disclosures.

Disclosures on Sustainable Development

Studies on sustainable development issues have looked into what motivates firms to disclose this particular type of information (Buhr 1998; Gray *et al.* 2001; Al-Tuwaijri, Christensen & Hughes 2004; Gao, Heravi & Xiao 2005; Cormier, Magnan & Van Velthoven 2005; Campbell, Moore & Shrivs 2006; Cho, Patten & Roberts 2006; Magness 2006; Aerts, Cormier & Magnan 2008; Brammer & Pavelin 2008; Clarkson *et al.* 2008; Cowan & Deegan 2011) ^[15, 38, 5, 36, 48, 18, 20, 53, 4, 14, 23, 25], especially industry types, environmental performance, public legitimacy, and public pressure. They were then followed by studies on the content of the disclosure on sustainable development issues, such as content analysis on environmental and social disclosure, especially communication in sustainability and corporate social responsibility reports. The accountability approach towards sustainable development issues offers the perspective to increase transparency. The subsequent emerging studies on sustainable development disclosure are discourse-based, emphasizing language use.

Sustainable development should now undeniably be disclosed. Issues on sustainable development disclosures are classified based on the theme of the information disclosed, namely disclosures on environmental concerns, community involvement, the economic aspect of sustainable development, and sustainability as a comprehensive approach towards sustainable development. This study focused on textual disclosures. Web-based disclosures will be an alternative disclosure form to annual and other mandatory reports. It would further address other communication types firms use to interact with their stakeholders.

The Framework of Responsibility and Accountability

This current study's framework was founded on the premise that responsibility and accountability exhibit an almost cyclical relationship and mechanism. This framework starts with responsibility as the foundation of activities to encourage decision-making toward an event. The resulting decision is *done* in a given event or under certain conditions. The audience inspection generates justifications for acts, and the anticipation of a subsequent holding-to-account (i.e., accountability) guides actors to a responsibility that prescribes or shapes what they must do in given circumstances. Identifying how responsibility and accountability interact is essential to understanding the difference between these two concepts. For example, Cummings and Anton (1990, p. 260) ^[27] suggest that responsibility is the critical factor that *influences* accountability and that particular duties and forms of accountability *flow from* the nature of an individual's responsibilities. At the same time, the potential outcomes of accountability influence how responsibility is delivered and discharged and how an individual accepts responsibility. Thus, responsibility and accountability are operationally interdependent. Similarly, Schlenker *et al.* (1994, p. 634) ^[59] propose that responsibility be generated as a result of "being *accountable to others*" [original emphasis], where "... there is an authority or another judge who requires information about some events to evaluate and sanction the actor's conduct".

Bovens (1998) ^[13] offers further valuable insights into the relationship between accountability and responsibility. In particular, Bovens (1998) ^[13] focuses on two fundamental types of responsibility and accountability by applying Hart's different forms of responsibility. First is responsibility as a virtue; "... the concept to voice a positive judgment or sketch the outlines of a character trait" (p. 26). The second form is responsibility as *accountability*, "being responsible in the sense of political, moral, or legal liability ... for the results, mostly harmful, of a given form of behavior or event ... before a forum" (p. 24). Responsibility as virtue is essentially forward-looking, while responsibility as accountability is backward-looking; each form's characteristic is informed or influenced by knowledge of the other. Based on how responsibility and accountability are conceptualized, responsibility creates an active form, while accountability constructs a passive form. In this conceptualization, a given actor's actions and decisions are guided by a sense of responsibility. Based on Bovens' (1998) ^[13] conceptualization of active and passive responsibility, the current study recognizes a mutual association between these concepts to understand the relationships between responsibility and accountability. Figure 1 illustrates the responsibility and accountability framework adopted in this study.

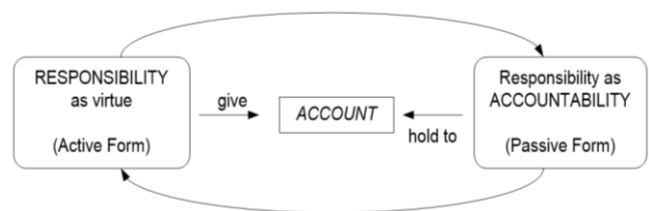


Fig 1: Responsibility and accountability mechanism

Critical Discourse Analysis as the Basis of Textual Analysis

Critical discourse analysis is a sociolinguistic approach to studying languages in a social context. In this context, critical discourse analysis is constructed in Ferdinand de Saussure's initiation tradition that theorizes language as a meaning-making system. Saussurean theory of language sees language as 'parole' – individuals' behavior depending on their intention and as 'langue' – language as systematic and social mechanisms (Chouliaraki 2008)^[21]. She adds that various linguistic signs, where signifiers represent social instances, create distinctions and mutual interactions in the language system. Consequently, the language system would reveal how social *meaning* is constructed.

By taking the social form of language, Fairclough (1992a)^[29] focuses on language and discourse as the 'spoken or written use of language,' where language is considered a form of social practice. This form implies that discourse is both a mode of action (the kind of actions individuals perform) and a mode of representation (the way actions are represented in the discourse). Thus, Fairclough (1992b) concludes that discourse is crucial in constructing a clear and concise social representation of the world's meaning. A critical point of view is the presence of social inequality expressed in discourse to explore social phenomena critically (Wodak & Meyer 2009)^[66]. The critical approach towards discourse analysis was founded by assuming that signs are socially motivated with potentially different reasons for combining one signifier with another (Fairclough 1992b). As a result, critically exploring and examining discourse will uncover the social practice constituting the discourse.

Discourse is defined as a verbal expression in spoken or written language. In a broad sense, Bloor and Bloor (2007)^[11] identify discourse as the 'phenomena of symbolic interaction and communication' amongst people. The phenomenon might manifest in either spoken or written language and a visual form of language. Chouliaraki and Fairclough (1999)^[22] define 'discourse' as semiotic elements of social practice, implying that discourse encompasses language, nonverbal communication, and visual images. They propose that the discourse concept be understood as a 'particular perspective' on distinct types of semiosis. Chouliaraki and Fairclough further conclude that when it comes to social practices, discourse is one moment that is dialectically linked to other moments. It shall be argued that the relationship could be seen as moments of social practices when discourse articulates with other discursive moments. Fairclough (1992b) advocates that discourse instances be positioned as three-dimensional, with the course of discourse being concurrently constructed in a piece of text, a case of discursive practice, and a case of social practice. Fairclough further explains that the relationship between discourse and social structure should be seen dialectically, with discourse in ongoing dialogue with social structures. Consequently, discourse should be regarded in each dimension to obtain a strong account of how social phenomena are represented.

Critical discourse analysis is a problem-oriented analysis that addresses the discourse's practical, political, and social aspects (Lee & Otsuji 2009)^[47]. The analysis is oriented by providing an explanatory model for analyzing discourses or texts concerning the broader levels of society and social practices. They further analyze critical discourse analysis

pertaining to power and ideology and the underlying text, discursive, and social practices. By employing an interdisciplinary approach, critical discourse analysis considers the effects of discourse and seeks to resolve and renovate questionable discursive and social practices. Fairclough (1992a)^[29] claims that a dialectical perspective avoids overemphasizing the social determination or the construction of the social discourse.

Consequently, the discursive constitution of society derives from a sound social practice directed toward the existing social structure. When Fairclough's argument is examined thoroughly, becomes apparent that the dialectical perspective in the discourse suggests that social practices and events are constantly struggling to formulate a coherent argument or message. Fairclough's work implies that an initial analysis of discourse as text will serve as the framework for understanding discourse as discursive and social practices. Therefore, analyzing textual characteristics presents a significant contribution to critical discourse analysis, which is the primary analysis in this study.

Research Design

Our primary data source was web-based disclosures on sustainable development. The Internet is a widely used medium for corporate disclosure and has evolved into an effective communication channel. The Internet has initially facilitated web-based disclosures of financial information, followed by accounting practices that affect and are affected by internet reporting (Craven & Marston 1999; Lymer 1999; Xiao, Jones & Lymer 2002; Beattie & Pratt 2003; Jones & Xiao 2004; Lodhia, Allam & Lymer 2004; Khadaroo 2005; Chan & Wickramasinghe 2006; Gallhofer & Haslam 2006)^[26, 52, 61, 7, 43, 51, 45, 19, 34]. Consequently, studies on the use of the website as a disclosure medium increasingly focus on the disclosure of sustainable development-related information (Campbell & Cornelia Beck 2004; Cormier & Magnan 2004; Khadaroo 2005; Lodhia 2005; Adams C.A. & Frost G.R. 2006; Joshi & Gao 2009; Prado-Lorenzo *et al.* 2009; Tagesson T. *et al.* 2009)^[17, 24, 45, 49, 1-2, 44, 58, 60]. These expanding interests suggest that the website will be a rich data source on disclosure practices, particularly with sustainable development issues.

The website offers a distinctive form of information and communication qualities. Conceptually, a website creates a type of contact known as 'mediated quasi-interaction' (Thompson 1995)^[62], in which the information produced can reach an indefinite number of potential recipients. It does not require a direct and immediate response. Thompson suggests that despite being a monological characteristic of dialogue, a 'mediated quasi-interaction' connects individuals through symbolic exchange between the producers and the recipients. The lack of interaction will not prevent the bonds between the recipients and the producers. While websites offer less symbolic cues, the relations may be extended over space and time. The Internet is a unique medium among all social spheres (Mautner 2005)^[54].

Consequently, websites will be able to reach a diverse range of potential audiences and present a rich data source. Regarding critical discourse analysis, Mautner (2005)^[54] further argues that ignoring the central role of discourse in contemporary society, such as the one formed on the Internet, might result in losing one of the discourse plots. Critical discourse analysis arguments rely heavily on social issues that affect discourse. The extent of the web

engagement in social life bolsters the case for selecting the web as the place of discourse.

The information offered via web pages on the website continues to evolve. Consequently, this form will challenge using a website as the data source. The changes in the existing text, graphics, and web objects rely on the purpose, function, and use of web pages and websites. Although web pages cannot be considered subtle, Koehler (2002) ^[46] suggests that they are more stable over time and that more subsequent adjustments occur during a particular period. Boese and Howe (2005) ^[12] also reveal that websites remain relatively stable despite the rapid change of the web based on genre as classification (in this case, website menu as classification). Therefore, this study collects periodical data to facilitate efficient and manageable analysis.

This study focuses on the language used in the text as a communication medium by deriving and adapting the systemic functional linguistics presented by Halliday (1985) ^[39], Halliday and Matthiessen (2004), and Eggins (2004) ^[28]. In addition, this study seeks to evaluate textual discourses in web-based texts released by companies on their websites. Accordingly, the primary data source for this study is the web-based accounting texts presented on company websites.

Analyzing Discourse as Text

Fairclough (1992a;b) ^[29] develops his critical discourse analysis framework into three dimensions: Discourse as text, discursive practices, and discourse as social practices, based on Foucault's argument that discourse comprises the social. Fairclough suggests that in the first dimension of discourse as text, texts, whether written, spoken, or visual, should be seen as the starting point to understand the social phenomenon. Analyzing discourse in the form of the text emphasizes the textual features based on Halliday's (1985) ^[39] argument, suggesting that texts systematically construe meaning embedded in the texts. The second dimension situates a discourse inside discursive practices focusing on text production and interpretation. The last dimension refers to discourse as social practices. This dimension analyzes the nature of discourse as part of social practices through an ideological perspective. Fairclough (1992b) argues that ideology exists in discourse practice, which makes it possible to explore discursive practices through the lens of how ideology is formed in discourse (see Gallhofer, Haslam, and Roper (2001) ^[35] for pedagogical explanation and application). The primary analysis in this study focuses on the first dimension of discourse as the text.

Analyzing texts will arguably reveal the signals of ideological processes and structures. Critical discourse analysis emphasizes written discourse in the form of authentic texts. Although texts in discourse can be written, spoken, or visual, fundamental distinctions between face-to-face and written discourse should be addressed. Chouliaraki and Fairclough (1999) ^[22] suggest that written communication enables an increase in time-space distantiation because "it allows communicative interaction to take place at a temporal and spatial distance" (p. 42). The differences between written and mediated discourse give evidence of distinctive linguistic and social practices. Textual structures in written discourse serve as the starting point for collecting confirmations on social practices in dialogue with discourse. The outcome of this points out that the structure of a sentence is the core linguistics element of analysis.

Data Collection

Adaro Indonesia is one of Indonesia's largest mining companies. It is a limited liability company that not only represents the sustainable development practice of the mining industry but also offers a comprehensive perspective of the sustainability practice in Indonesia. This study combined two data sources. First, Adaro Indonesia's web-based disclosures constituted texts on web pages. Text supplied via hypertext, links, and an attached electronic copy of the document in PDF format, such as the sustainability report available on the website, were excluded. This strategy was selected because the textual analysis focused on discourse in a web-based setting. Furthermore, hypertext was considered text outside a website since it must be downloaded for access.

An initial observation of Adaro Indonesia's website was held to identify an appropriate data collection period. Based on the weekly and then monthly observations over nine months from January to September 2017, it was discovered that significant website changes did not occur frequently. The stock market price was updated on the website daily. In addition, media releases were made public based on Adaro Indonesia's corporate actions. Therefore, most of the website material remained stable during the observation period.

Based on observation results, data collection would be held over one year. The process utilized a mixed method of website mirroring (HTTract) and web page capturing (NCapture from NVivo). There were no significant website changes during data collection in 2017, 2018, and 2019. Consequently, this study limited the analysis of the texts on each web page. There were 42 web pages captured and transformed into PDF form for analysis. As previously mentioned, Adaro Indonesia's website presented 37 out of a total of 42 web pages disclosing information that could be related to sustainable development practices. The main website and the extension for information on sustainable development web pages were analyzed using the clause as a unit of analysis. These web pages were transcribed and analyzed based on responsibility and accountability in sustainability practices.

Textual Analysis

Each of the transcribed texts would then be analyzed using Fairclough's textual analysis, which is based on the systemic functional linguistics of Halliday (1985) ^[39], Eggins (2004) ^[28], Halliday and Matthiessen (2004) ^[41], with transitivity analysis as the primary analytical tool. Theoretically, systemic functional linguistics is based on the basic structure of English sentences of 'subject,' 'predicator,' and 'object,' with 'subject' representing the actor, 'predicator' representing the action, and 'object' representing the goal of the action. The option of how each element is organized in a clause of sentences would reveal experience and could be construed systematically through meanings (Halliday & Matthiessen 2006) ^[40]. This study focused on clauses describing actors and actions regarding the idea of responsibility and accountability in sustainability practices, especially since the representation of sustainable development implementation experiences.

Transitivity Analysis

The reality presented through texts, such as any events and circumstances, is signified linguistically and interpreted in various ways (Fairclough 1992b). The clause encodes not

just events and circumstances but also its participants. The type of processes and participants systematically create meanings in any linguistic interaction. Systemic functional linguistics explores language, particularly English texts, as the system of meaning, which is considered a choice. The clauses of every sentence, in both spoken and written texts, are created by selecting from various alternative representations. The relationships between clauses are designated systematically. One of the focuses in systemic functional linguistics is the organization of clauses to comprehend how reality is represented in language and *ideational meanings* (Halliday 1985; Eggins 2004; Halliday & Matthiessen 2004) ^[39, 28, 41]. The ideational meanings dimension in systemic functional linguistics represents how social relationships and identities are denoted in the sentence. Halliday and Matthiessen (2004) ^[41] divide ideational meanings into two clause-related categories. The first is how reality is represented in the clause, *experiential meaning*, and the second is the representation of reality between clauses in clause complexes, *logical meaning*. This study focused on the experiential meaning to explore and analyze how actors and actions were represented in the sentences. Before the operation, the 'subject' would be identified to address the participants. The unit of analysis based on systemic functional linguistics was the clause. The form of the clause, theme + Rheme structure (Halliday & Matthiessen 2004) ^[41], was utilized to structure the clause, with the theme appearing at the beginning. Reasonably, the writer encourages the reader to focus on the clause's subject at its introductory position. This process was in the structure of theme + rheme to emphasize the theme as a thematic objective. For example, in the sentence 'Her teacher gave her a book,' the theme is her teacher, and the rest of the sentence is the rheme.

Eggins (2004) ^[28] explains that the transitivity system of process type reflects the experiential meaning of the sentence. The primary focuses of transitivity analysis are the forms of process encoded in the sentence structures and the types of participants involved as the clause elements. The structure of the clause is viewed as a representation of processes to investigate the experiential function of a clause. The representation covers both the process type and the configuration of participant roles for each process type. The transitivity system depicts six types of processes: Material, mental, behavioral, verbal, existential, and relational processes (Eggins 2004; Halliday & Matthiessen 2004) ^[28, 41].

This study focused on material processes where clauses described the process of doing (something). This description was based on the idea that the process involves one or more participants performing something or taking some actions. Actions are taken by participants, either a single participant or a group of participants (Eggins 2004) ^[28]. This study emphasized the processes involving many participants since organizational texts are considered the actions of a group of participants. Following Parsons and McKenna (2009) ^[57], this study explored material processes' concrete and abstract dimensions. The concrete dimension entailed an action completed by an actor with apparent human efforts. Actor and goal were direct participants in material processes. The object of the action can be either a Goal (the participant toward whom the process was oriented) or a Range (restatement of the process or the extent of the process itself). This formation would result in the structure

Actor+Material Process+Goal (Eggins 2004) ^[28]. Abstract material processes, such as strive, focus, attempt, demonstrate, pursue, and endeavor (Parsons & McKenna 2009) ^[57], utilize an implied action with no specific effort and are difficult to substantiate (McKenna & Graham 2000) ^[55].

Analysis and Findings

Web-based disclosures contain a significant quantity of text. On the one hand, this provided the benefits of obtaining significant evidence on the issues of how sustainable development problems are represented in disclosures. The evidence would construct a conceptual framework for the relationship between actors, actions, and sustainable development issues. On the other hand, text volume made the analysis highly laborious and inefficient. To overcome this limitation, and following Fairclough's (2003) suggestion to concentrate on specific areas, the focus of analysis would be on the theme aspects of the clause structure and process meanings.

As mentioned earlier, the clause consisted of two parts: Theme and Rheme. The theme of clause structure was the clause's initial main idea. The analysis identified the Agent of the clause, presumably the actor of any action presented in the clause, as a participant in the clause. Based on Halliday and Matthiessen (2004) ^[41], the existence of Agent would be divided into actor and non-actor categories. The rheme that followed the main idea contained the element of experience or meaning-making in the clause. As a form of reporting, it is evident that the disclosures on Adaro Indonesia's Website represented a declarative type of text, with the primary objective of presenting information to their website visitors. The analysis focused on disclosures about sustainable development issues. Other disclosures, especially those having a financial base theme, were excluded from this study.

The study would be based on the three core elements of sustainable development: Environment, people, and the economy. Sustainable development is the main concept, and the environment, people, and economy are the elements that have become an important part of business practices adopted by Adaro Indonesia. The data indicated that Adaro Indonesia did not provide a specific web menu or heading on their website that directly related to the topic of sustainable development. The observation of its sitemap indicated that Adaro Indonesia used sustainable development-related terms, such as corporate social responsibility (CSR), Adaro and Sustainability, Employees Safety, CSR Projects, Events, and Gallery. Findings would be presented according to the representation of actors and actions in sustainability practices, followed by findings regarding the concept of responsibility and accountability presented in the texts. It would be based on mirrored and captured website data.

Actors and Actions

The analysis began with considering the existence and non-existence of the agent as an actor or the doer as a process participant. This analysis adopted Halliday and Matthiessen's (2004) ^[41] *role function* of a subject by classifying a subject into (1) 'actor as agent' (Actor_Agent) and (2) 'non-actor as agent' (Non-Actor_Agent). The first category includes subjects that function as either grammatical subject (a subject that is predicated) or relevant subject (the doer of the action). This subject type indicates

the existence of actor in the sentence. The subsequent category classifies subjects that provide the fundamental message as psychological subject or theme subject as a non-actor agent. This group also includes subjects with nominalization theme forms. This subject type will likely show the non-existence of the agent in the sentence, either grammatically or logically. This study focused on the role function of subject 'actor as agent', assuming that the representation of 'actor as agent' revealed meaningful discourse in the text. Furthermore, identifying the actors involved provides insight into companies' approaches when representing themselves and their actions.

This study would focus on Adaro Indonesia's website disclosures about the company in an overview, operations, envirocoal (product type), growth and expansion, and CSR. The data identified Adaro Indonesia or Adaro as the actor in the clauses. Regarding the implementation of sustainable development, the text on Adaro Indonesia's website did not identify the company as the actor. The term 'the Group's management philosophy' was used to introduce how the company believed in CSR, focusing on the community's social and environmental issues. As an actor, Adaro Indonesia was not presented in the text. The following text illustrates this representation:

The core of the Group's management philosophy is Corporate Social Responsibility. Social and environmental policies represent "giving back" to the community. (adaro.com/CSR)

Adaro Indonesia portrayed itself as the actor in environmental issues-related actions. This presentation included information regarding land rehabilitation for local communities, community-based farming projects, and water treatment and distribution. At least 58 clauses had Adaro Indonesia or Adaro as the actor in the clause. The following example of texts illustrates the actor performing environmental issues-related actions where the concrete action was represented (emphasis added).

Adaro has implemented a comprehensive system of water run-off control and treatment to ensure that processed water meets the required environmental quality level. (adaro.com/CSR)

In addition to the regular CSR programs conducted surrounding the operational location, *Adaro also makes* contributions to the communities outside of its location. (adaro.com/CSR)

In some areas, *Adaro has to provide* rehabilitated land to local communities for agricultural purposes. [emphasis added] (adaro.com/land reclamation)

Adaro has worked with these communities on a number of projects including cultivation of vegetables, orchards, and other commercial crops. [emphasis added] (adaro.com/land reclamation)

Adaro has taken this water processing a step further by the establishment of an additional water treatment plant that is now producing drinking quality water and ... being pumped through a pipeline installed by

Adaro to a number of surrounding communities. [emphasis added] (adaro.com/water management)

Adaro undertakes extensive and continuous air monitoring around the mining operations ... [emphasis added] (adaro.com/air quality).

Following Parsons and McKenna (2009) ^[57], the present study explored both *concrete* and *abstract* dimensions of material processes. The majority of Adaro's presentation on sustainability implementation focused on Corporate Social Responsibility (CSR) initiatives, and the following texts displayed actions related to environment-related activities (emphasis added). The texts were considered as a concrete dimension of the material process, where Adaro as the actor was represented as having completed doing something (Parsons & McKenna 2009) ^[57], such as 'has implemented,' 'has taken' and 'has distributed.'

Adaro has implemented a comprehensive system of water run-off control and treatment to ensure that processed water meets the required environmental quality level. (adaro.com/CSR)

Adaro has taken this water processing a step further by the establishment of an additional water treatment plant that is now producing drinking quality water and which is not only being used as drinking water by the company and contractors but is also being pumped through a pipeline installed by Adaro to a number of surrounding communities. (adaro.com/CSR)

Adaro has distributed clean water to local communities since 2002 out of the awareness that it is a basic necessity of life needed by the surrounding communities. (adaro.com/CSR)

Adaro Indonesia mentioned in its social issues section that it had implemented a CSR program to enhance the local community economy and provide increased scholarships. The following is the text, which is also regarded as a concrete dimension of the material process.

In 2010, *Adaro continued* to make a donation for the scholarship of 5 students attending the Institute of Technology Bandung for the period of 2010/2014 in the amount of Rp 550 million. For the previous period of 2009/2013, Adaro also made a donation of Rp 500 million. (adaro.com/other social activities)

The abstract dimension of the material process involved an implied action with no specific effort or confirmation (Parsons & McKenna 2009) ^[57]. The following texts identify Adaro Indonesia as the actor of actions, although the actions were abstract (emphasis added).

Adaro strives to deliver positive energy from Indonesian coal. See how our strategy helps us do that. (adaro.com/about Adaro)

Adaro insists on world-class governance principles and standards, ensuring the best service for shareholders. (adaro.com/about Adaro)

In significant instances, Adaro Indonesia announced that the firm had earned awards or launched award-winning projects yielded intriguing results. Texts about awards not only reflected the awards themselves but also addressed a particular aspect of sustainability. Examples included the PROPER Award for environmental performance, the KSN Award for social welfare, the Coordinating Ministry for People's Welfare Award for CSR activities based on Millennium Development Goals, and the annual occupational health and safety awards from the Ministry of Energy and Mineral Resources. As a result, findings involving actors and actions reveal that public recognition through the awards received was crucial for Adaro Indonesia. There were 22 clauses disclosing information regarding awards received. The following texts are some of the examples (emphasis added).

Adaro Energy and its core subsidiary, *Adaro Indonesia*, consistently win national and international awards for corporate and mining excellence, environmental management, social responsibility, and more. (adaro.com/about Adaro)

In 2010, *Adaro received several awards*, such as the KSN Award from the Ministry of Social Welfare, the GKPM Award from the Coordinating Minister for People's Welfare, and the Asia Responsible Entrepreneurship Award (AREA) from Enterprise Asia, a non-profit organization based in Malaysia and registered in Hong Kong. (adaro.com/an outstanding record)

Adaro won one award in the Coordinating Ministry for People's Welfare awards honoring companies that run corporate social responsibility (CSR) programs based on the Millennium Development Goals. (adaro.com/about adaro)

Adaro Indonesia received the top-level Gold Award in the Ministry of Energy and Mineral Resources' annual occupational health and safety awards as a coal-sector company with the best score for environmental management in its mining operations.

Adaro implemented the award-winning Rural Community Economic Movement program with the aim of stimulating the economic development of rural communities. (adaro.com/CSR)

Responsibility and Accountability

Responsibility and accountability are crucial notions for sustainability practices. However, capturing how these concepts are implemented in corporate actions was challenging. Responsibility and accountability can be relatively easily conceptualized at the individual level. However, efforts to understand what it means to act responsibly and to be accountable at the organizational level are more complex. Findings on the concept of responsibility and accountability on Adaro Indonesia's website suggested that both concepts were acknowledged as the basis for corporate conduct. Further, Adaro Indonesia's corporate governance representation included both notions of responsibility and accountability. The following text demonstrates this representation by stating that being

accountable and responsible was part of its approach to corporate governance (emphasis added).

Our approach to corporate governance is premised on the understanding that mining is a highly regulated industry. Therefore, it requires checks and balances to ensure the company conducts itself in a fair, *accountable, responsible*, and transparent manner. (adaro.com/corporate governance)

We keep abreast of developments in best governance practices in Indonesia and internationally, and all Adaro employees are committed to upholding the principles of transparency, accountability, responsibility, independence, and fairness to protect the interests of all stakeholders – a commitment that has been a key factor in the company's long-term success. (adaro.com/our governance)

The text presented the concept of responsibility as a realization for Adaro Indonesia to act for society, a particular local community close to its mining sites. This initiative encompassed the economic, social, and ecological environments and the marketing of environmentally friendly coal. The following text contains instances of the representation of responsibility (emphasis added).

The presence of PT Adaro Indonesia in South Kalimantan has influenced the current economic, social and natural environment of the province down to the village level, and the company recognizes that there is *a responsibility* to give back. (adaro.com/CSR)

We added environmental *responsibility* as another pillar of our social investment program in 2013. We have focused on the conservation of watersheds through bamboo planting. (adaro.com/communities)

As presented in the following text (emphasis added), the concept of accountability revealed that Adaro Indonesia believed accountability to have a similar meaning as disclosure. The text described a statement suggesting accountability was integral to corporate governance. Therefore, it was presented as an element of corporate governance.

In 2008 we became a publicly listed company, which has forced us to raise our level of corporate governance, especially in terms of disclosure and *accountability*. (adaro.com/corporate governance)

Conclusion and Limitations

The findings on actors and actions in general and concerning the concept of responsibility and accountability suggested that Adaro Indonesia presented itself as the actor in the practice of sustainability. The textual representations demonstrated that sustainability was an important element in corporate actions, and Adaro Indonesia played an important role in the general implementation of this development concept. Fairclough (2003) suggests that ambiguity is observed through the representation of actors in a text, particularly the use of a non-actor subject in the text. The results showed a high level of non-actor representation in the disclosures. These findings suggested that, despite

companies' actions concerning sustainability being presented in the texts, it was frequently difficult to assess responsibility and accountability in the actions. Following Parsons and McKenna's (2009) ^[57] concrete and abstract experiential meaning of action, the findings suggested a common presentation of abstract action where confirmation and application were in question. Parsons and McKenna (2009) ^[57] also discovered that high textual representations are presented in a concrete material form, despite the material abstract representations presented in the texts that are similar to this study's findings.

Consequently, the implementation of sustainable development remained in the realm of the 'conceptual,' where it is difficult to corroborate many of the 'actions' indicated in the disclosures presented by the company. The study was limited by the high number of disclosures on the website, as was the possibility that the website content changes were not captured during the data collection period. This limitation might lead to a possible inadequacy of data coverage in the collection process.

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