SUSTAINABLE SYMMETRY: A COMPARISON OF INSTITUTIONAL GREEN STATEMENTS

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Abstract

Green Statements are at the forefront of public institutional communications however the sector is widely unregulated. Despite this, organisational Green Statements may be converging as different organisations are producing similar Green disclosures with the same target measurements. This study undertakes a Qualitative thematic analysis in order to identify the key themes present within organisational Green Statements. Data is collected from a pool of 107 global organisations spanning six industries, five countries and five years. This research finds that there are increasing levels of convergence within organisational reports. Using the institutional theory, we contend that this is a result of organisational legitimacy-seeking. Future research may wish to analyse the impact of keywords within Green Statements to ascertain the comparative strengths of terms within the Green Lexicon.

Keywords: Green Statements, Environmental Reporting, Organisational Mimicry, Institutional Theory
1 INTRODUCTION

The term “Green Statements” refers to the disclosures made by an organisation in reference to their environmental policy position. In recent times, Green Statements and policy disclosures has been at the crux of corporate reporting discourse. This topic’s rapid amplification of public exposure signifies a growing demand for institutional accountability and signals an ever-growing concern for the global environment (Nikolaeva and Bicho, 2011). Many firms have responded to this socio-cultural paradigm shift by growing the content of their environmental accountability reports, disclosing ever-increasing amounts of information. However, commentators are quick to point out that these actions may serve to dilute the relevance of Green Statements rather than provide stakeholders with decision-useful information.

Observers of present-day financial reporting phenomena will be quick to notice that the timing of these green behavioural shifts is almost synchronous, reminiscent of patterns found in herd-like behaviour. These patterns implicate that an underlying element of institutional isomorphism is affecting the dimensions of present-day environmental reporting culture. Previous research has indicated that country-specific and industry-specific lexical similarities exist within general corporate responsibility statements however this research has generally focused on keyword congruency rather than the thematic convergence of corporate environmental disclosures (Chen and Bouvain, 2009). Additionally, little research has been done into the cross-sectional chronological similarities and differences prevalent between organisational Green Statements. This paper aims to illustrate the emergence of thematic symmetry within organisational environmental disclosures to discuss the implications of corporate mimicry on inter-organisational comparability within a voluntary disclosure context.

Interest in sustainability research has been steadily increasing throughout the academic community in recent times, with inter-disciplinary sustainability research at the forefront of this movement (Schoolman et al., 2012). However, there still exists a division between academic sustainability research strands and the activities of societal stakeholders. As the world progresses ever-further towards the normalization of green economics, we believe that research should adapt to reflect the concerns of its immediate era. Thus our goal in this paper is to facilitate the production of relevant and useful information by collating a thematic database on Green Statement disclosures in order to signpost and illustrate the evolution of corporate Green reporting.

In 2013, widespread sustainability reporting reforms abounded within the Green Reporting sector, with boards such as the Global reporting initiative (GRI) and Sustainability Accounting Standards Board (SASB) revising their standards to promote increased materiality and accountability. This development signifies a paradigmatic shift away from the rigid ‘checkmarking’ which has dominated the environmental reporting sphere and a move towards a comparable generalised sustainability reporting system. Yet, as these systems are still fundamentally based on voluntary disclosure professional judgement frameworks, report quality will still be based on organisation-specific definitions of material disclosure. In order to learn the future issues of importance within the green disclosure sphere, we will analyse the commonalities shared within past and present Green Statements.

Another key motivation of the study stems from its implications for practice. As Green Statements continue to dominate the international sustainability sphere, it will become increasingly necessary to guide the development of Green reporting practice (Eccles and Serafeim, 2013). The analysis conducted within this paper will seek to guide the development of Green reporting practice by comparing and discussing the implications of the primary themes found within organisational green statements. By investigating past and present Green Statements, this research will lead the way for the design and development of future organisational Green Statements.

The rest of this paper is structured as follows. First, we will provide a literature review on previous green organisational disclosure research. Second, we will propose our research questions and justify them through the lens of institutional theory. Third, we will outline research methodology, findings and discuss the implications of our findings. Finally, we will conclude by discussing the questions raised by the research, the limitations of our investigation and opportunities for further research.
LITERATURE REVIEW

2.1 Green Statements

Although Green disclosure is a highly debated topic in both industry and academia, there is no standard definition for what constitutes a Green Statement. We take the term “Green Statement” to mean any disclosure made by an entity in regards to its environmental actions and policies. Much of the discourse related to the concept’s definition has centred on the substantiality and usefulness of corporate environmental claims (Gray and Milne, 2002; Hahn and Kühnen, 2013; Owen et al., 1997). This movement has given rise to the advent of sustainability reporting initiatives such as the GRI and SASB (G.R.I. Initiative, 2009; Eccles and Serafeim, 2013). However, while these bodies present environmental issues as part of a larger sustainability concept, we will choose to focus solely on environmental issues as the others are beyond the scope of this paper.

Aside from the GRI and SASB, the leading set of environmental disclosure principles stems from the UN Global Compact (UN Global Compact, 2011). The UN Global Compact is an initiative which aims to support businesses in the adoption and disclosure of sustainable business practices. Of the ten principles listed by the UN Global Compact, three are applicable to the environment. These principles are:

- Principle 7: Businesses should support a precautionary approach to environmental challenges;
- Principle 8: Undertake initiatives to promote greater environmental responsibility; and
- Principle 9: Encourage the development and diffusion of environmentally friendly technologies.

These principles are and have been a prominent signpost for businesses and organisations wishing to publish Green Statements since its inception in 1999.

There has been large magnitude of recent research into the field of environmental disclosures. However, most research has primarily focused on the materiality and relevance dimensions of Green Statements (Deegan and Soltys, 2007; Lee and Hutchison, 2005; Spence et al., 2010). Additionally, most research has focused purely on the accounting-specific dimensions of environmental disclosure, rather than the themes pervading these reports. Although some recent research has been conducted into the assessing the chronological evolution of sustainability reporting (Fifka, 2012), a wide-scale historical evaluation of sustainability reporting is not the aim of our research. Rather, our research is centred on the underlying thematic convergence of environmental statements in recent history rather than a wide-lensed summary of environmental disclosures to date.

Other more recent research has tended to focus on environmental disclosures through a regulatory lens. Boiral’s research focuses on the idea of applying a homogenous standard to a diverse and complex set of climate change problems (Boiral, 2013). On the other hand, Ioannou’s research explores the consequences of a mandatory Green disclosure regulatory system (Ioannou and Serafeim, 2011). While organisations do adopt some aspects of broader voluntary regulatory frameworks, it seemed that organisations disclosed information largely independent of regulatory recommendations (Andrew and Cortese, 2011). Thus, we contend that regulation, while correlated with disclosure symmetry is only loosely correlated with appearances of institutional isomorphism. Institutional theory has been regularly used into organisational studies as a method of explaining why different organisations adopt similar behavioural structures. As such, it offers a sublime lens from which to perceive the effects of externalities such as reporting trends on organisations.

2.2 Institutional Symmetry

Institutional theory has is the prime candidate in the measurement and study of institutional isomorphism (DiMaggio and Powell, 1983; Scott, 2001). Institutional theory has been commonly used in past research to study the behaviours institutions in relation to their disclosure statements. Specifically, Institutional theory perspectives are common within intra-industry behavioural research to discern the prevailing thought processes which drive and produce Green disclosures (Aerts et al., 2006; Baker et al., 2012; Rahaman et al., 2004; Zeng et al., 2012). Institutional theory provides a...
contextual paradigmatic lens which allows for a psychoanalytic examination of an industry’s cognitive culture by operationalizing patterns as part of a greater industrial whole.

Similarly, due to the ideal scope of institutional theory, there have been a multitude of recent country-specific studies into the topic of institutional mimeticism. Studies such as Zeng et al. have demonstrated that due to changes in national corporate cultures, organisational managers are feeling increasingly inclined to undertake Green disclosure practices (Zeng et al., 2012). Additionally, studies such as Aguilera and Jackson further support the notion of corporate nationality as a key determinant of Green Statement content (Aguilera and Jackson, 2003). In particular, this paper discusses the differences in perceptions of US and European perceptions of environmental risks, which is reflected in their Green Statements. As such, it would be important in any disclosure analysis to carefully consider the country of origin when comparing and discerning thematic trends.

2.3 Thematic Convergence

The position of a corporation relative to its peers within its chronological position has traditionally been a determinant factor in the production of its disclosures. In order to investigate deeper corporate trends, researchers have been increasingly turning towards thematic analysis in order to discern the prevailing concerns of corporations and industries. Thematic analysis refers to a method of analysis which emphasizes highlighting, investigating and recording themes within a dataset (Guest, 2012). This method focuses on the recognition and interpretation of themes, in order to recognize thematic co-occurrence and identify data categories.

Tate et al. investigated this issue by thematically analysing social responsibility disclosures to discern themes at different points in the supply chain (Tate et al., 2010). While qualitative research has traditionally been dominant in the analysis of Green Statements (Taneja et al., 2011), thematic analysis can provide a greater depth of information on each disclosure in order to better understand the trends in Green disclosures across Industry, Country and Chronological dimensions.

3 RESEARCH GOALS

Due to the complexity and multi-faceted nature of the climate change conundrum, climate change responses may pose a challenge to quantify. Green disclosure literature similarly commonly seeks to tackle this issue from a multitude of analytical standpoints with a vast array of heterogeneous variables. As such it is important to first ascertain the foundations of our analysis. From this, we draw our first question:

*What are the dominant themes in organisational Green Statements?*

As previously discussed, several studies have previously operationalised institutional theory as their analytical lens in regards to cross-organisational similarity. As such, we perceive institutional theory to be an ideal lens from which we can explain organisational trends in relation to Green reporting. Additionally, by using this theoretical perspective we can increase the compatibility of this paper with past and future research in order to establish a firm contribution to academic literature.

In this study, we adopt the model of institutional theory utilised in Kauppi’s review of the usage of institutional theory (Kauppi, 2013). Institutional theory suggests that in order to survive, organisations will adopt the prevailing rules and beliefs of their immediate environment. Kauppi’s Institutional theory model illustrates that there are both social and economic variants to this imitative activity. These desires for mimicry are based in uncertainty, which cause organisations to increasingly drive towards the twin desires of both legitimacy and profits. As a result, organisations become isomorphic as they conform to immediate environmental norms (Scott, 1995).
Isomorphism is defined as a state of existence where two objects are of equal shape. In an institutional setting, isomorphism is a term used to define structural similarity between organisations. This may have been achieved by imitation, coercion or development under similar conditions. Institutional isomorphism was a term first coined by DiMaggio and Powell and is a dominant concept in modern institutionalism. The isomorphic concept is important as it seeks to explain convergence within the evolutionary branches of organisations. (DiMaggio and Powell, 1983)

Figure 2:  
Isomorphic Dimensions

However, in our considerations of Isomorphism we recognise that Isomorphism may exist over a multitude of dimensions. As previous literature has suggested, Isomorphic tendencies are highly prevalent over the dimensions of Industry and Country. Additionally, literature has suggested that isomorphism additionally exists within a chronological context. Thus, for our investigation we will divide Isomorphism into three types:

- Industry
- Country
- Time

Subsequent to our initial inquiry we developed a second research question.

How are Isomorphic tendencies reflected in Green Statements?
4 METHODOLOGY AND DATA COLLECTION

During the initial investigation we adopted a Qualitative approach to data analysis. This was divided into stages, as illustrated below. We opted for a sequential approach to Qualitative research, utilising quantitative analytics to discover basic trend data (Creswell and Clark, 2007). From there we engaged in qualitative thematic analysis in order to follow the leads gained from our initial investigation and gain in-depth knowledge into the emergent themes within Green Statements. After this we analysed and discussed our findings.

Qualitative thematic analysis refers to a technique used in qualitative research which hones its focus on the pursuit of themes within a set of data. Qualitative thematic analysis utilises coding to decipher meaning within the text itself and draw out relationships from this context. Thematic analysis shares its concept of data-supported discoveries with grounded theory, making this technique excellent for identifying themes, building models and contrasting dichotomies. Due to this, we believe that this approach maximises the depth and novelty of this research while minimising the risk of error.

Figure 3: Methodological Approach

Data was collected from an array of global organisations over the period of 5 years spanning 2009 to 2013. This time period was selected to both maximise the availability of Green reports and illustrate a gradual evolution of institutional reporting behaviour in line with the expectations of Institutional theory. This investigation also collected data from mainly large corporations and multi-national organisations to increase the comparability of Green Disclosures and availability of data. The data was then collated into a database totalling 107 unique entries across 6 sectors: Banking, Finance, Education, ICT, Minerals and Retail with a two sector overlap (Banking and Finance). The data gathered additionally spanned 5 countries, with the corporations mainly being headquartered in Australia, US or UK. The results of the statistical analysis for this dataset are further illustrated in appendix tables A1, A2 and A3.

The selection of the six organisational sectors: Banking, Finance, Education, ICT, Minerals and Retail was chosen in order to maximise the relevance of the results of the investigation. Additionally the diversity of these sectors allows for the accurate identification of the major issues contained within the green statement sphere. Furthermore in order to emphasize the importance of the chronological dimension of analysis, only organisation with at least two Green Statements within the 5 year period were included in the final sample. These measures were taken in order to enhance the internal validity of the investigation and increase the generalisability of the findings.

5 ANALYSIS

Coding was done using an inductive approach to thematic identification. Green Statements were read sequentially and key highlights were recorded concerning each one. These were recorded in both Excel and Notepad. This process was repeated until the processing of all 107 statements was complete.

Upon the completion of the initial coding, we engaged in a quantitative data analysis, extrapolating the data in both Excel and SPSS in order to discern similarities and patterns between the variables. Specifically we conducted descriptive analytics in order to ascertain patterns within the data. Then, we conducted an exploratory factor analysis to attempt to ascertain the existence of statistically supported factor groups. The purpose of this initial examination was to answer the pre-determined research questions. The results of these investigations are elaborated in our findings.

Following this analysis we conducted a thematic analysis of the data, utilising the patterns found in our quantitative investigation to guide our analysis. Common organisational themes were discovered during this analytical process and recorded in both excel and notepad. These were later cross-checked to
highlight Green Statement patterns and similarities at both a linguistic and thematic level. These results are further explained in our findings.

6 FINDINGS

The analysis phase of this investigation yielded several intriguing findings. Upon the completion of our initial thematic coding, 15 codes were discovered. These were:

- Carbon
- Energy
- Water
- Waste
- Paper
- Infrastructure
- Institutional Practices
- Community Engagement
- Projects
- Regulatory Engagement
- Suppliers
- Products
- Transport
- Biodiversity
- Packaging

These codes were used as the main categorical measurement categories in our following qualitative analysis. Of these themes, Carbon was the dominant player with a near 100% appearance rate within organisation Green Statements. Other common mentions included energy and infrastructure. This result seems to show that in the context of Green Statements, all organisations share common primary themes.

Our preliminary quantitative analysis of industry yielded the following percentages:

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<tbody>
<tr>
<td>Banking</td>
<td>100%</td>
<td>100%</td>
<td>45%</td>
<td>45%</td>
<td>90%</td>
<td>75%</td>
<td>98%</td>
<td>50%</td>
<td>15%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Finance</td>
<td>100%</td>
<td>100%</td>
<td>83%</td>
<td>83%</td>
<td>67%</td>
<td>67%</td>
<td>100%</td>
<td>42%</td>
<td>0%</td>
<td>18%</td>
<td>42%</td>
<td>50%</td>
<td>50%</td>
<td>92%</td>
<td>0%</td>
</tr>
<tr>
<td>Education</td>
<td>100%</td>
<td>88%</td>
<td>94%</td>
<td>94%</td>
<td>19%</td>
<td>25%</td>
<td>81%</td>
<td>38%</td>
<td>13%</td>
<td>69%</td>
<td>44%</td>
<td>59%</td>
<td>81%</td>
<td>31%</td>
<td>0%</td>
</tr>
<tr>
<td>ICT</td>
<td>100%</td>
<td>100%</td>
<td>42%</td>
<td>42%</td>
<td>14%</td>
<td>81%</td>
<td>29%</td>
<td>7%</td>
<td>16%</td>
<td>36%</td>
<td>64%</td>
<td>90%</td>
<td>14%</td>
<td>7%</td>
<td>0%</td>
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<tr>
<td>Minerals</td>
<td>100%</td>
<td>0%</td>
<td>88%</td>
<td>44%</td>
<td>0%</td>
<td>19%</td>
<td>81%</td>
<td>28%</td>
<td>22%</td>
<td>19%</td>
<td>17%</td>
<td>34%</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Retail</td>
<td>93%</td>
<td>93%</td>
<td>72%</td>
<td>89%</td>
<td>11%</td>
<td>44%</td>
<td>79%</td>
<td>33%</td>
<td>41%</td>
<td>15%</td>
<td>74%</td>
<td>81%</td>
<td>70%</td>
<td>26%</td>
<td>93%</td>
</tr>
</tbody>
</table>

Table 1: Industry Analysis

The above percentages measure thematic prevalence when compared across industries. From this data we can clearly see that Carbon was the dominant theme, present in all but two cases in our analysis. However, it is interesting to note that while Biodiversity was almost a non-issue in financial sector disclosures, it was a dominant issue in Minerals sector disclosures, boasting a 100% appearance rate. Similarly, while Infrastructure was a minor theme in Minerals sector Statements (at 33%), it was the dominant theme in Finance-sector reports. Yet another example of industry-specific environmental themes is found within the retail sector, which emphasizes environmentally-friendly packaging measures in its environmental disclosures, an issue which is nearly non-existent across other industries. These results demonstrate that organisations within the same industry share common thematic issues such as Infrastructure for finance, Biodiversity for minerals and Packaging for Retail.

The preliminary quantitative analysis of country yielded the following percentages:

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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>97%</td>
<td>81%</td>
<td>70%</td>
<td>70%</td>
<td>49%</td>
<td>62%</td>
<td>79%</td>
<td>19%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>12%</td>
<td>58%</td>
<td>72%</td>
</tr>
<tr>
<td>Canada</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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<td>0%</td>
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<tr>
<td>Singapore</td>
<td>100%</td>
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<td>0%</td>
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<tr>
<td>UK</td>
<td>100%</td>
<td>57%</td>
<td>62%</td>
<td>62%</td>
<td>0%</td>
<td>38%</td>
<td>81%</td>
<td>19%</td>
<td>19%</td>
<td>67%</td>
<td>48%</td>
<td>86%</td>
<td>95%</td>
<td>57%</td>
<td>29%</td>
</tr>
<tr>
<td>US</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
<td>1%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Table 2: Country-specific Analysis

The above percentages measure thematic prevalence when compared across locality. While the thematic similarities are not as prevalent when compared to the industry-based analysis, it is evident that there are some country-specific similarities. This can be demonstrated in the increased importance of community factors and short-term projects in the UK when compared to the US, correlating with prior literature (Aguilera and Jackson, 2003). This prompts us to state that organisations within the same country share common thematic issues.
The preliminary quantitative analysis of year yielded the following percentages:

<table>
<thead>
<tr>
<th>Year</th>
<th>Carbon</th>
<th>Energy</th>
<th>Water</th>
<th>Waste</th>
<th>Paper</th>
<th>Regulatory</th>
<th>Infrastructure</th>
<th>Institutional</th>
<th>Community</th>
<th>Projects</th>
<th>Suppliers</th>
<th>Products</th>
<th>Transport</th>
<th>Biodiversity</th>
<th>Packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>35%</td>
<td>25%</td>
<td>40%</td>
<td>25%</td>
<td>20%</td>
<td>20%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>2010</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>2011</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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<td>100%</td>
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<td>100%</td>
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<td>100%</td>
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</tr>
<tr>
<td>2012</td>
<td>100%</td>
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<td>100%</td>
<td>100%</td>
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<td>100%</td>
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<tr>
<td>2013</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 3: Chronological Analysis

The above percentages measure thematic prevalence when compared across Year. From here we can see that the general themes seemed to remain fairly consistent over the 5 year timespan. This may warrant further thematic investigation in order to discern if Year is a key determinant in organisation disclosure behaviour.

In our Exploratory Factor analysis, we sought to discover links behind the appearance rates of our factors in order to aid in the discovery of the broader underlying themes concerning Green Statements. These results are displayed below.

<table>
<thead>
<tr>
<th>Correlation Matrix</th>
<th>Carbon</th>
<th>Energy</th>
<th>Water</th>
<th>Waste</th>
<th>Paper</th>
<th>Regulatory</th>
<th>Infrastructure</th>
<th>Institutional</th>
<th>Community</th>
<th>Projects</th>
<th>Suppliers</th>
<th>Products</th>
<th>Transport</th>
<th>Biodiversity</th>
<th>Packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
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<td>Water</td>
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Table 4: Factor Analysis

The correlation matrix found that the appearance of some themes was interrelated. For example we find that Institutional reform themes were often accompanied by paper conservation themes. Additionally, Water and Waste management themes often went hand in hand. Finally, the appearance of packaging driven themes tended to coincide with supplier-driven solutions.

While the initial quantitative investigation highlighted a multitude of surface-level relationships, it failed to explain why or how organisational Green Statements were related. Thus we reanalysed the backlog of organisational statements using qualitative analytical techniques, mainly inductive thematic analysis.

From our initial thematic analysis we found that there were four primary environmental themes:

- Resource-driven environmental measures
- Technology-driven environmental measures
- Initiative-driven environmental measures
- Process-driven environmental measures

Resource-driven environmental measures encompassed measurable resource disclosures. These themes were generally dominant in most statements across the board. Technology-driven environmental measures encompassed passive environmental reduction measures. This included the adoption of Green infrastructure and equipment, as well as overhead reductions due to regulatory standards. Technology-driven environmental measures were generally found in the form of buildings equipped with ‘Green’, energy saving and carbon reducing technology.

Initiative-driven environmental measures encompassed one-off projects and nature-driven environmental activities. This included community events and biodiversity initiatives, as well as community events. Finally, Process driven measures were derived from indirect environmentally-friendly activities. This included using environmentally friendly suppliers and trade partners, as well as initiatives to reduce GHG emissions via staff training and institutional change.
Upon further analysis it was found that these themes additionally coincided with the themes of the UN Global Compact (UN Global Compact, 2011). In regards to Resource-driven environmental measures we interpreted the ‘precautionary approach’ described in the UN Global Compact principles to encompass resource-monitoring and active carbon reduction initiatives. Similarly with Technology-driven environmental measures we believed that ‘the diffusion of environmentally friendly technologies’ represents passive, long-term capital-based measures to enhance environmental sustainability. Additionally, for Initiative-driven environmental measures we took ‘environmentally responsible initiatives’ to mean green actions undertaken by an organisation outside the immediate scope of its activities. Finally, we had operationalised Process-driven environmental measures to represent environmental sustainability measures along the supply chain and production process. While this was not a stated UN Global Compact theme it has been a prominent topic of discourse within recent literature (Tate et al., 2010).

![Figure 4: The Thematic Categorical model](image)

The model indicates that the four dominant categories of themes present within organisational green statements are Resources, Technology, Initiatives and Processes. These categories encompass the main measures which organisations use in order to measure their environmental outcomes. It is these outcomes which are reported to the general public, whether positive or detrimental to the environment. These organisational outcome reports form the basis from which organisational green disclosures are created.

The thematic categorical model was derived from the key categories of themes found in the initial thematic analysis. The categories were operationalized due to the prominent representation of these categories within the literature as well as the results of the initial analysis. Hence, the model serves to aid in the organisation and classification of the 15 codes identified earlier in the investigation.

From here, these codes were re-organised into the four thematic categories for the purpose of enhancing the clarity of our investigation. The results were as follows:

![Figure 5: Themes by Category](image)

Figure 5 shows the distribution of the primary themes within the broad categories displayed in figure 4. The categorisation of these themes enables a clearer perception of the methodological approaches of...
organisations towards their environmental preservation priorities. As such, once these themes were
categorised, the themes increased significantly in measurability and it becomes increasingly easy to link
overarching categories with dimension-specific (Industry, Country, Year) concerns.

The results of this study demonstrated that each industry sector tended to prioritize specific keywords
with its green statements. The Banking and Financial sector was dominated by targets or attempts at
achieving “Carbon Neutrality.” To do this most organisations increasingly strove for third part
accreditations such as “Green Star” ratings. Yet although environmental targets were continuously set, they were rarely met, with one bank continuously in the process of “seeking to reduce its environmental
footprint” despite never achieving its carbon targets. Nevertheless, urban sustainability and technology
driven solutions were highly prevalent in the financial and banking sectors, with organisations moving
increasingly towards green energy, wireless technology and energy efficient offices in the pursuit of the
illustrious Green Star certification. Most organisations which reported its Green Star ratings scored a 5
or 6 star rating, equivalent to a National or International excellence standard.

This sector was also proliferated with uniform reporting tables, utilizing heavily a Target/Result/Detail
format. Interestingly as there is no universal preset environmental reporting guideline format this
phenomena points to a basic level of Green reporting convergence these as organisations have the option
to report in any way (or opt for non-disclosure) yet they voluntarily choose to use the
Target/Result/Detail format.

Adherence to formats and cross-institutional standards however is taken to ridiculous levels in some
cases, resulting in the disclosure of essentially, non-disclosure. In one report within the minerals sector
in 2009, it is stated that (sic) “Biodiversity is not an important issue for us as we do not produce energy-
efficient or renewable energy-based products and services”. Later in 2011, an ICT company reported in
its biodiversity section that (sic) “Although we recognize the value of biodiversity, it is not a concern
for our business”. The presence of these redundant disclosures presents interesting implications for the
aims of corporate report preparers and the attitudes of corporations towards reports.

Thematic analysis within the retail sector in 2010 has highlighted predisposition towards palm oil
enabled environmental initiatives. However, it is also interesting to note that palm oil is also mentioned
in a banking sector’s Green Statements in the subsequent year. In a similar vein, the mention of Fairtrade
products dominated Australian Green Statements in 2011. These themes are no longer major themes in
present-day statements, however the previous spike in disclosure presents an argument for
chronologically influenced Green disclosure. This could suggest that statements published within the
same year share common thematic issues.

Finally, it seems to be that environmental incidents had an effect on corporate disclosure habits. In 2009,
although Oil spills were a topic of interest they were a relatively minor part of minerals-sector
sustainability reports. However in 2010 and the years since, oil spills and mitigation strategies have
dominated minerals-sector Green Statements, specifically within corporations which operate within the
oil drilling industry. Even institutions which played no part in highly publicised oil-related accidents
were affected by this behaviour and their disclosures followed suit. This phenomenon presents further
implications for organisational isomorphic tendencies.

7 DISCUSSION

The results of our investigation clearly point towards some degree of organisational isomorphism
present within present-day Green Statements. At a basic level there are clear parallels between the
reporting behaviours of industry-aligned and country-aligned organisations. Additionally the findings
suggest that the general themes of organisational sustainability reports are also thematically-aligned on
a chronological dimension. Although institutions are allowed freedom to choose their own Green
disclosure methods, it seems that institutional pressures may be pushing organisations towards greater
statement convergence.

The paper found that the Dominant themes of Green statements were divided into four main
categories. The Resource-related themes were Carbon, Energy, Water, Waste and Paper. The
Technology-related themes were Infrastructure and Regulatory engagement. The Initiative related themes were Community engagement, projects and biodiversity. Lastly, the Process related themes were Suppliers, Products, and Transport, Packaging and Institutional practices.

It was found that Isomorphic tendencies were reflected in green statements through their cross-organisational lingual similarity. Organisations, through their independent reporting processes, ended up reporting on the same topics and environmental protection methods while using the same buzzwords and linguistic features. These symmetries were found not only within individual industry sectors, but also from country to country and across yearly time periods. While organisations often claimed to be different to their competitors, the thematic content and structure of their green statements tended to be the same.

Although Sustainability is oft-used as a buzzword within both corporate and academic circles, most research has questioned the accountability of green statements rather than investigating green reporting culture as a whole (Nikolaeva and Bicho, 2011). This research observes statements as a medium of expression, rather than a collation of figures and examines the norms within this form of communication. The recurrence of common themes suggest that there are overarching paradigmatic constructs which shape and direct the language of green reports. In understanding the underlying concerns of organisations, we will be able to direct action towards efficient and fruitful endeavours.

The outcomes of this investigation are largely congruent with the literature. This paper largely confirms that organisations share similarities along pre-determined parallels (Aerts et al., 2006; Baker et al., 2012; Rahaman et al., 2004; Zeng et al., 2012). As identified by this paper, three of these parallels are Industry, Country and Year. It is imperative to note the consistency of our findings with previous literature, as this consistency only further serves to highlight the similarities in Green Statements across the reporting landscape. While the debate continues on the use of regulation as a tool to promote information standardisation, we must consider the possibility that the market has already standardised itself.

Interestingly enough, our results are also fairly consistent with the UN Global Compact Principles (UN Global Compact, 2011). This suggests that there is an underlying set of disclosure topics which governs the information disclosed by organisations within their Green Statements. Hence it would seem that the results of this study align with the theories of institutional philosophers DiMaggio, Powell and Scott (DiMaggio and Powell, 1983; Scott, 2001). This further strengthens the argument that organisational disclosure statements are governed by an underlying desire for institutional legitimacy.

The lexical similarities found within the thematic analysis of our paper further serves to strengthen our claims. While it may be plausible that organisations adopt the same set of basic benchmarks based on purely regulatory recommendations, the adoption of the same environmental reduction methods and reporting formatting clearly implies that organisations are converging on a cognitive level. Statistically, the odds of cognitively dissonant individuals producing such similar products are insignificant. Future research may wish to focus on the cognitive convergence of modern institutions and investigate the effect of changing external priorities on individual institutional operating environments.

Similarly, the ‘disclosure of non-disclosure’ as found within the thematic analysis of our paper provides a multitude of implications regarding the current Green reporting meta-framework. Specifically, the motivations behind disclosing the existence of a voluntary reporting category and yet not reporting any information on the issue raises a plethora of questions in regards to behavioural disclosure decision-making. This finding suggests that there is an underlying Green disclosure culture, of which its maintenance is prioritized over statement quality. Further research may wish to focus on defining ‘Green Statement Culture’ by collecting field data on green statement producers.

Although measures have been taken to mitigate the risk of systemic error, this research is not without limitation. The research is limited by its sample size when faced with its multi-categorical approach. Additionally, the thematic analysis suffers the typical subjectivity problems facing all qualitative analysis. It may be plausible for other researchers to analyse the same dataset used within this study and come to an alternative conclusion. However as the results of this study align with the findings of previous literature, we find that our claims are reasonable within its academic context.
Presently, there is a large focus on the ‘green’ issues of biodiversity, climate change and pollution (Pugh, 2014). However in the developing world, problems of water quality, sanitation and air quality run rampant. While many countries in the developed sphere may champion issues of environmental responsibility, their influence extends merely to their sovereign borders. On the other hand, corporations have extended their reach to the far corners of the world. This research adds to the growing body of sustainability literature by identifying and categorizing the major global environmental issues as stated by corporations in order to increase understanding and responsiveness rates to the issues which plague the planet in this present age.

8 CONCLUSIONS

This paper investigated the overarching themes present within corporate Green Statements. This investigation covered three dimensions (Industry, Country and Year) and sought to explain the findings with institutional theory, drawing on the concept of Institutional Isomorphism. The outcomes of this research indicated that there are increasingly pervasive elements of Green Statement Symmetry which may be the result of Institutional Isomorphism. This research and its findings present important implications for both academia and corporate environmental reporting stakeholders.

A key contribution of this work relates to its applications of emergent investigative methodologies in conjunction with a historically predominant theoretical lens. Additionally this work adds to the evolving body of institutional theory literature, highlighting chronological position as an important determinant of organisational reporting behaviour. Furthermore, this research provides a lexical analysis of the predominant themes present within Green statements which could serve to drive future behavioural research into Green disclosure patterns.

This research also contains a multitude of implications for practice. The research’s findings could be used to contribute to the ever-intensifying Green regulatory debate. This research demonstrates that in time organisations disclosures will converge into a comparable form as organisations strive to achieve greater levels of societal legitimacy. As a result this research could guide policy-makers and institutional trend-setters towards creating efficient and effective reforms which could vastly improve the quality of Environmental reports.

Future research should focus on the Green statements of other institutions stemming from different sectors to investigate whether the isomorphic effect is prevalent within those areas. Such research would expand upon the results of this study and investigate the patterns prevalent within universal green statement culture. This would allow for comparison of the priorities within the green reporting collective and allow for a greater insight into the motivations and outcomes of green reporting initiatives permeating within today’s society.

The recent emergence of Green reporting as a mainstream form of organisational disclosure may reflect a greater societal paradigm shift towards environmental sustainability objectives. While still in its infancy, this form of reporting is already starting to grow signs of its own culture as statements grow increasingly similar in both lexical and thematic content. The researchers anticipate that these trends will continue to grow as organisations increasingly turn to mimicry in order to achieve and maintain the highest levels of societal legitimacy. Even in the absence of regulation, in the future, it’s entirely possible that Green Statements will be almost symmetrical.

References


UN Global Compact (2011). The ten principles.
## APPENDIX

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### A1: Industry Distribution

### A2: Chronological Distribution

### A3: Country Distribution