XXI SEMEAD
Seminários em Administração
novembro de 2018
ISSN 2177-3866

MOVING 20 YEARS BEYOND DYADIC TIES: INFLUENCES OF THE NETWORK THEORY OF STAKEHOLDERS

ALESSANDRO CALLONI
FACULDADE DE ECONOMIA, ADMINISTRAÇÃO E CONTABILIDADE DA UNIVERSIDADE DE SÃO PAULO - FEA

JEFFERSON LUIZ BUTION
FACULDADE DE ECONOMIA, ADMINISTRAÇÃO E CONTABILIDADE DA UNIVERSIDADE DE SÃO PAULO - FEA

MOVING 20 YEARS BEYOND DYADIC TIES: INFLUENCES OF THE NETWORK THEORY OF STAKEHOLDERS

ABSTRACT:

The Stakeholder Theory is a theory of organization management that proposes explaining a firm by means of several relationships with other groups of interest, namely stakeholders, and its mainstream proposes a model in which the firm is in the center of surrounding stakeholders with dyadic relations to them. In 1997, Timothy Rowley contrasted these bilateral relationships (firm-stakeholders) and proposed a Network Theory of Stakeholders (NTS), where stakeholders are also interconnected. By adding concepts from network analysis, he also proposed that stakeholders have prominence in the flow of information within the network. In this paper, we investigate the 20 years of the NTS in a bibliometric and content analysis study. We found 15 papers particularly important for the NTS evolution and reviewed their backward and forward references to discuss our results. Thru the bibliometric analysis, we found that the NTS evolved from the strategic alliances grounds, passing thru a period of the social responsibility and ethics consolidation, which led to the following focus on Corporate Social Responsibility one decade ago. Latest developments were in the innovation field where networks may play a role in the development of innovation, dynamic business models, and value creation, or when together, in value co-creation. With this paper, we aim to offer an overview of the Network Theory of Stakeholders and insights for following peers who may intend to aggregate the network concept on their work along with the stakeholder theory.

1. Introduction

Stakeholder Theory is a theory of organization management that proposes explaining a firm by means of several relationships with other groups of interest, namely stakeholders, and seeks to identify, categorize and define these groups and their relations with the firm (Phillips, Freeman, & Wicks, 2003). In contrast to other organization management theories, the Stakeholder Theory is rich in moral and value features, also in dealing with relations and cooperative behavior (Phillips, 1997).

As a firm level theory, the mainstream of Stakeholder Theory proposes the organization as a central point of analysis with a gravity for stakeholders, to whom bilateral relations are evaluated. Then, the organization in study will be central until the lenses of analysis move to the next research object (Hart & Sharma, 2004).

Twenty years ago, Timothy Rowley contrasted this bilateral relationship, firm-stakeholder, in his article published in 1997 by the Academy of Management Review. He proposed the improvement of the bilateral concept, called a dyadic tie, to a network approach, where stakeholders are also interconnected. By adding concepts from network analysis, he also proposed that stakeholders have prominence in the flow of information that circulates in the network (Rowley, 1997).

Such ideas had a permanent influence in the literature and generated several paths, mixing the evolution of classic Stakeholder Theory to Rowley´s work on a Network Theory of Stakeholder. However, the influence of this shift to the concept of network in the stakeholder theory is still not clear.

Then, is it possible to demonstrate the evolution of the Network Theory of Stakeholder? A bibliometric analysis allows this demonstration because it provides quantitative insights into how scientific publications influence the dissemination of knowledge. In addition, the content analysis allows complementary qualitative insights on particular publications.

Although the Network Theory of Stakeholders has been used by scholars of several fields over the past two decades, a comprehensive compilation of this body of literature is not available to date. To this extent, this paper intends to minimize this lapse by organizing all impactful related papers on the topic, by highlighting its influencers, their followers and further developments over the years, and finally, by drawing insights of the common trending concepts with a combination of bibliometric and content analysis techniques.

In such manner, this paper provides a curatorship of main references on the Network Theory of Stakeholder and, along these lines, the trending topics where this theory have been employed. To meet this goal, we organized this paper into three objectives as follows:

Objective #1 - Identify the most influential scholars and papers on the Network Theory of Stakeholders in terms of classical works and potential contemporary papers.

Objective #2 - Identify the trends in the literature of the Network Theory of Stakeholders in terms of interdisciplinarity and particularly in the business area.

Objective #3 – Compile the prominent arguments of the Network Theory of Stakeholders over the years in the management area of study.

We finished this work drawing conclusions on particular contributors, discussing the phenomena in which this theory has been applied, and sharing the four common arguments of the selected literature for following peers who may intend to aggregate the network concept on their work along with the stakeholder theory.

2. Conceptual Foundations

The Stakeholder Theory offers a framework to explain, at the firm level, the relations between the groups of interest and the firm as a focal point. The Network Theory of Stakeholder is a branch of the stakeholder literature that considers the relationships are not one-to-one, or dyadic, but with and within groups. These two main concepts are better discussed as follows.

2.1.The Stakeholder Theory

Organizations still bring ingrained secular theories of maximizing shareholder value as the primary goal that should be pursued by a company. From the 1980s onwards, one movement contrasted with this belief from Freeman's book "Strategic Management: A Stakeholder Approach" (1984). Recognized as the first scholar to bring together stakeholder concepts into a single work, he directly or indirectly opened a line of thought for other scholars to present their contributions and models within the concept of stakeholders (Clarckson, 2017; Harrison,

Bosse, & Phillips, 2010; Phillips et al., 2003; Rowley, 1997; Savage, Nix, Whitehead, & Blair, 1991).

Stakeholder theory embodies a principle that challenges managers of organizations to rethink the structure of companies and their relationships with stakeholders, whose classic definition is: "groups or individuals that may affect or be affected by the achievement of the organization's objectives" (Freeman, 1984 p.25). The primary challenge has been, since Freeman, to understand who these individuals are, or which groups can be considered as stakeholders. A step forward was made with the creation of attributes such as power, legitimacy, and urgency (Mitchell, Wood, & Agle, 1997), serving as the basis for the identification and categorization of stakeholder types by their, then called, 'salience'.

Another step towards consolidating the theory was the clarification that it encompasses three interrelated but distinct aspects: descriptive/empirical, instrumental, and normative (Donaldson & Preston, 1995). More than interrelated, these three aspects support each other, and the central theses developed by the analysis of these aspects have led to the conclusion that the theory of shareholder value maximization is "morally untenable" (Donaldson & Preston, 1995 p.88).

The complexity of the organization relationships with stakeholders was perceived and discussed since the beginning of the theory's consolidation. It was also observed that it was not only a matter of composing a methodology or a normative method to explain the management of common interests, but to understand the complex relationships of a large, varied, and mutant number of stakeholders. And it became a virtually impossible task to compose a theory to comprehensively understand and explain, for an extended period of time, the behaviors and impacts of all stakeholder groups (Mitroff, 1983).

An important and critical point in the evolution of Stakeholder Theory is the concept of fairness in the relations between organizations and their stakeholders. This notion of fair treatment is imposed when coexistence between parties implies a mutual benefit. Activities, where groups of people spontaneously engage, require a contribution from the parties and restriction of freedom rights (Phillips, 1997). Moreover, this principle supports the decision of how managers can trade-off among the diverse demands of stakeholders.

The choice, or preference, of one stakeholder over the others by organization's managers, who need to deal with everyday options of resource allocation, have been received the attention of scholars and challenged the stakeholder theory (Jensen, 2001; Mitchell et al., 1997; Neville & Menguc, 2006). Although stakeholder groups can be identified by their attributes, as we mentioned before, the definition of salience is left to managers based on their own perception of these groups (Mitchell et al., 1997).

So far, this article has presented the bases and concepts of the stakeholder theory. We went through the early scholars who laid the groundwork for the development of theory and principles that helped to identify stakeholder groups, their salience, and importance. In the next chapters of this article, we will discuss the inter-relationships among stakeholders and their bonds with the organization.

2.2. The Network Theory of Stakeholder

The paper "Moving Beyond Dyadic Ties: A Network Theory of Stakeholder Influences", by Rowley (1997), contrasts many of the concepts introduced by stakeholder theory. The central idea of Rowley's work is that "to build a stakeholder theory of the firm, researchers must go beyond dyadic relationships." (p. 906). In addition, he used concepts from social network analysis to state that the company should be considered more than the focal point of a stakeholder group, as the company is also a stakeholder in other networks.

The main reason for using social network analysis is to understand the links that define interactions among groups that influence companies, or either are able to influence. Hence, the dyadic relationship is replaced by the concept of multiple and interdependent relation influences. The concept of interrelationship and interaction among groups of stakeholders is an important contribution to the theories of organizational management (Rowley, 1997, p. 906).

Rowley (1997) also adapted concepts from network analysis to understand stakeholder's influences on their relations. One of these concepts is the "density", that can be understood as the degree of existent network connections. So, the more connected the stakeholders are to each other, the greater is the network density. Higher density also means that there is a high exchange of information between the stakeholders.

This exchange of information can lead stakeholders to shared common behaviors and to increase their influence on a given 'focal' organization. On the other hand, networks that are not very connected and with little exchange of information have less influence on the central company and little capacity to influence other stakeholders. Moreover, the focal company has more freedom to make decisions without major interventions from unorganized or unconnected stakeholders.

If the density concept considers the network as a whole, the "centrality" concept deals with individual network participants. Centrality can be understood as the degree of bonds that a member has in relation to others. A large number of connections enables a network member to receive information, pass it on, and directly access other members of the network. Then, centrality and direct access lead to a powerful influential position. This concept seeks to identify members who may have high communication power in the network and consequently the possibility of influencing other members.

With these two structured concepts, Rowley developed a two-dimensional analysis combining high and low levels with the concepts of density and centrality. Understanding this analysis makes it possible for an organization to understand its position in the network and thus to adopt appropriated response strategies towards its stakeholders.

The objective of Rowley's work was to contrast the dyadic relationships contained in the classical stakeholder theory to focus on the company's reactions to its stakeholders. Then, the company should not react individually to each group of stakeholders, because the demands are simultaneous and originated in several members that are connected to a network. These connections imply a concomitant influence among the participants of a network, their behavior, and their conjoint demands. Density and Centralization concepts help to understand how networks work, the interrelations of the stakeholders, and to draw strategies for responses.

In this section, we briefly explained Rowley's work and its contribution to the Stakeholder Theory. The concept of interconnected stakeholder networks shows how it is

possible for groups with many connections to influence other stakeholders and thus have a prominent position on the network. His paper goes further by analyzing the density and centrality of the networks and thus appointing strategies that firms may adopt towards their stakeholders by considering their network position. In the following sections, we will discuss, through a bibliometric investigation, the influences of Rowley's article of 1997 to date.

3. Methods

This paper employs a mixed method of bibliometric research and content analysis to identify, aggregate, summarize, and analyze the scientific development of the Network Theory of Stakeholder, a specific aspect of the stakeholder theory. The former method addresses a quantitative perspective of the available literature while the latter aims to qualitatively examine the prominent papers on the topic.

3.1. Bibliometric and content analysis methods

According to Zupic & Čater (2015, p.430) "Bibliometric methods allow researchers to base their findings on aggregated bibliographic data produced by other scientists working in the field who express their opinions through citation, collaboration, and writing. When these data are aggregated and analyzed, insights into the field's structure, social networks, and topical interests can be put forward."

Indeed, there are correlations between scholar citations and other measures of influence or impact such as honors and laureateships. However, there are criticisms to the overvaluation of citations because this is a function of many factors, such as time, field, journal, type of article, reader style, and availability (Bornmann & Daniel, 2008).

In scientometrics, most used metrics are citations, co-citations, bibliographic coupling, and co-word. The unity of analysis may be any characteristic of a publication and the most usual are author, journal, keyword, year, and institution. (Cobo, López-Herrera, Herrera-Viedma, & Herrera, 2011). These techniques are hereon briefly described.

Citation regards to the number of other publications that cite the unity of analysis, thus it is widely used as a measure of influence. It relies on the assumption that scholars who consider a publication important for their work cite their sources of knowledge, so a heavily cited paper is considered important because it set the basis for many following peers. A citation analysis is usually operationalized as a Top-N list and aims to disclose the most influential on the field (Cobo et al., 2011; Zupic & Čater, 2015).

Co-citation measures the similarity of publications by counting the times in which two unities of analysis are cited in the same following paper. It has been extensively used and shown to be reliable because of its citation-based backward view. The assumption of co-citation is that "the more two items are cited together, the more likely it is that their content is related", however, citations are cumulative over time so it is not a technique which is sensible to map research fronts (Zupic & Čater, 2015, p.431). Then, co-citation is "used to analyze the intellectual structure of a scientific research field" and new unities are only identifiable thru cluster analysis (Cobo et al., 2011, p.1384).

The *bibliographic coupling* connects unities of analysis based on the references they share, so it has a reverse sense to co-citation and embodies a forward view. While co-citation analyses the relations among cited documents, or the knowledge base, the bibliographic coupling inspects the relations between citing documents, or the research front. Its strength is that bibliographic coupling does not need to wait for citations to accumulate, so it is more accurate for emerging fields or literature niches. On the other hand, it is not reliable for long time frames (Cobo et al., 2011; Ding, Chowdhury, & Foo, 2001; Zupic & Čater, 2015).

Co-word is a technic that counts the co-occurrence of words in given criteria, usually keywords, title or full abstracts. It aims to uncover the concepts, approaches, and even theories in a sample. Because it scrutinizes the actual content of the unity of analysis in terms of philology, regardless of citations, it provides an immediate picture of the research topic in any selected timespan (Cobo et al., 2011; Ding et al., 2001; Zupic & Čater, 2015).

Content Analysis is a qualitative, objective, and systematic analysis of communication and may be applied to any symbolic material, usually texts (thus also called textual analysis) (Conley & Tosti-Kharas, 2014), to codify them into categories or groups according to a given criteria (Duriau, Reger, & Pfarrer, 2007; Verbeeten, Gamerschlag, & Möller, 2016).

These criteria are usually latent in the texts and are exposed after extensive readings and interpretative connections among their significance and concepts (Raich, Müller, & Abfalter, 2014). Therefore, for the analysis of research papers, categorizations are inductively selected after many looped readings and interactions of the whole paper collection (Conley & Tosti-Kharas, 2014; De Bakker, Groenewegen, & Den Hond, 2005).

3.2. Composition of the set of papers and methodological path

We opted to use the Institute for Science Information (ISI) and the related Web of Science (WoS) as the source of bibliographic information for three main reasons: for being one of the most important databases; the index for the Journal Citation Report (JCR); and organizer of subject categories of specialized knowledge (Cobo et al., 2011; Wallin, 2005).

To compose the first selection of articles we searched for the terms 'Stakeholder' and 'Network'[i] in the WoS for all years. This yielded 96 peer-reviewed articles related to the management field that were following cited by 2698 works, being the oldest published in 1995. As expected, we found a skewed curve of citations (Raan, 1996) where the top 20 articles comprised 2242 citations in this first list, 83% of the total. After reading all 96 papers we considered that 15 were unconditionally in the scope. We used the software VOSviewer 1.6.8 and CitNetExplorer 1.0.0 to aid out bibliometric research (van Eck & Waltman, 2010, 2014).

Bibliometric studies are valuable tools for the clearance of the superabundance of literature, however, there is always a "filter failure" associated with the criteria (Hood & Wilson, 2001) and a subjective factor will then exists (Bar-Ilan, 2008). We preferred quality over quantity, meaning adherence to the Network Theory of Stakeholder because this first selection was used as nodes for following bibliometric analyses with snowball effects.

Excluded articles were mainly because the word "network" has a wide semantic in business so many scanned articles had completely different subjects. We preferred to face the semantic problem and qualitatively exclude mismatching papers than running the risk of

missing an important reference[ii]. Figure 1 shows the methodological path of this paper and depicts the main steps we proceeded to meet the three earlier discussed objectives. These steps are subsequently detailed.

In the first step, to meet objective #1, and to minimize the filter failure and overestimation of citations, we balanced citation and freshness. We then classified the 15 selected articles into two groups, namely the *Classic Works* group, with the high cited papers, and the *Potential Contemporary Papers* group, with less than 5 years and published by a journal with an Impact Factor of 5 years greater than 3.0. Two papers were overlapping the groups and we prioritized freshness to citations, considering them in the *Potential Contemporary Papers* only.

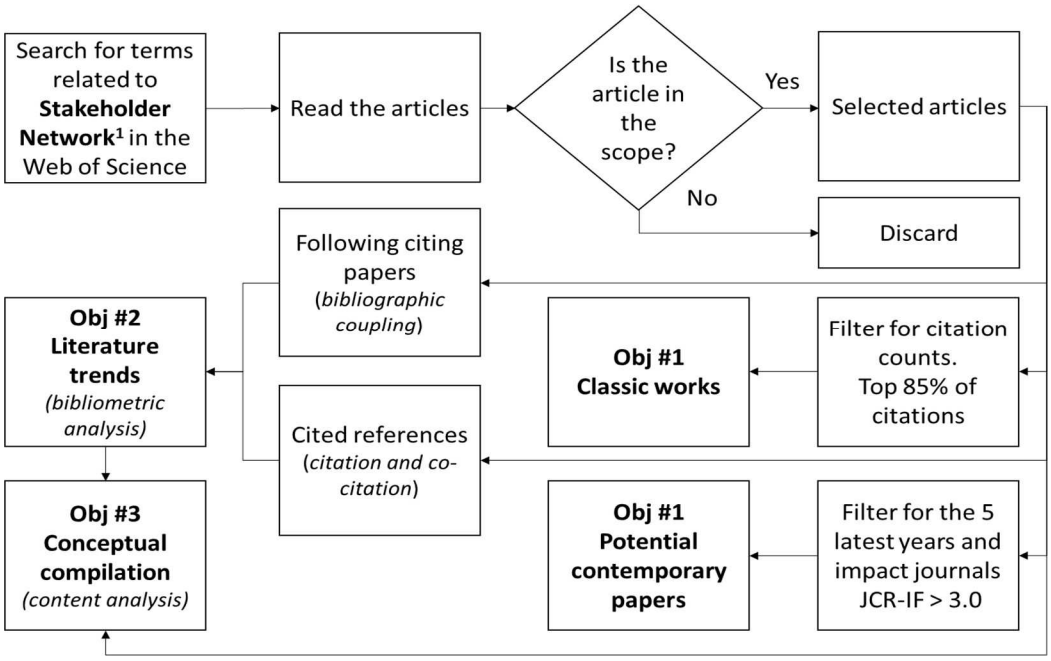

Figure 1 – The methodological path of this research paper.

In the second step, to meet objective #2, we organized the references cited by the 15 papers of the selected articles to perform a citation and co-citation analysis and compose a citation map to find the references that built the Network Theory of Stakeholders. A total of 951 backward citations were comprised after rejecting the overlaps. These papers were then clustered with a Visualization of Similarities (VOS) technique (Waltman, van Eck, & Noyons, 2010).

In addition, we tracked the following citing papers of the 15 selected articles to perform a bibliometric coupling analysis in aggregate, to understand its interdisciplinary influence, and in a triennium basis specifically in three fields: Business, Management, and Ethics. The latter to find the trends in the literature of the Network Theory of Stakeholders over the years (van Eck, Dekker, & den Berg, 2010; Wallin, 2005). A total of 1025 forward citations were comprised after rejecting the overlaps[iii].

In the third step, to meet objective #3, we performed a content analysis of the 15 selected papers to compile their attributes and describe the conceptual evolution of the Network Theory of Stakeholders over the years in consonance with the bibliometric results.

4. Results and discussion

In this session, we present the results of analyses as a sequence of the three research objectives based on the methodological path designed in Figure 1.

4.1. Influencers of the Network Theory of Stakeholders

We applied the citation technique to rank the *Classic Works* and the *Potential Contemporary Papers* and meet the first objective of this paper. Table 1 depicts this collection of papers.

We found seven classic works that influenced the development of the Network Theory of Stakeholders, four of them published by a journal of ethics. This is in line with the ethics roots of stakeholder theory and the prevalence of the Journal of Business Ethics in the field (Donaldson & Preston, 1995; Friedman & Miles, 2006).

As for the contemporary papers, we found eight works with the potential to course the future of the Network Theory of Stakeholders. Two of them (Dobele, Westberg, Steel, & Flowers, 2014; Hillebrand et al., 2015) were also in the top 85% of overall citations and could be in the classic works group either. As opposed to the classic works, these fresh papers were published by a wider array of journals, thus business fields, such as construction, marketing, public relations, and environment.

Table 1 – Influential scholars and papers: *Classic Works* and *Potential Contemporary Papers* of the Network Theory of Stakeholders.

Authors	Journal	Year	Total Citations WoS [1]	Citations in JCR Management Journals [2]
CLASSIC WORKS				
Rowley, T. J.	ACADEMY OF MANAGEMENT REVIEW	1997	824	390
Hart, S.L.; Sharma, S.	ACADEMY OF MANAGEMENT EXECUTIVE	2004	234	118
Neville, B. A.; Menguc, B.	JOURNAL OF BUSINESS ETHICS	2006	117	68
Roloff, J.	JOURNAL OF BUSINESS ETHICS	2008	99	47
Roloff, J.	BUSINESS ETHICS EUROPEAN REVIEW	2008	26	10
Frooman, J.	CANADIAN JOURNAL OF ADMINISTRATIVE SCIENCES	2010	17	13
Sachs, S.; Ruhli, E.; Meier, C.	JOURNAL OF BUSINESS ETHICS	2010	6	5
POTENTIAL CONTEMPORARY PAPERS				
Boutilier, R.G.; Zdziarski, M.	CONSTRUCTION MANAGEMENT AND ECONOMICS	2017	2	2
Schneider, T.; Sachs, S.	JOURNAL OF BUSINESS ETHICS	2017	1	0
Yang, A.; Bentley, J.	PUBLIC RELATIONS REVIEW	2017	1	1
Davila, A.; Molina, C.	BUSINESS & SOCIETY	2017	0	0
Reypens, C.; Lievens, A.; Blazevic, V.	INDUSTRIAL MARKETING MANAGEMENT	2016	8	8
Kull, A. J.; Mena, J. A.; Korschun, D.	JOURNAL OF BUSINESS RESEARCH	2016	5	3

Hillebrand, B.; Driessen, P. H.; Koll, O.	JOURNAL OF THE ACADEMY OF MARKETING SCIENCE	2015	23	18
Dobele, A. R.; Westberg, K.; Steel, M.; Flowers, K.	BUSINESS STRATEGY AND THE ENVIRONMENT	2014	23	12

Notes: [1]Total citations in all science fields reported by the Institute for Science Information (ISI) issued by the Web of Science (WoS). [2]Citations in journals indexed by the Journal Citation Report (JCR) in the categories of Business, Management or Ethics.

At this point, we found an evidence that the selection of papers was accurate because all the 15 papers share citations in a stream where every new publication cite most of the formers. This finding supports the cohesion of conceptual paradigms of these papers (Bornmann & Daniel, 2008) and it is better perceived in Figure 2, where a citation map highlights the number of times these 15 papers cite each other (van Eck et al., 2010).

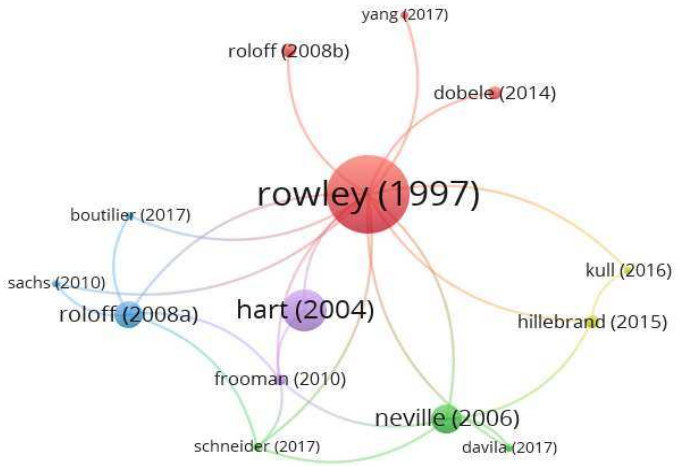

Figure 2 – Citation map of the most influential scholars and papers on the Network Theory of Stakeholders.

Notes: Size of circles represents citation counts within the group. Labels appoint first author only.

Graphically, it is even clearer that Rowley (1997) is the seminal work on the topic and influenced most of the following works, which are also interconnected thru citations.

4.2. Trends in the literature of the Network Theory of Stakeholders

Cited references

We organized the 951 backward citations of 15 selected papers to analyze the references that built the Network Theory of Stakeholders. We found that four of the most cited references were within the group of the 15 selected papers and, apart from this inner group, the seminal scholars of the stakeholder theory are top-ranked, such as Freeman, Mitchell, and Donaldson.

As for the referred journals, the Academy of Management Review set the basis for most of the papers, followed by the Journal of Business Ethics. This was not a surprise given the prominence of the Academy of Management, including a second journal in the list, and the Ethics inputs in the stakeholder theory (Bosse, Phillips, & Harrison, 2009; Griffin, 2017).

However, the marketing-related journals was a notorious finding. This finding is in line with the keyword analysis, which also includes marketing theory. A better connection within these keywords is shown in Figure 3, where it is possible to track ten years of evolution of the keywords assigned by the authors, then a proxy for research subjects (Cobo et al., 2011; Ding et al., 2001).

Figure 3 – Occurrence map of the author keywords in the references of selected papers.

Notes: Size of circles represents occurrence counts within the group.

An overall bibliometric analysis of references shows that the Stakeholder Theory is a strong influencer of the of the Network Theory of Stakeholders, as expected. But also the Marketing field have made contributions, along with the Corporate Social Responsibility (CSR) area (Porter & Rafols, 2009).

Citing papers

A total of 1025 papers cited the first selection and allowed a bibliometric coupling analysis to, initially in aggregate, identify the multidisciplinary of the Network Theory of Stakeholders. As an indicator of this phenomenon, in the earlier Table 1 it is also possible to find that not all citations of influential scholars and papers were made in the management area (Porter & Rafols, 2009).

As an example, out of the total 824 citations of Rowley (1997), only 390 were in the categories of Business, Management or Ethics, that we called the 'managerial triad'. As earlier discussed in the methods session we keep ethics in the managerial triad and our bibliometric findings support its influences.

4.3.Prominent arguments of the Network Theory of Stakeholders.

When Freeman consolidated the concepts of stakeholder in his work "Strategic management: A stakeholder approach" (1984), the idea that the company is in the center of the relations prevailed on the Stakeholders Theory. In addition, the theory claims that the relations between the company and its stakeholders are the same size and are equidistant from the focal organization (Donaldson & Preston, 1995). That is why the relationships between the stakeholders and the organization were presented in an independent and dyadic way (Fassin, 2009). Perhaps because of these principles, academics have focused their efforts on identifying,

classifying, and understanding stakeholders (Freeman & Evan, 1979; Freeman, 1984; Mitchell et al., 1997) rather than deepening studies on stakeholder-business interactions.

The relationships among organizations, groups, or individuals are much more complex and therefore difficult to be adequately explained in a simplified way (Fassin, 2008). Thus, assuming that stakeholders do not have an interrelationship is an idea that does not find any support (Dobele et al., 2014; Hillebrand et al., 2015). There is a dynamic interaction among stakeholder groups and those groups with organizations. This characteristic points to a situation that is not as static as the classical models of stakeholders may suggest (Fassin, 2008, 2009), but in continuous change. Therefore, relationships between stakeholders and organizations are not the same size nor are they equidistant from the focal organization (Boutilier & Zdziarski, 2017; Kull et al., 2016).

Curiously, the concept that stakeholders are not isolated is contemporary to the consolidation of the 'stakeholder' precepts. Mitroff, in 1983, argued that there is an interdependent network of relationships among all stakeholders whose relationships could be contrary to the company's goals (Mitroff, 1983). But it was only with Rowley's work, fifteen years later, that the perception of simultaneous interactions between multiple and interdependent stakeholders was definitively incorporated into the Stakeholder Theory (Rowley, 1997).

Rowley went further when he stated that depending on the density of the network and the centrality of the organization on the network, "the company may not be at the center of its network of stakeholders". In addition, the company is also a "stakeholder of other focal points in other networks" (Rowley, 1997, p.892).

In the latest decades, worldwide transformations are impacting the relations between the stakeholders and the organizations (Sachs et al., 2010). Governments have had their power diminished in the wake of globalization, multinational corporations have been integrating all continents through their operations, the performance of non-governmental organizations has served as spokesperson for social demands, the popularization of the internet and its connective applications enlarged the speed of information, and all these phenomena forced governments, companies, and organizations to operate with greater transparency (Hart & Sharma, 2004).

Also these changes have altered the characteristics of the stakeholder relationship with the firm (1) from individual and independent value exchange to a complex and multi-relational value exchanges; (2) from an implicit tension to an explicit tension in the interests; and (3) from a centralized control to a dispersed control in decision-making (Hillebrand et al., 2015). Moreover, the possibility of rapid mobilization of groups or individuals represents a considerable development of the relationship between organizations and their stakeholders, including those located in the fringe (Hart & Sharma, 2004).

This growing and intense exchange of information can lead stakeholders with different demands to cooperate, forming alliances, aiming to increase the power of their claims on organizations (Neville & Menguc, 2006). Therefore, groups of stakeholders that normally compete for company's attention and resources may change their behavior and act together to inflate their demands with the organization (Roloff, 2008a). Moreover, one stakeholder can influence the others according to their specific role in the network (Neville & Menguc, 2006; Rowley, 1997).

The strength of distinct stakeholder groups when combined for the same demand may reach an unfavorable dimension, usually not initially understood by the organization (Frooman, 1999). This time lag occurs because companies usually do not realize that they are decreasing their centrality in the stakeholder network (Rowley, 1997). In these situations, when stakeholder management is flawed or missing, stakeholders with a high degree of network connection may lead to a situation that is contrary to the interests of the organization (Dobele et al., 2014). Moreover, some stakeholders, such as non-governmental organizations (NGOs) tend to mobilize other groups to ally themselves to obtain greater salience (Dobele et al., 2014; Hart & Sharma, 2004; Yang & Bentley, 2017).

On the other side, alliances between stakeholders are not always negative for organizations. In collaborative networks, joint work among stakeholders can generate knowledge and solutions to complex social and scientific problems (Schneider & Sachs, 2017). However, this does not mean a peaceful and trouble-free coexistence (Boutilier & Zdziarski, 2017). By their diverse origin, stakeholders entering into collaborative networks have different motivations, priorities, and expectations for the outcome of their collaboration (Reypens et al., 2016; Sachs et al., 2010).

However, in this literature trend, the relationship between stakeholders and companies still have common goals of creating a solution addressed to a specific problem. Despite the differences pointed out, collaboration is a way to reach a solution that, otherwise, could not be found individually (Sachs et al., 2010).

Relationships between stakeholders have also been analyzed at a level where their definition is more comprehensive. The role of stakeholders linked to a focal company generates a relationship that is circumscribed to that organization. Comparatively, NGOs, social movements, and supranational organizations need to prove their legitimacy (Mitchell et al., 1997) to qualify them as stakeholders of a company (Roloff, 2008b, 2008a).

When the focus of a stakeholder's group or a stakeholder's network is not an organization, but an issue (Frooman, 2010), stakeholder definition becomes more holistic. For Roloff (2008a) these stakeholders are representatives of civil society, businesses, and government institutions who join forces to address a problem that affects all of them (Roloff, 2008b, 2008a).

The motivation for these stakeholders to work together is the need to solve a complex issue, which without the participation of these actors it is unlikely to provide a solution (Roloff, 2008b). The relationship between stakeholders is complicated and goes through several stages of development, ranging from skepticism, hostility, agreement and even collaboration (Roloff, 2008a). Moreover, the scope of the issues addressed by these stakeholders involves the management of various societal interests, organizations, and governments.

5. Conclusion

With this paper, we presented the most influential papers on the Network Theory of Stakeholders, some concepts they share, and following developments of their works. The paper of Rowley (1997) has proved to be a seminal work in this theory and our content analysis found

four prominent arguments in the following most relevant papers, namely the organization focus, the stakeholder relationship, the stakeholder network, and the issued focus.

We found 15 papers particularly important for the Network Theory of Stakeholder evolution and reviewed their backward and forward citations to discuss our bibliometric results based on almost two thousand references that comprised a twenty-year timespan. We found that the Network Theory of Stakeholder evolved from the strategic alliances grounds, passing thru a period of the social responsibility and ethics consolidation, which led to the following focus on Corporate Social Responsibility one decade ago. Latest developments were in the innovation field where networks may play a role in the development of innovation, dynamic business models, and value creation, or when together, in value co-creation.

We recognize that bibliometric studies are sensitive to time and to the knowledge base where information is retrieved, therefore we opted to use the Web of Science only and understand that citations are different in other databases. One main difficult we found was the wider semantic of the word 'network' in the business field, it was minimized by a snowball technique to find forward and backward citations. Also, the content analysis is always subjected to bias and we tried to minimize them by using two blind researchers to countercheck results, anyway analyses are qualitative and interpretative given the technique.

6. References

Bar-Ilan, J. (2008). Informetrics at the beginning of the 21st century-A review. *Journal of Informetrics*, *2*(1), 1–52. http://doi.org/10.1016/j.joi.2007.11.001

Bornmann, L., & Daniel, H. (2008). What do citation counts measure? A review of studies on citing behavior. *Journal of Documentation*, *64*(1), 45–80. http://doi.org/10.1108/00220410810844150

Bosse, D. A., Phillips, R. A., & Harrison, J. S. (2009). Stakeholders, reciprocity, and firm performance. *Strategic Management Journal*, *30*(4), 447–456. http://doi.org/10.1002/smj.743

Boutilier, R. G., & Zdziarski, M. (2017). Managing stakeholder networks for a social license to build. *Construction Management and Economics*, *35*(8–9), 498–513. http://doi.org/10.1080/01446193.2017.1289229

Cobo, M. J., López-Herrera, A. G., Herrera-Viedma, E., & Herrera, F. (2011). Science mapping software tools: Review, analysis, and cooperative study among tools. *Journal of the American Society for Information Science and Technology*, *62*(7), 1382–1402. http://doi.org/10.1002/asi.21525

Conley, C., & Tosti-Kharas, J. (2014). Crowdsourcing content analysis for managerial research. *Management Decision*, *52*(4), 675–688. http://doi.org/10.1108/MD-03-2012-0156

Davila, A., & Molina, C. (2017). From Silent to Salient Stakeholders: A Study of a Coffee Cooperative and the Dynamic of Social Relationships. *Business and Society*, *56*(8), 1195–1224. http://doi.org/10.1177/0007650315619626

De Bakker, F. G. A., Groenewegen, P., & Den Hond, F. (2005). A Bibliometric Analysis of

30 Years of Research and Theory on Corporate Social Responsibility and Corporate Social Performance. *Business & Society*, *44*(3), 283–317. http://doi.org/10.1177/0007650305278086

Ding, Y., Chowdhury, G. G., & Foo, S. (2001). Bibliometric cartography of information retrieval research by using co-word analysis. *Information Processing and Management*, *37*(6), 817–842. http://doi.org/10.1016/S0306-4573(00)00051-0

Dobele, A. R., Westberg, K., Steel, M., & Flowers, K. (2014). An Examination of Corporate Social Responsibility Implementation and Stakeholder Engagement: A Case Study in the Australian Mining Industry. *Business Strategy and the Environment*, *23*(3), 145–159. http://doi.org/10.1002/bse.1775

Donaldson, T., & Preston, L. (1995). The Stakeholder Theory of the Corporation : Concepts , Evidence , and Implications. *The Academy of Management Review*, *20*(1), 65–91. Retrieved from http://www.jstor.org/stable/258887

Duriau, V. J., Reger, R. K., & Pfarrer, M. D. (2007). in Organization Studies and Methodological Refinements. *Organizational Research Methods*, *10*(1), 5–34. http://doi.org/10.1177/1094428106289252

Fassin, Y. (2008). Imperfections and shortcomings of the stakeholder model's graphical representation. *Journal of Business Ethics*, *80*(4), 879–888. http://doi.org/10.1007/s10551-007-9474-5

Fassin, Y. (2009). The stakeholder model refined. *Journal of Business Ethics*. http://doi.org/10.1007/s10551-008-9677-4

Freeman, E. R., & Evan, W. M. (1979). A Stakeholder Theory of the Modern Corporation: Kantian Capitalism. *Ethical Theory and Business*.

Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Indianapolis: Pitman.

Friedman, A., & Miles, S. (2006). History and the nature of stakeholder theorizing. In *Stakeholders: Theory and Practices* (first, pp. 19–36). Cambridge: Oxford Unifersity Press.

Frooman, J. (1999). Stakeholder influence strategies. *Academy of Management Review*. http://doi.org/10.5465/AMR.1999.1893928

Frooman, J. (2010). The issue network: Reshaping the stakeholder model. *Canadian Journal of Administrative Sciences*, *27*(2), 161–173. http://doi.org/10.1002/cjas.150

Griffin, J. J. (2017). Managing for Responsibility: A Sourcebook for an Alternative Paradigm, (2016), 1–27.

Harrison, J. S., Bosse, D. A., & Phillips, R. A. (2010). Managing for stakeholders, stakeholder utility functions, and competitive advantage. *Strategic Management Journal*, *31*(1), 58–74. http://doi.org/10.1002/smj.801

Hart, S. L., & Sharma, S. (2004). Engaging fringe stakeholders for competitive imagination. *Academy of Management Executive*, *18*(1), 7–18. http://doi.org/10.5465/ame.2004.12691227

Hillebrand, B., Driessen, P. H., & Koll, O. (2015). Stakeholder marketing: theoretical

foundations and required capabilities. *Journal of the Academy of Marketing Science*, *43*(4), 411–428. http://doi.org/10.1007/s11747-015-0424-y

Hood, W. W., & Wilson, C. S. (2001). The literature of bibliometrics, scientometrics, and informetrics. *Scientometrics*, *52*(2), 291–314. http://doi.org/10.1023/A:1017919924342

Jensen, M. C. (2001). Value Maximization, Stakeholder Theory, and the Corporate Objective Function. *Journal of Applied Corporate Finance*, *14*(3), 8–21.

Kull, A. J., Mena, J. A., & Korschun, D. (2016). A resource-based view of stakeholder marketing. *Journal of Business Research*, *69*(12), 5553–5560. http://doi.org/10.1016/j.jbusres.2016.03.063

Mitchell, R. K., Wood, D. J., & Agle, B. (1997). Toward a Theory of Stakeholder Identification and Salience. *Academy of Management Review*, *22*(4), 853–886. http://doi.org/10.5465/AMR.1997.9711022105

Mitroff, I. I. (1983). *Stakeholders of the organizational mind*. (Jossey-Bass, Ed.). Michigan: Jossey-Bass.

Neville, B. A., & Menguc, B. (2006). Stakeholder Multiplicity: Toward an Understanding of the Interactions between Stakeholders. *Journal of Business Ethics*, *66*(4), 377–391. http://doi.org/10.1007/s10551-006-0015-4

Phillips, R. A. (1997). Stakeholder Theory and A Principle of Fairness. *Business Ethics Quarterly*, *7*(1), 51. http://doi.org/10.2307/3857232

Phillips, R., Freeman, R. E., & Wicks, A. C. (2003). What Stakeholder Theory is Not. *Business Ethics Quaterly*, *13*(4), 479–502.

Porter, A. L., & Rafols, I. (2009). Is science becoming more interdisciplinary? Measuring and mapping six research fields over time. *Scientometrics*, *81*(3), 719–745. http://doi.org/10.1007/s11192-008-2197-2

Raan, a F. J. V. a N. (1996). Advanced Bibliometric Methods As Quantitative. *Science*, *36*(3), 397–420. http://doi.org/10.1007/BF02129602

Raich, M., Müller, J., & Abfalter, D. (2014). Hybrid analysis of textual data. *Management Decision*, *52*(4), 737–754. http://doi.org/10.1108/MD-03-2012-0247

Reypens, C., Lievens, A., & Blazevic, V. (2016). Leveraging value in multi-stakeholder innovation networks: A process framework for value co-creation and capture. *Industrial Marketing Management*, *56*, 40–50. http://doi.org/10.1016/j.indmarman.2016.03.005

Roloff, J. (2008a). A life cycle model of multi-stakeholder networks. *Business Ethics: A European Review*, *17*(3), 311–325. Retrieved from http://10.0.4.87/j.1467-8608.2008.00537.x%0Ahttp://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=32470635&lang=es&site=bsi-live

Roloff, J. (2008b). Learning from multi-stakeholder networks: Issue-focussed stakeholder management. *Journal of Business Ethics*, *82*(1), 233–250. http://doi.org/10.1007/s10551-007-9573-3

Rowley, T. J. (1997b). Moving beyond Dyadic Ties: A Network Theory of Stakeholder Influences. *The Academy of Management Review*, *22*(4), 887. http://doi.org/10.2307/259248

Sachs, S., Rühli, E., & Meier, C. (2010). Stakeholder governance as a response to wicked issues. *Journal of Business Ethics*, *96*(2010), 57–64. http://doi.org/10.1007/s10551-011-0944-4

Savage, G. T., Nix, T. W., Whitehead, C. J., & Blair, J. D. (1991). Strategies for assessing and managing organizational stakeholders. *The Academy of Management Perspectives*, *5*(2), 61–75. http://doi.org/10.5465/AME.1991.4274682

Schneider, T., & Sachs, S. (2017). The Impact of Stakeholder Identities on Value Creation in Issue-Based Stakeholder Networks. *Journal of Business Ethics*. http://doi.org/10.1007/s10551-015-2845-4

van Eck, N. J., Dekker, R., & den Berg, J. van. (2010). A Comparison of TwoTechniques for Bibliometric Mapping: Multidimensional Scaling and VOS. *Journal of the American Society for Information Science and Technology*, *61*(12), 2405–2416. http://doi.org/10.1002/asi

van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, *84*(2), 523–538. http://doi.org/10.1007/s11192-009-0146-3

van Eck, N. J., & Waltman, L. (2014). CitNetExplorer: A new software tool for analyzing and visualizing citation networks. *Journal of Informetrics*, *8*(4), 802–823. http://doi.org/10.1016/j.joi.2014.07.006

Verbeeten, F. H. M., Gamerschlag, R., & Möller, K. (2016). Are CSR disclosures relevant for investors? Empirical evidence from Germany. *Management Decision*, *54*(6), 1359–1382. http://doi.org/10.1108/MD-08-2015-0345

Wallin, J. A. (2005). Bibliometric Methods: Pitfalls and Possibilities. *Basic & Clinical Pharmacology & Toxicology*, *97*(5), 261–275. http://doi.org/10.1111/j.1742-7843.2005.pto_139.x

Waltman, L., van Eck, N. J., & Noyons, E. C. M. (2010). A unified approach to mapping and clustering of bibliometric networks. *Journal of Informetrics*, *4*(4), 629–635. http://doi.org/10.1016/j.joi.2010.07.002

Yang, A., & Bentley, J. (2017). A balance theory approach to stakeholder network and apology strategy. *Public Relations Review*, *43*(2), 267–277. http://doi.org/10.1016/j.pubrev.2017.02.012

Zupic, I., & Čater, T. (2015). Bibliometric Methods in Management and Organization. *Organizational Research Methods*, *18*(3), 429–472. http://doi.org/10.1177/1094428114562629