Trade-offs in supply chain transparency: 
the case of Nudie Jeans Co

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Abstract
Though transparency is increasingly central to corporate sustainability and sustainable supply chains, the scholarly conversation about supply chain transparency is limited, as it defines supply chain transparency inconsistently and lacks an empirical basis. We address these shortcomings by developing a multidimensional definition of supply chain transparency and studying the Swedish garment retailer Nudie Jeans’ attempt to become “the most transparent company in the world.” We extend the scholarly conversation by analyzing how a company, in practice, attempts to work with supply chain transparency and how to explain the transparency outcomes of such attempts. We argue that three underlying tradeoffs, i.e., threat vs. collaboration, standardization vs. differentiation, and means vs. ends, shape a firm’s transparency outcomes. We question whether more supply chain transparency is always desirable, and argue that managers must choose between a compliance or cooperation approach to supply chain transparency.

Keywords: supply chain; supply networks; supplier relationships; sustainability; trade-offs; transparency

Word count: 10277
1. Introduction

Transparency, which is becoming increasingly central to corporate sustainability, can roughly be defined as disclosure of information (Doorey, 2011; Mol, 2013) and “means that the external impact of the actions of the organisation can be ascertained from that organisation’s reporting” (Martinez and Crowther, 2008, p. 19). Corporate transparency can take the form of, for example, sustainability reports (Hahn and Kühnen, 2013), environmental product declarations (Schau and Fet, 2008), and sustainability certifications (Bartley, 2007). With purchased materials and components accounting for a growing share of firms’ total expenditure and sustainability impact (Leppelt et al., 2013; Seuring and Gold, 2013), transparency requirements have increasingly extended beyond corporate boundaries into supply chains (Mol, 2013). This has given rise to the notion of “supply chain transparency” which can be defined as disclosure of information about supplier names, sustainability conditions at suppliers, and buyers’ purchasing practices (see Section 2).

Supply chain transparency can be a way to make voluntary corporate supply chain commitments (e.g., codes of conduct and ethical sourcing standards) more meaningful (Doorey, 2011; Laudal, 2010). It is claimed to be important because companies are often unwilling to voluntarily assume responsibility for supply chain sustainability (Doorey, 2011; Egels-Zandén, 2014). Activists and other stakeholders accordingly use “name and shame” campaigns to force companies to make supply chain commitments (Bartley, 2007) and to counteract corporate greenwashing (Dubbink, 2007). As “transparency can empower information users to exert influence on the disclosers” and “become a tool for holding powerful actors accountable” (Dingwerth and Eichinger, 2010, p. 74), it can facilitate “name and shame” campaigns and help counter a “race to the bottom” among suppliers in developing countries (Chan and Ross, 2003). This positive belief in the potential of supply chain transparency resonates with an increased societal emphasis on transparency both in general (e.g., Augustine, 2012) and in relation to sustainability (e.g., Gallo and Christensen, 2011; Mol, 2013).

The scholarly conversation about supply chain transparency is limited in two important ways. First, supply chain transparency is inconsistently defined and individual scholars tend to focus solely on just one of the many dimensions of transparency. This leads to limited and often dualistic framings of supply chain transparency, with companies being claimed to be either transparent or nontransparent. This framing is problematic because it ignores the fact that most companies, in both the same and different transparency dimensions, simultaneously display various “transparency outcomes”. By recognizing this simple fact, it is possible to extend the scholarly conversation beyond the question of why companies become transparent to encompass the question of how to explain the transparency outcomes of companies’ transparency attempts. Second, while several conceptual studies have analyzed supply chain transparency (e.g., Mol, 2013), few empirical studies have examined companies’ attempts to

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1 In this paper, we differentiate between transparency “attempts”, “outcomes” and “impacts”. Transparency attempts refer to corporate transparency focused initiatives. Transparency outcomes refer to the degree of transparency that results from these attempts, and transparency impacts refer to the effects of transparency attempts on suppliers’ sustainability performance.
be transparent in practice (see Doorey, 2011, for an exception). More empirically grounded studies of supply chain transparency are clearly needed.

We address these two limitations by asking how a company, in practice, attempts to work with supply chain transparency and how to explain the transparency outcomes of such attempts. We do so based on a study the Swedish garment retailer Nudie Jeans Co’s (Nudie) attempt to become “the most transparent company in the world”, and the development of a multidimensional definition of supply chain transparency that allow for a more exhaustive understanding of transparency outcomes. We also illustrate how the supply network of which a firm is part plays a key role in explaining supply chain transparency outcomes. We conceptualize the supply network as interconnected buyer-seller relationships, each having a certain “relationship atmosphere” that can be described in the dimensions: power, control, and conflict (Gadde, 2004). We conclude the paper by arguing that three underlying tradeoffs shape a firm’s transparency outcomes, questioning whether more supply chain transparency is always desirable, and arguing that managers must take a stand in how to work with supply chain transparency. In doing this, we contribute to the sustainability and supply chain literature and provide a starting point for future empirical studies of supply chain transparency.

2. Three dimensions of supply chain transparency

Transparency is particularly important to external stakeholders, as they generally lack the background details and knowledge available to internal users of information (Tapscott and Ticoll, 2003). Transparency thus represents a way to transfer power from the firm to its stakeholders (Martinez and Crowther, 2008) by reducing the information asymmetry between these actors and allowing stakeholders to make informed evaluations of the firms’ products (Chapman, 1995). As Fung (2013, p. 184) puts it, transparency is envisioned to enable “individuals to protect their interests and, collectively, to control the organizations that affect their lives.” Such straightforward consequences are far from certain in practice, however (e.g., Dingwerth and Eichinger, 2010).

Transparency is currently in vogue and is presented as the solution to numerous problems facing both public and private organizations (e.g., Garsten and Montoya, 2008). This general emphasis on transparency is mirrored in the sustainability literature (e.g., Doorey, 2011; Dubbink et al., 2008), which presents transparency as desirable in itself (e.g., Augustine, 2012) and as connected to desirable characteristics such as accountability (Dubbink et al., 2008), legitimacy (Kell, 2013), and trust (Augustine, 2012). Given this positive view of transparency, it is unsurprising that the transparency found in today’s market is presented as insufficient and that increased transparency is frequently advocated (Doorey, 2011; Dubbink et al., 2008; Martinez and Crowther, 2008).

In relation to supply chains, consumers and other stakeholders, such as nongovernmental organizations (NGOs) and governments, are increasingly demanding transparency from companies (Carter and Rogers, 2008; Doorey, 2011; Dubbink, 2007). This is so because supply chain transparency is seen as allowing independent organizations to monitor
sustainability conditions at the point of production and verify firms’ sustainability claims (Laudal, 2010). Stakeholders are unwilling to rely solely on corporate disclosed information because firms are assumed to “focus on the more successful examples while not being transparent on some of … [their] CSR ‘hot spots’” (Toppinen and Korhonen-Kurki, 2013, p. 209). The underlying assumption is that supply chain transparency can make firms’ sustainability attempts more effective and help overcome some of the problems identified in previous research into voluntary corporate supply chain commitments in developing countries (Egels-Zandén, 2007). In other words, supply chain transparency is presented as a central characteristic on which judgments of firms’ supply chain activities can be based (O’Rourke, 2003).

From a corporate perspective, embracing supply chain transparency has become a way to improve firm legitimacy (Carter and Rogers, 2008; Dubbink et al., 2008). As MacLean and Rebernak (2007, p. 4) put it, “there is no better way to build trust among stakeholders than through transparency.” Studies have also demonstrated that customers are more willing to purchase products from transparent companies (Bhaduri and Ha-Brookshire, 2011). Despite this, corporate managers have been hesitant to embrace supply chain transparency, claiming that information about factories is of great proprietary, economic, and competitive value (Doorey, 2011).

Scholars interested in “supply chain transparency” are unclear about how to define the term. Carter and Rogers (2008, p. 370), for example, speak of supply chain transparency as allowing “stakeholders to see further along an organization’s supply chain” without specifying what this entails in practice. Other authors equate transparency to the ability to track a product’s flow throughout the production process and supply chain (Doorey, 2011; Laudal, 2010); in other words, they equate transparency to traceability. Still other authors stress that transparency involves being transparent about sustainability conditions at suppliers (Cramer, 2008). Rather than disclosing supplier names (as is the focus in traceability), these authors stress the disclosure of trustworthy information about social and environmental conditions at the point of production. Finally, some authors stress transparency in terms of financial transactions between buyers and suppliers. This is usually stressed in relation to extractive industries and anti-corruption efforts (e.g., Schouten and Remme, 2006) but, given that buyers’ purchasing practices have been demonstrated to shape sustainability conditions at suppliers’ factories, it is a dimension relevant to most industries. Barrientos (2013, p. 44), for example, argues that buyers “subject suppliers to commercial pressures—through downward price pressures and flexible ordering systems—which underpin many poor working conditions, such as low wages, long overtime and casualised contracts.”

By recognizing the three dimensions hidden under the umbrella term “supply chain transparency” in previous research, it is possible to develop a more holistic definition. We propose that supply chain transparency comprises corporate disclosure of: i) the names of the suppliers involved in producing the firm’s products (i.e., traceability), ii) information about the sustainability conditions at these suppliers, and iii) the buying firms’ purchasing practices.
It is possible to imagine firms performing well on any of these three dimensions. In terms of disclosure of supplier names, H&M, for example, recently published its supplier list without publishing information about sustainability conditions at the disclosed factories. Furthermore, H&M published the names of only its first-tier garment factories, making it only partly transparent with regard to supplier names. A company that is fully transparent about supplier names would allow stakeholders to trace the product all the way from the raw materials to end consumers. All American Clothing Co, one such company, includes a “traceability number” with each pair of jeans sold, allowing customers to trace the names of suppliers all the way back to the cotton farmers.

In terms of disclosure of sustainability conditions, the multi-stakeholder initiative Fair Labor Association (FLA), for example, publishes factory auditing reports, evaluating suppliers’ social and environmental performance, for specific suppliers without disclosing their names. FLA provides full disclosure of sustainability conditions but does not connect this information to supplier names. FLA is thus transparent in terms of sustainability conditions but not in terms of traceability.

In terms of disclosure of purchasing practices, the Belgium-based fashion company Honest By provides one of the most interesting examples. For each product, Honest By provides a cost breakdown specifying the cost of the product (from fabrics, zippers, and cotton thread to wholesale and retail markups). Although such information does not provide a complete picture of Honest By’s purchasing practices, it does provide valuable information about pricing that, in turn, likely affects sustainability conditions at the point of production.

A transparent company would need to combine the traceability, sustainability, and purchasing dimensions and thus publish the names of specific suppliers, the sustainability conditions at each supplier, and relevant purchasing practices related to each supplier. One company moving in this direction is Patagonia, which publishes both supplier names and sustainability conditions for a handful of selected suppliers. Still, Patagonia does not publish the names and sustainability conditions of all its suppliers. Furthermore, Patagonia does not publish information about its purchasing practices in relation to its suppliers. In other words, Patagonia, like most if not all companies, simultaneously displays different transparency outcomes for different suppliers and supply chain transparency dimensions.

Finally, it is important to distinguish between internal supply chain transparency, i.e., the degree to which the firm can be transparent to itself, and external supply chain transparency, i.e., the degree to which the firm is transparent to external stakeholders. It is possible, arguably even likely, that firms are unwilling to externally disclose all their internally available information to minimize the risk of “name and shame” campaigns (Bartley, 2007) and disclosure of sensitive material (Doorey, 2011).

3. Supply network and transparency

There are numerous potential explanations of the transparency outcomes of corporate supply chain transparency attempts. In this paper, we explore one such explanation – the focal firm’s supply network. Relationships with suppliers and how the interfaces with suppliers are
organized have proven important both in general (e.g., Gadde, 2004) and in relation to supply chain sustainability (e.g., Locke et al., 2009). It is reasonable to assume that these factors will also be influential in shaping a firm’s supply chain transparency outcomes.

As pointed out in the Introduction, firms today increasingly rely on purchased material and outsourcing of production to third parties, i.e., they rely more on “buy” than “make”. This means that transparency no longer is a firm internal affair but extends across firm boundaries into the supply network. The implication of this is that inter-organizational issues need to be taken into consideration when analyzing supply chain transparency.

Outsourcing means relying on the resources of others, which leads to interdependencies among the firms in the supply network. For example, outsourcing firms are often afraid of losing control over the outsourced activities (e.g., Selviaridis and Spring, 2007). According to Gadde et al. (2010), a common problem is that outsourcing firms try to specify everything in detail in a contract. This means that they hamper the suppliers’ ability to organize their operations in a way that is most efficient from their perspective. In line with this, Tomkins et al. (2006, p. 52) suggest that “outsourcing requires giving up control of a business function and trusting the others to handle that function for you.”

Supplier relationships can be said to be characterized by what Gadde (2004) refers to as the “relationship atmosphere,” which in turn comprises three interrelated dimensions, i.e., control, power, and conflict, central to understanding how firms can induce others to act in their interests (Gadde, 2004; Stern, 1969). Regarding control, Frazier (1999, p. 229) claims that a control system is “the set of agreements, programs and interactions used by a firm in attempting to shape strategies and actions of associated members in the value chain.” Control concerns influencing others (Gadde, 2004), and Weitz and Jaap (1995) distinguish three forms of control mechanisms used to exert influence, namely, authoritative, normative, and contractual control mechanisms. Authoritative control is gained through ownership, position, or power. Normative control is achieved via shared norms, values, and trust among the parties involved in a relationship. Contractual control is regulated by contracts that determine various levels of compensation.

Power is “usually defined as the ability to influence others to do what they would not otherwise have done” (Gadde et al., 2010, p. 115). Furthermore, power is deeply rooted in interdependence (Gadde, 2004), so the more dependent one actor is on another, the more power the latter has over the former. It is important to note, however, that the possession of power should be distinguished from its exploitation (Gadde, 2004). Power can be exerted in either a threatening or an influencing way. It has been demonstrated that many successful firms, even though they possess power, do not exert it in a threatening way but instead use it to influence other parties. For example, exploiting relative bargaining power over business partners might reduce the possibility of gaining long-term relational advantages (e.g., Rokkan and Haugland, 2002).

Conflict is a built-in characteristic of business relationships due to the interdependencies between the involved actors. Conflict “exists when one partner perceives the other partner as impeding the attainment of goals or some other function of concern” (Weitz and Jaap, 1995,
How and to what degree conflict arises is closely related to how power is exploited (Gadde, 2004). Furthermore, conflict can be either dysfunctional or constructive. Close relationships are often full of conflict potential, but this can often be handled in a constructive way (Gadde, 2004).

In sum, given that supply chain transparency extends across firm boundaries into the supply network, we believe that the relationship atmosphere framework of power, control, and conflict is useful for analyzing the transparency outcomes of corporate transparency attempts.

4. Methodology
To examine how a company, in practice, attempts to work with supply chain transparency and how to explain the transparency outcomes of such attempts, we use material from a qualitative study of the medium-sized Swedish garment retailer Nudie Jeans Co’s attempt to become “the most transparent company in the world.” Given the dearth of empirical studies of corporate attempts to become transparent, reliance on a qualitative single-case study is in line with previously proposed methods (Marshall and Rossman, 1995). The focus on Nudie is merited because the company both is proactively attempting to be a transparency and sustainability leader, and allowed unusual research access (Eisenhardt and Graebner, 2007). Nudie is a medium-sized company with deliberately few suppliers, long-term supplier relationships, a mainly European supply network, high-quality and high-priced products, and a strong sustainability profile. While these features are not unique in the garment industry (see, for example, the Swiss company Switcher for similar features), they are rare and have likely influenced Nudie’s transparency outcomes. The Nudie case should, thus, to some extent be treated as a “unique case” (Yin, 2003, pp. 40–41).

In other words, our findings should be viewed as a starting point for further empirical research in other contexts rather than as straightforward generalizable conclusions. This holds for generalizations within the garment industry, where the vast majority of firms use strategies different than that of Nudie in relation to their supply networks (such as a larger number of suppliers, more globally dispersed suppliers and more short term relations). It also holds for generalizations to other industries where, for example, sustainability demands are less forceful than in the garment industry (cf. Bartley, 2007), and focal firms are even less aware of the names of their suppliers and sub-suppliers.

The study of Nudie’s transparency attempt is part of a larger study of Nudie’s sustainability practices, including its free repair service for its products and its use of organic cotton. Material for the study was gathered from interviews, written documentation, and observations. In 2012-2014, over 80 interviews were conducted with Nudie and with its suppliers and stakeholder representatives. Over 30 Nudie representatives were interviewed (several representatives on multiple occasions, with some interviews not being relevant to the transparency study), including all owners, all members of top management teams, CSR managers, representatives of all corporate departments, and all those involved in the transparency attempt. This allowed for interviews with “numerous and highly knowledgeable informants who view the focal phenomenon from diverse perspectives” (Eisenhardt and
Graebner, 2007, p. 28). All interviews were conducted at Nudie’s Swedish headquarters. The interviews focused both broadly on Nudie’s supply chain, sourcing strategies, sustainability activities, corporate strategy, and motives for becoming transparent, and specifically on the concrete details, challenges, and opportunities of Nudie’s attempt to become the most transparent company in the world.

Over 30 interviews were also conducted at Nudie’s suppliers in India and Portugal. Such supplier interviews are important, since Seuring and Gold’s (2013, p. 4) first recommendation for supply chain sustainability research is to collect more data “along supply chains” to develop “in-depth knowledge in the field of SCM” and “dramatically improve our understanding of inter-organizational issues.” They are also important to further capture diverse perspectives in the case (Eisenhardt and Graebner, 2007). The supplier interviews explored suppliers’ views of and involvement in Nudie’s transparency attempt. In addition, 10 interviews were held with Scandinavian and international stakeholders involved in the studied transparency attempt and/or the international sustainability debate. These included NGO representatives (e.g., Amnesty, Fair Wear Foundation, and Clean Clothes Campaign) as well as labor union representatives and factory auditors.

The interviews lasted on average one hour each and were semi-structured, audio recorded, and transcribed. Written documentation (e.g., factory audit reports, emails, PowerPoint presentations, Excel spreadsheets, and internal documents) was used to complement the information provided in interviews. Observations of project meetings related to the transparency attempt were also used to obtain complementary information. The fact that data was collected in multiple ways and largely longitudinally in real-time improve the credibility of the study (Eisenhardt and Graebner, 2007).

The transcribed interviews, written documentation, and observations were coded using the computer software NVivo to create a chronological account of the transparency attempt and to identify key challenges facing it. The codes included general codes (such as transparency, traceability and auditing), specific empirically derived codes (such as a code for each supplier’s name), and conceptually derived codes (such as relationship atmosphere, power and control). There were few inconsistencies between the information obtained from the verbal and written sources. Any inconsistencies identified, either between interviews or between written and verbal sources, were discussed with the involved actors and, if still unresolved, were included in the case description to transparently present divergences of opinion. Finally, analytical themes related to definitions of transparency and supply network were developed.

5. Supply chain transparency in the case of Nudie Jeans Co

5.1. Background to Nudie Jeans Co

Nudie Jeans Co is a medium-sized Swedish company with approximately 50 employees and a 2011 turnover of EUR 40 million (profits of EUR 5 million). The company was founded in early 2000s and has been increasing its turnover continuously over the last decade. The company’s ownership is divided between the two founders (still active in the company) and the current CEO. Eighty percent of Nudie’s turnover comes from the sale of jeans with the
remaining 20% coming from other products and accessories (such as shirts, t-shirts and bags). Nudie has profiled itself in terms of interest, engagement, and practical work in sustainability issues. As one owner put it in an interview, “it has always been central for us [the owners] to be able to go to sleep at night knowing that those who work and produce for us are doing well.”

Nudie has outsourced production of all its products. At the outset, production was restricted to Western Europe, but this has slowly started to change in recent years. In 2013, end production (i.e., sewing, washing, and packaging) took place mainly in Italy and Portugal, but Nudie also has a handful of suppliers (and sub-suppliers) in India, Romania, Tunisia, Turkey, and Scandinavia. The geographic expansion of production has been driven mainly by a desire to reduce costs. In particular, the move to India was “a big deal” for several Nudie representatives who “were very proud of only having produced in Europe” (interview, Nudie customer relations manager and store manager). This pride was related both to high sustainability standards and to a desire for extensive insight into suppliers’ operations. The focus on insight and quality has also led Nudie to have fewer than 30 direct suppliers for all of its sold products (including accessories and other minor products), with two Italian suppliers of core products being highly dominant in terms of volume.

5.2. Launching the supply chain transparency attempt

Nudie’s drive for transparency gained intensity in 2009, when the retailer was featured in media coverage under headlines such as “Popular Garment Contains Poison.” Journalists had discovered that Nudie’s products contained traces of a chemical banned from the European market. As the social media manager put it, “we only import our products from Europe so the result was very surprising. We did not have any idea of how it got there.” It was later found that the chemical traces had been transmitted to Nudie’s products during transportation with other goods. The scandal made Nudie managers realize the benefits of having more detailed information about where and how their products were produced, i.e., traceability would be beneficial, and that this could be a competitive advantage. As the sales manager put it, “the scandal sparked our desire to be open with everything and we realized that this could be a competitive advantage.”

In 2009, Nudie joined Fair Wear Foundation (FWF), which gave it a credible way to conduct factory audits at its suppliers. A few years later, in 2012, Nudie started to conduct supplier audits. Once auditing commenced, Nudie’s CEO officially launched the vision “to become the most transparent company in the world.” This was certainly an ambitious vision for a company that just had just started to conduct factory audits and whose managers did not know the names of all their sub-suppliers. Nudie managers, however, excluded internal processes and purchasing practices from “transparency,” making its vision somewhat easier to realize. In terms of internal processes, Nudie managers claimed that customers and other stakeholders were uninterested in Nudie’s internal operations, such as sustainability conditions at Nudie’s headquarters and stores. This meant that Nudie would not publish the same information (e.g.,

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2 FWF is a Dutch-based European nongovernmental multi-stakeholder organization that conducts independent verification of European companies’ performance and efforts to ensure good working conditions at their suppliers.
salary levels, gender distribution, unionization, and environmental performance) about its own operations as it wanted to publish about its suppliers’ operations.

In terms of purchasing practices, Nudie managers claimed that it was too sensitive to publish information about Nudie’s purchasing prices, volumes, and other business variables. As the sales manager put it, “we still consider this information to be a business secret and will therefore not disclose it.” In other words, managers were reluctant to disclose Nudie’s profit margins or the actual prices paid to suppliers. Nudie managers defined “transparency” so as, in practice, to include only two of the three supply chain transparency dimensions identified here (i.e., names of suppliers and sustainability conditions).

5.3. Supplier reactions to the transparency attempt

Despite Nudie’s focus on the supplier dimensions of supply chain transparency, it is worth noting that suppliers, before the launch of Nudie’s transparency vision, had received limited information about the vision. However, before Nudie could publish information about supplier names and sustainability conditions on its website, it had to receive written permission from its suppliers. As the customer relations manager at Nudie’s main Indian supplier (Supplier D) put it, “we have not been involved in this project [Nudie’s transparency attempt]. It is a Nudie project and they are now asking us to sign an agreement to get our consent in publishing information.” In other words, the entire attempt could be halted if suppliers refused to sign Nudie’s supplier transparency agreement, which allowed Nudie, on its website, to publish information about suppliers’ and sub-suppliers’ names and locations and full factory audit reports.

Most suppliers saw advantages in being promoted on Nudie’s website and the vast majority of Nudie’s suppliers signed the agreement. Nudie is, thus, able to publish both supplier names and sustainability conditions on their website for the vast majority of suppliers. As a manager at a Portuguese supplier put it, “the positive thing is that other clients might come to us.” However, a selected few suppliers were not equally forthcoming. For example, one Scandinavian supplier agent (Supplier A) of complementary products refused to disclose its suppliers’ names to Nudie, let alone make this information publicly available. The supplier perceived a risk that Nudie, or other buyers, would bypass it as middle-man and source directly from its sub-suppliers (this supplier had outsourced all its production). After the agent’s initial refusal to sign the transparency contract, negotiations followed and Nudie was eventually able to receive and publish information about the country where the products were produced. As Nudie’s CSR manager put it in the midst of the negotiations, “it is their [Supplier A’s] policy not to provide the names of their suppliers. I do not think that they will change, but we are continuously nagging them about this and at least we now get the country names.” Still, Nudie was unable to be fully transparent about this part of its production and has therefore threatened to cancel orders starting in 2014 if the agent does not sign the transparency agreement.

Another Scandinavian supplier agent (Supplier B) reacted similarly, refusing to sign the transparency agreement and provide its sub-suppliers’ names to Nudie. Since Nudie sourced finished products from this supplier, it pushed harder in this case to gain access to sub-
supplier names, both to improve quality control and to allow for factory audits. This was particularly pressing as the Scandinavian supplier agent had outsourced production to Indian sub-suppliers, i.e., to what Nudie managers perceived as high-risk suppliers in terms of sustainability violations. After negotiations, Nudie received the names of the Indian sub-suppliers and conducted factory audits, but the Scandinavian agent still refused to sign the transparency contract due to the risk of being bypassed by Nudie or other buyers. As Nudie’s CSR manager put it, “we eventually received the names of the sub-suppliers for internal use, but at the moment we do not have permission to publish this information on our website. They are afraid that we will go straight to the sub-supplier to get a better price…we have explained that we are not interested in doing that.” In early 2014, the names of the sub-suppliers and the audit results could still not be published, and Nudie has threatened to cancel orders starting in 2014 if this agent continues to refuse to sign.

One of Nudie’s high-volume Portuguese suppliers (Supplier C) also refused to sign the transparency agreement, but for a different reason. Since this Portuguese supplier did most of its production in-house, there was no risk of Nudie, or other buyers, bypassing it. On the contrary, being promoted on Nudie’s website could potentially attract new customers. The supplier’s management, however, regarded the factory audit results as internal documents, and the owner felt upset by the transparency agreement. As Nudie’s CSR manager put it, “the owner of Supplier C was insulted by the transparency agreement…he considers the audit results to be between us and them.” This reaction was related partly to the transparency agreement and partly to this supplier’s feeling that it had been unjustly portrayed in the previous audit report. The supplier has even banned the specific auditor who conducted the offending factory audit from visiting its factory again. Due to the attractive price levels and product quality offered by this supplier, Nudie managers have decided to collaborate more closely with it to build trust and to conduct more informal factory audits in the near future. No ultimatum has been given to this supplier, despite Nudie’s inability to publish factory audits for it and its sub-suppliers.

Nudie’s main Indian supplier (Supplier D), which had its name published on Nudie’s website in connection with another sustainability project, also reacted unexpectedly. Immediately after its name was published, the Indian supplier requested the removal of its name from Nudie’s website, because another of the supplier’s buyers had requested this removal. This was because the other buyer (an agent company) was afraid that potential buyers would bypass it as an agent and source directly from the Indian supplier. As the CEO of Supplier D recalled, “I got a call from a buyer that requested that we removed our name from Nudie’s website. They [the buyer] were afraid of losing business if our name was out in the open.” While Nudie agreed to temporarily remove the name of the Indian supplier from the website, the supplier later signed the transparency agreement and then had its name published despite potentially negative reactions from other buyers.

Finally, Nudie has yet to send the transparency agreement to suppliers of fabrics and complementary material (e.g., zippers, buttons, and threads). However, when Nudie has inquired about the names of these suppliers’ sub-suppliers, it received limited or no information.
5.4. Adding factory audits to the picture

Once the suppliers signed Nudie’s transparency agreement, they agreed to the publication of factory audits on Nudie’s website. In practice, this was only the case when Nudie had conducted a factory audit at the supplier and, as of 2013, Nudie had audited only a limited number of suppliers. Nudie initially prioritized its two high-volume Italian suppliers (combined accounting for approximately 85% of production volumes). Since both of these suppliers had outsourced all production to sub-suppliers, Nudie also audited all their sub-suppliers as well. In addition to the two key Italian suppliers, Nudie also prioritized medium-volume Portuguese suppliers (accounting for 0.5–2.0% each of production volumes) and their handful of suppliers and sub-suppliers located in countries perceived as being at a high risk of sustainability violations (e.g., India, Romania, Tunisia, and Turkey).

This left low-volume suppliers, sub-suppliers to medium-volume suppliers, and new medium/low-volume Portuguese suppliers. The new Portuguese suppliers were not audited mainly because of the short lead time between test orders and finished product (making supplier changes nearly impossible) and uncertainty as to whether the supplier relationship would continue after the test period. In other words, Nudie representatives perceived it as unfeasible and potentially unnecessary to audit these new suppliers. The low-volume suppliers were not audited because they either were located in Scandinavian countries (low-risk countries where FWF could not suggest qualified auditors) or were perceived as highly compliant during non-audit visits from Nudie representatives. The sub-suppliers of audited medium-volume suppliers were not audited because Nudie representatives felt that it made more sense to audit all first-tier suppliers before auditing these sub-suppliers.

Finally, Nudie has so far limited auditing to post-fabric suppliers. In other words, fabric and material suppliers (sub-suppliers to Nudie’s suppliers) and their sub-suppliers (e.g., cotton farms and yarn producers) have not been audited. Similarly, suppliers of complementary products (e.g., zippers, buttons, and thread) have not been audited.

5.5. Communicating supply chain transparency

With transparency agreements and factory audits in place, in 2013 Nudie launched the transparency attempt on its website. In most cases, all available information was published: for audited suppliers, both the supplier name and audit were published, and for non-audited suppliers, only the supplier name was published. The initial plan was to publish complete factory audit reports, but Nudie managers eventually decided to publish audit report summaries. According to the CSR manager, this was because “if you have not read an audit report before, I believe it will generate an enormous amount of questions.” Full audit reports were instead available on request (no such request had been made as of early 2014).

The summaries were intended to describe the main audit findings but, in a few instances, major non-compliances were excluded. For example, legal working hour non-compliances at a Portuguese supplier (Supplier E) were omitted from the summaries so that Nudie would not, as the chairman put it, “commit public suicide” and to reduce the supplier’s vulnerability when the audits were published. Similarly, for Nudie’s Indian supplier (Supplier D), audit results about juvenile workers were omitted from the summary, since Nudie managers did not
know whether this comprised a legal violation, how to answer questions about the finding, or what corrective actions to take. As the CSR manager put it, “we do not know how to handle this [juvenile workers], since there is not any real solution.” For a Turkish sub-supplier (Supplier F), audit findings about illegal migrant workers were omitted, since this had been corrected before publishing (other corrections were, however, mentioned in the audit summaries rather than omitted).

In addition, several non-audited suppliers were also omitted from the published information. For example, sub-suppliers to several medium-volume Portuguese suppliers were omitted, creating the impression that these suppliers did not use sub-suppliers. This was done because Nudie managers had limited information about these sub-suppliers. Similarly, some low-volume fabric suppliers were omitted from publication, since Nudie did not have direct contact with these frequently changing suppliers and Nudie managers perceived that it would be too time-consuming to keep this information updated.

For a few selected products, Nudie was able to publish information extending from cotton field to finished product. This was possible for products using fair trade cotton, since this cotton is labeled with an ID number that identifies the farmer. This was also possible for selected products for which Nudie had actively sourced specific high-quality cotton from selected suppliers. However, for the vast majority of its products, Nudie at most named the fabric supplier.

6. Discussion
6.1. Defining supply chain transparency in practice
As discussed in the section “The three dimensions of supply chain transparency,” the term “supply chain transparency” is often inconsistently defined. The Nudie case illustrates that firms can leverage this inconsistency to their advantage. Most notably, although Nudie strove to become the most transparent company in the world, it excluded the purchasing practice dimension of supply chain transparency, and, thus, did not “become equally subjected to transparency” as their suppliers (Mol, 2013, p. 2). In this way, Nudie managed to define transparency to, at least partly, serve its own interests by not disclosing central but sensitive information about purchasing prices and markups (cf. Doorey, 2011; Toppinen and Korhonen-Kurki, 2013).

This finding resonates with Dingwerth and Eichinger’s (2010) argument, based on their study of the Global Reporting Initiative, that the outcomes of specific transparency attempts depend greatly on the interests of the involved actors, and Mol’s (2013, p. 1) argument that “transparency in value chains” is “a central object of power struggles, with uncertain outcomes.” In practice, supply chain transparency is not about “declaring the truth” (Madsen, 2009), but rather about declaring a particular perspective serving certain actors’ interests. Nudie’s increased transparency can certainly become a way to transfer power to stakeholders and allow stakeholders to hold Nudie accountable for sustainability conditions in its supply chains (Dingwerth and Eichinger, 2010; Fung, 2013; Martinez and Crowther, 2008). However, it could also allow Nudie to shift blame to its suppliers, since Nudie discloses their
names and sustainability problems but makes it difficult for stakeholders to evaluate Nudie’s role in these problems by withholding information about purchasing practices. In line with Gray’s (2010, p. 50) argument about information disclosure more broadly, there is thus a risk that companies, in order to gain competitive advantage over rivals and retain status-quo in global value chain, shape transparency to be little more than “fairy tales to help the children sleep at night.”

Supply chain transparency does not just have downstream implications of “empowering” stakeholders to “exert influence” on the company (Dingwerth and Eichinger, 2010, p. 74); it also has upstream implications for firms’ supply networks. This is illustrated by Nudie’s attempt to exert contractual control when requiring suppliers to sign formal transparency agreements (cf. Weitz and Jaap, 1995), by the conflicts resulting from some suppliers’ refusal to sign (cf. Weitz and Jaap, 1995), and by a display of power in which Nudie managers attempted to force some suppliers on which they were less dependent to sign while refraining from pressuring suppliers that were more difficult to replace (cf. Gadde, 2004).

6.2. Transparency outcomes

The realization that supply chain transparency has supply network implications is a good starting point for understanding the transparency outcomes of supply chain transparency attempts. In the Nudie case transparency outcomes must be analyzed relative to the traceability and sustainability dimensions of supply chain transparency, since Nudie refrained from including the purchasing practice dimension in its transparency work.

6.2.1. Traceability dimension

Compared with other garment industry companies, which have difficulties naming all the suppliers involved in their production (Boström et al., 2012; Doorey, 2011), Nudie has a high level of traceability. This is illustrated by the fact that Nudie managers can name all their suppliers from fabric onward in the supply chain. This results from both Nudie’s type of supply network (deliberately few long-term suppliers) and the type of “relationship atmosphere” (Gadde, 2004) that Nudie has gradually created in its supply network. For example, as Nudie’s CSR manager put it, “initially they [i.e., the two key Italian suppliers] were hesitant to reveal information about sub-suppliers, but over time they have come to understand why this is important to us.” In other words, through the use of normative control, rather than authoritative or contractual control (Weitz and Jaap, 1995), Nudie managers have been able to build an atmosphere of openness with key suppliers and in this way have incrementally improved traceability.

So far, such normative control has not given Nudie access to information beyond fabric suppliers or sub-suppliers to suppliers of complementary material (e.g., zippers, buttons, and threads). These suppliers have been reluctant to reveal information about sub-suppliers, likely due to both less frequent buyer–supplier interactions (limiting the ability to exert normative control) (cf. Weitz and Jaap, 1995) and Nudie’s weaker bargaining power vis-à-vis these suppliers (cf. Gadde, 2004).

Similarly, normative control has been largely inadequate to induce some of Nudie’s agents to reveal the names of their sub-suppliers (see, for example, Supplier A and Supplier B in section
Since a key competitive advantage of most agents is the names of their suppliers, supply chain transparency is perceived by agents as potentially undermining their business model by, for example, allowing buyers to bypass them. To handle this situation, Nudie has reverted to authoritative control, threatening to use its power to force agents to reveal sub-supplier names. This has not yet led to signed agreements, but rather to deadlock and to dysfunctional rather than constructive conflict, at least partly because Nudie lacks an authoritative position vis-à-vis these suppliers. As illustrated by Nudie’s main Indian supplier (Supplier D in section 5.3), agents unrelated to the focal firm (in this case Nudie) could also influence transparency outcomes by threatening and forcing suppliers to withdraw from transparency attempts. This conflict of interest between firms and agents raises the broader question of whether supply chain transparency will lead to the demise, or reshaping, of agents in supply networks (cf. Weitz and Jaap, 1995).

It is worth noting that Nudie’s ability to trace products extends beyond fabric suppliers in two exceptional cases. The first is when Nudie is using Fair Trade cotton, since this certification requires the tracing of cotton from field to fabric supplier, i.e., it requires traceability. Traceability “piggy-backs on wider social developments” such as sustainability certifications (Mol, 2013, p. 1), meaning that firms’ prior use of such standards facilitates supply chain transparency. Nudie has leveraged this and disclosed the names of some cotton suppliers of its Fair Trade products. The second exception is when Nudie purchases specific types of high-quality cotton for one-off projects. In these cases, disclosure of the names of the cotton suppliers is central to creating a unique selling point for the product.

### 6.2.2. Sustainability dimension

As could be expected, Nudie’s transparency outcomes are less encompassing for the sustainability, as compared to the traceability, supply chain transparency dimension, i.e., Nudie does not audit all of the suppliers that it is aware of in its supply network. With most firms having hundreds, or even thousands, of suppliers and sub-suppliers and each factory audit requiring resources, a key question facing firms is how to prioritize what suppliers to audit. Despite the practical relevance of such prioritizations and extensive research into how firms work with codes of conduct and auditing (e.g., Bartley, 2007), few, if any, studies have analyzed firms’ audit prioritizations (Egels-Zandén, 2010). In the Nudie case, the prioritization was based on initially auditing high-volume Italian suppliers (and their sub-suppliers), subsequently auditing suppliers (and sub-suppliers) in perceived high-risk countries, and finally auditing Portuguese medium-volume suppliers. In other words, the Nudie case indicates that suppliers’ production volumes and geographic locations were central variables determining prioritization decisions and shaping Nudie’s transparency outcomes in the sustainability dimension.

The Nudie case also illustrates how a company can incrementally improve its transparency outcomes by auditing more and more of its suppliers. However, by late 2013, several suppliers, such as fabric suppliers, sub-suppliers to medium-volume suppliers, and new suppliers, were still not audited, implying that Nudie cannot disclose any information about the sustainability conditions at these suppliers’ factories. Furthermore, Nudie’s conflict with the Portuguese supplier (Supplier C in section 5.3) that refused access to Nudie’s auditors...
after being upset and insulted by Nudie’s proposed transparency agreement and previous factory audit illustrates how supply chain transparency, in rare cases, can lead to worsened outcomes in the sustainability dimension. This conflict also illustrates how firms cannot themselves completely control their transparency outcomes and at least partly depend on supplier buy-in.

6.2.3. External vs. internal transparency

Nudie’s internal transparency outcomes in the traceability and sustainability dimensions are clear cut, i.e., Nudie managers either did or did not know the names of the suppliers (traceability) and whether or not audits had been conducted (sustainability). However, Nudie’s external transparency outcomes are less clear cut, since Nudie, in some cases, selectively disclosed information or was restricted by suppliers’ refusal to sign the transparency agreement. Selective disclosure in relation to factory audits was enabled by Nudie’s decision to disclose audit summaries rather than complete factory audits. This allowed Nudie managers to exclude particularly problematic audit findings (e.g., legal working hour non-compliances at Supplier E, juvenile workers at Supplier D, and illegal migrant workers at Supplier F in section 5.5) from the disclosed information. Furthermore, Nudie managers disclosed the names of some, but not all, third-tier suppliers, giving the impression that some second-tier suppliers did not use sub-suppliers. Although there were cases of selective disclosure, it is important to point out that Nudie in the vast majority of cases disclosed all available information.

The Nudie case again illustrates that supply chain transparency, in practice, is not about “declaring the truth” (Madsen, 2009), but rather about declaring a particular perspective. Nudie’s exclusion of certain information challenges the core logic of transparency in terms of reducing information asymmetry (Chapman, 1995) to allow stakeholders to assess firms’ external impact (Martinez and Crowther, 2008). It also to some extent supports the greenwash critique alleging that firms disclose successful examples while not being transparent about some of their “hot spots” (Toppinen and Korhonen-Kurki, 2013). In an industry characterized by name-and-shame campaigns (Bartley, 2007), it is understandable why Nudie managers were hesitant to disclose highly sensitive information that could have financially detrimental consequences on both their own and their suppliers’ business (cf. Doorey, 2011). Still, it is precisely the willingness to assume this vulnerability that makes stakeholders attach importance to transparency in the first place (Dingswerth and Eichinger, 2010; Doorey, 2011).

6.3. Transparency tradeoffs

Based on this discussion of transparency outcomes and how transparency was defined in practice in the Nudie case, it is possible to challenge the dominant assumption in previous research that “the more transparency the better” (Mol, 2013, p. 2). More specifically, the Nudie case allows us to highlight three main tradeoffs that firms face when attempting to create transparent supply chains.

6.3.1. Tradeoff I: threat vs. collaboration

First, firms face the tradeoff of threatening or collaborating with suppliers. Supply chain transparency facilitates “name-and-shame” campaigns by reducing information asymmetries
(Bartley, 2007; Doorey, 2011), increasing the pressure on firms and suppliers to improve sustainability conditions. Such increased surveillance and control pressure (Mol, 2013) on suppliers through transparency has also been proven, in a study of the ILO Better Work program in Cambodia, to lead to improved sustainability compliance in supplier factories (Ang et al., 2012).

However, publicly disclosing negative information about sustainability conditions at suppliers, or disclosing agent’s sub-suppliers’ names, risks undermining firm–supplier trust, as illustrated in the Nudie case by the offended Portuguese supplier (Supplier C in section 5.3). Trust and collaboration have, in turn, proven central to improving suppliers’ sustainability conditions (e.g., Locke et al., 2009), implying that supply chain transparency might lead to counterproductive results. Furthermore, the transparency threat increases incentives for suppliers to deceive factory auditors to avoid negative exposure, and such deceptions severely undermine buyers’ sustainability work in supply chains (e.g., Egels-Zandén, 2007). As discussed above, Nudie handled the threat vs. collaboration tradeoff by, in some cases (such as Supplier A and Supplier B), threatening suppliers and risking its supplier relationships (e.g., when resorting to authoritative control in relationships with agents and disclosing negative audit findings) and, in other cases, protecting suppliers, attempting to collaborate, and risking the credibility of its transparency attempt (e.g., when excluding sensitive factory audit information from the disclosed audit summaries at Suppliers D-F).

6.3.2. Tradeoff II: standardization vs. differentiation

Second, firms face the tradeoff of standardizing or differentiating their transparency work. By pushing a “one-size-fits-all” solution onto suppliers (i.e., standardizing), supply chain transparency attempts face the same criticism as codes of conduct and factory auditing, i.e., that they should be transformed to “incorporate the voices of suppliers, workers and communities in the design, implementation, [and] monitoring” to ensure that local actors’ priorities shape private regulation (Lund-Thomsen, 2008, pp. 1012). On the other hand, by adjusting to the specific circumstances of specific suppliers (i.e., differentiating), firms risk being accused of double standards and greenwashing (cf. Doorey, 2011; Dubbink et al., 2008).

Nudie managers opted mainly for standardization in this tradeoff, forcing them into authoritative control, conflict, and deadlock. Nudie, like many firms that outsource (Gadde et al., 2010), tried to retain detailed control instead of trusting others to handle particular functions for them (Tomkins et al., 2006). If Nudie managers had taken the suppliers’ (e.g., agents’) network contexts into consideration, they could have foreseen many of the network effects that took them by surprise, as in the case of their main Indian supplier (Supplier D). This, in turn, might have made Nudie more likely to involve suppliers before launching the transparency attempt and, consequently, to differentiate its implementation.

6.3.3. Trade off III: means vs. ends

Third, the above discussion indicates a more fundamental tradeoff (or question) of whether transparency is a means to an end or an end in itself. Most authors stress that transparency is a means to improve sustainability conditions in supply chains (Dubbink, 2007; Laudal, 2010).
However, as indicated in the above two tradeoffs, supply chain transparency may in some instances have negative consequences, implying that the recent transparency attempts of Nudie, H&M, Nike, Patagonia, and others might be praised because they incorporated the institutionalized transparency myth in their business (cf. Augustine, 2012; Meyer and Rowan, 1977) rather than because their attempts actually had a positive impact on the factory floor.

In other words, and in line with Dingwerth and Eichinger’s (2010) argument about transparency in another context, supply chain transparency attempts might have become ends in themselves. This raises the question of “transparency for whom” (Mol, 2013, p. 4). Echoing Khan et al.’s (2007, p. 1070) argument about codes of conduct, what matters in supply chain transparency attempts could be that “the sensibilities of western consumers” are “soothed” as the reputation capital of garment products is safeguarded through transparency attempts; “whether the stitchers” approve “of the means through which the [sustainability] ‘problem’ was solved” is of little interest to the firms and western stakeholders. Since we have not examined the impact of Nudie’s transparency attempt on the factory floor, it is for future empirical studies to determine the impact of transparency attempts in improving suppliers’ sustainability performance. The Nudie case simply raises a warning flag that supply chain transparency might have become an end rather than a means and, as such, could have detrimental sustainability impacts in practice.

7. Conclusions

This paper extends the scholarly conversation about supply chain transparency by analyzing how a company, in practice, attempts to work with supply chain transparency and how to explain the transparency outcomes of such attempts. We have done this by synthesizing previous definitions of supply chain transparency, proposing that it comprises three dimensions (i.e., traceability, sustainability conditions, and purchasing practices). Based on a study of the Swedish garment retailer Nudie Jeans Co’s transparency attempt, we have outlined different supply network explanations for the transparency outcomes of Nudie’s attempt. This makes an important contribution to the sustainability and supply chain literature, which previously has inconsistently defined supply chain transparency, lacked empirical studies of supply chain transparency, and focused more on why firms engage in supply chain transparency attempts than on the more nuanced question of explaining the transparency outcomes of supply chain transparency attempts.

On an overall level, our findings show that managers face three trade-offs when attempting to create transparent supply chains. Combined these trade-offs indicate that managers have to choose between a compliance or cooperation approach to supply chain transparency. In the compliance approach, managers develop a standardized supply chain transparency policy (“standardization” in tradeoff II), require suppliers to comply with this policy, threaten to stop purchasing from non-compliant suppliers (“threat” in tradeoff I), and treat transparency as end in itself (“ends” in tradeoff III). In other words, in the compliance approach, managers work on supply chain transparency in a way similar to how they have traditionally worked on codes of conduct in supply chains (cf. Locke et al., 2009). The upside of this approach is that it is easily communicated, i.e., it allows the firm to gain legitimacy (cf. Dubbink et al., 2008;
MacLean and Rebernak, 2007), and provides a uniform way of working on transparency. The downside is that, as occasionally illustrated by the Nudie case, it requires that managers be willing to jeopardize their relationships with suppliers and cancel contracts with suppliers resisting transparency attempts. It also requires that the firm have enough power, through authoritative control, to force suppliers to comply. As the Nudie case illustrates and Locke et al. (2009) convincingly argue more generally, this is far from certain in global supply chains.

In the cooperation approach, managers instead attempt to understand the network context of their suppliers and to involve suppliers in developing supply chain transparency attempts. Managers also view supply chain transparency as a means to the end of improved sustainability conditions (“means” in tradeoff III) and are open to differentiating the transparency work to fit the network context of specific suppliers (“differentiation” in tradeoff II) in an attempt to strengthen collaboration with suppliers (“collaboration” in tradeoff I). A cooperation approach can minimize dysfunctional conflicts in supply networks, shift the focus to normative rather than authoritative control, and potentially make supply chain transparency a tool for developing supply networks. On the other hand, while a cooperation approach may allow for internal transparency, it makes external transparency difficult since the firm’s disclosure, as illustrated in the Nudie case, can be perceived as greenwashing attempts.

Whether the compliance or cooperation approach is most suitable depends, among other things, on why the firm is engaging in supply chain transparency, its position in the supply network, and the characteristics of the supply network. The Nudie case illustrates that managers should strive to consistently apply one approach, as it is problematic to mix elements from both. For example, if a firm, as Nudie did, in some cases threatens to cancel contracts if suppliers do not sign its standardized transparency agreement and in other cases accepts supplier refusal to sign, the firm’s legitimacy in the supply network risks being damaged. Similarly, if a firm, as Nudie did, in most cases discloses complete and standardized information (enabled by its compliance approach) but in a few selected cases excludes information (due to its cooperation approach), the firm’s legitimacy in the eyes of external stakeholders risks being damaged, as stakeholders cannot trust the disclosed information. To avoid undermining the benefits of each approach, managers are advised to aim for consistency.

Future research is well advised to continue to focus on the underexplored topic of “inter-organizational issues” (Seuring and Gold, 2013, p. 4), as the Nudie case clearly indicates that firms cannot single-handedly control its supply chain transparency outcomes. Future research should also examine how companies in other settings (such as other industries and corporate sizes) work with supply chain transparency and how the setting influences how firms deal with trade-offs in supply chain transparency. Finally, future research should examine the impact of supply chain transparency on sustainability conditions on the factory floor, since the Nudie case indicates that some aspects of transparency lead to counterproductive impacts.
8. References


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