

Contract-Boundary-Spanning Governance Mechanisms: Conceptualizing Fragmented and Globalized Production as Collectively Governed Entities

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ABSTRACT

Conceptualizing how private actors can and should control their supply chains is a tricky question with both economic and legal dimensions. The topic is of extreme importance in today's global economy. On the one hand, this importance is highlighted by events such as the catastrophic and deadly collapse of the Rana Plaza factory building in Bangladesh and the economic fiasco of the Olkiluoto 3 nuclear power plant construction project in Finland, both arguably caused by the lack of effective supply chain governance. On the other hand, the potential benefits of successful supply chain governance, shown by examples such as open book accounting in automotive manufacturing, provide another perspective on the importance of focusing on supply chain governance. In this paper, I provide a framework for conceptualizing supply chain governance from a legal perspective. First, I combine the governance analytics of global value chain theory with research into compliance mechanisms and practical examples of contract boundary spanning governance mechanisms. This provides a preliminary typology that helps distinguish between adequate and inadequate governance mechanisms. Second, in contractually organized supply chains, governance mechanisms necessarily transgress contract boundaries and thus privity. This leads me to refer to them as contract-boundary-spanning governance mechanisms. To help conceptualize the requirements for attributing legal normative effects to such mechanisms, I propose using Teubner's factual

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framework for evaluating liability in contract networks. Combined together, the typology and the framework provide a tool for evaluating and discussing the appropriateness of liability in different factual situations. This tool is not limited to any specific jurisdiction or doctrine and is thus trans-substantive. It enables further comparison of the legal doctrines available in different jurisdictions and transnationally for their potential in establishing liability in different configurations of supply chain governance.

INTRODUCTION: THE NEED FOR CONTRACT-BOUNDARY-SPANNING GOVERNANCE

Fragmentation and globalization pose major challenges to contract law. This is illustrated by recent events like the catastrophic collapse of the Rana Plaza building, which claimed the lives of over a thousand factory workers,¹ and the economic fiasco of the Olkiluoto 3 (OL3) nuclear power plant in Finland, which has resulted in a decade's delay and multibillion euro arbitration claims.² One common denominator in both cases is the challenge of implementing effective contract-boundary-spanning governance mechanisms in fragmented and globalized structures of production.

By contract-boundary-spanning governance mechanisms, I refer to the increasingly sophisticated mechanisms that are used by private actors to govern chains or networks of contracts for a particular purpose. From a traditional perspective, contracts create boundaries between actors that define their respective rights and obligations. The fragmentation and globalization of production, however, put pressure on actors to revise this framework. While keeping the advantages of contract boundaries, for example in relation to limiting liability, actors may at the same time wish to overcome these boundaries in order to better control the whole chain or network of production, for example in relation to ethical production practices, cost-effectiveness, or ability to innovate.³

¹. See, e.g., Editorial, *One Year After Rana Plaza*, N.Y. TIMES (Apr. 27, 2014), available at <http://www.nytimes.com/2014/04/28/opinion/one-year-after-rana-plaza.html>. For a more victim-oriented perspective, see Jason Motlagh, *The Ghosts of Rana Plaza*, VQR (2014), available at <http://www.vqronline.org/reporting-articles/2014/04/ghosts-rana-plaza>. For more discussion, see Section II.A *infra*.

². See, e.g., Jussi Rosendahl, *Update 2-Finland's Nuclear Plant Start Delayed Again; Areva, TVO Trade Blame*, REUTERS (Sept. 1, 2014, 6:54 AM), available at <http://www.reuters.com/article/finland-nuclear-olkiluoto-idUSL5N0R20CV20140901>. For more discussion, see Section II.A *infra*.

³. For an example of the diverse ways in which actors try to spread ethical values in production chains and the problems that they face, see generally RICHARD M. LOCKE, *THE*

This desire comes into conflict with the doctrine of privity of contracts, which some actors may try to simultaneously employ and evade to their advantage.⁴

In Part I, I introduce the problems of production, as fragmented by sourcing and subcontracting into chains or networks of entities connected by bilateral contracts, in a globalized context where vastly different regulatory and enforcement frameworks may apply to different actors of the same production chain or network.⁵ I then use global value-chain (GVC) theory and its typology of value-chain governance as one example of how to conceptualize the governance of fragmented and globalized production over contract boundaries. Finally, to see how the typology developed under GVC theory might be combined with existing research on private compliance, I discuss Richard Locke's recent account of private compliance mechanisms. My aim here is to provide a preliminary

PROMISE AND LIMITS OF PRIVATE POWER: PROMOTING LABOR STANDARDS IN A GLOBAL ECONOMY 126–55 (2013). Locke's general gist that actors must work together over contract lines to effectively promote ethical behavior can be contrasted with the regulatory and legal challenges related to ethical values, in particular the conventional notion that an actor who contractually requires another party to follow certain ethical standards *prima facie* has all the legal trumps in her hand if the other party does not follow these standards. See generally Ingeborg Schwenzer & Benjamin Leisinger, *Ethical Values and International Sales Contracts*, in *COMMERCIAL LAW CHALLENGES IN THE 21ST CENTURY: JAN HELLNER IN MEMORIAM* 249 (Ross Cranston et al. eds., 2007). For an example of cost management, see generally Peter Kajüter & Harri I. Kulmala, *Open-Book Accounting in Networks: Potential Achievements and Reasons for Failures*, 16 *MGMT. ACCT. RES.* 179 (2005). For an example of innovative R&D, see generally Ronald J. Gilson et al., *Contracting for Innovation: Vertical Disintegration and Interfirm Collaboration*, 109 *COLUM. L. REV.* 431 (2009).

⁴. The aftermath of the Rana Plaza disaster provides a recent example. In the wake of the catastrophe, the Accord on Fire and Building Safety in Bangladesh was undertaken by numerous first world companies to effectively implement worker safety measures in Bangladeshi factories. A number of North American companies, however, saw this instrument as potentially opening up too many liabilities due to it being an enforceable agreement between companies and their suppliers' workers' representatives and thus establishing privity between the two. See, e.g., Benjamin Hensler and Jeremy Blasi, *Making Global Corporations' Labor Rights Commitments Legally Enforceable: The Bangladesh Breakthrough*, *WORKER'S RIGHTS CONSORTIUM* (June 18, 2013), available at <http://www.cleanclothes.org/resources/recommended-reading/making-global-corporations-2019-labor-rights-commitments-legally-enforceable-the-bangladesh-breakthrough>; Steven Greenhouse, *U.S. Retailers See Big Risk in Safety Plan for Factories in Bangladesh*, *N.Y. TIMES* (May 22, 2013), available at http://www.nytimes.com/2013/05/23/business/legal-experts-debate-us-retailers-risks-of-signing-bangladesh-accord.html?_r=0. Instead, the North American companies decided to utilize another instrument, the Alliance on Bangladesh Worker Safety, which would try to achieve the same results as the Accord without creating privity between these companies and their suppliers' workers. I discuss these instruments in more detail in Section II.A *infra*.

⁵. For a discussion of the terms "fragmentation" and "globalization," see Gary Gereffi et al., *The Governance of Global Value Chains*, 12 *REV. INT'L POL. ECON.* 78, 79–82 (2005).

typology of contract-boundary-spanning governance that can be used to examine the mechanisms at play in the private governance of production.

In Part II, I examine how the typology identified in Part I may be used to understand and critique how companies control production in the context of three case studies. The first is the Accord on Fire and Building Safety in Bangladesh (“Bangladesh Accord”). Here, a dedicated governance contract was created to resolve problems in the underlying chain of bilateral contracts. The second is the open-book accounting practices of German automotive production. Here, governance is not based on a dedicated governance contract. Instead, more general requirements of cooperation “cascade” down the chain of contracts. These requirements are complemented by various context-sensitive courses of action for improving the functioning of the chain. The third is the ongoing OL3 nuclear power plant construction project in Finland. Here, it seems that inadequate governance has contributed to the severe dysfunctionality of the chain structure. To conclude Part I, I briefly examine the difficulties that adequate contract-boundary-spanning governance poses from a legal doctrinal perspective and how the typology set out in Part I can help.

In Part III, I examine two problems that contract-boundary-spanning governance mechanisms pose for the doctrine of privity of contracts. In place of chains of purely bilateral contracts, contract-boundary-spanning governance entails a move toward overlapping layers of governance that extend the control of actors over a whole chain of bilateral contracts. The first is whether a dispute should be subsumed under one or more of the bilateral contracts of the chain, under the contract-boundary-spanning governance mechanism, or both. The second is how an actor may challenge a contract-boundary-spanning governance mechanism without privity. While the answer depends on the specific situation and applicable rules of law, I propose using the typology presented in Part I to complement the factual framework used by Gunther Teubner for evaluating which relationships are legally meaningful enough to overcome the limits of privity. This results in a trans-substantive analytical tool for studying the legal effects of contract-boundary-spanning governance mechanisms that may thus also have transnational application.

In the Conclusion, I hypothesize on one possible legal cause for the shift in contract governance from individual contracts to collective entities of contracts. Previously, contract boundaries have been used to limit liability and impose on actors an individualistic operating logic. Now, developments in national contract laws may be driving a change in this logic such that more emphasis is placed on the new regulatory subjectivity of collective entities of contracts. One particular development

may see an increased role for contract-boundary-spanning governance mechanisms in limiting liability, instead of resorting to contract boundaries.

I. A LEGAL FRAMEWORK FOR GOVERNING GLOBALLY FRAGMENTED PRODUCTION

A. *Brief Background on Fragmentation and Globalization*

We live in a regulation-heavy world where compliance plays a major role in organizing production. Product safety, labor, environmental, and other regulations set legal requirements for organizing production. Further, companies may wish to exert compliance on their suppliers and subcontractors for other reasons, such as ethics, cost-management, or research and development (R&D).⁶ Two trends, the fragmentation and globalization of production, make compliance governance especially difficult.⁷

Profit-seeking companies are motivated to specialize in their more lucrative core competencies. This increases pressure to fragment value chains by bringing some aspects of production in-house while outsourcing others. For example, companies like Apple concentrate on design, marketing, and R&D, while leaving manufacturing and component design mostly to outside suppliers.⁸

While fragmentation allows companies to concentrate on their core competencies, it also fragments liability. Corporate and contract law typically do not impose liability on a company for the conduct of its contractors or suppliers. Thus companies may have more interest in whether an outsourced product or service meets requested quality requirements than in how outsourced production is managed and organized. While the latter may have an effect on, for example, brand

⁶. For an example of ethical values, see generally Schwenzer & Leisinger, *supra* note 3. For an example of cost management, see generally Peter Kajüter & Harri I. Kulmala, *Open-Book Accounting in Networks: Potential Achievements and Reasons for Failures*, 16 MGMT. ACCT. RES. 179 (2005). For an example of innovative R&D, see generally Ronald J. Gilson et al., *Contracting for Innovation: Vertical Disintegration and Interfirm Collaboration*, 109 COLUM. L. REV. 431 (2009).

⁷. See Gary Gereffi et al., *The Governance of Global Value Chains*, 12 REV. INT'L POL. ECON. 78, 79–82 (2005).

⁸. For an illustrative description, see, e.g., Gary Gereffi, *Global Value Chains in a Post-Washington Consensus World*, 21 REV. INT'L POL. ECON. 9, 20–21 (2013). See also John Humphrey, *Upgrading in Global Value Chains*, ILO World Commission on the Social Dimension of Globalization Working Paper No. 28, 3–5 (2004).

image or the cost structure of production, it is the end product that often seems more important than the production process.

With increasingly effective means of transporting goods and information, the fragmentation of production takes place on a global scale. The country of production need not have any relation to a company's country of origin or to the intended market. Again, for example, Apple, based in the United States, outsources the manufacturing of its devices to manufacturers operating in China and elsewhere, while the components used in the devices come from a number of different source countries.⁹ At the same time, the devices are marketed globally to wealthy consumers.

Globalization can distort the regulatory framework in which production occurs due to differences in regulatory and enforcement environments across the production chain. Similarly to fragmentation, when outsourcing production to a third-world country, the key aim of an outsourcer is to ensure that the end product is competitively priced and fulfills quality, product safety, and other standards in markets where the outsourcer runs a considerable risk in relation to brand image or liability for defects. On the other hand, the procedural aspects of production, such as environmental and labor impact, are less directly important to the outsourcer. The effect of procedural aspects of production may not be as easily visible in countries where the end product is marketed and may rely, for example, on grassroots action to come to light. Thus disparities in production-related regulations and their enforcement may be less of a concern for an outsourcer.

The big picture of fragmentation and globalization is complex and beyond the scope of the article. Gereffi notes that fragmentation increasingly seems to be countered through relational contractual practices between companies that try to secure the sustained availability of commodities and services.¹⁰ Similarly, globalization not only gives rise to jurisdictions that can be utilized as potential regulatory loopholes but also to jurisdictions that exert their regulatory standards beyond their own boundaries.¹¹ But no matter how they shape and reshape themselves, the trends of fragmentation and globalization underlie the

⁹. *Id.*

¹⁰. See Gereffi, *supra* note 8, at 16.

¹¹. See Dan Danielsen, *Local Rules and a Global Economy: An Economic Policy Perspective*, 1 *TRANSNAT'L LEGAL THEORY* 49, 52 (2010).

governance realities of global production and thus need to be accounted for.

B. Global Value-Chain Theory as One Answer to the Problem of Conceptualizing Fragmented Entities

Fragmentation and globalization cause severe difficulties for the legal conceptualization of production. Due to existing notions of contractual privity, contract law is chiefly concerned with looking at individual contracts and the parties to them. Fragmentation and globalization, however, result in production through chain or network structures, consisting of several different contracts with several different actors.

Similar to groups of companies or joint ventures, chain or network production structures consisting of several contracts between several actors may have one or more actors in leading positions. The definition of a lead firm is context dependent, but as a starting point it might be said that the contracts and other relationships of a lead firm have a major impact on other actors by narrowing their freedom of choice.¹² Thus while the production structure consists of contracts between independent entities, the position of the lead firm in relation to the other companies may be more akin to, for example, the parent company of a corporate group than to an independent actor.

Understanding fragmented and globalized production thus requires a methodology that can overcome the limits of privity. Conceptualizing the relationship of the constituent contracts of a production chain to the whole is crucial for understanding the relative roles of companies that are, from a traditional privity perspective, independent actors without a legally relevant stake in the other actors of the chain.

GVC theory provides one possibility for conceptualizing production beyond contract boundaries. It is not a legal theory but instead a step in a succession of economic and political theories used to understand the

¹². This effect may be limited to certain actors, such as in the example of contract structures in U.S. automotive manufacturing described by Omri Ben-Shahar & James J. White, *Boilerplate and Economic Power in Auto Manufacturing Contracts*, 104 MICH. L. REV. 953 (2006), or more broadly so that it affects practically all actors, such as in the OL3 scenario discussed in Section II below. For a discussion of the effect of lead firms on downstream actors and their employers in global garment and electronics industries, see RICHARD M. LOCKE, *THE PROMISE AND LIMITS OF PRIVATE POWER: PROMOTING LABOR STANDARDS IN A GLOBAL ECONOMY* 126–55 (2013).

effect of fragmentation and globalization on production.¹³ The aim of GVC theory is to understand the sectoral logic of global production (for example grain trade, electronics production, service providers such as help-desks).¹⁴ The use of the word “value,” in contrast to earlier theories, such as global commodity-chain theory, emphasizes that not just the global flows of commodities are in focus, but also how local value creation is affected. In particular, GVC theory has recently been used to understand how production affects other values, such as economic development, welfare, the environment, or social structure.¹⁵ According to Gereffi, GVC theory has been used this way by, for example, the World Bank, the International Monetary Fund, the World Trade Organization, the U.S. Agency for International Development, and the Organisation for Economic Co-operation and Development.¹⁶

Understanding production from a GVC perspective begins by examining value chains as entities consisting of linked actors, each in its own physical and regulatory setting. Instead of studying individual companies, regulatory actors, or contractual relationships, the focus is on understanding how the parts affect the whole. How do the actors’ different objectives, capabilities, and regulatory environments affect their possibilities for controlling production? To this end, GVC theory is used to develop analytical tools that can be used to compare and evaluate production as a whole.¹⁷

One example of such a tool is the typology of governance types proposed by Gereffi, Humphrey, and Sturgeon.¹⁸ The typology allows comparison between value chains based on their private governance structure. At the same time it shifts the focus from individual companies and contracts to the effect contracts have on one another in chain- or network-type production structures. The typology is based on three factors: the complexity of information required for a transaction; the extent to which information can be codified in a contract; and the capabilities of the supplier base.¹⁹ Each factor can have a value of either

¹³. See Jennifer Bair, *Global Capitalism and Commodity Chains: Looking Back, Going Forward*, 9 COMPETITION & CHANGE 153, 159–61 (2005).

¹⁴. *Id.* at 162; Gereffi, *supra* note 8, at 10.

¹⁵. Compare, for example, the call for widening the GVC research agenda presented in Bair, *supra* note 13, at 167–72, with the review of GVC-related literature almost ten years later in Gereffi, *supra* note 8, at 23–28.

¹⁶. See Gereffi, *supra* note 8, at 23.

¹⁷. See, e.g., Gereffi, *supra* note 8, at 20–21 (listing analytic GVC metrics).

¹⁸. See Gereffi et al., *supra* note 5, at 83–88 (identifying five types of GVC governance: hierarchy, captive, relational, modular, and market).

¹⁹. *Id.* at 85–87.

“high” or “low.”²⁰ While eight combinations are possible, according to Gereffi, Humphrey, and Sturgeon, only five exist in practice.²¹

At one end of this spectrum of five different governance types are “market-based relationships”; at the other is “vertical integration.”²² This reflects the traditional divide between markets and hierarchies in industrial organization. Governance through arm’s length contracts based on market price mechanisms occurs when production does not require complex information, transactions are relatively easy to codify, and supplier capability is high. In such situations little input is needed from buyers, and capable suppliers are abundantly available. Governance through vertical integration, on the other hand, occurs when product complexity is high, the ability to codify transactions is low, and capable suppliers are not easily available. In such situations, production often relies on tacitly communicated information and the coordination of different actors and resources such as intellectual property rights.²³

Between the more traditional modes of market-based contracts and vertical integration, Gereffi, Humphrey, and Sturgeon identify three additional governance types: “modular,” “relational,” and “captive” value-chain governance.²⁴

In modular value chains, the relationship between a buyer and suppliers is close to a price-based, market-type structure, the difference being that the actors share knowledge of common standards. The complexity of information required for a transaction is high, but, due to shared standards, the ability to codify the transaction is also high.²⁵ Thus the buyer can rest assured that a capable supply base can correctly understand its requirements. An example of a modular value chain is a turnkey business model, where the lead firm can, due to shared standards, relatively easily order complex products without a need for overseeing production.²⁶

Relational value chains may form where shared standards do not exist. The complexity of information required for a transaction is high and the lack of shared standards makes the ability to codify the transaction low, despite a capable supply base.²⁷ In such situations, cooperation is required between the buyer and supplier to ensure quality. Due to

²⁰ *Id.*

²¹ *Id.* at 85, 87, endnote 10.

²² *Id.* at 83.

²³ *Id.* at 87.

²⁴ *Id.* at 86–87.

²⁵ *Id.* at 86–87.

²⁶ *Id.* at 97–98.

²⁷ *Id.* at 86–87.

challenges in codifying the transaction, special governance mechanisms are required. These can be based on, for example, mutual trust, reputation, or special contractual arrangements.²⁸ A relational value chain may exist, for example, in prototype-related production, such as the development of new products.

Captive value chains may form when both the ability to codify transactions and product complexity are high but supplier capabilities relatively low.²⁹ The supplier's relatively low capabilities make it dependent on cooperation with the buyer. Similarly, it is difficult for the supplier to find alternative markets. Ben-Shahar and White's description of the dependence of outsourced divisions of U.S. automotive manufacturers on their parent companies is an example of a captive value chain.³⁰

Central to Gereffi, Humphrey, and Sturgeon's typology of value-chain governance is how value chains may evolve from one governance type to another.³¹ This has bearing on how value chain actors can upgrade their production capabilities. A supplier might, for example, try to improve its position by migrating from a role in a captive value-chain structure towards a role in a market or modular structure.

While GVC theory is not a legal concept, Gereffi, Humphrey, and Sturgeon's typology of value-chain governance deals with the relationships between actors in contractually structured value chains and may thus have legal relevance.³² Law and regulation has a major role in organizing economic production that has hitherto been underutilized.³³ One particular question that arises is the legal consequences of a "wrong" choice of value-chain governance. For example, a lead firm might organize a modular value chain by contractually requiring all actors to follow its set of standards in production. If the lead firm does not ensure that its standards are effectively disseminated among the different actors, should it be liable for this deficiency, or can it retreat beyond the contract boundary and so escape liability? To open up the question of law and value-chain governance, I next tie together the framework proposed

²⁸. Examples of contractual arrangements for value-chain governance are discussed in Sections I.C and II *infra*.

²⁹. Gereffi et al., *supra* note 5, at 86–87.

³⁰. See Ben-Shahar & White, *supra* note 12, at 970–78.

³¹. Gereffi et al., *supra* note 5.

³². For some general remarks on GVC theory and law, see Kevin B. Sobel-Read, *Global Value Chains: A Framework for Analysis*, 5 TRANSNAT'L LEGAL THEORY 364 (2014).

³³. See The IGLP Law and Global Production Working Group, *The Role of Law in Global Value Chains: A Research Manifesto*, 4 LONDON REV. INT'L L. 57 (2016).

by Gereffi, Humphrey, and Sturgeon with one account of private compliance.

C. Toward a Typology of Contract-Boundary-Spanning Governance: Intertwining GVC Theory with Locke's Account of Private Compliance

The ghost of globalization past sets the stage for Locke's account of the development of labor compliance in subcontracting in the garment and electronics industries.³⁴ Here, companies outsourced production to third-world countries and concentrated only on the end product and its price, while shutting their eyes to working conditions. To use Gereffi, Humphrey, and Sturgeon's typology, the starting point, at least in relation to working conditions, was market-based, value-chain governance. Products were ordered from the lowest bidder, possibly located in a vastly different regulatory setting than that of the buyer. Little, if any, attention was paid to working conditions. Once reports on poor working conditions began circulating in Western media, companies started polishing their tarnished images through increasingly sophisticated measures.³⁵

The first phase was to implement private labor standards that value-chain actors were required to comply with.³⁶ The standards consisted of codes of conduct drafted by Western lead firms.³⁷ These required suppliers to guarantee workers basic rights such as child and forced labor prohibitions, minimum wages, and freedom of association.³⁸ Suppliers were then required to pass these codes of conduct on to their own suppliers, the standards cascading down the value chain until all parties to the chain were subject to them. From the perspective of working conditions, this can be seen as a move from market-based to modular governance.

According to Locke, such compliance programs are generally seen as falling short of their objectives.³⁹ He identifies three main reasons for this shortcoming.⁴⁰ First, a wide range of factors affects the relative power of actors, so that a single buyer may not be able to exert its standards on a powerful supplier.⁴¹ Second, the causes of compliance problems may be

³⁴. See LOCKE, *supra* note 3.

³⁵. See *id.* at 24.

³⁶. See *generally id.* at 24–45.

³⁷. *Id.*

³⁸. *Id.*

³⁹. See, e.g., *id.* at 35–45, 66–68.

⁴⁰. See *id.* at 28–35.

⁴¹. See *id.* at 32.

invisible to factory audits.⁴² Audits may even undermine trust between actors, driving problems further underground. Third, the traditional approach to enforcing standards with a fear of sanctions may not be effective in all situations and may even discourage companies from compliance.⁴³ Companies often follow regulations and standards, not due to fear of sanctions, but instead because they have been educated or assisted to do so in their everyday affairs. Following Gereffi, Humphrey, and Sturgeon's typology, it seems that modular value-chain governance based on shared standards was not successful due to the lack of shared standards in practice. A more relational governance model, with emphasis on creating implementable standards in practice and not just on paper, can be seen as the next phase of development.

From the premise that suppliers in the developing world may lack resources, expertise, and management systems necessary for combating the root causes of compliance failures, capability-building developed to supplement traditional compliance programs.⁴⁴ The idea is to create shared standards in practice by empowering suppliers and their employees to promote continuous improvement. Capability-building builds on traditional compliance programs but emphasizes transparency through trust and multilateral communication instead of the traditional compliance model of top-down communication enforced through audits and sanctions.

Despite their advantages, capability-building programs have their own challenges due to what Locke sees as three problematic assumptions.⁴⁵ The first is that assistance in some areas, for example industrial or technical upgrading, would lead to improvement in other areas, such as social upgrading. However, the enforcement of standards related to, for example, working conditions may have little to do with profitability or technical sophistication. The second assumption is that actor interests would be convergent, so that all actors would equally share an interest in developing working conditions, instead of concentrating solely on profit maximization. In practice, however, actors' interests may be widely divergent, and it may be difficult to guarantee that gains from capability-building are spread evenly, instead of accruing to the benefit of more powerful actors. The third assumption is the universality of technical, managerial, and organizational changes, such that features implemented, for example, in U.S. lead firms could be directly transplanted to other countries and contexts. In practice, capability-

⁴². *See id.* at 33.

⁴³. *See id.* at 34.

⁴⁴. *Id.* at 78–85.

⁴⁵. *See id.* at 102–04.

building programs may not be transplantable into other contexts without more but must first be adapted to fit local social and cultural realities.

Locke identifies two further factors that could promote effective compliance: accounting for the upstream practices of lead firms, and public regulation and its enforcement.⁴⁶ First, lead-firm practices have a crucial effect on production. Lead firms cannot simply impose obligations on other actors; they must also support the whole by their own conduct. For example, unpredictable product life cycles may translate to cyclical changes in production that may in turn require the use of short-term labor, which increases risks of poor labor practices. As a solution, Locke proposes a more equal sharing of risks and gains through more collaborative relationships between actors.⁴⁷ Second, public regulation also has a central role in supporting private compliance. While public actors can be efficient in creating regulation, effective enforcement may prove difficult. According to Locke, private governance mechanisms seem to work best when complementing and complemented by public mechanisms, so that each gains from the institutional support of the other.⁴⁸ The Bangladesh Accord⁴⁹ may be seen as a practical example of this further phase of development proposed by Locke.

In sum, Locke traces several stages of development in private compliance mechanisms. These different stages of development can be mapped onto Gereffi, Humphrey, and Sturgeon's types of value-chain governance. Using Gereffi, Humphrey, and Sturgeon's typology that identifies what kinds of governance types typically are effective in prescribed situations, a level of legal normativity may be extrapolated. In other words, if one governance type seems inadequate in a particular situation, then legal consequences might be attached to the use of inadequate governance. However, the fit must be seen for the moment as very preliminary.

First, Gereffi, Humphrey, and Sturgeon's discussion of their typology remains on a general level. Providing concrete examples of contractual and other governance mechanisms, as I have done here through Locke's discussion, helps us better conceptualize the different governance types from a potentially normative, and thus also a legally relevant, perspective. Conversely, the typology enables a move towards a legally relevant classification of the different mechanisms described by Locke.

⁴⁶. See *id.* at 126–55, 156–73.

⁴⁷. See *id.* at 153–55.

⁴⁸. See *id.* at 64–68, 169–73.

⁴⁹. Discussed in Section II.A *infra*.

Nonetheless, even more concretization of Gereffi, Humphrey, and Sturgeon's typology will probably be needed for legal application.

Second, the different mechanisms and approaches referred to by Locke also constitute fuzzy, and potentially broad, categories. Like contracts, the mechanisms used for contract-boundary-spanning governance exist in countless different forms. For example, I categorized Locke's capability-building under Gereffi, Humphrey, and Sturgeon's relational value governance. The further developments proposed by Locke, the integration of lead-firm practices and public regulation into governance mechanisms, would fall into the same category of relational governance. This creates a broad set of different techniques crammed into a single category that could perhaps be refined into subcategories. Nonetheless, even the existing typology of governance forms seems descriptive enough to be useful, as I show below.⁵⁰

To be sure, additional research on the suitability and practical effect of the approach discussed here is needed. As a preliminary step, in Part II I examine a number of contract-boundary-spanning mechanisms in practice and what kinds of legal interventions they might accommodate.

II. CONTRACT-BOUNDARY-SPANNING GOVERNANCE MECHANISMS IN PRACTICE

A. *Governing with a Dedicated Governance Contract: The Case of the Bangladesh Accord*

As an example of a dedicated governance contract I examine the Bangladesh Accord.⁵¹ The Bangladesh Accord followed the Rana Plaza catastrophe that took place in 2013 in Bangladesh.⁵² Rana Plaza, a building that housed a number of garment factories, was not in

⁵⁰. See Section II *infra*.

⁵¹. Accord on Fire and Building Safety in Bangladesh, May 13, 2013, *available at* http://www.achact.be/upload/files/Bangladesh_Accord_on_fire_and_building_safety_2013.pdf.

⁵². See *generally* ACCORD ON FIRE AND BUILDING SAFETY IN BANGLADESH, <http://www.bangladeshaccord.org> (last visited July 15, 2015). For additional general information on the Rana Plaza disaster (also called the Savar Building collapse), the search term "Rana Plaza" may be used in various news sites. See *generally* N.Y. TIMES, <http://www.nytimes.com> (last visited Feb. 1, 2016). For scholarly discussion, see, for example, Mark Anner et al., *Toward Joint Liability in Global Supply Chains: Addressing the Root Causes of Labor Violations in International Subcontracting Networks*, 35 COMP. LAB. L. & POL'Y J. 1 (2013); Beryl ter Haar and Maarten Keune, *One Step Forward or More Window-Dressing? A Legal Analysis of Recent CSR Initiatives in the Garment Industry in Bangladesh*, 30 INT'L J. COMP. LABOUR L. & INDUS. REL. 5 (2014).

compliance with local fire and building codes.⁵³ It collapsed, causing over a thousand deaths.⁵⁴ The catastrophe drew global media attention to third-world working conditions. This in turn led to strong responses from companies utilizing Bangladeshi suppliers, with some even threatening to boycott Bangladesh due to perceptions that the state was unable to prevent such catastrophes.⁵⁵

Such solutions might only have moved the problem elsewhere. Thus a number of companies responded by drafting the Bangladesh Accord in cooperation with global and local labor unions. It requires parties to fund and implement at their supplier factories a program on fire and building safety.⁵⁶ At the same time, the Bangladesh Accord requires parties to cooperate with the Bangladesh government's National Action Plan on Fire Safety.⁵⁷ Other actors, such as the International Labour Organization (ILO) and nongovernmental organizations, are incorporated as witnesses, while the ILO also has a role in governing the Bangladesh Accord. Actual parties include global and local labor unions and numerous brand-name companies such as Adidas, Benetton, and H&M.⁵⁸

From the perspective of value-chain governance, the most interesting aspect is how the Bangladesh Accord takes into account the collateral effects of enforcing fire and construction standards. For example, parties must require their supplier factories to keep workers employed with regular pay when a factory closes for renovation, so long as this period is no longer than six months.⁵⁹ The parties must also make reasonable efforts to ensure that any workers whose employment is terminated due to a loss of orders at a factory that refuses to undertake repairs are offered employment with safe suppliers.⁶⁰ In case of disputes, a trade union, for example, may start arbitration proceedings against a company in breach

⁵³. *See id.*

⁵⁴. *See id.*

⁵⁵. For some immediate corporate responses before the full scope of the catastrophe was evident, see Steven Greenhouse, *Bangladesh Fears an Exodus of Apparel Firms*, N.Y. TIMES (May 2, 2013), available at <http://www.nytimes.com/2013/05/03/business/factory-owners-in-bangladesh-fear-firms-will-exit.html?pagewanted=all>. For a more meditated "legal" perspective, see Wendy Wysong, *When It's So Broke, You Can't Fix It: The Decision Not to Do Business in Highly Corrupt Countries*, CLIFFORD CHANCE (June 23, 2014), available at <http://www.lexology.com/r.ashx?i=2567537&l=7LHHCP0>.

⁵⁶. *See* Accord on Fire and Building Safety in Bangladesh, *supra* note 51.

⁵⁷. *Id.*

⁵⁸. For a current list of signatories and witnesses, see *About: Signatories*, ACCORD ON FIRE AND BUILDING SAFETY IN BANGLADESH, *supra* note 52.

⁵⁹. *See* Accord on Fire and Building Safety in Bangladesh, *supra* note 51.

⁶⁰. *Id.*

of the accord.⁶¹ Thus under the Bangladesh Accord parties have contractual obligations to actors that normally would not be their direct contractual partners in a value chain. In effect, the Bangladesh Accord creates a direct contractual relationship between lead firms and their suppliers' workers and worker representatives.

The Bangladesh Accord seems to have increased workplace safety in Bangladesh factories falling under the scope of the agreement, but it has not managed to avoid controversies resulting from the different interests of buyers, suppliers, and workers.⁶² At the same time, it has received a competitor in the form of the Alliance for Bangladesh Worker Safety, which weighs the interests of the actors involved very differently than does the Bangladesh Accord.⁶³ In particular, the Alliance does not create a direct contractual relationship between lead firms and their suppliers' workers.

Whatever its practical effect will ultimately be, the Bangladesh Accord has fundamentally changed the governance of the underlying contractual structure. First, it creates a contract-boundary-spanning governance mechanism that brings together the interests of actors that previously would not have been in direct contract in a value chain: different buyer companies, factories that supply them, and the factories' employees. Second, it takes into account the actions of the lead firms by placing on them a contractual duty to care for supplier employees affected by the implementation of standards required by a lead firm. Third, it takes into account the Bangladeshi government's national action plan and also integrates the ILO into its framework, fusing public and private initiatives into one mechanism.

Most interestingly from a legal perspective, the Bangladesh Accord is an example of a dedicated governance contract that exists to complement the contractually organized production chain from lead firms through various middle actors to factory employees. However, the scope of the Bangladesh Accord, limited to the fire and building safety of supplier factories, makes it a very narrow instrument. Due to its narrow scope, the Bangladesh Accord does not create a truly open contract-boundary-spanning governance mechanism between the different actors. It only takes into account the issues or interests specifically mentioned in the

⁶¹ *Id.*

⁶² See Steven Greenhouse & Julfikar Ali Manik, *Stalemate over Garment Factory Safety in Bangladesh*, N.Y. TIMES, Jun. 25, 2014, <http://nyti.ms/1levTMI>.

⁶³ See generally ALLIANCE ON BANGLADESH WORKER SAFETY, <http://www.bangladeshworkersafety.org> (last visited July 15, 2015). For scholarly discussion and comparison to the Accord, see Beryl ter Haar and Maarten Keune, *supra* note 52.

agreement, leaving out others that have not received similar levels of media attention.

B. Governing Without a Dedicated Governance Contract: The Case of a German Automotive Original Equipment Manufacturer

A different approach from that of the Bangladesh Accord is taken by contract-boundary-spanning governance mechanisms that do not employ dedicated governance contracts. One example is provided by Kajüter and Kulmala's research on open-book accounting.⁶⁴ Open-book accounting refers to practices where actors involved in the same production chain share with one another production-related cost information.⁶⁵ This is done to understand and develop production from an overall perspective. In one case examined by Kajüter and Kulmala, the incorporation of open-book practices resulted in a particular contract-boundary-spanning governance mechanism between a German automotive original equipment manufacturer (OEM) and its value chain. Kajüter and Kulmala's study was not juridical in nature, but a number of legal insights can be taken from their work.

In order to govern the cost-effectiveness of its value chain, a German automobile OEM agreed with its key suppliers on open-book accounting practices.⁶⁶ This was done to identify cost-reduction opportunities. These suppliers were then expected to pass on the practice to their own suppliers, collecting and sharing information from actors with which the OEM had no bilateral relationship. This provides the OEM with a "value chain flow chart," a map containing the names and locations of various tiers of suppliers, the flow of material between them, and the value added at each stage. The value chain flow chart provides the OEM with a detailed view of value-generation that spans the value chain and is not just limited to its bilateral contractual partners. Such a mechanism makes it possible to identify and target governance measures where needed in the value chain.

According to Kajüter and Kulmala, the OEM uses a number of techniques in order to make it more feasible for the different actors of the value chain to share sensitive cost information.⁶⁷ These include, first, the establishing of working groups consisting of members from both the OEM and a supplier, which promotes interpersonal trust.⁶⁸ Second, the OEM

⁶⁴. See Kajüter & Kulmala, *supra* note 3, at 186–90.

⁶⁵. *Id.* at 182–84.

⁶⁶. See *id.* at 187–90.

⁶⁷. See *id.*

⁶⁸. *Id.*

provides cost-free technical support in the form of process analysis and optimization.⁶⁹ Third, the OEM develops dedicated tools for the disclosure and analysis of information.⁷⁰ Finally, how the benefits gained from these practices are shared depends on factors such as whether the actor receiving the benefit can use the beneficial processes in its contracts with buyers other than the OEM.⁷¹

A crucial difference between the Bangladesh Accord and the open-book practices discussed here is the legal form of the contract-boundary-spanning governance mechanism. While the Bangladesh Accord takes the form of a dedicated governance contract with its own enforcement mechanism, the open-book approach discussed here relies on cascading contract terms. There is no single dedicated governance contract to connect the relevant actors of the value chain and guarantee them a unified forum for dispute resolution and enforcement. Despite this, the OEM has a considerable amount of access to potentially sensitive information on actors that it does not have a direct contractual relationship with. Furthermore, the structure in place enables it to directly affect these actors despite the lack of a clearly defined bilateral contract. Finally, there is no single set form for the ensuing cooperation. What seems to be a general contractual requirement of adopting open-book accounting is complemented by context-sensitive action. Thus, while still limited in scope, the contract-boundary-spanning governance mechanism in place in the German automobile OEM example is much more open to alternative considerations and courses of action than the Bangladesh Accord.

C. Inadequate Governance and Its Consequences: The Case of the Olkiluoto 3 Nuclear Power Plant Project

Finally, I turn to the OL3 nuclear power project as an example of how the typology discussed in Part I might help identify inadequate governance. OL3 is the first nuclear reactor built in Finland after a long pause in nuclear construction.⁷² OL3 was supposed to be up and running

⁶⁹ *Id.*

⁷⁰ *Id.*

⁷¹ *Id.*

⁷² The newest currently operating nuclear reactors in Finland were constructed in the 1970s. For the history of nuclear construction for the commercial production of electricity in Finland, see Magnus Hellström et al., *Project Governance and Path Creation in the Early Stages of Finnish Nuclear Power Projects*, 31 INT'L J. PROJECT MGMT. 712 (2013).

in 2009 but now seems delayed until 2018 if not later.⁷³ The main parties are locked in multibillion-euro arbitration proceedings. Because of the large amount of publicly available information, in particular two reports prepared by the Finnish *Säteilyturvakeskus* (Finnish Nuclear and Radiation Safety Authority (FNRSA)), there is relatively ample material available for general discussion of the OL3 value-chain structure and its problems.⁷⁴ I will not discuss the project and its regulatory setting in detail here, as I have done so elsewhere.⁷⁵ Instead, what follows is a summary intended to highlight value-chain governance aspects.

Nuclear power is often viewed with reservation. The effects of a nuclear accident may be devastating, as seen most recently in Fukushima.⁷⁶ Storing nuclear waste has its own difficulties. Nonetheless, society demands increasing amounts of carbon-free electricity, of which nuclear power is one source, leading to a balancing between the interests

⁷³. For a brief overview of recent developments regarding the dispute, delay, and damages claims in English, see, for example, Jussi Rosendahl, *Update 2-Finland's Nuclear Plant Start Delayed Again; Areva, TVO Trade Blame*, REUTERS, Sept. 1, 2014, available at <http://www.reuters.com/article/finland-nuclear-olkiluoto-idUSL5N0R20CV20140901>; Jussi Rosendahl, *Areva-Siemens Raises Claim to \$4.4 Billion over Finnish Reactor Delays*, REUTERS, Oct. 25, 2014, available at <http://www.reuters.com/article/us-nuclear-olkiluoto-idUSKCN0IE06A20141025>.

⁷⁴. The FNRSA reports are available in English translation. See SÄTEILYTURVAKESKUS (STUK), MANAGEMENT OF SAFETY REQUIREMENTS IN SUBCONTRACTING DURING THE OLKILUOTO 3 NUCLEAR POWER PLANT CONSTRUCTION PHASE (Jan. 2006), available at http://w3-x.net/rmi/rh/download/ar-6649-6882-4944_STUK_Bericht_Olkiluoto.pdf [hereinafter STUK 2006]; SÄTEILYTURVAKESKUS (STUK), INVESTIGATION OF THE PROCUREMENT AND SUPPLY OF THE EMERGENCY DIESEL GENERATORS (EDG) AND RELATED AUXILIARY SYSTEMS AND EQUIPMENT FOR THE OLKILUOTO 3 NUCLEAR POWER PLANT UNIT (May 2011), available at <https://www.stuk.fi/documents/88234/148256/OL3-EDG-investigation-report.pdf/15eb63a9-90ac-44c4-8953-e8f89b72b2d8> [hereinafter STUK 2011]. For English overviews of the reports, see Press Release, Säteilyturvakeskus (STUK), Insufficient Guidance of Subcontractors' Work in Olkiluoto 3 Nuclear Power Plant Project (Dec. 7, 2006), available at <https://www.stuk.fi/web/en/topics/nuclear-facility-projects/olkiluoto-3/news-concerning-olkiluoto-3/insufficient-guidance-of-subcontractors-work-in-olkiluoto-3-nuclear-power-plant-project>; Press Release, Säteilyturvakeskus (STUK), The Procurement of the Emergency Diesel Generators (EDG) for the Olkiluoto 3 Nuclear Power Plant Unit Has Been Investigated (June 30, 2011), available at <https://www.stuk.fi/web/en/topics/nuclear-facility-projects/olkiluoto-3/news-concerning-olkiluoto-3/the-procurement-of-the-emergency-diesel-generators-edg-for-the-olkiluoto-3-nuclear-power-plant-unit-has-been-investigated>.

⁷⁵. See Jaakko Salminen, *Sirpaloituneen sopimusrakenteen hallitseminen ja kaksiasianosaissuhde* [Control of Fragmented Contractual Structures and the Bounds of Privity], LAKIMIES 482, 495–503 (2015) (Fin.) (English translation on file with author).

⁷⁶. For general information on the Fukushima nuclear disaster, the search term “Fukushima” may be used in various news sites. See generally N.Y. TIMES, <http://www.nytimes.com> (last visited Feb. 1, 2016).

of safety and carbon-free electricity. Due to the major risks related to it, nuclear construction is tightly regulated. In Finland, a key regulatory actor is the FNRSA, which sets regulations governing the construction of nuclear power plants, monitors their implementation, and decides whether a specific approach complies with its regulatory requirements.⁷⁷

Importantly, all plans and works related to nuclear safety are subject to the approval of the FNRSA.⁷⁸ If plans change, new approval is needed.⁷⁹ Further, rather than being set in stone, the FNRSA's regulations are relatively open guidelines based on a requirement to use best available technology.⁸⁰ Thus it is difficult for an actor to know with certainty whether a given approach will be acceptable, especially if modifications need to be made. Finally, the FNRSA has an official relationship only with the licensee (the actor that has received a license to construct and operate a nuclear power plant). If some other actor, such as the main contractor, a subcontractor, or a supplier, has a question on how to interpret regulations, the licensee must forward the question to the FNRSA for a binding answer.⁸¹ If the question comes from a low-tier subcontractor, it might first have to pass through a long chain of contracts before even reaching the licensee.⁸²

Based on the FNRSA's reports, the licensee (TVO, a Finnish utilities company) outsourced almost all value-chain governance to the main contractor (a consortium between the French Areva and the German Siemens).⁸³ This includes responsibility for regulatory compliance of the power plant, relationships with subcontractors, and site management.⁸⁴ The licensee is in no direct contact with subcontractors, other than through its audits. The licensee receives information on project quality and progress from the main contractor and forwards this information to

⁷⁷. See STUK 2006, *supra* note 74, at 55.

⁷⁸. *Id.*

⁷⁹. See generally STUK 2011, *supra* note 74, for the issue of erroneously using mass-produced parts in emergency diesel generators.

⁸⁰. See Article 7a of the *ydinenergialaki* (Nuclear Energy Act) (Fin.) and in particular its *travaux préparatoires* (*HE 117/2007 vp laiksi ydinenergialain muuttamisesta*) (Fin.), according to which “ydinvoimalaitoksen käyttö lupaa tiettyinä ajankohtana käsiteltäessä vallinneet hyväksyttävyysskriteerit eivät välttämättä enää päde, kun laitoksen käytön hyväksyttävyyttä arvioidaan myöhempanä ajankohtana. Hyväksyttävyys on arvioitava käsittelyajankohtana vallitsevien edellytysten mukaan” [author's translation: acceptability criteria in force when evaluating a nuclear license might no longer be relevant when acceptability is re-evaluated at a later stage. Acceptability must be evaluated in light of requirements current at the time of re-evaluation].

⁸¹. See STUK 2011, *supra* note 74, at 34–35; STUK 2006, *supra* note 74, at 57.

⁸². See, e.g., STUK 2006, *supra* note 74, at 31.

⁸³. *Id.* at 40–42.

⁸⁴. See, e.g., *id.*

the FNRSA. The licensee has only limited possibilities for influencing the main contractor's choice of suppliers.⁸⁵ Like the licensee, the main contractor seems to have outsourced some of the governance of its subcontracting to its own suppliers.⁸⁶

The two FNRSA reports find a number of problems with this contract structure. The first report, from 2006, focuses on the dissemination of the FNRSA's safety requirements in three different scenarios: the pouring of the concrete base slab, the welding of the steel containment liner, and the acquisition of a polar crane and material hatch.⁸⁷ The report notes that central actors, such as the licensee and the main contractor, concentrated on their own internal processes instead of adopting a value-chain wide perspective.⁸⁸ Similarly, the FNRSA had focused on the licensee rather than the value chain as a whole, while at the same time concentrating more on the general safety of devices and structures than interorganizational problems.⁸⁹ These factors led to major deficiencies in transmitting the FNRSA's safety requirements between the different actors.⁹⁰

The second report, from 2011, focuses on differences in required methods of control and oversight when comparing a long multinational procurement chain to a single subcontractor or supplier in the context of acquiring emergency diesel-power generators.⁹¹ The central findings are similar to the earlier report. First, information flow fragmented *within* organizations. For example, an operation might be classified as either mechanical or electrical work, and experts in either might have little awareness of the whole.⁹² Second, information flow fragmented *between* organizations. Due to the contract structure, the main contractor had no official direct contact with the FNRSA, while the licensee could not communicate directly with the suppliers and subcontractors of the main contractor.⁹³ The licensee focused on monitoring the main contractor without being aware of the role of actors in the rest of the value chain.⁹⁴ At the same time, actors at the other end of the value chain might even be unaware that they were participating in the construction of a nuclear

⁸⁵. See STUK 2006, *supra* note 74, at 42.

⁸⁶. *Id.* at 29, 32.

⁸⁷. See *id.* at 63.

⁸⁸. *Id.* at 47–54.

⁸⁹. *Id.* at 55–57.

⁹⁰. See, e.g., *id.* at 31–35, in relation to the steel containment liner.

⁹¹. See STUK 2011, *supra* note 74, at 4.

⁹². *Id.* at 30–34.

⁹³. *Id.* at 34–35.

⁹⁴. *Id.* at 24.

power plant.⁹⁵ Finally, the FNRSA, licensee, and main contractor ended up having different views on the interpretation of safety requirements, for example, in relation to whether mass-produced parts could be used in certain situations.⁹⁶

Based on the FNRSA's reports, a number of observations can be made. First, unlike the governance structures of the Bangladesh Accord and the German automobile OEM, it is not the licensee but the FNRSA, a regulatory actor, that primarily sets the standards required from OL3 value-chain actors. Despite this, the licensee can be seen as the lead firm of the value chain. Unless all actors are aware of how to interpret and implement the FNRSA's requirements, the licensee cannot avoid having a role as a crucial information gateway between the FNRSA and the rest of the value chain. Thus the choices of the licensee in organizing the value-chain structure have an effect on all other actors.

Second, the role of the FNRSA's standards in OL3 is critical. All value-chain actors were required to operate under these standards. However, the FNRSA's standards were open and ambiguous, such that certainty on how they should be applied in a given situation may require consultation with the FNRSA. The main contractor or its suppliers and subcontractors could not always know beforehand to what extent the FNRSA would approve of a chosen approach. Further, the requirements of the FNRSA extend to every aspect of nuclear construction. Finally, any deviation or change in plans or procedures on the part of one actor could affect the rest of the value chain, in the worst case rendering the end product unusable and even in the best case requiring additional work from numerous actors in managing deviations and requesting the FNRSA to accept them.

Third and finally, despite these factors, the licensee aimed at a modular value-chain structure in which it would only have a limited monitoring role. Responsibility for implementing the safety requirements was left to the rest of the value chain. The problem here is that under the Finnish regulatory scheme a nuclear power plant is not a standardizable product. Due to the ensuing lack of shared standards a modular governance structure does not seem to be a realistic way of organizing value-chain governance in this context. Difficulties in implementing the FNRSA's standards should be acknowledged in value-chain governance, especially as the efficient dissemination of safety requirements requires cooperation between the FNRSA, the licensee, and all other actors. Efficient value-chain governance would have required a means for

⁹⁵ *Id.* at 21.

⁹⁶ *Id.* at 23–27.

effective communication and coordination between the different actors, and thus, in practice, a more relational value-chain governance structure.

The disputes over liability arising from OL3 seem far from settled.⁹⁷ Nonetheless, the OL3 scenario can provide an example of inadequate contract-boundary-spanning governance. While some level of contract-boundary-spanning governance is used, for example in the form of standards required from the whole value chain and the monitoring of compliance, the chosen governance mechanism is clearly inadequate for effectively coordinating the adoption of required standards. The question then arises whether the choice made by a private actor of inadequate governance can have legal consequences. This question has broad implications for other similar situations. For example, the Bangladesh Accord can be seen as a voluntary response to the catastrophic consequences of inadequate value-chain governance. In the next section, I examine possibilities for legal and other responses to inadequate value-chain governance.

D. Contract-Boundary-Spanning Governance and Legal Normativity

Contract-boundary-spanning governance mechanisms exist in diverse forms. I have illustrated some of this diversity through the case studies above. In the case of the Bangladesh Accord, governance was founded on a dedicated governance contract that connected various actors in the underlying chain of bilateral contracts. In the case of the German automobile OEM, governance was based partly on cascading certain requirements down a chain of bilateral contracts and partly on context-sensitive action that actors take on a case-by-case basis, and which can be directed to any given point in the chain of bilateral contracts.

With the third example, OL3, the focus is the issue of whether a lead firm has implemented adequate contract-boundary-spanning governance. In the OL3 example, the lead firm tried to utilize modular governance, but this resulted in the failure of the value chain in a context where standards could not be unambiguously defined, and cooperative innovation under a strict regulatory setting was instead required. The use of a relational contract-boundary-spanning governance mechanism, allowing more coordination and control in ensuring that the required

⁹⁷. Despite speculation in 2015 that there would be a “partial or intermediate award in the coming months,” it seems likely that the current ICC arbitration will drag on for longer, as no such award has surfaced as of January 2016. *See, e.g.,* Geert De Clercq, *Breakthrough in Areva-TVO Nuclear Dispute Seen This Year—Sources*, REUTERS (Apr. 1, 2015), available at <http://www.reuters.com/article/areva-finland-idUSL6N0WT4CI20150401>; Jussi Rosendahl, *Finland Says Has No Role in Areva-TVO Dispute*, REUTERS (Jan. 21, 2016), available at <http://www.reuters.com/article/areva-edf-finland-idUSL8N1551SP>.

standards were adequately defined and met, similar to the Bangladesh Accord or the German OEM example, might have helped alleviate the severe problems encountered by OL3.

To be sure, three examples do not constitute a large data set. Nonetheless, they provide some preliminary perspectives for the legal study of contract-boundary-spanning governance. Crucially, it seems that we are dealing with a form of control exerted by lead firms over the whole value chain, even those with whom they have no direct legal relationship. The form of governance depends primarily on the interests of the lead firm or, alternatively in some cases such as OL3, a regulatory actor. If lead firms or regulators, respectively, are interested in the functioning of the value chain as a whole, value-chain governance is more effective than if the rest of the actors are left on their own. While this is nothing new and echoes Locke's emphasis on the actions of lead firms and regulators, it provides a starting point for understanding contract-boundary-spanning governance mechanisms. Most importantly, it enables a discussion of whether a poor choice of governance might have legal consequences under existing normative structures.

To frame this discussion, I first discuss two "easy" alternatives for enforcing contract-boundary-spanning governance. I then turn to the third and more problematic alternative: legal liability for inadequate governance choices.

Under the first alternative, private actors are voluntarily interested in developing the governance of their value chain. One major challenge related to the voluntary adoption of contract-boundary-spanning governance mechanisms is a fear of blurring liability: if a lead firm establishes a governance mechanism, à la the Bangladesh Accord or the German OEM, that connects it directly to various actors along its production chain, the lead firm may expose itself to liability to more actors than would be the case under a chain structure with no contract-boundary-spanning governance mechanism.⁹⁸ Despite this, spectacular failures of value chains with inadequate governance mechanisms, such as the Rana Plaza catastrophe or the huge pecuniary claims arising out of the OL3 fiasco, may provide motivation for considering more efficient governance mechanisms. On the other hand, the apparent success of such mechanisms in other contexts, such as the German OEM example, should also provide motivation for their voluntary adoption.

Under the second alternative, a regulatory actor would have an interest in making the effective governance of a value chain a necessary precondition for the lead firm. For example, in the OL3 scenario, the

⁹⁸. See, e.g., Hensler and Blasi, *supra* note 3.

FNRSA's mandate might be broadened so that the FNRSA could require the use of appropriate value-chain governance mechanisms in nuclear construction.⁹⁹ Such an intervention in private actors' freedom of contract could be justifiable due to the safety interests related to nuclear construction. When a regulatory actor is strategically located, for example, in the jurisdiction where the end product is to be used, such interventions can have a major effect even on actors in other jurisdictions or on actors far removed from the lead firm in the contract structure. In other cases, such as in relation to working conditions of suppliers in foreign jurisdictions, regulatory intervention might be justifiable, for example, through the development of a general state duty to protect human rights.¹⁰⁰ This could then be used to require businesses operating under such a duty to use adequate contract-boundary-spanning governance mechanisms to ensure that their suppliers in other jurisdictions also comply with the relevant requirements.

However, both these alternatives are inadequate when a lead firm's or regulatory authority's interest is lacking. This is especially clear from the events preceding the Bangladesh Accord. While the Bangladesh Accord was a voluntary undertaking, it was implemented only in response to a major catastrophe-turned-media-uproar. Similarly, in the OL3 scenario, not only the lead firm but also the regulatory authority would arguably have had the power to require effective governance but did not do so.

Furthermore, it is probably impossible for any individual governance mechanism to explicitly take into account all the interests of involved actors *ex ante*. For example, the Bangladesh Accord covers one narrow issue, fire and building safety, and some related questions (for example, the effects that shutting down factories for repairs may have on employees). This leaves untouched a wide range of other issues that might be relevant from the perspective of how the lead firms should govern the value chain in relation to working conditions. Similarly, the regulator in OL3 extensively covered a range of security-related standards but did not anticipate that the lead firm would choose a method of governance that could harm the effective dissemination of those

⁹⁹ . One possible example is provided by the proposed U.K. energy sector contracts for difference model contract, providing actors with standardized contract terms for example in relation to dispute consolidation. See DEPT. OF ENERGY & CLIMATE CHANGE, FIT CONTRACT FOR DIFFERENCE: STANDARD TERMS AND CONDITIONS, 2014, ¶ 60 (U.K.), available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/267649/Generic_CfD_-_Terms_and_Conditions_518596495_171_.pdf.

¹⁰⁰ . On such duties, see, for example, Daniel Augenstein & David Kinley, *When Human Rights 'Responsibilities' Become 'Duties': The Extra-Territorial Obligations of States that Bind Corporations*, in HUMAN RIGHTS OBLIGATIONS OF BUSINESS: BEYOND THE CORPORATE RESPONSIBILITY TO RESPECT? 271–94 (Surya Deva & David Bilchitz eds., 2013).

standards. With regard to the German OEM, the general objective of reducing the value chain's cost-structure is not restricted to a single manner of implementation but requires instead a case-specific analysis of the best approach in a given situation. While still limited, such an open-ended approach in relation to implementation might be more effective than the predefined and limited effects of the Bangladesh Accord.

All this points to the limits of lead firms' and regulators' interests as drivers of effective governance. Thus, legal liability for inadequate governance may be desirable in order to guarantee that the interests of value-chain actors are taken into account even when the governance scheme undertaken by a lead firm is inadequate. The prospect of such liability poses a number of questions, beginning with its grounds. This will depend on the jurisdiction. If comparative fault is allowed in a particular jurisdiction, for example, inadequate governance by the lead firm might be seen as a factor contributing to damages caused by another actor's breach of contract, thus potentially limiting the latter's liability. Some other remedies might also prove relevant, such as finding a contract unenforceable due to unconscionability¹⁰¹ or the adjustment of an unfair contract under Nordic contract law.¹⁰² The existence of at least some level of contract-boundary-spanning governance could also result in a duty of care on the part of the lead firm to act so that its standards are effectively disseminated throughout the chain or so that its own actions do not negatively affect the implementation of the standards.¹⁰³ In all these

¹⁰¹ . For example, Ben-Shahar and White note that some of the American auto-OEM supply chain contracts that they studied would probably have been unenforceable. See Ben-Shahar & White, *supra* note 12, at 958.

¹⁰² . Denmark, Finland, Iceland, Norway, and Sweden share an almost identical contracts act, often referred to as the Nordic Contracts Act. Section 36 of Finland's Nordic Contracts Act allows, in principle at least, the adjustment of unfair contracts for a range of reasons. 36 § Laki varallisuusoikeudellisista oikeustoimista (1929:228) (Fin.), *translated in* § 36 Contracts Act (1929:228) (Fin.), <https://www.finlex.fi/fi/laki/kaannokset/1929/en19290228.pdf>. For brief English discussion on possible scenarios for adjusting unfair contracts, see Herman Bruserud, *Changed Circumstances*, in *THE NORDIC CONTRACTS ACT: ESSAYS IN CELEBRATION OF ITS ONE HUNDREDTH ANNIVERSARY* 59, 59–82 (Torgny Håstad ed., 2015); Johan Bärlund, *Protection of the Weaker Party in B2B Relations in Nordic Contract Law*, in *THE NORDIC CONTRACTS ACT: ESSAYS IN CELEBRATION OF ITS ONE HUNDREDTH ANNIVERSARY*, *supra* at 83, 83–106; Hilde Hauge, *Unfair Contract Terms in Nordic Contract Law*, in *THE NORDIC CONTRACTS ACT: ESSAYS IN CELEBRATION OF ITS ONE HUNDREDTH ANNIVERSARY*, *supra* at 157, 157–178; Jori Munukka, *The Contractual Duty of Loyalty: Good Faith in the Performance and Enforcement of Contracts*, in *THE NORDIC CONTRACTS ACT: ESSAYS IN CELEBRATION OF ITS ONE HUNDREDTH ANNIVERSARY*, *supra* at 203, 203–215.

¹⁰³ . This question has received considerable attention, for example, with regard to whether and under what conditions codes of conduct impose legal duties on their drafters in labor-rights-related cases. For forms of liability under tort, contract, and promissory

scenarios, it is extremely important to precisely distinguish the factual situation of the case at hand from other similar situations that typically do not give rise to liability.¹⁰⁴ Thus the typology proposed here for understanding contract-boundary-spanning governance may prove useful in developing these theories of liability.

Further questions are posed by the nature of the legal relationship between the different actors governed (or ungoverned) by a contract-boundary-spanning governance mechanism. The doctrine of privity of contracts typically narrows a value-chain actor's possibilities for bringing a claim to only those actors with whom it has a direct contractual relationship. Those suffering from inadequate governance, however, may be far removed from the lead firm in a chain of contracts. Traditionally in such situations, the dispute moves along the chain from one actor to another until it reaches the lead firm. For example, in the OL3 scenario, the main contractor tried to resolve the issue of multiple lawsuits by bringing a claim against the lead firm with whom it has a direct contractual relationship, while at the same time trying to settle claims from its own suppliers.¹⁰⁵

This kind of chain litigation has its own problems, including high costs as well as difficult questions of choice of law and proper venue (for example whether a forum at one end of the chain can effectively take into account factors related to a governance mechanism at the other end of the chain). Furthermore, conflicts of interests may limit the effectiveness of chain litigation if some actors are economically dependent on the lead firm or otherwise unable to cooperate (for example due to insolvency). A lead firm may also try to distance itself from its subcontractors or suppliers, diminishing the publicity effects of chain litigation when compared to a direct claim against a lead firm. Finally, in cases like the

estoppel in the United States, see Joe Phillips & Suk-Jun Lim, *Their Brothers' Keeper: Global Buyers and the Legal Duty to Protect Suppliers' Employees*, 61 RUTGERS L. REV. 333, 350–77 (2009). For tort law alternatives from a civil law perspective, see Cees van Dam, *Tort Law and Human Rights: Brothers in Arms on the Role of Tort Law in the Area of Business and Human Rights*, 2 J. EUR. TORT L. 221, 231–34 (2011). For a comparison of some forms of contract and tort liability between U.S., English, and Dutch law, see LOUISE VYTOPIL, CONTRACTUAL CONTROL IN THE SUPPLY CHAIN: ON CORPORATE SOCIAL RESPONSIBILITY, CODES OF CONDUCT, CONTRACTS AND (AVOIDING) LIABILITY 61–115 (2015).

¹⁰⁴. Phillips and Lim, van Dam, and Vytöpil stress the importance of distinguishing the factual situation of a case at hand for the applicability of the liability figures they discuss. See sources cited *supra* note 103.

¹⁰⁵. For anecdotal evidence from subcontractor interviews, see Aleksandra Kiskonen and Jaakko Salminen, *Loppuraportti: Ydinvoimalaitosprojekti ja sopimussuhteet (SOPU) - projekti* (Final Report of the Nuclear Construction and Contractual Relationships (SOPU) project) from 30.10.2013 (Fin.) (on file with the author).

Bangladesh Accord scenario, if it were not for the dedicated governance contract that establishes privity between the lead firms and the representatives of workers of Bangladeshi factories, it might be practically impossible for workers or their representatives to sue lead firms that are far removed not only in the chain of contracts but also geographically, economically, and juridically.¹⁰⁶ In the next section I examine in more detail the role of the doctrine of privity of contracts for contract-boundary-spanning governance mechanisms.

III. CONTRACT-BOUNDARY-SPANNING GOVERNANCE AND THE DOCTRINE OF PRIVACY

Contract-boundary-spanning governance mechanisms are used to supplement chains or networks of contracts. They may exist as independent agreements separate from the chain of contracts, as in the case of the Bangladesh Accord, or they may be built into individual contracts constituting the chain, as in the case of codes of conduct or other contractual requirements that cascade from one bilateral contract to the next. In either case, the governance mechanism should not be seen as merely a chain structure. Instead, it is a means for some actors in the chain to coordinate and control actors beyond their own contract boundaries. As the examples discussed above show, this control can be direct despite the ostensibly indirect legal relationship of actors far removed from one another in a chain of contracts.

In effect, contract-boundary-spanning governance mechanisms can be used to overcome some of the limits set by the privity of contracts in a chain or network of contracts. Under the privity of contracts doctrine, a contract creates rights and obligations that bind only the parties to it; these rights and obligations have no force beyond the contract boundary defined by privity. In some cases, however, contract-boundary-spanning governance mechanisms allow lead firms to control actors that are not party to the same contract and so not in privity. Arguably, direct control should entail the possibility of a direct legal relationship to prevent any possible abuse of such direct control. More generally, contract-boundary-spanning governance mechanisms are intertwined with their underlying chain or network of bilateral contracts. The relationship between the contract-boundary-spanning governance mechanism and the chain or network of contracts requires a reconceptualization of the legal relationships between actors in this context.

Two questions arise with particular force. First, when bilateral contractual relationships that form a chain or network of contracts are

¹⁰⁶ . For discussion of a number of these issues, see van Dam *supra* note 103, at 228–232.

supplemented by contract-boundary-spanning governance, what is the relationship between the two? Second, when an actor who does not have a direct contractual connection to the lead firm (for example, through a dedicated governance contract such as the Bangladesh Accord) is nonetheless affected by the lead firm's governance choices, what is the relationship between the two? These questions pose considerable challenges and are largely beyond the scope of this paper. I will, however, provide some outlines for resolving them.

First, Teubner's idea of selective attribution can be used to clarify the issue of the relationship between a contract-boundary-spanning governance mechanism and the bilateral contracts of the chain or network.¹⁰⁷ Selective attribution was proposed by Teubner in the context of networked forms of economic cooperation, such as franchising, just-in-time production, and virtual enterprises. Teubner recognizes that networked forms of economic cooperation constitute multiple layers of organization.¹⁰⁸ On the one hand, network actors' relationships are grounded in the logic of the bilateral contracts that are used to create the founding relationships between network members. Disputes relating to these can be resolved under traditional conceptions of privity in relation to the individual contracts. On the other hand, network members have subscribed their individual contracts to the logic of the network as a whole. Disputes related to the level of the network operating logic should be resolved in relation to the mechanisms the parties have decided to use in incorporating the network logic. Some disputes might involve both layers of organization.

The Bangladesh Accord can be used to concretize the idea of selective attribution. The Bangladesh Accord is used to create an additional layer of contract that directly connects actors who, when examined from the level of the underlying chain of contracts, would not normally be connected to the same bilateral contract. These two layers are in a symbiosis with one another. If problems related to the whole exist in a particular bilateral contractual relationship, the layer that connects all the multiple actors and contracts helps find a solution. On the other hand, the connecting layer would be meaningless without the underlying contracts. Both layers complement one another. In cases of disputes, however, the layers may intersect and intertwine in ways that allow a dispute to be attributed to one or more bilateral contracts, the governance

¹⁰⁷. See GUNTHER TEUBNER, NETZWERK ALS VERTRAGSVERBUND: VIRTUELLE UNTERNEHMEN, FRANCHISING, JUST-IN-TIME IN SOZIALWISSENSCHAFTLICHER UND JURISTISCHER SICHT 137 (2004), *translated in* GUNTHER TEUBNER & HUGH COLLINS, NETWORKS AS CONNECTED CONTRACTS 168 (Hugh Collins ed., Michelle Everson trans., 2011).

¹⁰⁸. *Id.*

mechanism, or both. Whether and how this attribution can be done depends on the circumstances of a particular scenario and applicable legal rules.

Having two layers of dedicated contracts, as under the Bangladesh Accord example, makes the legal characterization of the different layers relatively simple: both the layer of bilateral contracts and the layer of the contract-boundary-spanning governance mechanism create contractual relationships between their respective parties. While this may not make it easy to sort out the conflicts related to overlapping layers of contracts, it would help in the sense that the relationships related to either of the layers could be characterized as contractual. Problems may arise where not all value-chain members are party to the governance contract. This seems to be the case under the Bangladesh Accord. Suppose that a company owns a garment factory. The company is not party to a governance mechanism like the Bangladesh Accord but is located beneath the lead firm in a contract chain, which is a party to such a mechanism. The company ends up in a dispute with its workers. The union that represents the workers is party to the same governance mechanism as the lead firm. The dispute revolves around the effects of the governance mechanism on workers. Would the company have standing against other actors that are party to the governance mechanism, such as the lead firm, and on the other hand, could the union and the lead firm enforce the terms of the governance mechanism against the company, who is not a party to it?

This leads to the second issue. How should the legal relationship between actors be characterized if the contract-boundary-spanning governance mechanism does not take the form of a dedicated governance contract à la the Bangladesh Accord? In particular, what is the legal relationship of actors that are not party to the same bilateral contract but nonetheless become involved in a dispute related to the governance mechanism? Depending on jurisdiction and the circumstances of the case, the legal relationship of the involved actors might fit numerous different categorizations. These could include implied contracts, tortious relationships, contracts to the benefit of third parties, promissory estoppel, or extracontractual duties of good faith that do not comfortably fit existing classifications of contract or tort.¹⁰⁹ One alternative is also simply to deny the existence of a legally relevant relationship.

As one possible line of reasoning, I refer again to Teubner's work on the legal categorization of networked forms of cooperation under German

¹⁰⁹. See, for example, Phillips and Lim, *supra* note 103, for examples discussing promissory estoppel, tortious relationships, and contracts to benefit third-parties. *See also*

law. Unlike the dedicated governance contract in the case of the Bangladesh Accord, Teubner does not conceptualize the network-level operating logic as necessarily an express or even implied contract.¹¹⁰ Instead, he argues that in networks of contracts duties of good faith arise that may extend beyond the boundaries of an actor's bilateral contracts to other network members.¹¹¹ For Teubner, the general requirements for such duties of good faith are, first, that the constituent contracts refer to one another (not that each contract has to reference all the others but that references in the different contracts as a whole cover the whole network); second, that the constituent contracts refer to the existence of a shared network objective; and third, that there exist contract-boundary-spanning factual cooperation between network members.¹¹²

While it depends on the exact content of the contracts and the nature of the contract-boundary-spanning governance mechanism, the German OEM example discussed above would seem to fulfill Teubner's requirements. The "shared objective" would be cost-structure optimization. In addition to references in contracts, the "value-chain flow chart" that the lead firm gains provides a detailed reference of relevant actors. Finally, in practice, there is contract-boundary-spanning cooperation in the form of sharing cost information between actors that are not party to the same bilateral contract. Teubner's model might further be extrapolated to other cases, such as the different approaches described by Locke.¹¹³ An ethical code of conduct might similarly be seen as a shared objective. All contracts incorporating the code of conduct explicitly refer to it, creating a system of references. Finally, in Locke's examples, the level of factual cooperation would range from compliance monitoring by a lead firm, as under traditional compliance governance, to more extensive cooperation, as under capability building. This is also where the typology presented by Gereffi, Humphrey, and Sturgeon can clarify Teubner's framework by helping distinguish different factual constellations in a way that enables meaningful discussion over exactly what kind of factual cooperation is required.

Within the limits of this paper I cannot go into the details of Teubner's approach. Broadly speaking, however, it is squarely grounded in German legal scholarship. The practical relevance of Teubner's approach (or any

VYTOPIL, *supra* note 103; TEUBNER, *supra* note 107, at 190–93, *translated in* TEUBNER & COLLINS, *supra* note 107, at 213–18 (describing a number of possible approaches under German and English law).

¹¹⁰. See TEUBNER, *supra* note 107, at 181–211, *translated in* TEUBNER & COLLINS, *supra* note 107, at 207–34.

¹¹¹. *Id.*

¹¹². See TEUBNER, *supra* note 107, at 210–11, *translated in* TEUBNER & COLLINS, *supra* note 107, at 233–34.

¹¹³. These were referred to in Section I.C *supra*.

other approach similarly grounded in a specific legal system) and whether and how it might be translated into other legal systems is uncertain. However, the three factual preconditions identified by Teubner for networked contracts seem to capture crucial aspects of contract-boundary-spanning governance. When coupled with the typology provided by Gereffi, Humphrey, and Sturgeon, they might prove useful as a descriptive and analytical tool for discussing the preconditions for any legal effects that might be attributed to contract-boundary-spanning governance mechanisms, whatever the legal system. This would provide a framework for discussing contract-boundary-spanning governance in a legal context and make it easier for future research to concentrate on the different legal forms and institutions that, in different jurisdictions, might be relevant for understanding and developing the law of contract-boundary-spanning governance. In particular, by moving beyond the legal forms of individual jurisdictions, it would help create a transnational legal discourse on what kind of factual cooperation would be required for legal relationships that overcome the doctrine of privity of contracts.

CONCLUSION: COLLECTIVE ENTITIES OF CONTRACTS AS NOVEL REGULATORY SUBJECTIVITIES

In answer to the question of what legal effect should be given to contract-boundary-spanning governance mechanisms, I argue that some measure of legal normativity requiring appropriate contract-boundary-spanning governance for particular situations already exists. Take the example of the Bangladesh Accord. Concern over brand image after the Rana Plaza disaster was certainly the major reason for many Western companies to commit to the Bangladesh Accord.¹¹⁴ Nonetheless, at least some of the legal systems in which companies signatory to the Bangladesh Accord operate have established fairness in contracting as a key consideration in their laws of obligations. For example, the proportionality of contractual relationships is an integral component of contract law in the Nordic countries, where major Bangladesh Accord signatories such as H&M are based.¹¹⁵ Similarly, the requirement of good faith in contractual relationships under most legal systems where Western signatories of the Bangladesh Accord are domiciled embodies

¹¹⁴. See Section II.A *supra*.

¹¹⁵. See sources cited *supra* note 102.

varying levels of mutuality that requires actors to take into account the interests of their contractual counterparts.¹¹⁶

While the practical effects of such general principles as proportionality or good faith in their respective legal systems are diverse, difficult to systematize, and primarily intended for bilateral relationships, they help set the stage for developments in contract-boundary-spanning governance mechanisms.¹¹⁷ In particular, while a global context obfuscates matters of choice of law, venue, and enforceability in complex contractual structures, a lead firm based in a country with a system of law that requires proportionality or good faith in contractual relationships cannot fully insulate itself from legal questions arising out of the effects that its own contrary practices may have on its production chain. From this perspective, and assuming a critical stance, a mechanism such as the Bangladesh Accord might be construed in part as a protective measure aimed at establishing limits to liability from claims related to inadequate governance of a lead firm vis-à-vis its production chain. For example, the Bangladesh Accord guarantees the wages of a Bangladeshi worker for a six-month grace period. Conceivably, a lead firm's actions under the accord could result in a longer-term loss of a worker's livelihood, which might prove devastating from a Bangladeshi worker's perspective. Arguably, the Bangladesh Accord limits claims for such damages.

This hypothesis should not be understood to diminish any beneficial effects of various private governance measures, such as the Bangladesh Accord. Instead, it is a call for more research toward understanding how existing systems of laws of obligations in countries in which lead firms are based cope with and shape globally positioned collective entities of contracts that are governed by one or more specific actors. Law's relationship to these new regulatory subjectivities, collective entities of contracts governed by one or more actors in an uncertain legal framework, needs to be uncovered to ensure the more effective regulation of globally-fragmented production. The preliminary typology provided in this paper helps achieve the objective of mapping legal effects to specific forms of contract-boundary-spanning governance.

¹¹⁶. For a general discussion of some aspects of good faith in Western European jurisdictions, see Simon Whittaker & Reinhard Zimmermann, *Good Faith in European Contract Law: Surveying the Legal Landscape*, in GOOD FAITH IN EUROPEAN CONTRACT LAW 7, 7–62 (Reinhard Zimmermann & Simon Whittaker eds., 2000), and for a discussion with reference to the United States, see Robert S. Summers, *The Conceptualisation of Good Faith in American Contract Law: A General Account*, in GOOD FAITH IN EUROPEAN CONTRACT LAW 118, 118–41.

¹¹⁷. Teubner's monograph, *supra* note 107, provides one such approach that is ultimately based on two German judgments concerning the contract-boundary-spanning effects of contracts in a business-to-business context.