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# COMMUNICATING MORAL LEGITIMACY IN CONTROVERSIAL INDUSTRIES:

# THE TRADE IN HUMAN TISSUE

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**Abstract**: It is recognized that globally active companies are involved in the discursive construction of the meaning of moral legitimacy. Establishing normative conformance is problematic given the plurality of norms and values worldwide, and is particularly difficult for companies operating in morally controversial industries. In this paper we investigate how organizations publicly legitimize the trade of human tissue for private profit when this practice runs counter to deep-seated and widespread moral beliefs. To do so, we use inductive, qualitative methods to analyze the website discourse of three types of organizations that trade in human tissue and are associated with different degrees of moral controversy with respect to tissue procurement and use. Our analysis reveals an object-oriented approach to moral legitimizing centered on the human tissue as a morally disputed good. We find that the website discourse translates human tissue into technology, constructs normative meaning around a dominant instrumental value associated with human-tissue-as-technology, and reproduces and stabilizes this meaning by six discursive mechanisms that amplify and anchor it. Moreover, the use of amplifying and anchoring discourse was greater in organizations associated with greater controversy. The results are consistent with an object-oriented sociality.

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# COMMUNICATING MORAL LEGITIMACY IN CONTROVERSIAL INDUSTRIES: THE TRADE IN HUMAN TISSUE

Establishing moral legitimacy is an imperative for all companies, and one which takes on complexity under globalization (Palazzo and Scherer, 2006; Scherer and Palazzo, 2007). Given the plurality of norms, values, interests and standards that exists at the global level, as well as the dearth of global governance mechanisms, normative conformance is problematic. As a result, globally active companies are involved in the discursive construction of the meaning of moral legitimacy (Scherer and Palazzo, 2007, 2011). This task is particularly challenging for companies operating in legal but morally controversial industries, such as the arms industry, "sinful" industries like gambling and tobacco, and those involving social taboos, like as the trade in human tissue examined in this research (e.g. Byrne, 2014; Cai et al., 2012). Following Cai et al. (2012) we draw on Wilson and West to delineate controversial industries: "those characterized by "products, services or concepts that for reasons of delicacy, decency, morality, or even fear tend to elicit reactions of distaste, disgust, offense or outrage when mentioned or when openly presented" (Wilson and West, 1981, p. 92). In this paper we are focusing on a context that is *morally* controversial: the trade in human tissue.

Past research shows that organizations in morally controversial industries attempt to evade disapproval by reassuring audiences that they conform to existing shared norms and values (Scott, 2008; Suchman, 1995). Indeed, research in this tradition equates moral legitimacy with normative conformance. One way that organizations demonstrate this conformance is by publicly communicating their engagement in corporate social responsibility activities (Cai et al., 2012; Tata and Prasad, 2015). When moral controversy is associated with the type of good traded, past research also shows that establishing moral legitimacy can involve concealing an organization’s activities from audiences who may disapprove of them and aligning publicly with other, approved of values, to challenge disapproval (e.g. Galvin et al, 2005; Hudson and Okhuysen, 2009). However, establishing conformance with, and challenges to, social values is problematic when audience values are heterogeneous as they are for companies operating internationally (see Ashforth and Gibbs, 1990). Moreover, when a market is online and consists of many rivals, there are likely to be competitive benefits for globally active companies in being visible rather than concealed. Therefore, while existing theory on how organizations in morally controversial industries legitimize their activities provides a valuable starting point, it is important that this theory be extended to provide a better understanding of how moral legitimacy is communicated by organizations selling controversial products and services in online global markets characterized by large numbers of small players seeking attention.

The purpose of this paper is to provide an enhanced understanding by addressing two research questions: (1) How do organizations discursively legitimize their trade in controversial products and services? (2) What is the variability in legitimizing discourse across organizations facing different degrees of controversy? Given the paucity of theory associated with these research questions, we use inductive, qualitative methods to address them (see Edmondson & McManus, 2007) and analyze the website discourse of three types of organizations that trade in human tissue and that face different levels of controversy associated with their activities. Like Utgård (forthcoming), we study website discourse because websites are an instrumental, publicly accessible communication mechanism (Seele and Lock, 2015); a necessary face of organizations that operate in online global markets. Further, their content can be compared and contrasted.

We chose to study organizations that trade in human tissue because there are controversial and heterogeneous values associated with this activity. On the one hand, the knowledge gained from human tissue indisputably advance science and alleviate human suffering. The significant volume of public and private funds invested in bioscience is clear evidence of societal support for these values. On the other hand, however, there are moral concerns about “the global expansion of a human body shop” (Sharp, 2000, p. 297), involving the objectification of the human body, its commoditization, and the exploitation of tissue donors. The fragmentation of a human body into ever finer pieces runs counter to fundamental moral principles such as respect for bodily integrity, ownership of one's body and respect for the dead (Kirby, 2012). Traditional medical ethics is at odds with the pursuit of profit (Poitras and Meredith, 2009). Moreover, surveys repeatedly show that people believe it to be unjust and unfair for private companies to reap profits from donated tissue, even for medical research, not to mention for more “frivolous” uses such as cosmetic surgery and products (e.g. Steinsbekk et al., 2013). Yet the profit potential is high when a single body can spin off cash flows of between $80,000 and $200,000 for the various players involved in recovering, processing and distributing tissue (International Consortium of Investigative Journalists, 2012), and once human tissue has been processed, it can be bought and sold freely.

Further, although the trade in human tissue is governed by bioethical frameworks and a web of elaborate regulative structures (e.g. Tassé, 2011), they do not resolve the co-existence of heterogeneous values internationally. The European approach to safeguarding morality through institutional frameworks and regulations contrasts with the North American model favoring individual responsibility and a case-based approach (see van Liedekerke and Dubbink, 2008). Even within Europe there are large differences in rules and practices across jurisdictions (van Veen et al., 2006; Zika et al., 2010). Thus, the delineation of what is morally acceptable is locally defined and partial, while the trade is global.

Our research contributes to an understanding of how organizations operate in markets that are internationally controversial. Our analysis reveals an object-oriented approach to legitimizing in that the website discourse (a) translates the morally disputed object (human tissue) into a less controversial good (technology); (b) constructs normative meaning around a dominant instrumental value associated with human-tissue-as-technology; and (c) reproduces and stabilizes this meaning by six discursive mechanisms that amplify and anchor it. Further, the use of amplifying and anchoring discourse was greater for organization types associated with more controversy.

## Theoretical Background

### *The trade in human tissue as controversial*

There are long-standing taboos (Scheper-Hughes, 2000) and repugnancy or a "yuck factor" (Roth, 2007; Steinsbekk et al., 2013) associated with the trade of human tissue. Even so, human tissue has long been associated with commercial value – in the eighteenth century, material quarried from corpses was sold to buyers such as dentists, wigmakers, and medical researchers (Hogle, 1999; Richardson, 1996) – and today the demand for human tissue continues to outstrip supply for several reasons. Bioengineering advances create new clinical applications where human tissue provides medical and cosmetic benefits, the sequencing of the human genome has facilitated a shift towards more personalized drug therapies, which require large epidemiological studies and tissue samples from well-characterized patient cohorts, and the development of pharmaceutical and cosmetic products relies on human tissue testing. Global demand for human tissue and tissue-related services was $700 million in 2009 and grows by 20-30% annually (Vaught et al., 2011). A $1 billion annual trade in human tissues is turned into clinical end products; for example, bone is used for orthopedic and dental applications, and skin is used to protect burn victims from bacterial infections and for cosmetic surgery (Kirby, 2012). The industry is fragmented: it is dominated by small firms and no single company holds more than a 3% share of the global market (Vaught et al., 2011).

The trade in human tissue is controversial because the fundamental moral issues concern activities that are inherently controversial: procuring tissue and using tissue (Tassé, 2011). Procuring human tissue is controversial because the meaning of "consent" is inherently ambiguous, even though considerable effort has been invested in developing systems to address key legal and ethical concerns. The regulatory regime lacks a common international legal framework regarding consent from living or dead donors (van Veen et al., 2006), reflecting the moral pluralism that exists at the global level. Research increasingly involves large international collaborations that pool samples, and tissue can be shipped from countries where explicit consent is not required for use in countries where consent is required. Moreover, compliance with donor regulations is uneven because it is largely delegated to local research ethics committees or institutional review boards (Zika et al., 2010). The industry value chain involves a large and difficult-to-estimate global network of players, involving research labs, hospitals, morgues, universities and commercial entities, and it is often difficult to know even from what country a particular tissue sample is sourced (International Consortium of Investigative Journalists, 2012).

Using human tissue is controversial because the commoditization of the human body – especially for profit – is controversial. Human beings are transformed into commoditized objects, reducing them to a set of parts that can be "frozen, banked, placed in libraries or repositories, marketed, patented, bought and sold" (Andrews and Nelkin, 1998, p. 54). Even though it is not legal to pay directly for body parts, it is legal to pay intermediaries for their processing, storage and shipping (Anteby, 2010), and there are considerable profits to be made, in which the donor does not share. There is also moral pluralism with respect to the use of tissues, with widely varying standards and regulations related to privacy protection, sample storage and transfer, intellectual property rights and feedback to sample providers (Zika et al., 2010).

Also contributing to controversy associated with the trade in human tissue is the fact that the general public (the potential donor pool) holds strong attitudes about acceptable practices, but trusts (often erroneously) that they are followed (e.g. Zika et al., 2010; Hoeyer, 2008; Human Tissue Authority, 2007). For example, a recent European study of more than 30,000 people found that while only 34% of respondents had heard of the organized collection of tissue samples from patients (vs. 84% who had heard of genetically modified food), more than 90% of them expressed an opinion on the form of consent that should be used; moreover, two-thirds of respondents thought researchers should seek specific consent (for every new piece of research) rather than broad consent (only once), a practice that is rarely followed (Zika et al., 2010). Further, although surveys show that people believe it to be unfair for private companies to reap *unjust* profits from donated tissue (Steinsbekk et al., 2013), what is considered “unjust” varies. While the Council of Europe recommends that “biological materials should not, as such, give rise to financial gain” (quoted in Steinsbekk et al., 2013, p. 151), the reality is that private companies are heavily involved procuring human tissue and expected to play a greater role in the future (Somiari and Somiari, 2015), and once tissue has been collected, there are no constraints on its trade. Moral pluralism is also manifested in discussions associated with the growing commercial uses of tissue (Steinsbekk et al., 2013).

### *Evading moral disapproval*

There are two streams in past research on the evasion of disapproval. The first focuses on how organizations defend challenges to legitimacy after revelations of discrediting actions (see Reuber and Fischer, 2009), such as the use of sweatshops (Lamin and Zaheer, 2012) or using organs from executed prisoners in clinical trials (Schrempf-Stirling, 2014). The second stream, and the one we draw on here, focuses on how organizations in morally controversial industries evade disapproval on an ongoing basis.

Evading disapproval in this context involves shaping the frames of public audiences. Frames are “schemata of interpretation” (Goffman, 1974: 21) through which actors see the world. Past research has illustrated “the purposeful efforts that skilled actors take to shape the frames of others” (Kaplan, 2008: 731) with respect to contested social change (e.g. Benford & Snow, 2000) and change within organizations (e.g. Mantere, Schildt & Sillince, 2012). However, scholars are also examining the ongoing construction of meaning between organizations and audiences (e.g. Glynn & Navis, 2013), which is our focus.

Organization scholars have examined the ongoing evasion of disapproval through two related theoretical perspectives, one focusing on organizational legitimation and the other on organizational stigmatization. Suchman defines moral legitimacy as “a positive normative evaluation of the organization and its activities” (1995, p. 579). This theoretical construct is akin to the construct of core-stigma, which results in an organization being judged as tainted because a core attribute is viewed as unacceptable (Hudson, 2008). While there are differences between core-stigma and perceptions of illegitimacy (Devers et al., 2009; Hudson, 2008), both result from an incongruence between the values among market actors and their audiences that leads to negative social evaluations with a moral basis (Hudson, 2008).

Research shows that organizations can evade disapproval of activities through challenging and hiding tactics. Challenging tactics introduce competing values; for example, arguing that gambling is a beneficial activity because it results in charitable donations (e.g. Galvin, Ventresca & Hudson, 2005), while hiding tactics conceal an organization's existence or activities from audiences who will disapprove (e.g. Hudson, 2008; Hudson and Okhuysen, 2009). In morally controversial industries, the usefulness of such tactics is questionable. Open challenges can backfire, by drawing hostile attention to the morally unacceptable aspect of an activity and/or skepticism of attempts to legitimize it (Ashforth and Gibbs, 1990; Suchman, 1995). This concern is salient in the market for human tissue because market actors benefit from the general public's low awareness of industry practices. Further, hiding organizational activities can be disadvantageous if these tactics also hide the organization. While discrete signage may conceal morally questionable organizations (Hudson and Okhuysen, 2009), many organizations, including those trading human tissues, need to be globally visible and provide a clear value proposition to the market while avoiding censure. Thus, although this body of literature sensitized us to the need to pay attention to the occurrence of challenging and hiding tactics when analyzing organizational discourse, we were open to the possibility of detecting additional legitimizing tactics.

## Research Context, Design and Methods

We used an inductive research approach, drawing on qualitative data to develop new theoretical insights on how organizations in controversial industries discursively construct moral legitimacy. Such an approach is appropriate for two reasons. First, as has been discussed there are limits to the extent we can draw on findings on legitimizing tactics from the broader literature and so an inductive approach "fits" (see Edmondson and McManus, 2007). Second, such an approach allows us to capture discursive complexity and nuances that would not be possible to study with quantitative data.

Like Utgård (forthcoming), we chose to study the discourse embedded on organizational websites. Websites have two properties that are essential in addressing the research questions. The first property is that websites represent an “authoritative text” of the “official” firm (see Kuhn, 2008, p. 1236) that is publicly accessible. Websites are intended to “introduce the ... organization to the world and to facilitate further contact” (Crowston & Williams, 2000, p. 208). They are an instrumental, publicly accessible communication mechanism (Seele and Lock, 2015); a necessary face of organizations that operate in online global markets. As such, they are an important and relevant site to reveal how organizations publicly legitimize their activities to a pluralist world. The second property is that the discursive content on the websites of different organizations can be compared and contrasted (Utgård, forthcoming). Websites constitute a communication genre (Yates & Orlikowski, 1992), characterized by a particular purpose and form, with “rules” that are socially constructed, widely recognizable, and yet customizable by individual actors. They normally include elements such as navigation and hypertext (Muller, 2011), but vary in terms of aesthetics, structure, materiality and discursive content (Pablo & Hardy, 2009).

### ***Research context***

The trade in human tissue is an ideal context in which to investigate how organizations operating in controversial industries legitimize their activities because there is variability in the extent of controversy around a shared, common good. It was desirable to focus on one type of good because the traded good itself influences market morality (Almeling, 2007; Anteby, 2010). Specifically, we focused on the legal trade in what the U.S. Food and Drug Administration

(FDA) defines as “human cells, tissue, and cellular and tissue-based products” (HCT/Ps), which excludes vascularized human organs, such as kidneys, liver, hearts and lungs (U.S. Food and Drug Administration, 2013). We gained knowledge about this trade from diverse sources including historical accounts (e.g. Hogle, 1999; Richardson, 1996); policy reports (e.g. Vaught et al., 2011; Zika et al., 2010); academic research from perspectives in science and medicine (e.g. Karimi-Busheri, 2015; Riegman & van Veen, 2011; van Veen et al., 2006), bioethics (e.g. Scott et al., 2012; Steinsbekk et al., 2013; Tassé, 2011) and social science (e.g. Scheper-Hughes, 2000; Sharp, 2000; Siminoff et al., 2010); media articles (e.g. International Consortium of Investigative Journalists, 2012); and attendance at an international biobanking conference (the 2012 International Biobanking Summit).

Variability across organizations with respect to controversial activities associated with the trade in human tissues stems from whether an organization is non-profit (lower controversy) or for-profit (higher controversy), and from differences across organizational types, in terms of their procurement and use of human tissue. We focus on three types of organizations: Bankers, Producers and Traders. We assert that *Bankers* have the lowest controversy associated with their activities. Bankers store human tissue for depositors, such as police forces (for crime evidence), hospitals (for transplants) and R&D organizations (for use in research). Since depositors are both suppliers and buyers, Bankers are a step removed from controversies associated with tissue procurement and use. We view *Producers* as being associated with more controversy than Bankers. Producers are organizations that make tissue-based products intended for implantation in a human body (e.g. bone allografts). They source tissue from dead donors, and while there is always some controversy associated with consent, there is less controversy than when tissue is sourced from living donors. Their tissue-based products are intended to repair another human body, a use which most people consider morally acceptable (Siminoff et al., 2010), although some members of the public disapprove of profiteering from this activity.  Finally, we contend that *Traders*, organizations that procure and sell human tissue, have the highest degree of controversy associated with their activities. There are few constraints on how Traders can legally source tissue, as long as the process is approved by local ethics committees (for example, hospitals approving the post-surgical harvesting of tissue), and so the meaning of consent varies widely.  Further, Traders freely sell tissue to buyers that members of the public can disapprove of, such as for-profit firms in general, and cosmetics-related organizations in particular (see Siminoff et al., 2010).

### *Sample*

We used an inductive, multiple-case research design to permit a “replication logic” where individual cases serve as replications, contrasts and extensions to the emerging theory (Eisenhardt & Graebner, 2007).  We started by collecting and analyzing data from Traders, and then sampled theoretically (Corbin & Strauss, 2008).  We found differences in the discourse used by for-profit and non-profit Traders; for example, for-profit Traders used deputizing, a discursive mechanism described in the Findings section, while non-profit Traders did not.  We attributed these differences to the differences in moral disapproval that for-profits and non-profits face in trading human tissue (see Anteby, 2010), and so we expanded the sample to include a greater range of moral controversy, adding Producers and Bankers.   All of the organizations were selected randomly within a type from online lists of organizations offering products and services based on human tissue.  We stopped adding organizations to the sample when we had reached a point of theoretical saturation (Glaser & Strauss, 2011, p. 61) in that no new legitimizing mechanisms emerged from data analysis.

Our final sample consists of ten organizations for study. We labeled them Trader1, Trader2, Trader3, Trader4, TraderNP, Producer1, Producer2, ProducerNP, Banker1 and Banker2, where "NP" designates a non-profit organization. The organizations are described in Table 1. It should be noted that although we were unable to find age and size data on each of the organizations in the sample, we know that they represent a considerable range of age and size, with age ranging at least from five years to 50 years, and size ranging at least from eight people in the entire organization to more than 700 people, and we did not detect any discursive patterns related to these differences.

*** Insert Table 1 about here ***

### *Data and data analysis*

Our empirical material consists of all pages of the websites of the ten organizations in our sample. We used textual analysis to investigate the data because it provides an understanding of how meaning is created in and by a text, and how the meanings of individual elements of text are inter-related (Culler, 2001). Thus, it is well-suited to our overall research objective of uncovering how meaning that legitimizes morally controversial activities is constructed. Although textual analysis can be based on presuppositions from prior texts, here we focus on intertextual meaning within a text (Culler, 2001, p. 105-112).

The analysis consisted of four steps, involving progression from a within-case analysis to an across-case analysis (see Eisenhardt & Graebner, 2007), and from analysis of individual text segments of a website to an intertextual analysis of the website in its entirety. As is common in inductive research, there was continual, iterative cycling between pre-existing theory, the data and the emerging theory.

We started by creating textual tables of the data (see Suddaby & Greenwood, 2005).

There was one textual table for each organizational website, with one row consisting of a distinct text segment. Rather than deciding a priori which text to include, we included all the text because we wanted to be able to make comparisons across organizations in terms of what was included and excluded, given the prevalence of hiding tactics in prior research on the evasion of disapproval. A text segment represented a key idea, so it normally consisted of a paragraph of text. There were exceptions, however, where one idea was expressed over several paragraphs; for example, the question and answer for one FAQ item or a press release. In these cases, the entire item was defined as a text segment. Through this process we identified 1,282 text segments across the ten websites, as shown in Table 1. In addition, websites have non-word textual entities that don't exist in other genres that need to be captured in order to understand the meaning of the complete text. We therefore collected data on what non-word features were included on each website, such as hyperlinks to other organizations (e.g. certification bodies and media articles), online gadgets (e.g. online shopping carts and search mechanisms), and the loading of documents (e.g. PDF files of publications and licenses).

Once the textual tables were built, we followed an inductive approach to analyze their content at the text segment level, systematically coding each text segment, using the constant comparison method (Corbin & Strauss, 2008). We started with a set of codes based on past research on legitimizing discourse and the evasion of disapproval. We successively coded each organization separately, meeting afterwards to compare codes. Through discussion, we reached agreement on the codes assigned and the adjustments that needed to be made to the set of codes before the next organization was analyzed. Through this analysis, we inferred six distinct discursive mechanisms related to discussions of the procurement and use of human tissue: commoditizing, fear-mongering, deputizing, scaling, corroborating and affiliating. Table 2 summarizes how we defined these mechanisms and provides an illustrative quotation for each. They are described further in the Findings section.

*** Insert Table 2 about here ***

The third step of analysis was an intertextual within-case analysis of the website text to analyze how these mechanisms were inter-related to create meaning. An intertextual analysis is predicated on the belief that a text is a discursive space that is organized to create meaning, and to understand this meaning one must understand the relationship between different elements of text (Culler, 2001). In order to identity these relationships, we followed the advice of Strauss (2003, p. 184) and constructed diagrams as integrating devices, producing a diagram for each website showing how the relationships between human tissue, its procurement and its use were embedded in the website text. These diagrams revealed a key theoretical insight detailed in the Findings section: the website discourse translated human tissue into technology, and the intertextual operator (Culler, 2001), or the "glue" underlying and integrating elements of text on each website – and thereby conferring normative meaning – was a single dominant value associated with human-tissue-as-technology. Further, this value was stabilized and reproduced by the six discursive mechanisms identified previously: three amplifying the value and three anchoring it, as illustrated by the clustering in Table 2.

Finally, in the fourth step of analysis, we looked for patterns in the intertextual analysis across the cases. This comparative analysis revealed that normative meaning on all the websites was constructed through (a) the translation of human tissue to technology; (b) the integrative role of a dominant instrumental value; and (c) discursive mechanisms stabilizing and reproducing this value. However, we found substantial differences across the three types of organizations – concomitant with substantial similarities within each type of organization – in terms of what the underlying dominant value was, and in the frequency and intensity of the discursive mechanisms reinforcing it. Moreover, within a type, we found differences between for-profit organizations and non-profit organizations that were consistent with the cross-type patterns. These findings are detailed in the next section.

## Findings

### *Instrumental normativity*

The analysis revealed that the website discourse embedded normative meaning in human tissue. However, this normativity was not related to *moral values* associated with *human tissue*; instead, it was related to *instrumental values* associated with human tissue *as translated into technology*. We deliberately use the descriptor "instrumental" here rather than "pragmatic." "Pragmatic" in studies of legitimacy has meant self-interested calculations (Bitektine, 2011, p. 154; Suchman, 1995, p. 578), and by "instrumental" we mean to convey that these are broad, societal-level values that go beyond self-interest and are instrumental in nature.

The translation of human tissue to technology is the foundational legitimizing mechanism in that it shifts the meaning of the website text from more controversial activities to less controversial activities. Mechanisms identified in prior research are aimed at legitimizing an activity directly. The legitimizing we uncovered on these websites is fundamentally different; it is object-oriented because it transfers attention to activities associated with a completely different type of entity, or object.

Further, each organization discursively constructed a dominant instrumental value associated with the technology that was the same within type, but different across types. The dominant value on each website was the intertextual operator (Culler, 2001), integrating textual elements about the procurement and use of human tissue, and thereby providing normative meaning to the website. The dominant value constructed for the three types of organizations are shown at the top of Table 3, which also contains a representative tag line from the websites reflecting each value.

*** Insert Table 3 about here ***

For Bankers, the dominant instrumental value was stewardship. Human tissue *samples* (the technological entity) are depicted as being subject to both physical deterioration and questionable provenance, and so tissue depositors need tissue preservation and tracing systems. For example, this quotation from Banker1's website highlights the importance of stewardship: "*organisations are required to keep DNA samples taken for tissue typing for transplantation or as part of investigations for 30 years, storing them in a highly controlled facility*."

For Producers, the dominant instrumental value was safety: human tissue is potentially diseased and dirty, and requires screening and sterilization before it can be implanted into someone. For example, Producer1's website states: "*There has never been a confirmed case of disease transmission with any [Producer1] processed tissue… These donated tissue forms improve the quality of life for thousands of recipients annually*." The labels "*processed tissue*" and "*tissue forms*" in the quotation also illustrates a greater shift from tissue to technology, from the "tissue-samples-requiring-processing" discourse of Bankers to the "tissue-as-processed object" discourse of Producers.

This shift was more pronounced for Traders. The dominant instrumental value on their websites is research: human tissue is objectified and valued as research material. For example, Trader1's website refers to human tissue as a "*test system*": "*Only human test systems truly reflect the human responses to drugs, even the most commonly used animal model of respiratory function, the guinea pig, fails to replicate all human responses*." Further, tissue that could be used in research, but is not, is labeled as "*waste*." For instance, Trader1's website also emphasizes the waste when surgical procedures leave tissue on the operating table: these procedures "*generate skin samples (and underlying subcontaneous tissue) that can be used by scientists*" and "*excess tissue not used in this way simply ends up in the clinical waste incinerator, so this "recycling" of tissue is of benefit to all stakeholders, it really is a win-win situation*." This quotation nicely illustrates the discursive translation of human tissue to the more objectified "*skin samples*" and "*recycled*" tissue that can be used to achieve a societal-level instrumental value of cost-effective scientific research. While the commoditization of human body parts is disapproved of, the commoditization of technological entities is not.

The intertextual analysis of the websites revealed that the six discursive mechanisms we identified reinforced this shift, by amplifying and anchoring the dominant instrumental value associated with the organizations' technology, as is discussed below. More discursive mechanisms were detected on Trader and Producer websites, compared with Banker websites, which is important theoretically, because these are the organizations with more controversial activities related to the procurement and use of human tissue.

### *Amplifying mechanisms*

*Amplifying* refers to the tactic of magnifying, or heightening, the importance of the dominant instrumental value. Amplification occurred through three discursive mechanisms: commoditizing, fear-mongering, and deputizing.

*Commoditizing* amplified the dominant instrumental value by reinforcing the meaning of human tissue as a technological object that exists independently of humanness. Commoditizing legitimizes organizational activities because there is little controversy associated with the procurement and use of technological objects per se. Bankers commoditized human tissues by emphasizing their technology-based safeguarding of samples.  The quotation from Banker in Table 3 illustrates how the tissue sample and the data associated with the sample jointly constitute the technological object.

Producers commoditized human tissue by assigning a product label to it and listing it in product catalogues.  For example, the quotation from Producer1 in Table 3 shows how the product named "*Graftech Cervical Dowel*" is related to the dominant value of safety ("*resists expulsion*").  ProducerNP commoditized by using product numbers: for example, *CO101AL* is a "*whole cornea with scleral rim*."  Producers also tended to name their processes, and process names such as "*BioCleanse®*" and "*Cancelle™*" (both used by Producer2) commoditize the technology used to achieve the value of safety.

For Traders, commoditizing discourse amplified the instrumental nature of tissue-as-research-material.  One aspect of this is retail-oriented language and functionality.  Trader websites were similar to that of retailers such as Amazon.com in that researchers could register as an account holder, add a product to an online shopping cart, and conduct an online product comparison.  The websites also provided functionality such as the ability to participate in an online chat, pay for purchases with a credit card or via PayPal, and get a 25% discount by ordering early.  Underlying this retail orientation was a representation of tissue-as-product.  The product description from Trader2, shown in Table 3, illustrates how human tissue has been transformed into technological objects – samples – that have been bundled and classified to serve as research data.  Tissue is frequently available on pre-processed slides, which is displayed in product catalogues.  For example, Trader3 listed more than 80 products, each with an identification number, name and price: Product *ARY-HH0118* is "*Pancreas Carcinoma & Normal TMA*," of species "*human*," available at a cost of "*$265 U.S. dollars per slide*."  A slide holds tissue from 80 donors (called "*cases*") and each "case" is described by sex, age, and biopsy results. Thus the technological object *ARY-HH0118* entangles physical tissue material from multiple donors as well as information about these donors, and can be added to an online shopping cart.

It is interesting to note that this degree of commoditization, and concomitant removal of the human aspect of the tissue, are not evident in pre-Internet supply catalogues. For example, the American Type Culture Collection's *Catalogue of Strains II* (Hay et al., 1981) regularly describes the tissue available for sale in more human terms; for example: "*biopsy material taken from a normal area of the lung of an 18 year old male Caucasian with osteogenic sarcoma*" (p. 129) and "*derived from malignant ascites fluid from a 47 year-old premenopausal Black woman with infiltrating ductal carcinoma*" (p. 151). At times the description of the donor was quite extensive; for example, "*Clinical picture, at age 16; presence of a sun sensitive rash noted from infancy; short stature; scanty hair; poor dentition and a basal cell carcinoma of the eyelid. At ages 19-23; height increased to normal and hair growth became extensive*." (p. 155). This personalization of the donor was not present on the websites, and the comparison suggests that the existence of more heterogeneous audiences that can access online catalogues is associated with downplaying the humanness of human tissue and emphasizing its role as a technological object.

A second mechanism, *fear-mongering*, amplified the dominant instrumental value by portraying it as under threat, and was evident only on Producer and Trader websites. Fear mongers normalize extreme, fearful outcomes to scare an audience into following a recommended course of action to avoid them (Glassner, 2004; Pfau, 2007). Fear-mongering legitimizes organizational activities by attaching urgency to them, through emphasizing the downside if the activities are not carried out. The quotation in Table 3 from Producer2 portrays safety as under threat from inadequate procedures, and that from Trader2 portrays research as under threat from a long drug development process. While all the Producer and Trader websites used fear-mongering, the emotion attached to it was heightened most on the websites of the for-profit Traders, which are associated with the greatest controversy in terms of tissue procurement and use. For example, the quotation shown in Table 3 from Trader2's website described the failure rate in drug development as "*staggering,*" with clients "*doing everything they can to eliminate risk along that landmine-littered pathway*." Discourse on Trader1's website was similarly emotionally charged: "*Despite record levels of investment, most drugs (80-90%) fail in clinical trials. New ways to predict which drugs will succeed are urgently required and there is no more relevant model than fresh intact human tissues…. At Trader1 we know that time saved equals money saved! Our efficacy models enable you to progress through the drug development process faster than your key competitors*." In contrast, the website of TraderNP, which faced less controversy with respect to procuring and using tissue because of its non-profit status, stated matter-of-factly that tissues "*are vital for medical researchers seeking to improve the detection and treatment of many different diseases*."

A third amplifying mechanism was used only on the websites of the for-profit Traders. *Deputizing* is the assignment of responsibility for morally charged activities to suppliers. Outsourcing has been found in other contexts to enable organizations to abdicate social responsibility for contestable activities (e.g. Adobor, 2012). Deputizing distanced Traders from acquiring donor consent by attributing it to anonymous ethics review boards, as shown in Table 3 by the quotation from Trader4's website. Deputizing legitimizes organizational activities by signaling that moral issues are being taken care of other actors in conformance with standards, even though these other actors are anonymous and the standards are vague and unspecified. It amplifies the dominant value of research by eliminating the need to discuss the ethics of procurement and emphasizing the efficiency of procurement; for example, the quotation from Trader4 in Table 3 suggests that they can bypass any possible hold-ups related to consent and provide fresh samples quickly.

### ***Anchoring mechanisms***

While amplifying mechanisms heightened the importance of the dominant instrumental value associated with the organizations' technological objects, *anchoring* mechanisms reinforced and stabilized organizational claims associated with it, by tethering these claims to, or weighing them down with, evidence and allies. Anchoring occurred through three distinct types of mechanisms: scaling, corroborating, and affiliating.

*Scaling* anchored the organization's claims with respect to the dominant instrumental value through the use of numerical metrics. Scaling legitimizes organizational activities by quantifying their achievement of the dominant instrumental value. All of the organizations used scaling: a representative scaling statement for each type of organization is shown in Table 3. The Banker quotation scales Banker1's stewardship results in terms of stem cell recovery, the Producer quotation scales ProducerNP's safety record through the volume of surgeries involving its products, and the Trader quotation scales Trader3's achievement in increasing the cost-effectiveness of research, by "*cutting bench time in half*."

While it is not surprising that organizations scale their achievements in order to differentiate their quality from their competitors', we found that scaling was used to a greater extent for organizations associated with greater moral controversy. In order to examine the variance in the use of scaling discourse, we counted, on each website, the number of text segments that scaled the organization’s role with the instrumental value. The average percentage of scaling text on a website increases from Bankers to Producers to Traders, with 7.4% of the text segments scaling Banker’s roles, 9.3% of text segments scaling Producers’ roles, and 14.0% of text segments scaling Trader’s roles. Further, and consistent with this finding, scaling rhetoric within an organizational type is used more on the websites of for-profit organizations than on those of non-profit websites: 11.7% vs. 4.2% on for-profit vs. non-profit Producer websites and 15.0% vs. 2.1% on for-profit vs. non-profit Trader websites.

*Corroborating,* from named third parties, anchors organizational claims with respect to the instrumental value and legitimizes organizational activities by providing external validation for the organization’s achievements. All of the websites highlighted links with industry associations and certification bodies, as would be expected. Table 3 shows representative quotations from the websites of each of the three types of organizations that illustrate other ways in which the websites provide corroboration. These quotations also indicate how the digital nature of websites provides functionality for corroboration, which goes beyond mere endorsement. Corroborations can link to content on other organizations’ websites through hyperlinks. Since there are no spatial limitations on a website, websites can be a repository of many such links, or many posted items, to provide a greater weighting or anchoring of claims. For example, Banker1 provided a link so that readers could go to a regulator’s website to read its inspection report, as well as a link to the inspection reports of its rivals – “[o]*ther tissue bank inspection reports are also available using the link below*” – which offers evidence from a named and neutral third party that Banker1’s stewardship fares well in the comparison. Producer1’s website provided eleven personal testimonials such as the one shown in Table 3, which quoted a named physician at a prominent hospital, describing a surgical case that was facilitated by a Producer1 product. TraderNP provided links to 98 publications resulting from research using TraderNP tissue.

Analysis of the corroborating discourse on each website indicates that the extent of corroboration does not vary among the three types of organizations, but the nature of the corroborators does vary. Bankers and Producers tended to corroborate with personal testimonials from named individuals such as depositors, donors, physicians, and patients. Traders tended to corroborate using impersonal evidence; in particular, publications. Of the non-profit traders, only Trader1 lists testimonials, but they are anonymous, with vague attributions; for example, to "*Senior Scientist, Top 25 European Pharma*" and "*President & Head of R&D, Canadian Biotech*." Consistent with past research emphasizing concealment in morally controversial contexts (e.g. Hudson, 2008; Vergne, 2012), the rarity of personal endorsements on Trader websites could be explained by potential endorsers in markets of greater controversy being wary of too much visibility.

The third anchoring mechanism, *affiliating,* involves the provision of ways for external actors to engage with the organization, becoming "allies" in pursuit of the dominant instrumental value. Affiliating legitimizes organizational activities by mobilizing others to support them. All of the organizations had a basic search function on their website and an online inquiry form. However, greater opportunities for engagement were evident only on the Producer and Trader websites.

The Producer websites provided diverse ways that tissue sources (donors and their families) and users (clinicians) could affiliate with the organization to achieve safe transplants. As Producer2's quotation in Table 3 shows, donors could share, online, the story of a loved one who gave the gift of life. They could sign up for a run to raise money for tissue banks, or donate money to a runner. They could elect to have a longer-term affiliation with the organization by subscribing to an emailed newsletter or by applying to become an ambassador to discuss donation at community venues. Engagement with physicians and operating room nurses was available through continuing medical education opportunities, as shown by the quotation from ProducerNP in Table 2, which was accompanied by a link to register for a program.

The Trader websites did not provide affiliation mechanisms for tissue suppliers, but did provide ways that tissue users (researchers) could engage continuously with the organization to serve research, such as becoming a registered account holder. As the quotation in Table 3 from Trader4 illustrates, Traders also encouraged researchers to have a persistent affiliation with the organization by signing up to receive emailed notifications of tissue availability or a "*Deal of the Month Newsletter*" [Trader2] and by following them on Twitter.

## Discussion

Our objective in this study was to understand how organizations legitimize their activities when these activities are morally controversial. Towards this end, we studied organizations that offer products and services based on human tissues and showed that there were systematic patterns in how they publicly legitimized their procurement and use of tissue. Specifically, we found that the organizations maneuvered the moral controversy by exiting it, discursively, and constructing a new moral order based on a different object and a much less controversial social value. We believe our findings allow us to make three distinct contributions to our understanding of business ethics. We discuss these contributions below and consider avenues for future research.

### ***Towards an object-oriented theory of legitimizing***

Our first contribution is to propose an object-oriented model of organizational legitimizing, as shown in Figure 1. Our intertextual data analysis revealed a legitimizing mechanism that translated, discursively, an object that is associated with controversial activities to an object associated with less controversial activities. In the context studied here, the meaning associated with "humanness" was not embedded in the website text because human tissue was discursively translated into technology produced by the organization. Entangled with this translation was a shift in values from the multiple moral values that are socially associated with the procurement and use of human tissue to a single dominant instrument value that is associated with the organization's technology. This dominant value played the central role in constructing the meaning of the discursive space of the websites; it was the intertextual operator (Culler, 2001) or the "glue" inter-relating different elements of text.

*** Insert Figure 1 about here ***

Therefore, in displacing the focus of the text from activities that need to be legitimized to activities that do not need to be legitimized, the object-oriented model of legitimizing presented here is fundamentally different from discursive legitimizing mechanisms described in prior literature. It is, however, consistent with an object-centered sociality (Knorr Cetina, 1997) in that different market actors – donors, patients, clinicians, researchers, and the organization trading human tissue – are inter-related through the goal of achieving the instrumental dominant value through the organization's technology. The importance of the material in the legitimizing discourse found here suggests that it might be fruitful to consider sociomaterial approaches to organizational legitimizing in future research on business ethics (see Callon, 1986; Latour, 2005).

Another promising avenue for future research might lie in linking our findings with categorization theory. Much of the research on legitimating discourse and categorization has focused on how organizations differentiate themselves within a category (e.g. Kennedy, 2008; Navis & Glynn, 2010). Our finding of a shared dominant value within a type of organization raises the question of how organizations convey distinctiveness within a type while amplifying and anchoring the same dominant value. The question of how this can be accomplished in the context of moral controversy is a particularly intriguing one, because of the constraints associated with the possibility of disapproval from some audiences.

Further, ethical issues associated with the use of the communication tactics found here may be fertile ground for future research. Chipulu et al. (forthcoming) recognize the importance of accounting for instrumental (means-ends) consideration in this respect. Building on Weber's alternative types of rationality (1922/1978), they suggest that a "universalizing" tactic aimed at core ethical values may be ethically preferable to the legitimizing tactics. Rather than burying ethical values, such an approach may improve sense-making and dialogue among organizational stakeholders and lead to ethical improvements within corporations. This suggests that a fruitful avenue for future research for scholars of business ethics in identifying the dimensions of core ethical values that could form the basis of ethically-based communication strategies of organizations that trade in human tissues.

A related direction for future research concerns the ethicality of legitimation processes and the complementary question of "why" rather than "how to" with respect to legitimizing in controversial industries. Critical and reflexive accounts of ethical choices in such settings could complement existing research on legitimizing practices such as those found here and in other contexts (e.g. Baumann-Pauly et al., 2016; Chelli et al., forthcoming; Talbot and Boiral, 2015; Windscheid et al., forthcoming). Ethical codes for practice (e.g. Adelstein and Clegg, 2016; Aßländer et al., 2016;) and the broader values and ideologies that underpin such practices (e.g.

Haase and Raufflet, forthcoming) deserve further research attention.

### ***Meaning is stabilized and reproduced through a suite of mutually reinforcing discursive mechanisms***

Our second contribution is to show how the dominant instrumental value conveying normative meaning on the website is stabilized and reproduced through a suite of mutually reinforcing discursive mechanisms that amplify and anchor it, as illustrated in Figure 1. These findings are consistent with prior research showing the importance of boundary-management in morally contested contexts (e.g. Hudson & Okhuysen, 2009). We add to past research by illustrating how boundary-enactment is performed through digital media. Deputizing constricts organizational boundaries by assigning morally disputed activities – obtaining donor consent in this case – to anonymous, external actors. This deflection is performed through text and also through an absence of text (an absence of hyperlinks), so that these actors stay anonymous and unknowable. Affiliating expands organizational boundaries by providing opportunities for external actors to become organizational allies in achieving a (less controversial) instrumental value, and is performed digitally through hyperlinks and website features enabling user engagement.

Overall, our study reveals discourse that is more “dimensional” than has been reported in past research, which has focused primarily on word-based text. Evidentiary “weight” (for example, hyperlinks to other market actors and the virtually limitless loading of material on websites) and digital engagement mechanisms (e.g. emailed newsletters and online wish lists) are used to anchor legitimacy claims. As communication becomes increasingly digitized, scholars need to pay attention to the presence and role of non-word text when analyzing how organizations portray their ethics and morality.

It is striking that amplification and anchoring varied with the level of controversy across the three types of organizations. This variability is consistent with Hudson and Okhuysen's finding that organizational responses to stigma vary across environments (2009). However, in contrast to their finding that hiding mechanisms increased as the level of stigma in the environment increased, we found a greater "loudness" in the discourse of organizations facing greater controversy. All of the organizations claim, on their website, to achieve the dominant value with their tissue-based technology, but the organizations facing greater controversy amplify that claim to a greater extent, and anchor it more strongly in terms of scaling its benefits, providing corroborating evidence and facilitating actor affiliation. We believe that the difference in findings between the Hudson and Okhuysen (2009) study and ours can be explained by the difference in the nature of "conformity" under conditions of core-stigma and moral controversy. Organizations that are core-stigmatized engage in activities that are incongruent with shared moral guidelines. Rather than conforming to such guidelines, they attempt to minimize the negative effects of non-conformity by hiding their activities. Organizations engaged in global activities that are morally controversial do not seek value congruence either, but for a different reason: value congruence in such a context lacks meaning because of the existence of multiple, incompatible values. Instead, organizations discursively construct a new moral order based on a new object. The organizations facing the greatest controversy have the greatest need to stabilize and reproduce the legitimacy of the constructed moral order and so use amplifying and anchoring mechanisms to a greater extent.

### ***The trade in human tissues offers potential for further research on the global construction of moral legitimacy***

Our third contribution lies in the identification of the trade in human tissues as a promising domain for further research on business ethics and morality in a global context. Medical research is increasingly dependent on a rapidly escalating volume of high quality and diverse “biospecimens.” Somiari and Somiari emphasize the need “readily available and accessible, good quality, human tissue to feed today’s high throughput” (2015, p. 25). They note that spiraling demand leads to cost pressures and greater commercial involvement, and the need for new sources of supply which will extend tissue procurement from traditional academic settings to community and local hospitals with less formal and established procedures. Thus, managers in an increasing number of organizations – many of them both small and globally active – need to understand multiple evolving ethical frameworks and publicly establish their company’s moral legitimacy in the face of heterogeneous values. This study is a first step in understanding these challenges and how they are addressed and we hope that other researchers will join us in this endeavor.

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**Table 1. Sample and sample characteristics.**

| *Organization* | *Website Word Count* | *Website Text Segment Count* |
|---|---|---|
| Banker1 | 7,555 | 99 |
| Banker2 | 7,632 | 104 |
| Producer1 | 7,647 | 53 |
| Producer2 | 39,886 | 256 |
| ProducerNP | 15,318 | 143 |
| Trader1 | 16,800 | 153 |
| Trader2 | 33,931 | 240 |
| Trader3 | 2,325 | 56 |
| Trader4 | 9,638 | 131 |
| TraderNP | 12,245 | 47 |

Note: “NP” in a label designates a not-for-profit organization.

Table 2. Discursive mechanisms used to discuss the procurement and use of human tissue.

| **Description of data coded** | **Illustrative quotation** | **Mechanism** | **Type of Mechanism** |
|---|---|---|---|
| Human tissue is objectified on the basis of the instrumental value | “*24hr deal*: *Order frozen tumor tissue samples through* [Trader2] *and receive the normal adjacent tissue specimen for free*.” | Commoditizing | Amplifying the instrumental value |
| An urgent threat to the achievement of the instrumental value | “*As you probably know, following tumor resection, ~25-30% of proteins and 20-25% of genes are differentially expressed within the first 30 minutes, so if you are trying to identify a key target in cancer then you want to get these tissues as soon as possible.”* [Trader4] | Fear-mongering | |
| Morally charged activities are assigned to an anonymous external actor | “*Our partners are all IRB compliant and work closely with* [Trader3] *to ensure the highest quality of collection”* | Deputizing | |
| Numerical metrics are used to quantify claims made regarding the instrumental value | *“…we have provided more than two million tissue implants with zero incidence of allograft-associated infection.”* [Producer2] | Scaling | Anchoring the instrumental value |
| Named third parties are used to validate claims made regarding the instrumental value | “*The Maryland Stem Cell Research Fund awarded* [Johns Hopkins researcher] *and collaborative partner* [ProducerNP] *a three year grant to develop biomaterial nanofibers containing tissue extracts and particles.”* | Corroborating | |
| People can engage with the organization to achieve the instrumental value | *“[ProducerNP’s] Continuing Medical Education program is dedicated to offering high quality educational events that improve patient care and promote ongoing learning among healthcare professionals.”* | Affiliating | |

**Table 3. Data supporting claims with respect to the instrumental value emphasized on the website.**

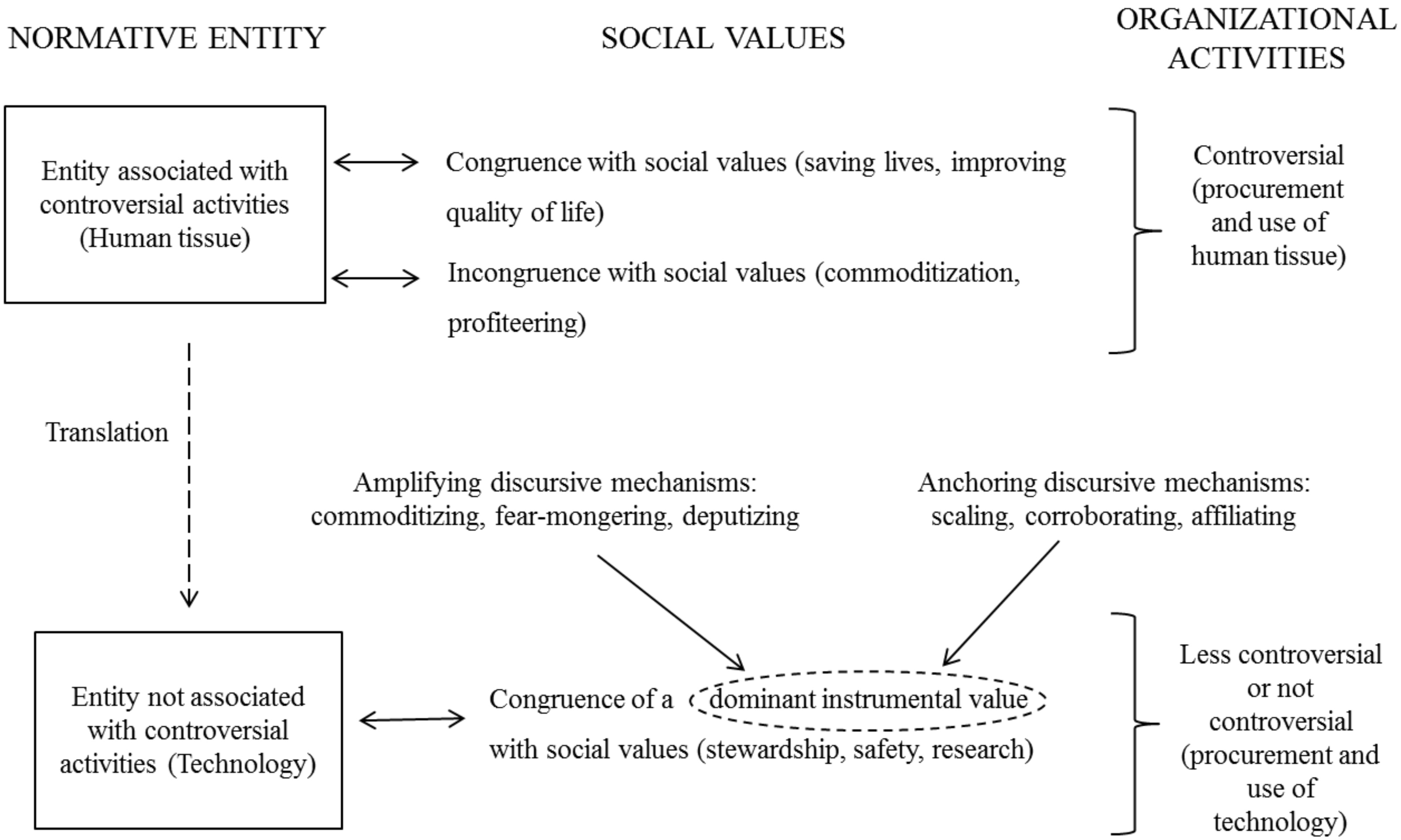
Increasing controversy →

| | **BANKERS** | **PRODUCERS** | **TRADERS** |
|---|---|---|---|
| **Instrumental Value** | Stewardship | Safety | Research |
| Example of tagline expressing instrumental value | "*With you for life*" [Banker2] | "*Improving lives by advancing science, safety and innovation*" [Producer2] | "*Accelerating discovery*" [Trader3] |
| **DISCURSIVE MECHANISM** | | **REPRESENTATIVE QUOTATIONS** | |
| **AMPLIFYING** | | | |
| **Commoditizing** human tissue | *"Our industry-leading, bespoke inventory system maintains a full and detailed record of all samples that allows for full traceability."* [Banker1] | "*Graftech® Cervical Dowel: Threaded graft resists expulsion, Dense cancellous bone to provide rapid ingrowth*" [Producer1] | "*These are pre-aliquotted DNA plates containing 180 cases and 180 controls of data-rich patient samples within breast, colon, prostate, and lung cancer, as well as metabolic disorders such as diabetes, cardiovascular disease and obesity*." [Trader2] |
| **Fear-mongering** with respect to the achievement of the instrumental value | Not used | "[Producer2] *has advanced beyond the use of aseptic processing, which does not ensure the removal or inactivation of microorganisms inherent to the donor or tissue, to better protect recipients from the risk of donor-to-recipient disease transmission."* | "*We all know the stats: 10 years and $1 billion. That's roughly what it takes to bring a drug from the lab bench to a pharmacy shelf. That's for drugs that actually make it. The failure rate in drug development is staggering. Our clients are doing everything they can to eliminate risk along that landmine-littered pathway*." [Trader2] |
| **Deputizing** others to carry out morally charged activities | Not used | Not used | *"By working with our collaborating hospitals and post mortem sources that already have IRB/ethics approval in place, we can provide those "tough" tissues e.g. fresh samples and those with specific inclusion and exclusion criteria."* [Trader4] |

**Table 3. Data supporting claims with respect to the instrumental value emphasized on the website (continued).**

| **ANCHORING** | **BANKERS**<br>Instrumental value: Stewardship | **PRODUCERS**<br>Instrumental value: Safety | **TRADERS**<br>Instrumental value: Research |
|---|---|---|---|
| **Scaling** the organization's claims with respect to the instrumental value | "*The processing facilities at* [Banker1] *have secured the highest published rates of stem cell recovery in the industry, exceeding 95 percent*." | "*Each year, more than 130,000* [ProducerNP] *tissues are used in transplant surgery"* | "[Trader3's] *human tissue microarrays are the perfect cost effective research tool, allowing high throughput analysis with statistical precision cutting bench time in half*." |
| **Corroborating** the organization's claim with respect to the instrumental value | "*Our latest* [regulatory body] *inspection report is now published on the* [regulatory body] *website. Please take a minute to read our report in full:"* [Banker 1] | "*In our institution, cancellous allograft bone in combination with* [Producer1's product] *is now the standard method for treating all fractures requiring bone grafts"* | *"A list of publications that have involved* [TraderNP] *can be found here."* |
| **Affiliating** others with the organization to achieve the instrumental value | Not used | "*If you would like to tell us about a loved one who gave the gift of life through tissue donation, share your story here."* [Producer2] | "*We are delighted to announce … our Hepatocyte Hotline. This is an e-mail based alert service that notifies researchers of the availability of fresh primary human hepatocytes*." [Trader4] |

Figure 1. An object-oriented model of organizational legitimizing in controversial industries.


NORMATIVE ENTITY
SOCIAL VALUES
ORGANIZATIONAL ACTIVITIES
Entity associated with controversial activities (Human tissue)
Congruence with social values (saving lives, improving quality of life)
Incongruence with social values (commoditization, profiteering)
Controversial (procurement and use of human tissue)
Translation
Amplifying discursive mechanisms: commoditizing, fear-mongering, deputizing
Anchoring discursive mechanisms: scaling, corroborating, affiliating
Entity not associated with controversial activities (Technology)
Congruence of a dominant instrumental value with social values (stewardship, safety, research)
Less controversial or not controversial (procurement and use of technology)

Note: Elements specific to the trade in human tissue are shown in parentheses.