

**Markets, Morals, and Practices of Trade:  
Jurisdictional Disputes in the U.S. Commerce in Cadavers**

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Abstract

The notion that markets permeate society is nothing new, but the development of markets for goods previously deemed off-limits to trade, such as human life and death, has raised anew the debate on morals and markets. This study examines the U.S. commerce in cadavers for medical education and research to explore the question of what makes markets moral. Because researchers have typically embraced an external view of moral legitimacy (even when examining market participants' behaviors), they have mostly focused on the taboo against trading certain categories of goods and the narratives deployed by participants to counter such a categorical taboo. Such answers to the question of a market's legitimacy have often neglected practices of trade. This study assumes that markets are active internal social projects and draws on archival, interview, and observational data on trade in cadavers to examine the strategies used by market participants to legitimize commerce. In particular, the study shows that market participants rely not just on narratives, but also on enacting practice-based distinctions between proper and improper trading to defend their professional jurisdiction and to legitimize commerce. How to trade proves integral to the definition of a market's moral legitimacy. The study's findings shed light on the foundations of market legitimization and on the reliance on morals to sustain professional jurisdictions.

The notion that markets permeate society is nothing new. Scholars have long noted the pervasiveness of markets in society (Zelizer, 1979; Hirschman, 1982; Fourcade-Gourinchas and Healy, 2007; Sandel, 2009). Yet the development of legal markets for “goods” previously deemed off-limits to trade, such as human life and death, has proven surprising and raises anew the question of morals and markets. The growth of U.S. markets for contract pregnancy and for previously purchased life insurance policies during the late twentieth century illustrate this development (Spar, 2006; Quinn, 2008). Trades involving life and death defied deeply held beliefs about what markets should and should not encompass. Such trades have often been considered taboo because they are viewed as undermining individuals’ “self-images or identities as moral beings” (Fiske and Tetlock, 1997). Though taboos still prevail against commerce in many equally sacred “goods,” particularly human anatomical goods like blood, cadavers, and organs (Titmuss, 1971; Scheper-Hughes, 2000; Delmonico et al., 2002; Healy, 2004; Sanal, 2004; Steiner, 2006), the gradual relaxation of such taboos testifies to the growing reach of markets. For instance, selling one’s eggs, plasma or sperm is a fairly common and legal practice in the United States today (Snow and Anderson, 1993: 65-66; Almeling, 2007). The legality of commerce does not, however, imply moral legitimacy; instead, it brings new urgency to the question of what makes markets moral.

Answers to this question have mostly focused on the narratives deployed by market participants to counter the taboo against trading certain categories of goods. This taboo is widespread and well documented in the morals-and-markets literature (Caprom and Radin, 1988; Anderson, 1995; Carruthers and Espeland, 1998). Scholars embracing an external (bystander’s) view of moral legitimacy tend to be most vocal about such a

taboo (Titmuss, 1971; Scheper-Hughes, 2000; Delmonico, et al., 2002). However, even researchers acknowledging a more internal, strategic view of legitimacy—i.e., positing that legitimacy can be built within a market (White, 1981; Granovetter and Swedberg, 1992; Fligstein, 2002)—have generally examined the narrative efforts deployed by market participants to counter the categorical taboo. For instance, in the secondary market for life insurance, whose morality is often contested, participants’ narratives depicting sophisticated, wealthy sellers of life insurance as making “rational financial decisions” and diseased sellers as exercising “customer choice” represent important devices for building legitimacy (Quinn, 2008). In this sense, much of what scholars have written on morals and markets from the perspective of participants has focused on narratives as the most crucial legitimizing devices (Zelizer, 1979; Zelizer, 1985; Sanal, 2004; Chan, 2009). Yet assuming that contested markets are active social projects with a problematic legitimacy, a broad range of other devices, including market practices, could also help to render markets moral (Fourcade-Gourinchas and Healy, 2007).

Two literatures in particular suggest paying closer attention to participants’ practices in sustaining a market’s morality. First, the literature on professions points to work practices as potential legitimizing devices. Perhaps nobody struggles more with the question of morals than participants in contested markets. Probably more than others, they have a vested interest in seeing their activities depicted as moral (Hughes, 1971). For participants belonging to a professional group closely associated with a given market, the question of a market’s morality can easily become intertwined with a question of their professional jurisdiction (Freidson, 1970; Abbott, 1988). Work practices often prove integral to defending a profession’s jurisdiction (Van Maanen and Barley, 1984; Barley,

1986; Abbott, 1988; Nelsen and Barley, 1997; Bechky, 2003) and possibly a market's legitimacy. Second, a growing literature on the role of conventions in shaping the economy depicts markets as shared understandings among participants on how to organize and coordinate action (Favereau, 1989; Thévenot, 1990; Boltanski and Chiapello, 1999; Biggart and Beamish, 2003). From that perspective, the quality of traded goods is said to result from the steps or actions of trade (Callon et al., 2002). As an illustration, a "used-car" is labeled as such, not because the cars is used, but because of how it is purchased and sold. Assuming that morality is part of a good's quality, practices of trade might prove an important facet of the study of morals and markets.

This paper presents an inductive qualitative study of participants in a contested market—the commerce in cadavers for medical education and research in the United States—to understand their efforts to make such commerce moral. Commerce is here understood in its historical definition, namely as the exchange between human beings of products of nature (Zelizer, 2005: 293). The study relies primarily on archival trade data and on interviews with market participants. It first documents the jurisdictional dispute prevailing in this type of commerce. It then presents the professionals' answers to such a dispute by showing how they construct a narrative distinction between their own commerce and an implicitly less moral alternative. These professionals include a group that I call gatekeepers who actively and most openly pursue such an agenda. Gatekeepers also geographically insulate their commerce from the broader market and create, in effect, two distinct circuits within the broader commerce in cadavers. In addition, gatekeepers promote specific practices of trade within their circuit. These practices help them distinguish their own pursuit from an alternative course of action. In that sense, I

argue that the doing of commerce is inherent to the pursuit of legitimacy. Building on the literatures on professions and conventions, I show that *how* goods are traded also contributes to morality. Such a finding supplements the categorical taboo against trading certain goods and provides a better understanding of what makes markets moral.

## **THEORIES OF MARKETS' MORAL LEGITIMACY**

### **The External, Categorical View of Legitimacy**

What makes markets morally legitimate? Answers to this question have traditionally been addressed from an external perspective, namely by bystanders granting or withdrawing legitimacy to given markets based on the categories of traded goods. This view of legitimacy locates action mainly beyond the purview of individual market participants (Meyer and Rowan, 1977; DiMaggio and Powell, 1983; Dobbin et al., 1993), emphasizing instead “the way in which market-wide structuration dynamics generate cultural pressures that transcend any single organization’s purposive control” (Suchman, 1995: 572). In this view, moral arguments for and against markets are voiced by external “observers,” projecting their views onto a given market situation. Or, as Albert Hirschman has pointed out, whether markets are seen as a “civilizing force,” a “corrupting force,” or a “feeble mechanism” with ambiguous outcomes depends on who is observing the market (Hirschman, 1982). Thus what makes markets moral depends on external observers’ implicitly shared perspective.

Richard Titmuss’ (1971) study on blood procurement exemplifies such an approach to moral legitimacy. His conclusion that altruistic donations were preferable to commercial transactions stemmed partly from an efficiency argument, but also from his

own (external) moral standpoint (Oakley and Ashton, 1997: 5) . Market mechanisms were in his eyes ill-suited to procuring blood, and he considered altruistic donations morally superior to commerce. By opposing commerce in blood, Titmuss was in part drawing on an external taboo. Whether he saw markets in general as corrupting forces is unknown, but the development of a market *for* blood went against his normative views of society. This last point is important since it suggests that the nature of the traded goods is seen as partly conditioning a market's moral legitimacy.

Many scholars studying morals and markets note similar normative inferences based on the categories of traded goods. Human life, death, and sexuality are typically seen as categories of goods deemed inappropriate for trade (Caprom and Radin, 1988; Anderson, 1995; Carruthers and Espeland, 1998). Human anatomical goods are also often considered taboo to trade (Titmuss, 1971; Scheper-Hughes, 2000; Delmonico, et al., 2002). Such a taboo is implicitly meant to preserve a line between distinct social spheres (Fiske and Tetlock, 1997; McGraw and Tetlock, 2005). For instance, contract pregnancy is regularly denounced as undermining “the dignity of women” (Anderson, 1995: 168). As for the secondary market for life insurance, critics contend that it “violates the sanctity of life” (Quinn, 2008: 740). Comparing different entities or goods according to a common metric, in this case a market metric, tends to suggest that they belong to similar domains (Espeland and Stevens, 1998). And porosity between domains can put the entire category of traded goods at risk of commensuration. For example, a market in reproductive services can be seen as creating “adverse effects on all persons, not simply on those who choose to enter that market” (Caprom and Radin, 1988: 63). Similarly, for female prostitution, “the open market might render an understanding of women (and

perhaps everyone) in terms of sexual dollar value impossible to avoid” (Radin, 1996: 133). In short, the external view of moral legitimacy generally links a market’s legitimacy to the category of traded goods.

### **The Internal, Strategic View of Legitimacy**

The more internal, strategic stream of research offers a very different answer to the question of what makes markets moral. The moral legitimacy of markets is not solely an external assessment; it can also be constructed within markets (Fourcade-Gourinchas and Healy, 2007). Research on the social nature of markets has shown that markets are active social projects (White, 1981; Granovetter and Swedberg, 1992; Fligstein, 2002). In this view, building or sustaining moral legitimacy rests on the ways by which individuals within markets “deploy evocative symbols in order to garner societal support” (Suchman, 1995: 572).<sup>1</sup>

The central postulate of this strategic stream of research is that market participants can deploy efforts to build or sustain a market’s legitimacy by shaping, for instance, perceptions of their environment (Pfeffer, 1972; Pfeffer and Salancik, 1974; Ashforth and Gibbs, 1990). Institutional theorists, traditionally more inclined to emphasize the strength of external views of legitimacy, have also embraced the strategic postulate (Johnson, 2008; Battilana et al., 2009; Kellogg, 2009). Institutional entrepreneurs, through their repeated, often collective efforts, have been shown to modify the ways institutions, industries, and markets operate. Founders of the Paris Opera, for instance, were able to

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<sup>1</sup> Both the external and internal views of legitimacy assume that morality is defined by what a community deems appropriate (Durkheim, 1973), but the community’s perimeter varies. From an internal view, community is narrowed to signify only market participants, not the broader society in which a market is embedded, as is the case for the external view.



modify the blueprint of existing royal academies, to create a new form of enterprise (Johnson, 2008). Similarly, assumptions on what labor markets for surgeons might entail can gradually shift, due to participants' collective efforts (Kellogg, 2009). In that sense, participants' efforts are not deployed in vain and can shape markets.

An implication of the strategic postulate is that no specific category of goods can *a priori* be deemed off-limits to trade. If markets involve certain categories of goods that prove contested, all it will take to build legitimacy is more effort. Perhaps nowhere are these internal efforts more salient than when dealing with death. In the secondary market for life insurance, for instance, much work is directed at ensuring that the “desecrating life” notion never surfaces in the context of trades (Quinn, 2008: 758-759). Instead, selling one's own life-insurance policy is conceived as good financial planning or an exercise of consumer choice (Quinn, 2008). Also in the life-insurance industry, in preference to “betting on death,” market participants aim to protect widows and orphans (Zelizer, 1979: xiii). In such contexts, internal actors actively resist frames that might fuel contestation. Put otherwise, they attempt to classify their experiences within alternative, legitimate frames.

Classification exercises can, however, take numerous forms, including narrative and practice-based distinctions. Strong classifications and distinctions have long been posited to underline moral legitimacy (Durkheim and Mauss, 1903; Needham, 1973; Douglas, 1986; Douglas, 2002). Distinctions are seen as providing the basic building blocks of social life and sustaining salient boundaries that help, in turn, to define communities (Lamont, 1992; Lamont, 2000; Lamont and Molnár, 2002; Rao et al., 2005). As Mary Douglas notes, ideas about separating or demarcating impose “system on an

inherently untidy experience” (Douglas, 2002: 5). By extension, the absence of strong distinctions is said to lead to a crisis of identity (Douglas, 1986: 96). Thus distinguishing and classifying experiences proves to be a central to define morality.

**Narrative distinctions.** The main form of classification documented in morals-and-markets research from the participants’ perspective has been narrative distinctions. The focus on narratives might be in part an artifact of past research designs relying mainly on legal and press data to document historical transformations (Zelizer, 1979; Zelizer, 1985; Spar, 2006; Quinn, 2008). Such a focus might also reflect the researchers’ embrace, even when examining participants’ behaviors, of an external, categorical taboo since their narratives directly challenge that taboo.

In many if not all markets, narrative devices are extensively used to construct markets and legitimacy (White, 1992; Kennedy, 2008; White, 2008). Narrative framings provide explanations and justifications for action (Goffman, 1974; Boltanski and Thévenot, 1991; Snow, 2004). For example, grass-fed-meat-and-dairy market participants rely on such narrative classifications as authentic vs. manipulated and sustainable vs. exploitative to promote their market pursuit (Weber et al., 2008). In contested markets, where the burden of justification tends to be higher, the efforts deployed to shape narratives typically prove quite salient and well documented (Zelizer, 1979; Zelizer, 1985; Sanal, 2004; Spar, 2006; Quinn, 2008). As an illustration, funeral home directors have been shown to rely on narratives that depict the deceased as living individuals to legitimize their pursuit (Barley, 1983). The more convincingly they frame their tasks as care for a “living” person, the more legitimate their pursuit appears. Similarly, forensic medical experts label a cause of death as “undetermined” to emphasize “not the limits of

medical knowledge but a professional challenge” proving that a given death has not been in vain but in the service of a legitimate scientific pursuit (Timmermans, 2005: 1005).

The implicit narrative emphasis often seems to be on countering a categorical taboo. Homeless street people in the United States, for instance, who sell their plasma described the trade as an “economic opportunity,” not as exploitation (Snow and Anderson, 1993: 156). Similarly, surrogate mothers who receive payment for engaging in contract pregnancy invoke a wish to help infertile couples, not to make money (Spar, 2006: xi). Such narrative framings of contested market pursuits contrast sharply with those that outsiders would use to describe similar trades, but offer market participants a way to make sense of their pursuit and to counter the categorical taboo against their behavior. Though these framings may be self-serving, the expression of such views by sufficient numbers of internal participants plants the seeds for a market to lay claim to moral legitimacy.

All market participants engage to some degree in narrative distinctions, but in contested markets closely associated with a professional group, professionals are particularly well positioned and motivated to deploy such narratives. Professionals are often eager to shape the perceptions of legitimacy for their activities since their own jurisdiction is at stake (Freidson, 1970; Abbott, 1988). Their jurisdiction or the “simple claim to control a certain kind of work” (Abbott, 1988: 64) is intertwined with how they and others view the work being performed. The work is tightly connected to their social identity (Hughes, 1971). For instance, challenging the morals of trading securities can easily be understood as challenging the morals of traders. Similarly, challenging the morals of mass-produced meat can easily be seen as challenging the morals of farmers

(Weber, et al., 2008). If mass production of meat is seen as immoral, those whose claim it is to (mass) produce meat might also be deemed immoral. Faced with jurisdictional disputes, professionals will deploy all their power to retain their jurisdiction (Abbott, 1988: 134-142).

Past research indicates that legitimizing narratives often appear to originate with professionals. In the life-insurance market, for instance, heads of trade associations were shown to be instrumental in spearheading the adoption of narratives on protecting widows and orphans (Zelizer, 1979). Similar dynamics were observed in the Chinese life-insurance market where life-insurance managers and sales agents prove instrumental in developing a “money management” narrative legitimizing commerce (Chan, 2009). Likewise in the French funeral industry, directors of large funeral companies were vocal in claiming that they “catered to each consumer’s needs” to justify the often high costs of their services (Trompette, 2008). Generally speaking, the morals-and-markets literature’s few discussions of professional groups in contested markets have focused on these professionals’ efforts at using narratives as legitimizing devices.

**Practice-based distinctions.** Narrative distinctions are not the only way to uphold moral pursuits; practice-based distinctions provide similar opportunities. In markets, practices can also “create and sustain stable categories that then legitimate statuses” (Fourcade-Gourinchas and Healy, 2007: 303-304). Few studies have examined the efforts deployed to create and enforce those practices. The results of such efforts have nonetheless been occasionally noted, perhaps most clearly in studies of the Danish pornographic film industry (Jensen, 2008) and of men’s bathhouses in the United States (Hudson and Okhuysen, 2009). Following legalization of picture pornography in

Denmark in 1969, the Danish film industry adopted the practice of using mainstream actors to legitimize its pursuit. Likewise, employees of men's bathhouses in the United States have adopted some routines of mainstream health clubs (such as orienting clients, handing out towels or assigning lockers) to gain legitimacy. These studies suggest the existence of a wider range of devices internal actors may use to uphold moral projects than is currently depicted in the morals-and-markets literature.

Two literatures in particular justify paying attention to practices as legitimizing devices. First, the literature on professions observes that narratives are only one element of defending jurisdictions (Abbott, 1988: 60-68). Narratives are perhaps most relevant in the public arena, but inscribing professional claims into the legal arena provides an alternate way to uphold a professional jurisdiction (e.g., in certain states, only those individuals who succeeded at a bar examination are qualified to practice law). And professionals rely as well on recurring practice-based distinctions in the workplace to defend their jurisdiction and ensure the legitimacy of their pursuits. Practice-based distinctions include task distinctions, but also distinctions in ways apparently similar activities are performed (Van Maanen and Barley, 1984; Barley, 1986; Nelsen and Barley, 1997; Bechky, 2003; O'Mahony and Long Lingo, Forthcoming). As illustrations, factory craftsmen and corporate executives test their colleagues' morals by assessing their practical responses to given situations. Abusing a factory's leniency system (Anteby, 2008) or engaging in conflict too overtly (Morrill, 1991) were both taken to indicate that certain individuals might not rightfully belong to the work group. Such an ongoing practice-based distinction also upholds the legitimacy of the work performed.

Second, the literature on market conventions points to practices of trade as central to the shaping of markets and to the qualification of traded goods (Favereau, 1989; Thévenot, 1990; Boltanski and Chiapello, 1999). Conventions are defined as “understandings, often tacit but also conscious, that organize and coordinate action in predictable ways” (Biggart and Beamish, 2003: 444). Though conventions apply both to narratives and practices, they have been often documented in patterns of practice. The approach implies that the ways goods are traded also constitute the market (Callon, 2005; de La Pradelle, 2005; MacKenzie, 2006; Zbaracki, 2007). In essence, the quality of traded goods is said to result from the steps or actions of trade (Callon, et al., 2002). Typically, a table strawberry or a yogurt becomes identified as such because of how it is produced, packed, distributed, presented, and received by customers (Garcia, 1986; Dubuisson-Quellier, 1999). At each step of the process, the product gets further qualified to become what producers and customers identify it with. For instance, a “melon from Provence” (a French region) is said to be *from* Provence, not because it is grown in Provence, but because of the multiple expected steps that lead it to being sold as such (de La Pradelle, 2005). The literature on market conventions has perhaps come closest to making the link between morals and practices.

This study of commerce in cadavers provides a window into both the practices and narratives of market participants, particularly those belonging to a professional group traditionally associated with such commerce. It shows how professionals’ efforts shape commerce and aim to address the questions of the market’s and their jurisdiction’s moral legitimacy. In doing so, this study suggests a pragmatic view of moral markets grounded in participants’ efforts to promote select practices of trade. In that sense, the answer to

what makes markets moral is not only tied to the category of traded goods or to the narrative distinctions deployed to legitimize potentially contested commerce, but also to practice-based distinctions on *how* to trade.

## **SETTING, DATA, AND METHODS**

### **Commerce in Cadavers**

Historically, commerce in human cadavers was created by medical schools that trained future physicians. Most physicians undergo training in anatomy that requires the dissection of a cadaver. Finding an adequate supply of cadavers for this purpose often poses an ongoing challenge (Baumel, 1968; Dasgupta, 2004). The recent advent of anatomical training software does not seem to have dampened the demand for cadavers (Prentice, 2005). Other health-care fields, such as reconstructive dentistry and osteopathic medicine, also increasingly rely on cadavers or cadaver parts (jaws and joints, respectively) for initial training. And the continuing medical education of practicing professionals can often require cadavers or parts as well. For instance, medical device manufacturers regularly invite surgeons to training sessions where they test new instruments on human remains (Gawade, 2002: 27). Overall the demand for cadavers appears to be growing, but is hard to estimate.

The supply of cadavers is slightly easier to assess. There is no federal monitoring of whole-body donation, but estimates suggest that the total number of U.S. whole-body donations approximated 20,000 in 2006 (Becker and Elías, 2007). The U.S. supply is controlled by close to 150 academic-housed whole-body-donation programs (State Anatomical Board of Florida, 2006) and a dozen independent ventures, both for-profit

and non-profit organizations. Academic-housed programs are defined here as programs housed in facilities that focus primarily on higher education or research. By contrast, independent ventures are not affiliated with higher education or research institutions.<sup>2</sup> Staff members of academic-housed programs historically formed an “exclusive group of individuals applying somewhat abstract knowledge to particular cases” (here, whole-body donations) and therefore can be considered a profession (Abbott, 1988: 318).

Current U.S. legislation governing the commerce in cadavers constrains the purchase and sale of cadavers while facilitating the acquisition and transfer of cadavers to meet medical demands. Since 1968, the Uniform Anatomical Gift Act (UAGA), adopted by every U.S. state, has provided a legal framework for such commerce (National Conference of Commissioners on Uniform State Laws, 1968). The Act created a framework for obtaining donor consent and prioritized the rights of next of kin to bequeath anatomical gifts of decedents who did not specify their wishes. A 1987 revision of the UAGA, enacted by most U.S. states, made it a felony to “knowingly, for valuable consideration, purchase or sell a [body] part for transplantation or therapy, if removal of the part is intended to occur after the death of the decedent” (National Conference of Commissioners on Uniform State Laws, 1987). To allow procurement programs to recover part of their costs, however, the 1987 Act excluded “the reasonable payment [by users] for the removal, processing, disposal, preservation, quality control, storage, transportation, or implantation of a part.” This provision allowed providers (in particular independent ventures) to require “reasonable” payment for their services.

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<sup>2</sup> One independent venture had links with a continuing-medical-education training facility, but the majority of such ventures operate independently.



Though prohibitions on the purchase and sale of cadavers (as opposed to body parts), and for purposes other than transplant or therapy (such as education and research), were not spelled out in the Act, its scope was usually interpreted as encompassing cadaver procurement regardless of purpose. The 2006 revision of the UAGA made this loophole explicit by excluding the body in its entirety from the definition of a part: “The term [part] does not include the whole body” (National Conference of Commissioners on Uniform State Laws, 2006). As the California Supreme Court had previously clarified, “Given the current provisions of the Uniform Anatomical Gift Act, there is no basis to conclude that there is a general public policy in this state prohibiting hospitals or medical centers from giving, or prohibiting patients from receiving, valuable consideration for body parts which are to be used for medical research or the advancement of medical science” (Moore v. Regents of University of California, 1990). Thus the purchase or sale of body parts or cadavers for purposes *other than* transplantation and therapy is legal as long as proper consent has been obtained.

This legal framework has lent encouragement to the commerce in cadavers. An article published by the Cato Institute praised the commerce in cadavers for medical education and research as an example of an unregulated market (Harrington and Sayre, 2006). New independent ventures procuring cadavers with names like Science Care and Life Legacy have begun operating in the same geographies as academic-housed programs. These ventures, as will be shown, have heightened the pressure on academic-housed programs to legitimize their own pursuits.

## Research Design

This research project uses in-depth analysis of a contested market in a given geography to understand how markets are rendered moral. Like previous researchers on the morality of contested markets (Zelizer, 1979; Zelizer, 1985; Healy, 2006; Quinn, 2008), I focus on moral issues that emerge within these markets. I build on the assumption that moral pursuits are a part of markets' internal dynamics to uncover participants' efforts to build legitimacy (Fourcade-Gourinchas and Healy, 2007). Unlike prior research on contested markets, which largely focuses on the narratives deployed to counter a categorical taboo, my emphasis is on participants' narratives *and* practices. Thus, my data are not court transcripts or press articles but data generated by market insiders, pertaining in particular to practices. Such a design trades depth for breadth and does not allow for cross-geographical or longitudinal comparisons. But because it captures the nuances of what participants consider to be legitimate pursuits, this approach is well suited to documenting market participants' efforts.

Any U.S. state might seem a suitable setting to study the commerce in cadavers, but few states keep extensive records of commerce. In 2007, however, the state of New York established an exhaustive legal reporting obligation (starting with the prior year) for "acquisition and use" of human cadavers. I therefore made a methodological choice to focus on that state and on the data from a given year, 2007. I chose the second year of obligatory reporting because data from the first year, 2006, included at least one reporting error, suggesting that some programs might need an initial year to perfect their reporting procedures.<sup>3</sup> The dynamics of New York's commerce in cadavers were typical in many ways of what could be found elsewhere. New York's legislature enacted a classic version

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<sup>3</sup> Analyses of the 2006 data support the 2007 findings reported here.

of the UAGA, its medical schools have historically procured most donations, and a few independent ventures have been licensed to operate in the state. At the same time, professional gatekeepers seemed more active and numerous in New York than in other states to the point of being able to strongly limit independent ventures' in-state activities.<sup>4</sup> Thus, New York represented a geography in which the efforts of professional gatekeepers were likely to be more salient than in other settings.

### **Data Sources**

Three types of data are necessary to understand the efforts deployed by participants in the commerce in cadavers. First, we need a clear picture of actual trade in the commerce in cadavers. Archival data on the acquisition and use of cadavers in New York State helps fill in this picture by making patterns of trade evident. Second, interviews are necessary to capture market participants' efforts and views. Most interviews were conducted in-state, but out-of-state interviews were also conducted to broaden the understanding of market participants' efforts. Finally, observations during program visits help to contextualize participants' practices in relation to the commerce in cadavers.

*Archives.* A state license is required to acquire and use cadavers in New York; fifty-three programs were licensed in 2007 (see for details Table 1). All “non-transplant anatomic banks” licensed in New York to acquire and use whole bodies must submit activity reports to the New York State Department of Health. Failure to report such activities could lead to the loss of a license and consequent inability to operate in the state. “Non-transplant anatomic banks” are defined by New York State law as “any

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<sup>4</sup> Efforts to legitimize commerce in cadavers have been deployed in other states, such as Maryland and Minnesota. In those states, a limited number of individuals seemed to have spearheaded these efforts.

person or facility that solicits, retrieves, performs donor selection and/or testing, preserves, transports, allocates, distributes, acquires, processes, stores or arranges for the storage of non-transplant anatomic parts, including whole bodies, body segments, organs or tissues from living or deceased donors, for education and/or research purposes” (State of New York Public Health Law, 2007). Access to these reports was crucial in compiling a full picture of cadaver commerce in the state.

- Insert Here Table 1, Profile of Non-transplant Anatomical Banks in New York, 2007 -

**Interviews.** To understand how the commerce in cadavers operated, 48 interviews were conducted (see Table 2 for details). The vast majority of the interviewees (38) were staff members at academic-housed programs that I label *professionals*. The remaining interviewees were staff members of independent ventures and of the Office of the Chief Medical Examiner, as well as “industry” insiders, namely two corporate users of cadavers (automotive-industry employees involved in crash-test research), two funeral directors often asked to transport cadavers, and an airline executive who specialized in the transportation of “human remains.” The interviews typically lasted 45 minutes and were conducted on-site or by phone, often after face-to-face introductions at professional meetings attended by many staff members of academic-housed programs (see Observations, below). Interviews were organized around a consistent set of questions but were also tailored to respondents’ areas of expertise and to the nature of their involvement in commerce. All interviewees were asked to provide examples of typical cadaver-acquisition-and-use decisions. Three-quarters of the interviews were recorded, and extensive notes were taken during all interviews.

To form a sample of interviewees, I first contacted all individuals listed as contacts in the activity reports submitted to the New York State Department of Health. Of the 53 individuals contacted, 28 agreed to be interviewed. (Non-respondents did not appear to differ significantly from respondents with respect to program type or size.) Of the five independent ventures licensed in New York, three agreed to be interviewed. Another venture not licensed in New York also agreed to an interview.<sup>5</sup> To add robustness to the data, I also conducted interviews with out-of-state professionals. These additional interviewees were selected via a two-step process. First, I approached randomly selected participants in sessions on anatomical donations at the principal annual meeting of clinical anatomists, explained my project, and inquired whether they might later agree to be interviewed; most respondents agreed. Second, I asked interviewees to suggest other potential interviewees. This process yielded a random sample of New York commerce participants and a snowball sample of participants in the commerce in cadavers nationwide.

- Insert Here Table 2, Details of Interviewees -

*Observations.* I conducted on-site observations in six cadaver-procurement programs, for a total of 15 observation days, to familiarize myself with their operations. The sampling of observations was a convenience sample. All interviewees were asked at the end of the interviews whether they would permit day-long observations at their site. From among the approximately 50 percent of interviewees who agreed to such observations, I selected the most geographically convenient. I observed both smaller and larger programs, as well as both academic-housed and independent programs. I took

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<sup>5</sup> Most independent ventures appeared to operate on an identical model.

extensive notes on the activities of staff members ranging from program directors to administrative assistants. I also attended three consecutive annual conferences of the American Association of Clinical Anatomists (AACA), a professional association dedicated to advancing the art and science of clinical anatomy. At the AACA conferences, I attended and took extensive notes at the Anatomical Services Committee's session (which focuses on whole-body donations) and several presentations organized by that committee. Almost half of all U.S. academic-housed programs participated in the committee's activities. Each of the three years that I attended, 50-100 participants came to the session. These sessions were the sole national annual venues for programs to exchange practices and ideas regarding the acquisition and use of cadavers.

### **Data Analysis**

An initial set of analyses examined actual patterns of cadaver trades in New York. Archival data were used to reconstruct a map of commerce that identified the main cadaver-procurement and recipient programs and quantified flows of cadavers in the state. To test the accuracy of the reconstructed map of commerce, interviewees were asked to report any trades they had engaged in with other programs and to name those programs when relevant. Their answers were triangulated with data from the archives. There were no discrepancies between the interviewees' answers and the archived New York State Department of Health records.<sup>6</sup>

The second phase of analysis consisted of reading and coding the interview data. This analysis was conducted in keeping with grounded theory guidelines (Glaser and

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<sup>6</sup> The possibility that programs refused to be interviewed because they had failed to report their data accurately cannot be discounted, but the likelihood seems low: because I triangulated programs' replies, an entire set of "non-accurate" respondents would have had to decline interviews.

Strauss, 1967; Miles and Huberman, 1994). As an illustration, once transcribed or noted, interview data were analyzed for salient attributes. Any issues that participants repeatedly voiced in reference to the commerce in cadavers were treated as salient attributes. I read the interview transcripts and notes with an attentive eye to assertions opposing and in defense of certain practices. Recurring themes, such as donors' consent and the dissection of cadavers prior to use were gradually tracked for content. To strengthen the analyses, an independent coder also read all the transcribed interviews to analyze recurring themes; we then compared themes, reread the interviews in light of each other's insights, and fine-tuned our shared understanding of the narratives.

Finally, observational data were also recorded to identify key steps in the procurement and use of cadavers and to capture the nature of a typical day at a given program. In addition, annual-meeting field notes proved important for identifying controversies in the field. Though many of these observations are not detailed here, they contributed substantially to my general knowledge of the commerce in cadavers.

## **FINDINGS**

The findings are detailed in four sections. An initial section points to a jurisdictional dispute within the commerce in cadavers. I then explain how the professionals traditionally entrusted with this commerce handle such a dispute. First, I document the narrative distinction they rely on to distinguish their own pursuit from an alternative circuit of commerce. Second, I show how they geographically insulate, in practice, their pursuit from an alternate one by trading a fair number of cadavers among themselves. The key role a particular group of professionals—those I label *gatekeepers*—play in

maintaining such insularity is described in a third section. Yet alongside narrating their work differently and trading select cadavers, the professionals, particularly gatekeepers, also promote proper ways of trading cadavers. In a last section, I detail the practice-based distinctions made by professionals between proper and improper commerce, which suggest that how cadavers are traded also contributes to building moral legitimacy.

### **Jurisdictional Dispute in the Commerce in Cadavers**

Given the sacredness often attributed to the human body and to death (Mitford, 1998), the commerce in cadavers has historically proven contested. In the past, cadaver procurement in the United States operated mostly “outside of the legal process or in the shadows of law” and was commonly referred to as “body-snatching” (Goodwin, 2006: 11). Those responsible for procuring corpses for medical schools often resorted to disinterring cadavers or paying others to do so (Sappol, 2002; Goodwin, 2006). Some states tried to curb such practices by permitting use of the cadavers of specific populations, such as convicted murderers or indigents, for medical education. Despite such measures, grave robbing flourished until the early twentieth century (Goodwin, 2006: 171). Historically, procuring cadavers generally proved to be illegal, was mostly deemed illegitimate, and hardly constituted a profession.

In 1968, academic-housed staff members involved in the commerce in cadavers started gaining some legitimacy for their pursuit. The 1968 Uniform Anatomical Gift Act’s definition of the legal parameters for donations provided them with a new legal basis for their pursuit. Though anatomical donations, like cadaveric organ transfers, mostly failed “to become routinized within the collective lay imagination” (Sharp, 2006:



41), they gained broader acceptance with the Act's adoption. Gradually, leaders from major faiths also endorsed whole-body donations as acts in accordance with their respective traditions and, more importantly, as signs of generosity (Mitford, 1998). Inspired by such progress, academic-housed staff members formed in 1991 a "Willed Body Directors" shared interest group at the American Association of Clinical Anatomists (AACA) (Cahill and Payer, 1991). Most academic-housed programs were supervised and run by faculty members holding a Ph.D. in anatomical sciences, physiology, or physical anthropology—individuals already members of the AACA. Some programs started even holding end-of-year "remembrance ceremonies" attended by medical students and deceased donors' families to honor the deceased. All these changes provided new visibility and legitimacy for the profession.

Starting in the 1980s, independent ventures took advantage of the opportunity offered by the legislation governing the commerce in cadavers to set up operations. Gradually, the scale of their operations made them key players in commerce. For instance, by 2007 the two largest U.S. independent ventures were each securing several thousand donations per year as compared to a maximum of several hundred for the most successful academic-housed programs. The activity reports of New York license-holders reflect this trend. As Figure 1 indicates, the volume of cadavers procured by independent ventures trumped that of academic-housed programs. While academic-housed programs received donations locally, independent ventures often reached beyond their home base. A study of a typical venture found, for instance, that the overwhelming majority of donations (82 percent) came from out-of-state (Anteby and Hyman, 2008: 965). This sourcing pattern explains why ventures tended to locate near active airports. Proximity to

airports also ensured fast delivery of specimens—a critical consideration, since preservation is paramount in the commerce in cadavers.

- Insert Here Figure 1, Cadavers Procured by Type of License-Holders, 2007 -

The rise of independent ventures was perceived as a direct threat by professionals. Early attempts by ventures' staff to join gatherings of professionals were vehemently resisted. In a few states, local professionals even asked health officials to investigate the ventures' facilities to attest to their legality. Professionals issued a policy statement noting their concern about "independent entrepreneurs, acting as third-party brokers" and "certain donor programs that appear to be operating for budget enhancement" (Cahill and Marks, 1991: 232). Like body-snatchers in the past, independent ventures' motives and character were depicted as distinct from those of academic-housed programs. Most academic-housed staff also deemed the ventures "unprofessional" since they were run by individuals with no medical training. (The training of a few entrepreneurs as funeral home directors was also deemed "irrelevant" by these professionals.)

A line between legal and illegal commerce in cadavers still remained, but the boundary between the academic-housed programs' and the ventures' pursuits was harder to distinguish. Clearly if someone operated outside the law, she engaged in a "soulless exercise" in desecrating the human body (People v. Brown, 2005). Within the law, however, the boundary between types of providers was harder to ascertain. As an illustration, a recent request for proposals for cadavers issued by the University of California System (obligatory due to the level of funds engaged) was open to independent ventures and academic programs alike (Regents of the University of California, 2008).

With their legitimacy only in its infancy, academic-housed staff members were suddenly confronted with a jurisdictional dispute that echoed their worst fear, namely being associated with the historical body-snatcher image (evoked by the new ventures) that their profession had tried hard to distance itself from.

### **Distinguishing Circuits of Commerce via Narratives**

To counter the jurisdictional dispute, all interviewed professionals perceived themselves as operating within a “sphere” or “circuit” distinct from that of programs and individuals engaged in what they called “unethical” and “illegal” commerce. Characterization of the other circuit as immoral was widespread among academic-housed respondents. (The terms *moral* and *immoral* can obviously be reversed depending on the profile of respondents.) As one professional put it, “for the most part willed-body programs are run on a pretty legitimate basis, [but] you are going to find a rascal in every business once and a while.” In New York in particular, all professionals voiced a similar narrative distinction between these circuits.<sup>7</sup>

These other programs were described as “outsiders” or as operating “off the radar.” It did not matter that some “immoral” programs operated legally. Academic-housed interviewees saw these programs as outsiders because they “duped naïve donors and their families about their motives.” Operating off the radar suggested not only that the immoral circuit might engage in illegal practices, but also that it might deceive potential donors and their families about its goals. While professionals saw themselves as pursuing “higher goals,” participants in the immoral circuit were said to engage in

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<sup>7</sup> In only one instance the distinction between circuits was described in health terms, suggesting that the safety norms adopted by the independent ventures might prove less stringent than those adopted by the academic-housed programs. Hepatitis and HIV testing were, for instance, routine in both circuits.

commerce “only for themselves.” The perceived egotistic goals of independent ventures troubled the professionals and led them to condemn such ventures on moral grounds. In the eyes of academic-housed interviewees, the independent entrepreneurs epitomized the immoral circuit.

Evidence of past misconduct was usually invoked in those instances to illustrate what was wrong with the immoral circuit. For example, “random occurrences that hit the press around the country of, you know, improper use of cadavers or body parts” were cited as proof of an immoral circuit’s existence. What one interviewee called “the New Jersey example of stolen body parts”—an incident in which the bones of the television commentator Alistair Cook were stolen from a funeral home and sold for profit—was frequently mentioned as an example of how commerce could go wrong.<sup>8</sup> Similarly, independent ventures’ marketing letters to funeral homes suggesting that families might “save money” if they agreed to “donate their loved one to science” were seen as evidence of wrongdoing. (The funeral homes would be reimbursed for their transportation and cremation costs, and might therefore encourage families with limited means to consider this option.). These letters reinforced the idea that ventures acted “only for themselves.”

Whereas many independent ventures’ interviewees downplayed the distinction between circuits and aspired to be perceived as an “equivalent option” to an academic-housed donation, some also voiced pride in belonging to an alternate circuit. They questioned the morality of academic-housed programs “turning down some cadavers that could be put to good use” and “not fully utilizing” the ones they accepted. The ventures’ staff emphasized that their cadavers were “extensively” used and that multiple recipients benefited from the donation. Moreover, all independent venture interviewees considered

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<sup>8</sup> For a description of the Alistair Cook incident, see Scheper-Hughes (2006).

the quality of services they provided to families and to specimen-users higher than those offered by academic-housed programs. For instance, the ability to return cremated ashes to the family within months or to answer any users' needs on the spot was seen as evidence of superior service. Thus, the academic-housed programs lacked what the ventures saw as "organizational" skills.

Though generally described as distinct by professionals, the two circuits of commerce exhibited some porosity. For one thing, professionals acknowledged that problems they attributed to the other circuit could also arise in their own ranks. Several academic-housed programs mentioned the "temptation to do things they should not be doing" when speaking about academic colleagues. As one professional pointed out, some recent scandals involving cadavers implicated staff members at academic-housed programs (not independent ventures) who had sold specimens for profit.<sup>9</sup> Furthermore, some professionals acknowledged the need filled by independent ventures. One such interviewee said that he occasionally referred families to these ventures when they inquired about donating a recently deceased relative he did not want to accept. He cited such ventures by name, without endorsing any of them, to "help the family" in "pursuing the path they had chosen." Despite the porosity, the narrative contrast between circuits was generally maintained. Overall, this contrast strengthened the distinction between the professionals' pursuit and an alternative course of action.

### **Insulating in Practice Circuits of Commerce**

While professionals were establishing a narrative distinction between their activities and the broader market for cadavers, they were also actively engaging in commerce by

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<sup>9</sup> The scandal referred to occurred at UCLA in 2004, see Madigan (2004)] for details.

trading a relatively high number of cadavers in New York. To avoid confusion in circuits and defend their jurisdiction, professionals located in New York opted to only trade those cadavers secured in-state by other academic-housed programs. Such a strategy helped them trade cadavers while seeming to oppose market developments.

Commerce in cadavers in New York operated in a fairly insular fashion; trades with out-of-state programs, particularly independent ventures (even those licensed in New York), were infrequent. Given how commerce in cadavers operates in the United States, these patterns point to purposeful trading practices. Archival data on cadaver acquisition in New York suggest that in-state programs essentially operated in a regional submarket. Of the 1,694 cadavers secured in 2007 by all non-transplant anatomical banks located in New York, only 31 (1.8 percent) came from outside the state. Moreover, these few out-of-state cadavers came from another academic-housed program, not from independent ventures. Thus, most cadavers acquired by in-state programs were procured locally and from academic-housed programs, despite the availability of such specimens from out-of-state independent ventures. A similar insularity prevailed in specimen-usage patterns as well; in-state cadaver acquisitions were used exclusively within the state.

By contrast, independent ventures tended to acquire and send cadavers nationally, but none acquired whole-body donations in New York or sent cadavers to New York programs. Among the programs licensed in New York to acquire and use cadavers, five were independent ventures, all located out of state (see Table 1). These ventures actively recruited donors in many states, particularly those with high concentrations of retirees, like Arizona and Florida, but none reported donations in New York. Though it is possible that unlicensed ventures might be sourcing in-state, ventures were typically quite careful

to obey prevailing laws to counter the stigma often associated with their pursuits. Thus it seems unlikely that unlicensed independent ventures sourced in the state.

The existence of a regional New York submarket was facilitated by the active transfer between academic-housed programs of cadavers, thus reducing the need for these programs to look to other sources, including out-of-state sources, for specimens. In 2007, academic-housed programs located in New York secured a total of 1,146 cadavers.<sup>10</sup> Of these, 469 (41 percent) were transferred voluntarily to other academic-housed programs (see Table 3). Though only a few programs had sufficiently ample supplies to distribute specimens, many programs benefited from their distribution. Nine in-state academic-housed programs transferred cadavers they had acquired to other in-state recipients, and 70 percent (30 of the 43) of in-state academic-housed programs received cadavers from another in-state program.

- Insert Here Table 3, Overview of New York License Holders' Cadaver Trades, 2007 -

These transfers were voluntary and depended on programs' willingness to part with specimens they had acquired. Regardless of the number of donations, no academic-housed program ever had "spare" cadavers. Cadavers could always be put to good use—for example by lowering the number of students per cadaver in a class or by offering physicians advanced training in new procedures. Even so, some academic-housed programs, the largest being referred to in-state as "source" programs, voluntarily transferred cadavers to other programs, known as "recipients." Recipient schools were aware that such transfers depended on the willingness of source schools to part with their resources. As one recipient-school professional explained, "I am sort of in a position of a

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<sup>10</sup> The 548 remaining cadavers secured by the Chief Medical Examiner's Office will be discussed later.

beggar.” Source schools in turn reminded recipients that transfers were done at their discretion. The following quote is typical of the position of source programs: “I will be blunt: our school has no surplus. I do not supply all my [own] demands.” Sources schools were transferring cadavers at a cost.

These cadaver transfers can be traced to the longstanding practice at some large programs of supplying smaller local institutions, which professionals at source schools called “community” or “affiliate” institutions. The term *affiliate* suggested a shared trajectory, but no formal connection linked the affiliate institutions and the programs that supplied them. For instance, a program housed in a large university regularly supplied two nearby community colleges with approximately five cadavers each per year. The community colleges, considered part of the “broader medical community” by the source program, trained nurse practitioners and physical therapists. Such local transfers were often referred to by the source schools as “social distributions.”

These trade patterns created *de facto* a fairly insular commerce for cadavers in New York, thus achieving what most professionals hoped for, namely the physical separation of their activities from those of independent ventures. In New York, transfers among programs ensured separate circuits on a fairly constant basis for specimens procured by academic-housed programs and those procured by independent ventures. In other states, the goal of physical separation between circuits could be pursued mainly on a per-program basis. For instance, as an out-of-state professional explained, “We do not allow our specimens to mix with other groups [of specimens].” In particular, he added, “I will not allow my specimens to be used with specimens from private brokers or for-profit ventures.” Despite some porosity between academic-housed programs and independent



ventures in the commerce for anatomical parts, the in-state commerce in cadavers remained fairly isolated from out-of-state trades, particularly trades with independent ventures.<sup>11</sup> Such patterns of trade suggest an attempt to distinguish in practice circuits of commerce within the broader commerce in cadavers.

### **Professional Gatekeepers' Role in Promoting Select Trades**

The insularity of commerce in New York was largely traceable to the efforts of a select group of in-state professionals to supply their peers. Despite legitimate internal demand for cadavers within their host institutions, these professionals chose to distribute some of their specimens to other institutions. In particular, the four in-state academic-housed programs that each secured annually more than 100 cadavers transferred 54 percent of their supply (460 out of 852 cadavers) to other academic-housed programs. Five smaller in-state academic-housed programs also distributed some of their acquired specimens.

It is noteworthy that all nine schools supplying their academic peers were part of the Anatomical Committee of the Associated Medical Schools of New York (AMSNY). The decisions to coordinate efforts at the state level and to geographically extend the transfer of cadavers beyond the confines of affiliate programs originated within this professional committee. AMSNY is a consortium of public and private medical schools. Its Anatomical Committee was created in 1975 to improve whole-body donation practices. Membership in the committee was by invitation and grew gradually over the years from four members at its inception to 11 by 1979, 15 by 1985, and 18 since 1988 (see Table 4). Over the past decade, the committee has promoted specimen transfers

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<sup>11</sup> This physical distinction was less clear-cut in the commerce in body parts. Four of the independent ventures licensed to operate in New York sent parts to in-state users, mostly for specialized training and research needs such as continuing orthopedics-surgery training and brain research.

among its members by hosting yearly coordination meetings to discuss matching cadaver supply to demand. By 2003, the committee had also started asking its members to voluntarily report annual cadaver transfers.

The subgroup of New York academic-housed programs that belong to AMSNY's Anatomical Committee—those that I label *gatekeepers*—included only 18 of the 45 non-transplant anatomic-bank sites licensed for the acquisition and use of cadavers and located in New York. This group nonetheless accounted for 68 percent of all cadavers acquired in-state (1,146 out of 1,694) and for all cadavers voluntarily secured in-state once the Chief Medical Examiner Office's numbers are excluded. Moreover, committee members were responsible for all in-state transfers of cadavers. Importantly, all gatekeepers were holders of doctorates, mainly in anatomical sciences, physiology or physical anthropology.

- Insert Here Table 4, Details of the AMSNY's Anatomical Committee, 2007 -

Gatekeepers played a central role in promoting proper sourcing. All but one gatekeeper mentioned this as a goal of the consortium. As a typical gatekeeper explained, “We wanted to make sure no school in New York State was forced to go to unethical sources to get cadavers.” As another gatekeeper noted, “If we cannot supply the needs of all our members, we will force some to go outside and look for cadavers.” The existence of “less honorable” outsiders was perhaps best captured by a professional at a recipient school, who recalled his initial interactions with gatekeepers. In his words, “they wanted to get everybody, all of the schools in the state who either accept donations or use cadavers . . . to come together in that sort of blanket organization” and to make sure “that

everything was done legitimately and above-board.” He explained the gatekeepers’ efforts relating to concerns over “the way some of the things were being handled by certain less-than—well, what am I trying to say?—less-than-honorable, I guess would be the best way to put it, persons at the time.” The honor or legitimacy of commerce was at stake.

Gatekeepers were particularly concerned over the years about the need to regulate the commerce in cadavers. Yet freedom of interstate commerce prevented even receptive legislators from barring out-of-state ventures from operating in the state. Legislators did require ventures to register as licensed “non-transplant anatomic banks,” however, and most of the largest national ventures complied. Even so, gatekeepers were often disappointed by the lack of more stringent legislation. “The people who sell you houses are regulated,” explained one gatekeeper. “The people who make food for you are regulated. . . yet something as big and as important as body donations are not!” Concerned academic-housed programs therefore took it on themselves to shape commerce via a group of like-minded peers.

The gatekeepers’ concerns were also partly self-serving. They mentioned their fears that unethical conduct would have a ripple effect on potential donors’ willingness to register, and ultimately on the supply of cadavers. They also invoked the need to maintain “public trust” and the likelihood that “public impression would probably govern the availability of bodies far more than any regulations would.” Scandals involving cadavers could have “an impact on all of us,” one gatekeeper noted, because potential donors would be “far less likely to actually go through with a donation if they think something illicit may be done.” Another gatekeeper pointed out that it would be to his own “benefit

that there be no scandals involving anatomical materials at medical schools in New York State.” He added, if someone acts unethically “that could come back and bite,” and clarified, “So while, yes, you could say that it [transferring cadavers] was a good thing to do, it was also the right thing to do for our own programs.” Gatekeepers wanted, in effect, to protect their own circuit.

### **Distinguishing Circuits of Commerce via Practices of Trade**

In addition to employing distinct narratives to describe the two circuits and maintaining a physical separation between circuits, gatekeepers also developed a set of practices for trading cadavers to defend their jurisdiction. The practices went beyond mere compliance with prevailing law. As one gatekeeper put it, certain practices might “strictly speaking, be legal, but that does not make them ethical.” These practices suggest how to trade cadavers properly and by implication how not to do so. Many trading practices, such as that of “never removing fingernail polish from a cadaver so medical students remember this cadaver is somebody,” were mentioned in interviews. Those mentioned by more than half the interviewed professionals are explained below and summarized in Table 5. The fact that some programs did not enforce all practices did not undermine the collective pursuit; a full consensus, though desirable, was not needed to uphold their overall goals. (Table 6 presents a summary of interviewees’ adoption of each practice.)

- Insert Here Table 5, Comparison of Practices of Trade across Circuits -

- Insert Here Table 6, Interviewees’ Adoption of Main Practices -

**Covering costs versus making a profit.** Payment for services needed to secure specimens was an accepted practice among all interviewees working in academic-housed

programs or ventures. In line with the 1987 Uniform Anatomical Gift Act guidelines, the “reasonable payment” by users to cover specific costs linked to procurement of a cadaver (such as transportation and embalming costs) could be invoiced by the source to the recipient program. (Similar wording was included in the Act’s 2006 revision.) In New York these costs amounted to approximately \$1,500 per in-state transferred cadaver. There was little variation in cost between one academic-housed source program and another, and costs were stable over time. As one typical gatekeeper explained, “We sat down and figured out all the expenses we have wrapped in this—the labor, the supplies, and the time factor involved. And we just got it [the cost] that way.”

Charging procurement fees in excess of actual costs, though legal, was largely condemned at academic-housed programs. Even modest profits were viewed with concern by most professionals, and particularly by gatekeepers. Some believed that prevailing law banned any profit. “I am not allowed to make a profit,” one respondent explained. “All we do here is pass on the costs. I need to pay people who do the work for me. That’s it.” Most professionals, though aware of legal tolerance of some levels of profits, nevertheless considered pursuing profit unacceptable. “Programs in it for the money are a corrupting influence and need to be closed down,” one interviewee declared. Another speculated that “I could probably, if I wanted to, easily demonstrate that, you know, someone should be reimbursing us \$2,000 a cadaver if I wanted to build that profit in, right? . . . That’s not happening as long as I have something to say about it.” This stance was widely shared among professionals. “Some people do it for money,” another typical advocate of closing profit-driven programs noted, “but many folks do not

understand that money will be made on grandma.” Only covering procurement costs was deemed appropriate.

A desire to expose what they called the “deceit” of independent ventures also informed the gatekeepers’ practices. Though some ventures registered as non-profit organizations, it was noted, they still “made profits; they only reinvest them in the venture.” The following quote captures this stance: “There are many non-profit companies that manipulate perceptions. Their non-profit status has nothing to do with the work of God. Many people are misled by this *non-profit* term.” Overall, professionals distinguished between their own programs and ventures by noting that the former made no profit. The habit of earning “legally accepted levels” of profits was not considered an option by gatekeepers or by the vast majority of professionals.

**Obtaining donors’ versus families’ consent.** In all U.S. states, including New York, a cadaver can legally be donated, after death, without the deceased’s explicit prior consent. Such legislation is meant to generate a sufficient supply of cadavers for the needs of medical education and research. All states permit donations by immediate next of kin (spouses, parents, adult siblings, and adult children). In all but one state, the law also allows for donations by guardians; in half the states, individuals unrelated to the deceased, such as a public-health officer or a chief medical examiner—those likely to handle unclaimed cadavers—can consent to donation.

Though acquisition of unclaimed cadavers and those donated by family members was legal in most states, few interviewed professionals relied on this acquisition channel.<sup>12</sup> Cadavers acquired this way were generally deemed inappropriate; the vast

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<sup>12</sup> Local legislation in a few small geographic regions of New York barred such acquisitions.

majority of academic-housed programs required prior direct consent of the deceased.<sup>13</sup> As one gatekeeper explained, “First of all, we require the individual to be signed up themselves [in other words, not by others] prior to death.” Such programs maintained lists of registered donors to ensure that “proper” consent had been obtained. In most instances, potential donors had submitted consent forms years before death to ensure that their wishes to donate their body to science would be followed. (Donors were also asked to discuss their wishes with family members.) As further evidence of discomfort with family donations, the rare professionals that relied in part on family donations often exhibited a need to justify their practices. For instance, a professional who obtained approximately 70 percent of his specimens via individual consent but complemented that supply with family donations minimized the stigma attached to the practice. In his words, the latter donors “might have talked about it with family members, but they just never signed the forms,” thus, allowing him to partly normalize his actions.

By contrast, the professionals noted that independent ventures were in the habit of approaching families, rather than donors, in their efforts to obtain consent. Interviews with ventures partially confirmed that perception: approaching family members was the preferred way to secure donations in the initial years of operations. “In our first few years,” one venture staff member noted, “80 percent of specimens came via family, not donor, consent.” With time, however, the same ventures began compiling their own lists of potential donors and increasingly obtained consent from the future donor, not his or her family. This gradual shift did not prevent ventures from still approaching relatives of potential donors, particularly the gravely ill, to explain the process of “donating a body to science.” Independent ventures typically employed “development” staff conducting

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<sup>13</sup> The main exception is the Maryland State Anatomy Board, which accepted unclaimed cadavers.

outreach efforts to hospitals' and hospices' populations, including chaplains, to help locate potentially amenable donors or relatives.

Professionals' views on what constitutes proper consent (i.e., direct donor consent) were also embodied in their practice of generally not engaging in commerce with the Office of the Chief Medical Examiner. In 2007, for instance, the Office offered 548 cadavers to academic-housed programs in all five Manhattan boroughs.<sup>14</sup> These cadavers had always been identified by family members, but not claimed; they were therefore technically unclaimed, though not anonymous. (In other words, these donations were akin to donations with families' consent.) Despite the Office's practice of only releasing identified cadavers to academic-housed programs, only 74 such cadavers were accepted by four academic-housed programs (including members of the AMSNY's Anatomical Committee). Another 175 went to an embalming school and the remaining 299 went unused.

The condition of specimens was occasionally cited as a reason to reject unclaimed cadavers, but this was not the sole reason for the professionals' reluctance to do so. A rare professional who accepted such specimens noted that the specimens were often useable. "I always tell my colleagues that they need to go there to find specimens, but I do not understand why they don't. I often am the only one responding to a call by the Chief Medical Examiner. All of them should be running there to find specimens." Instead, most professionals, though they needed cadavers and were located near one of the Office's five sites, relied on more distant academic-housed programs to fill their needs.

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<sup>14</sup> New York Public Health Law (article 4211) specifies that unclaimed cadavers are to be delivered to "schools for study." *Schools* encompass a broad range of teaching institutions.



Most professionals expressed normative reluctance to use unclaimed cadavers, as exemplified by the following typical comment from one professional not working with the morgue. In the past, he explained, the organization that was supplying him cadavers “occasionally got the cadavers from unclaimed bodies, I think in the New York City area.” Though he knew the practice was legal, “that’s a little less respectable because those people didn’t make a donation. Those people died as transients and then subsequently their bodies were given away, so to speak, by the city morgue.” In his words, this was an improper “means” of acquiring cadavers. Only direct donor consent was the “honorable” way to operate.

**Prioritizing versus answering needs.** All three versions of the Uniform Anatomical Gift Act (1968, 1987, 2006) have specified the intended use of anatomical specimens, namely for transplantation or therapy. Though the Acts regulate use of anatomical specimens for these purposes only, they have been widely regarded as applying to other intents as well. In particular, all of the programs (including ventures) that used specimens for medical education and research viewed themselves as operating under the UAGA rules. But not all medical education and research intents were deemed equally worthy by interviewed professionals who made it a habit of screening cadaver requests for intent. The gatekeepers articulated a particularly narrow hierarchy of acceptable uses with the development of the medical profession as a priority.

The highest priority for gatekeepers was basic anatomical teaching needs, mainly the training of first- and second-year medical students. As one staff member of a large source program explained, that while colleagues “cannot teach their introductory gross anatomy course...I am not going to send cadavers to any institutions for a post-graduate

training course, a research program, continuous medical education or anything like that. That is not going to happen.” The needs of other physicians-in-training were a secondary priority. Residents in surgery, emergency medical training, ob-gyn and the like were also considered priority recipients. Next in line were allied health professionals, such as physical-therapy students and physician assistants, but only once the needs of medical students had been filled since there were not “enough specimens to go around.” In addition, undergraduate courses were sometimes deemed acceptable recipients, but some professionals imposed more restrictions on such uses. The rule that “only people going for a state-licensure-affiliated health degree can touch a cadaver” often applied.

The more contested intended use of cadavers within medical education was in “clinical courses” and ad-hoc continuing-medical-education seminars. The latter category often proved somewhat variable in content. For instance, it included both short training programs aimed at certifying practicing physicians and training in the use of company-specific medical devices. (The former were deemed more appropriate than the latter.) The reasoning behind such contestation was articulated by a typical gatekeeper while describing the latter use: “We do not deal with private companies like Johnson & Johnson. But if a physician in our medical school sponsors a class and J&J foots the bill, then we are OK. As long as our faculty members are the ones requesting specimens, we trust them to advance medical education and research.” The “big companies” were left to acquire “lots of their materials” from the independent ventures with often less stringent criteria for intended use.<sup>15</sup>

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<sup>15</sup> An archival study of shipping invoices at a typical independent venture confirmed that for-profit companies were a major category of specimen recipients (Anteby and Hyman, 2008: 967).

Finally, most professionals were united in their condemnation of the “traveling body exhibit,” an atypical but highly visible use of cadavers. “This is the worst,” one interviewee explained. “Putting bodies into traveling exhibits is just wrong. It’s all for show and play, something for the Middle Ages.” Though a few representatives of academic-housed programs saw “some educational purpose” in these exhibits, they were repeatedly compared unfavorably with the medical education and research pursued in their programs. No professional stated that she would allow her specimens to be used in such a manner.

**Respecting versus processing a cadaver.** The question of a cadaver’s integrity arose at two specific junctures in commerce: at the outset, in the case of preparing acquired specimens, and often post-use when cremating remains. No state law or legal ruling specified that cadavers needed to be kept whole. In fact, legislators had never addressed this practical issue. Post-use cremation practices elicited broad agreement among professionals, but interpretations of proper conduct varied with respect to initial preparation of specimens.

Post-use cremation practices among professionals were mainly guided by the desire to preserve the integrity of remains. Much effort was expended to ensure that used cadavers (and occasionally parts) were returned to the source program for cremation. (Gatekeepers asked their staff to report the number of cadavers returned each year to source programs.) The threshold of integrity could at times be open to debate. For instance, temporal bones were occasionally deemed integral to the body and sometimes not. One professional “asked them back from users, so we can cremate them with the rest.” Another program “usually let the specimen users dispose them. . . Since nothing is

left but bone dust, we consider this disposable material.” Despite such definitional variation, most professionals aimed to preserve the integrity of cadavers when cremating remains. Some independent ventures also adhered to the same practice.

By contrast, with regard to a cadaver’s integrity prior to use, the two circuits of commerce differed starkly. All interviewed staff members of ventures noted that dissection prior to use was the norm in their operations. The vast majority of interviewed professionals opposed dissection of cadavers prior to use and provided normative reasons for their position. The comment that “cutting bodies up and distributing parts is not what we are about” captured these respondents’ position. As one professional put it, “Some programs say the body will be segmented. Let’s be clear: that means processed! They basically remove all but the head and the hands. . . . I worry about that.” Another professional clarified, “we are not in the business of distributing partial remains.” A third added, “There are places that want just a certain part of the body, and I don’t feel very comfortable cutting the body up and sending it all over the place. . . . I would rather not cut the body up [and] respect a cadaver.”<sup>16</sup> For professionals, preserving a cadaver’s integrity prior to use was seen as a form of respect.

Nonetheless, a few professionals at large programs, particularly in source programs in New York, endorsed the practice of dissecting cadavers prior to use. They believed strongly in maximizing specimen use by sending parts, not just whole cadavers, to users. The same interviewees usually also encouraged re-use of specimens and parts when possible. In particular, when a donor proved unsuitable for an anatomy course (e.g., due to obesity), dissection prior to use was deemed appropriate. “If a donor is not

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<sup>16</sup> Practical considerations also occasionally guided some of the professionals’ views on the dissection of cadavers prior to use. For instance, two professionals cited the potential difficulty of tracking body parts.

suitable, then I harvest from the cadaver and get specific parts, such as arms, legs, et cetera,” one interviewee explained. “You can find seventy different purposes for each of these parts.” However, most professionals did not dissecting cadavers prior to use—a practice also shared by the majority of gatekeepers.

## **DISCUSSION**

The narrative and practice-based strategies of professionals and independent ventures’ staff securing cadavers constituted an interaction order in which alternate meanings of commerce were at stake. From a traditional acceptance involving mainly local sourcing and a fairly esoteric professional knowledge, the U.S. commerce in cadavers evolved to become an entrepreneurial pursuit spanning the entire country and requiring organizational rather than professional expertise. Moreover, independent ventures achieved a partial “commodification” of the traditional professional activities linked to securing cadavers by transforming these activities into commodities, which could then be bought and sold without the involvement of jurisdictional professions (Abbott, 1988: 146). Staff members of academic-housed programs, mostly trained medical professionals with a Ph.D., were suddenly confronted with an alternate view of their activities—a view that relied on new forms of structuring expertise (i.e., organization and commodification) directly competing with the older professional system (Abbott, 1988: 324).

The contest over the meaning, and ultimately the legitimacy of commerce, was not only being waged through narratives and words as past research on morals and markets would suggest, but also in practices undertaken at the bottom of consent forms, in programs’ profit-and-loss balance sheets, in priority-cues of specimen-users’ demands,

and on dissection tables upon receipt of cadavers. The struggle between legitimate and illegitimate commerce and its associated jurisdictional dispute were partly about practices of trade. The issue was not whether cadavers (as a category of goods) or only a subset of cadavers (New York specimens) could be traded, but how cadavers should be traded for commerce to occur. The “character” of the profession (Abbott, 1988: 190) was seen in essence as intertwined with the ways trading activities were performed.

In keeping with the importance of classification and distinction in sustaining morality (Durkheim and Mauss, 1903; Needham, 1973; Douglas, 1986; Douglas, 2002), the professionals promoted a view of commerce requiring several crucial tests that had to be met in practice to render commerce legitimate. First, accepting only specimens originating in-state and from other academic-housed programs suggested legitimacy, but origin was not a sufficient criterion of legitimacy. Obtaining a donor’s direct consent, asking for reimbursement of only the procurement costs, prioritizing users’ needs, and refusing to dissect a cadaver prior to use formed a set of practices more strongly pointing towards moral legitimacy. Practices of trade have traditionally been seen as constraining, but they can also be dynamic. By no means merely sources of inertia, they also are generative (Feldman and Pentland, 2003)—here, helping professionals specify and defend their jurisdiction and the legitimacy of their pursuit.

By contrast, the independent ventures championed a view of commerce that centered on catering to specimen-users’ needs and on the belief of engaging in an extensive use of cadavers. Such a view justified securing, if needed, donations from family members (not donors) and dissecting cadavers prior to use to allow as many users as possible to benefit from cadavers. Reasonable profits (above and beyond costs) were

seen as normal means to achieve these ends. In that spirit, prioritizing specimen-users' demands pointed to an inability to answer all demands and signaled more the limits of an organization's capability than the legitimacy of its endeavor.

Because some professionals in New York, those that I labeled gatekeepers, were able to institutionalize their perspective on commerce via the control and coordinated distribution of "proper" specimens to other academic-housed programs, their perspective was fairly consistently enforced. By accepting the "social distribution" of specimens, other professionals implicitly accepted the social contract attached to them, namely following proper practices of trade. While lower sourcing costs might have also influenced the recipient programs' decisions, the aspiration to belong to a legitimate circuit of commerce was probably as, if not more, central to their decisions.

### **A Pragmatic View of Moral Markets**

The U.S. commerce in cadavers is instructive for it highlights issues that scholars of markets and morals need to consider if they are to better understand how markets prove legitimate. First, the task is likely to require focusing more attention to practices of trades. Most of the literature on morals and markets has focused on the contested categories of traded good and the narratives used to legitimize these trades. This study shows that *how* trades are conducted can also render markets moral.

Relying on literature on professions and conventions, this study shifts the focus of moral assessment away from the good itself toward the trade, thus challenging a central assumption of the literature on morals and markets. This literature often depicts the moral stance as reluctance to trade certain categories of goods (Caprom and Radin, 1988;

Anderson, 1995; Carruthers and Espeland, 1998). Human anatomical goods in particular are often seen as taboo to trade (Titmuss, 1971; Scheper-Hughes, 2000; Delmonico, et al., 2002). When the category of the traded goods proves contested, market participants need to deploy narratives to legitimize their pursuit (Zelizer, 1979; Zelizer, 1985; Sanal, 2004; Spar, 2006; Quinn, 2008; Chan, 2009). Though the categorical taboo remains a useful shortcut for moral guidance, the study of the commerce in cadavers suggests that the taboo on trading certain categories of goods may be an excessively conservative device to guard against potential moral hazard. Assuming that proper practices of trade can be enforced, a focus on categorical taboos might give way to a more pragmatic view of moral markets—one relying on practices of trade to guide moral action.

The study's findings provide a novel way of understanding morals and markets. I will illustrate this point with the example of indulgences in the Catholic Church that developed in the third century for religious purposes and gradually evolved to focus solely on money (Lea, 1896). The exchange of money for the pardon of a sin might strike the contemporary mind as a peculiar form of commerce, but the original circumstances of the trade provide some context for its initial legitimacy. By the time critics in the fourteenth century denounced the commerce in indulgences as illegitimate, practices surrounding the trade had significantly evolved and focused only on the financial transaction. Initially, confession, communion, and acts of redemption (such as a prayer or a pilgrimage) were prerequisites for such a transaction. Moreover, multiple steps—often involving various levels of the Church's hierarchy—were integral to the granting of an indulgence. Thus, though the trade itself might be seen today by some as morally illegitimate, the process whereby it occurred historically contributed to its legitimacy.



Again, focusing solely on the traded good (here, indulgences) or on the narratives surrounding trades (here, the pardon of a sin) raises the risk of overlooking much of what might render markets moral.

The view of grounding legitimacy in practices echoes the position of pragmatic philosophers, such as Charles S. Peirce and John Dewey, that individuals solve problems by relying on practical habits that include “coherent repertoires” for acting vis-à-vis a set of given problems (Gross, 2009: 371). Other scholars have also repeatedly noted that the collective enactment of practices over time can produce and reproduce social order and meanings (Ortner, 1984; Certeau, 1988; Bourdieu, 1990; Knorr-Cetina, 1999; Swidler, 2001). In given markets, communities of practices can, for instance, pave the way for guiding social action and for moral legitimacy to emerge (Lave, 1988; Lave and Wenger, 1991; Orr, 1996). The pragmatic view of moral markets builds on these literatures, alongside those on professions and conventions, to call for paying close attention to participants’ practical responses to given market situations as ways to gain legitimacy.

An implication of a pragmatic view of moral markets is that markets traditionally seen as uniformly moral or immoral can include submarkets or circuits, each with its own morality, that are distinguished along lines of practices. We already know that a given market can harbor distinct “circuits of commerce” (Zelizer, 2005) in which goods that appear similar in nature can take on very different cultural meanings. More specifically, each circuit is said to incorporate “somewhat different understandings, practices, information, obligations, rights, symbols, and media of exchange” (2005: 293). Those circuits can also entail contrasted morals: in that sense, circuits for “fair” vs. “unfair” goods or “ethical” vs. “unethical” goods can coexist.

This implication also means that markets in goods that are usually deemed legitimate to trade can lose their moral legitimacy when such trades are conducted improperly, a point well illustrated by the recent U.S. crisis involving home mortgages. The mortgage-loan market was previously deemed legitimate and embraced by the largest financial institutions. Little attention was paid, however, to how these loans were sold to customers. Some data suggest that loan-generation practices were increasingly out of keeping with longstanding practices that loan officers had previously enforced (de Michelis, 2009: 6). In the absence of such practices, moral legitimacy can also become difficult to sustain.

Further research might want to focus on common practice-based distinctions in circuits across markets to identify potential classes of practices that point towards moral legitimacy. Typical classes of practices might, for instance, entail ones upholding distinct participants' rights (e.g., donors' vs. specimen-users' or borrowers' vs. lenders') or favoring varying scopes of beneficiaries (e.g., society vs. individual entrepreneurs or nations vs. financial institutions). Research designs across markets and circuits would allow for a clearer cataloging and a better understanding of classes of practices.

### **Professions and Character**

A second contribution of this study is to highlight the role of morals as legitimizing devices for professions. In the twentieth century, "character" (i.e., morals) "lost much ground" as the basis for legitimizing professional work domains (Abbott, 1988: 191). With the recent rise of contested markets in such diverse domains as agriculture, finance, and medicine, professional character might regain some of its lost ground. Professions

clearly do not epitomize morality since they “seize all sorts of human activities, not just the moral ones” (Abbott, 1988: 324). Professions, nonetheless, tend to enforce some sense of order (Durkheim, 1964: 28). The gradual inclusion in commerce of goods previously deemed off-limits to trade might therefore offer new opportunities for professions to test their ordering capacity. In such instances, professional boundary-work involving moral claims will almost certainly intensify (Gieryn, 1983; 1999).

This study also suggests that jurisdictional settlements in contested markets involving only “character” or morals are likely to prove fragile. Examining all facets of a jurisdiction, including practices of trade, informs the multiple ways by which professions defend their control over certain forms of work. Likewise, jurisdictional settlements take multiple forms (Abbott, 1988: 69-79). For instance, work tasks can be divided or one profession can be subordinated to another. Thus, professional morals are only one facet of a jurisdiction or a settlement. When taken at face-value, particularly in their narrative form, such morals can mask many other facets of a profession’s legitimacy, particularly ones enshrined in practice.

While character has historically grounded many professions, most notably British barrister, physicians, clergymen, and army officers, its role in sustaining professional legitimacy remains to be more fully explored. As an example, character is often presented as competing with other legitimizing strategies, such as technical legitimacy (Abbott, 1988: 191). Such a view misses the tight interplay between morals and practices. The conduct of British naval officers’ and North American zookeepers exemplify this interplay. During the sixteenth and seventeenth centuries, British naval officers learned how to intercept foreign ships while being “gentlemen” (Elias, 2007: 30-31). The steps

they followed to intercept ships sustained and reflected their character. Likewise, North American zookeepers' current ability to breed captive animals is tightly aligned with their moral duty to protect endangered species (Bunderson and Thompson, 2009: 40). Future research might consider examining the interplay between character and other legitimizing strategies across multiple settings. Mutual reinforcement, rather than competition, between legitimizing strategies might be the norm.

Given the preeminence of markets in contemporary society, and assuming that markets “construct society” (Fourcade, 2007: 1019), it is crucial to better understand how markets are rendered morally legitimate. Though the commerce in cadavers is an extreme setting in which to study markets, the relationship between practices of trade, professions, and morality is likely to apply to other markets as well. A view of morals along lines of practice can also apply, for instance, to the market for “fair-trade” vs. “regular” coffee or for “ethical” vs. “unethical” investing. Practices of trade or how trades are conducted are infrequently explored aspects of contested markets. Such practices can be thought of as the products of long, chaotic chains of decisions. At the same time, they often are rooted in professions and constitute an integral facet of the market and its morals.

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**Table 1**  
**Profile of Non-Transplant Anatomical Banks in New York, 2007**

Category	Number of Licensed Holders	Number of In-State License Holders	Example of License Holders
Academic-housed program	45	43	Mercy College New York University University of Rochester
Independent venture	5	0	Science Care Life Legacy Foundation Anatomy Gifts Registry
Office of the Chief Medical Examiner	1	1	Bronx location Queens location
Medical-devices manufacturer	1	1	Ellman Innovations
Private orthopedics practice	1	1	Orthopedics Associates

*Note*\_\_The academic-housed programs not located in-state were the Maryland State Anatomy Board, housed at the University of Maryland, and the Robert Wood Johnson Medical School at the University of Medicine and Dentistry in New Jersey.

**Table 2**  
**Details of Interviewees**

Category of interviewees	Number of Interviewees	Licensed in New York State	Located in New York State
Academic-housed programs	38	24	23
Independent ventures	4	3	0
Office of the Chief Medical Examiner	1	1	1
Industry insiders (5)	5	0	0
Total	48	28 (58%)	24 (50%)

*Notes\_*Nine of the 23 in-state-licensed and located academic-housed program interviewees were gatekeepers described in the Findings.



**Table 3**  
**Overview of New York License Holders' Cadaver Trades, 2007**

Category (Number of Programs)	Cadavers Acquired Independently	Cadavers Used In-House	Cadavers Transferred to Users Located in New York
Academic-housed programs (45)	1,717	1,455	500
<i>Out-of-state academic-housed programs (2)</i>	<i>571</i>	<i>266</i>	<i>31</i>
Independent ventures (5)	3,466	80	0
Office of the Chief Medical Examiner (1)	548	0	249
Other* (2)	0	0	0
Total for license holders located in New York (44)	1,694	1,189	718
Total for all license holders (53)	5,731	1,535	749

*Note\_* \* This category included a medical device manufacturer and a private orthopedic practice, both with no activity in 2007.

**Table 4**  
**Members of AMSNY's Anatomical Committee, 2007**

<b>Program</b>	<b>Year Joined</b>	<b>Cadavers Acquired Independently</b>	<b>Cadavers Used In-House</b>	<b>Cadavers Transferred to Users Located in New York</b>
Albany Medical College	1988	239	70	180
Albert Einstein College of Medicine	1979	53	63	0
Columbia University*	1979	43	56	0
CUNY	1978	0	20	0
Mount Sinai School of Medicine	1975	37	56	0
New York Chiropractic College	1977	0	40	0
New York College of Osteopathic Medicine	1977	0	53	1
New York Medical College	1975	30	40	2
New York University School of Medicine†	1978	30	39	1
Stony Brook University Medical Center	1980	74	72	2
SUNY at Buffalo	1975	294	197	97
SUNY Downstate Medical Center*	1979	16	60	3
SUNY Upstate Medical Center	1988	183	79	120
University of Rochester	1980	136	80	63
Weill Cornell Medical College	1975	11	50	0
<b>Total</b>		<b>1,146</b>	<b>975</b>	<b>469</b>

*Notes*\_\_ \* These programs both possessed two licenses but only a single committee membership. For example, Columbia University's Department of Anatomy and Cell Biology and its Department of Orthopedic Surgery had separate licenses, but only one representative of Columbia University sat on the Committee. †New York University's College of Dentistry had a separate AMSNY membership but did not report activity in 2007.

**Table 5**  
**Comparison of Main Practices of Trade**

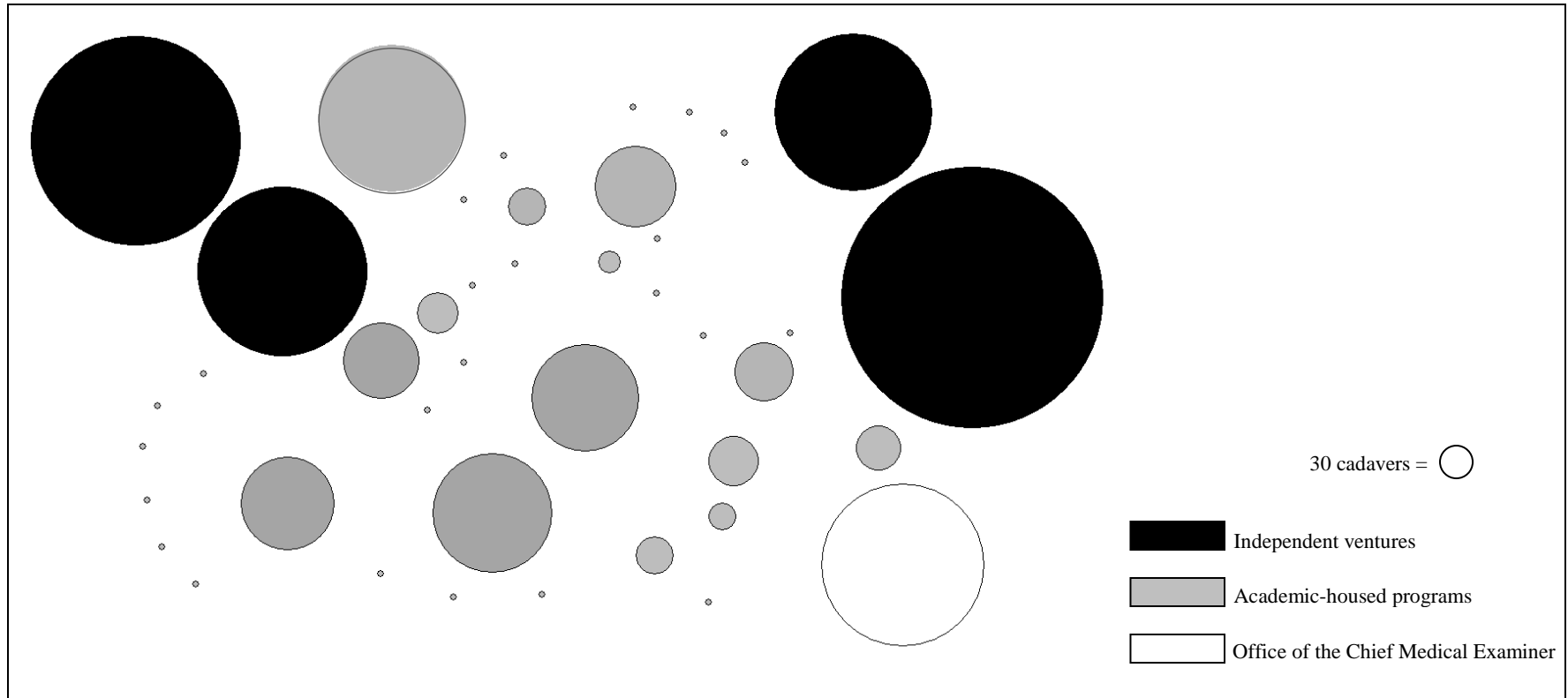
<b>Dimensions of Comparison</b>	<b>Reminder of the Legal Provision</b>	<b>Practices Most Academic-Housed Programs' Staff Perceive as Legitimate</b>	<b>Practices Most Independent Ventures' Staff Perceive as Legitimate</b>
Payments and profits	Reasonable payment to allay procurement costs is legal.	Requesting reimbursement by the user of only the procurement costs.	Making a profit by asking user to reimburse costs above the procuring costs.
Consent	Potential donors, families, and other identified parties (e.g., a medical examiner) can consent to a donation.	Obtaining donors' direct consent to secure donations.	Obtaining families' consent (without donors' direct consent) to secure donations.
Intended use	The law provides no explicit guidelines on use for educational and research purposes.	<p>Prioritizing specimen-users' needs by:</p> <ul style="list-style-type: none"> <li>- serving medical students' anatomical needs first, particularly the needs of first-year medical students;</li> <li>- serving the anatomical needs of other health-related medical professionals once medical students' needs are served;</li> <li>- serving continuing-education anatomical needs once students' needs are served;</li> <li>- serving medical research anatomical needs;</li> <li>- not serving the anatomical needs of for-profit companies.</li> </ul>	Serving all medical-education and training anatomical needs, including the needs of for-profit companies.
Integrity of the cadaver	The law provides no explicit guidelines on the integrity of a cadaver.	Refraining from dissecting a cadaver prior to use.	Dissecting a cadaver upon receipt and prior to use to distribute parts to multiple users.

**Table 6**  
**Interviewees' Adoption of Main Practices**

<b>Interviewee</b>	<b>Reimbursing Only Procurement Costs</b>	<b>Accepting Only Donations with Donors' Direct Consent</b>	<b>Accepting Donations with Families' Consent</b>	<b>Prioritizing Users' Needs</b>	<b>Serving All Users' Needs</b>	<b>Refraining from Dissecting a Cadaver Prior to Use</b>
P1	X	X		X		X
P2*	X	X		X		X
P3	X		X	X		X
P4	X	X		X		X
P5	X	X		X		X
P6*	X	X		X		X
P7	X	X		X		X
P8	X	X		X		X
P9*	X		X	X		
P10	X	X		X		X
P11	X	X		X		X
P12*	X	X		X		X
P13	X	X		X		X
P14*	X	X		X		
P15	X	X		X		X
P16	X	X		X		X
P17*	X	X		X		X
P18	X	X		X		X
P19	X		X	X		X
P20	X	X		X		X
P21	X	X		X		X
P22	X		X	X		X
P23	X	X		X		X
P24*	X	X		X		X
P25	X	X		X		X
P26	X	X		X		
P27	X	X		X		X
P28	X	X		X		X
P29*	X	X		X		X
P30	X	X		X		X
P31	X	X		X		X
P32	X	X		X		X
P33	X	X		X		
P34	X	X		X		X
P35	X	X		X		X
P36	X	X		X		X
P33*	X	X		X		X
P34	X	X		X		X
P37	X	X		X		X
P38	X	X		X		X
I1			X		X	
I2			X		X	
I3			X		X	
I4			X		X	

*Notes*\_\_ The table reports the practices only of those interviewees handling cadavers for medical education and research purposes (n = 42). In the first column, "P" stands for professional or an interviewee employed by an academic-program and "I" stands for independent or an interviewee employed by an independent venture. \* indicates professionals who also are gatekeepers.

**Figure 1**  
**Cadavers Procured by Type of New York License-Holders, 2007**



*Notes* \_ Circles represent the number of cadavers acquired independently by the license-holder (not transferred cadavers). License holders that did not independently acquire cadavers were assigned a value of 1 and are represented by the smallest circles.