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**The Values of Strategy: Valuation Practices, Rivalry and Strategic Agency**

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## **Abstract**

The concept of value is held dear by strategy theorists and practitioners alike as they share a concern about value creation, value propositions, value add, value chains, shareholder value and a plethora of other value constructs. Yet, despite its centrality, the concept of value has attracted limited attention in strategy scholarship. Most commonly, notions of value as profit or utility, inherited from economic theory, are assumed rather than analyzed. This paper advances the discussion of value in the strategy discourse by conceptualizing value as a correlate of valuation practices. Following this view, value is neither understood as the property of an object nor as a subjective preference; rather, values are constituted through valuation practices including rankings, ratings, awards, reviews and other valuation mechanisms that bestow values upon things in the first place. The paper explores this idea through analyzing valuation practices and their constitutive mechanisms; and it exploits this idea for the conceptualization of rivalry and strategic agency. The learnings are twofold: Because goods are ordered, hierarchized and “appreciated” by consumers, critics, competitors and others through mediating valuation practices, it follows that (1) rivalry takes place at the level of valuation practices as they constitute the spaces in which accounts of worth are constructed and contested; and that (2) strategic agency may be understood in relation to an actor’s capacity to cope with and influence these valuation practices.

**Key words:** strategy; value; valuation; practice; agency; rivalry; power

## Introduction

Value creation, value proposition, value add, value chain, shareholder value and a plethora of other hyphenated value-terms form prominent part of the rhetoric of strategy. Despite the centrality of value, however, in much of the strategy literature to date value is assumed rather than analyzed. In their exhaustive content analysis of 2,125 strategy articles, Furrer et al. (2008; see also Ramos-Rodríguez and Ruíz-Navarro, 2004) identified 26 dominant concepts, value being not one of them. In reviews of social-science oriented strategy research, such as Strategy as Practice (Vaara and Whittington, 2012), cognition (Eggers and Kaplan, 2013) and behavioral strategy (Gavetti, 2012), the concept of value is equally absent. Even critical approaches that advocate an opening up of the research agenda have taken the notion of value for granted rather than turning it into an object of inquiry (e.g. Cummings and Daellenbach, 2009). The few contributions that do discuss value explicitly (e.g. Porter and Kramer, 2011; Maurer et al., 2011; Prahalad and Ramaswamy, 2004) expose a narrow, simplified notion of value: they either equate value with financial profit or they understand values as subjective preferences residing in consumers' minds. Whereas the former assumes value creation to take place within the firm, the latter understands value creation as a function of utility and hence exogenous to organization.

The motivation of this paper is to address this somehow surprising blind spot in strategy research. In order to do so this paper draws on insights from economic sociology and valuation studies, as well as inspiration from the pragmatist John Dewey. Dewey suggested understanding value not as a noun but as a verb, as an act of valuing. Valuation is accomplished through practices that constitute, as their correlate, values. It is the contention of this paper that such a valuation perspective will help rethinking the concept of value and its relation to strategy. Putting the novel idea pursued in this paper in the old form of the syllogism: if strategy is concerned with the creation of value; and if value is the correlate of valuation practices; then it follows that strategy has to be understood in relation to valuation practices. Hence this paper is about exploring the concept of valuation practices and exploiting the idea in order to advance our understanding of rivalry and strategic agency in response.

A valuation perspective may sound complicated; yet, in practice, it is not. Take the example of the value of research (see Karpik, 2011). How do we know whether a paper is valuable or not? One way to analyze its

value would be to look for characteristics such as truth or objectivity in the paper. Dewey would argue that all we find is ink on paper. Truth and objectivity can be more adequately analyzed by investigating those valuation practices that make a paper worthy. This includes studying valuation mechanisms such as peer reviews, journal rankings, citation indexes, download statistics, search algorithms and other valuation practices to which we resort to in order to determine the value of a paper. Note that truth and objectivity are still important values. But the valuation perspective understands them neither as intrinsic properties of a paper nor as preferences of a subjective mind, but rather as effects of valuation practices that organize the encounter between paper (world) and reader (mind).

This analytical strategy can be applied to more than just paper(s). Valuation practices structure consumer markets through categorizing, ordering and hierarchizing goods, enabling consumers and others to make decisions (Antal et al., 2015; Kornberger et al., 2015). Even a commodity such as gold (the perhaps most universal and abstract of all goods) takes on new values through novel valuation practices. For instance, “conflict free” is a new value that attaches itself to something as stubborn as gold, forcing producers to rethink where and how to “create value” – as “conflict-free gold” is not to be found underground but is forged in conversations between states, NGOs and others about standards and classifications (Reinecke, 2015). In the wine industry, critics act as powerful intermediaries that consecrate tastes and shape preferences (Bessy and Chauvin, 2013). Similarly, in financial markets, rating agencies provide valuations that function as critical mediating devices, constituting the value of investment objects and hence facilitating strategic investment decisions (Ouroussoff, 2010). In the public sector, bureaucracies rely on valuation practices such as audits, assessments, cost-benefit analysis, etc. to plan and justify policy decisions (Espeland, 2001). These examples illustrate what this paper sets out to explicate: that the value of a scientific paper, a consumer good, gold, a stock or a public investment is neither “in” these objects, nor is their value simply a function of subjective preference or utility; rather, following Dewey, in order to understand their values we need to study the valuation practices that constitute these objects as valuable in the first place. Therein lies the first contribution this paper makes.

The second contribution this paper seeks to make is to bring this novel theoretization of value to bear on strategy research and to derive some implications, perhaps even conclusions, in regards to the ongoing

conversations around strategic agency (Rasche and Chia, 2009) and rivalry as cognitively framed, socially constructed phenomenon (Porac et al., 1995). This is potentially significant because the study of valuation focuses on those practices through which goods are evaluated and ordered, mediating between producers and consumers, investors, and others, allowing them to compare and make decisions. Hence, this paper suggests that rivalry shifts from the level of competition between goods to the level of competition within and between valuation practices because it is at the level of valuation practices where things are made valuable in the first place (Karpik, 2010). This includes struggles over competing claims in regards to the legitimacy of different valuation practices, devices and criteria, and the resulting categorizations of what is valuable. To use the example of the value of research again as an illustration, valuation practices such as government-sponsored research assessments, global accreditations, university rankings, the *Financial Times* list of the top 45 journals, the h-index and a myriad of other valuation mechanisms, are strategically important because it is through these practices that the world of research is valued and ordered, and competition between universities, schools and sometimes researchers is engendered. Perceived as real, the league tables, ratings and indexes that come into existence as a corollary of valuation practices are real in their consequences (Thomas and Thomas, 1928). Thus, strategic agency may be understood in relation to an actor's capacity to influence and cope with valuation practices.

By way of reverse colonialization, the third contribution of this paper is to provide some reflections from a strategy perspective for students of valuation. To date, much of the new, inspiring literature on valuation has focused on the consumption side of valuation (Vatin, 2013; Karpik, 2010). Bringing into focus the work of strategizing and its relation to valuation might encourage researchers to put as much attention towards production than they have in the past towards consumption. More specifically, this paper might spur valuation scholars' interest in tracing how valuation structures the intentionality of decision-makers and patterns rivalry.

The argument unfolds as follows. First, the paper critically discusses the notion of value as deployed in three strands of recent strategy research that explicitly focus on value, arguing that they leave important questions of value and its creation unanswered. The paper then explores the concept of valuation practices before elaborating on the implications of valuation practices for strategic agency and rivalry. The

paper concludes with reflections on further research opportunities, and with some speculations about possible inferences for practice.

### **Theoretical Context: Tracing Value in Strategy Research**

Provisionally we can define strategy's goal as attempt to "deliver greater value to customers or create comparable value at a lower cost, or do both." (Porter, 1996: 62). Whilst different strategy schools would disagree on how to accomplish this goal, most would implicitly agree with the fundamental idea that strategy is concerned with value creation (Bowman and Ambrosini, 2000).

Yet, despite its centrality and significance, value has attracted limited attention in strategy scholarship (see the cited meta-analysis by Furrer et al., 2008). Only few contributions in strategy explicitly reflect on the notion of value. Notable exceptions include Porter and Kramer's (2011) influential paper on shared value; developments towards a culturally informed RBV (e.g. Maurer et al., 2011); and studies on the co-creation of value (e.g., Prahalad and Ramaswamy, 2004). These contributions represent the (albeit small) state of the art in discussions of value within the strategy discourse. In analyzing them we cannot claim an exhaustive review of the notion of value (which would be a paper in its own right); instead we identify three strands of strategy theory in which value is explicitly discussed, and the otherwise taken-for granted assumptions about the nature of value come to the fore. Moreover, the three strands of strategy research reflect the overall "pendulum" movement of the strategy field (Hoskisson et al., 1999) from an outside-in approach towards an RBV and, more recently, a co-creation perspective. As the analysis will show, these contributions give testimony to the narrow, simplified notion of value within strategy scholarship, equating value either as economic construct or subjective utility. Whilst these contrasting notions of value echo debates between Smith, Bentham, Marx, Menger and other political economists (see Robinson, 1962), our paper suggest to utilize a different analytical stance: with Dewey we propose to disentangle the concept of value by theorizing it as produced in ongoing practice. But before doing so let's rehearse how strategy studies have conceptualized value.

#### *Shared value*

In their much-discussed Harvard Business Review article, Porter and Kramer (2011) introduced the

concept of shared value. In an attempt to bring business and society back together, the concept of shared value describes an approach “which involves creating economic value in a way that *also* creates value for society by addressing its needs and challenges” (Porter and Kramer, 2011: 4; emphasis in original). According to the authors, shared value creation unfolds along two dimensions. First, shared value recognizes that “social harms or weaknesses frequently create *internal* costs for firms – such as wasted energy or raw materials, costly accidents, and the need for remedial training to compensate for inadequacies in education.” (Porter and Kramer, 2011: 5; emphasis in original). Second, shared value “recognizes that societal needs, not just conventional economic needs, define markets” (p. 5). Hence, shared value follows a two-prong strategy. It advocates growth by reconceiving possible markets and products and by increasing productivity internally (p. 7). Whilst central to their argument, the concept of value receives little attention and even less analysis. The authors emphasize that shared value does mean “economic value creation” (p. 17), which equates to profit defined by revenues minus costs. Through the concept of shared value, the authors argue, this economic definition of value is merely extended and applied to societal issues (p. 6). Porter and Kramer clearly write in the tradition that defines economics as the universal language in which human concerns are to be debated and decided (von Mises, 1949; Becker, 1993). For Porter and Kramer, this idea translates into the imperative to focus on shareholder value (Jensen and Meckling, 1979) with the slight modification that shareholder value can also be pursued by addressing social needs. Porter and Kramer’s shared value remains a one-dimensional economic value, created inside the firm and objectified in profit using the “measuring rod of money” (Coase, 1978: 210). The suspicion that there are values that are in tension, perhaps even in conflict with economic value, does not occur to Porter and Kramer. While much remains to be contested in Porter and Kramer’s account of shared value (see Crane et al., 2014; Barman, 2016), the important point for this paper is to emphasize the singular, purely economic conceptualization of value in the shared value framework.

### *The culturally informed RBV*

Recent contributions to RBV have argued for a stronger focus on the role of social and cultural values as critical resources for strategy making (Maurer et al., 2011; Rindova et al. 2011; Ravasi et al., 2012). For instance, Maurer et al. (2011) use the example of Walmart’s support of the gay and lesbian movement, which led to a number of adverse consequences, such as employees and conservative groups threatening



with boycotts. Walmart withdrew its support, which then enraged the gay and lesbian community. As Maurer et al. (2011: 443) explain, “social movements can undermine the economic value the firm is trying to create by associating social issues to the firm’s strategy.” In response, the authors suggest a “culturally informed RBV” that shares with the traditional RBV (Wernerfelt, 1984; Barney, 1991) the idea that economic value “is the *net* benefit calculated by aggregating the perceived benefits of a firm’s products and services by purchasers and subtracting the associated costs” (Maurer et al., 2011: 434). The culturally informed RBV departs from “[c]onventional RBV [which] suggests that if firms are able to identify VRIO resources and capabilities, they will create economic value. However, this conventional view understates the challenges firms face in balancing their own internal capabilities with the values held in the institutional context.” (Maurer et al., 2011: 443). It is the focus on social values which allows understanding the formation of perceived benefits – something that traditional RBV has assumed to be exogenous to the firm. To remedy this blind spot, the culturally informed RBV focuses on “how individuals form their perceptions of whether something is valuable.” (Maurer et al., 2011: 434). This approach calls for a concern with social and cultural values that shape preferences: “Firms that recognize the dynamic interplay between their resources and their institutional context in the face of social issues can engage in important cultural work, and thereby preserve their strategy’s economic value.” (Maurer et al., 2011: 432). Following this view, values are understood as a plural construct: economic value is embedded in cultural, social and other values. The issue with this conceptualization is the assumption that these non-economic values are given and exist outside the organization in the consumer’s mind as preferences. The organization can bring them “inside” by making them part of its “cultural toolkit” (Rindova et al., 2011; citing Swidler, 1986). But how do these plural values come into existence? And if they are exogenous to the firm how can these values become part of the strategist’s toolkit?

### *Co-creation of value*

The literature on co-creation is based on the assumption that the locus of value creation shifts from the individual organization to an ecosystem in which it is embedded (Normann and Ramirez, 1993). In ecosystems, consumers (amongst other actors, such as suppliers, peers, intermediaries or even competitors) play an active role in the creation of value (Prahalad and Ramaswamy, 2004). Because of its intellectual ancestry in the marketing field, the co-creation literature focuses predominantly on one specific

external co-creator: the consumer (Vargo and Lusch, 2004). The literature emphasizes the co-creative aspect of consumption:

“[...] aficionados of rugby or cricket experience more entertainment utility when attending these games than would an out of place baseball fan. Therefore, the benefit experienced through the same product or service is different for each consumer, and each consumer’s human capital determines how much value he or she actually experiences” (Priem, 2007: 224).<sup>1</sup>

Rather than analyzing the value add of a firm, Priem suggests speaking of “value aid”, emphasizing that a good is only the mediator of value, not its sole source. As he argues, the consumer’s ability to make sense is constitutive of the value of the good, service or (as in the case of sport) the experience. Co-creation extends to other important stakeholders in the value creation process. Consider once more the example of “conflict free gold” (Reinecke, 2015). In this case, the value of gold is not contingent on its material qualities but on other values such as its mode of production or the utilization of revenue derived from its sale. These new qualities are ushered into existence co-creatively by NGO’s, governments, investors, markets, as well as consumers and other actors. For instance, ethical investors looking for opportunities to invest in socially responsible bonds will appreciate the value of “conflict free gold” in a different way than a more traditional financier. Consequently, a variety of actors are “arbiters of value” as they “validate the value of products and services” (Priem, 2007: 219). But if value is not “in” the product that leaves the assembly line (or the gold mine), how do investors, regulators, consumers and other arbiters of value go about doing their job to “validate the value of products and services” (Priem, 2007: 219)? If values, like beauty, are in the eye of the beholder, a mere expression of her subjective preferences, how can the strategist create value in the beholder’s eye?

#### *The question to be addressed*

The discussion of value in the three strands of strategy research remains caught up in a dilemma: value is either supposed to be created inside the firm and measurable as profit or defined as expression of utility

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<sup>1</sup> This point has been discussed in depth in the literature on the co-creation of brands (see Arvidsson, 2006; Zwick et al., 2008; Kornberger, 2010).

(subjective preferences) external to organization. In Porter and Kramer's world, value is a singular, economic construct that equates to shareholder value and is articulated using the measuring rod of money. The culturally informed RBV gestures towards institutional theory (Lawrence and Phillips, 2004), social movement research (Weber et al., 2008) and other more sociologically inflected literature that focus on "multiple orders of worth" (Boltanski and Thévenot, 1999/2006) as a precondition for economic value creation. In so doing it challenges central tenets of the RBV such as the assumption that organizations are engaged in value creation by deploying their assets, know-how and competences more effectively than their competitors do. Yet despite acknowledging that values are a plural construct, and that non-economic values matter for strategizing, the culturally informed RBV rather simplistically assumes values to be "out there" akin to other contingencies or forces. Cultural work becomes de-facto a form of (qualitative) market research identifying consumer preferences. The literature on the co-creation of value is an uneasy marriage of the two: whilst value creation inside the organization is understood (in line with traditional strategy thought) as profit, value creation of external actors is conceptualized as their ability to interpret, adapt and appropriate the "value aid" the firm provides. In the co-creation literature, value leads a double-life as subjective preferences and as shareholder value measured in monetary terms.<sup>2</sup>

In sum, strategy scholarship locates value on the balance sheet or in the eye of the beholder; value is either conceptualized as reductionist economic construct inside the organization or as atomistic subjective preference "out there". The focus on valuation practices suggests an alternative: it disentangles the concept of value in order to understand the concrete practices and processes through which something is constituted as valuable in the first place. This paper's promise is that such a theorization of value as correlate of valuation practices provides an analytically fruitful way to understand strategic agency and

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<sup>2</sup> Does it matter that strategy as a field harbours two conflicting notions of value? Perhaps yes, because some of the dominating debates in the field such as the competency trap (Levitt and March, 1988) and the innovator's dilemma (Christensen, 1997) result from this conceptual slippage. While value defined as internal profit might increase over time, value defined as utility might decrease simultaneously (see Lopdrup-Hjorth, 2011). Following this argument, the innovator's dilemma is not a consequence of a relentlessly working market logic but the result of the epistemological slippage of the researcher.

rivalry. This implies extending practice theory (and especially Strategy as Practice) as it has neglected valuation as influential practice; and expanding upon valuation studies as it has not reflected in depth on valuation practices and how they pattern rivalry and structure the intentionality of decision makers.

### **Valuation practices and their mechanisms**

As if anticipating the strategist's dilemma, Dewey argued that the difficulty of analyzing values lies in their ambiguous ontological status. On the one hand, values are seen as "emotional epithets" that are merely articulations of subjective preferences; on the other hand, values should hold up as a-priori, rationally defined principles providing a sound basis for morals, politics, science and other domains of life (Dewey, 1939: 191). How to avoid the dilemma? Dewey (1913; 1939) suggested an approach that understands value as a correlate of valuation practices. He defined valuation as "activity of rating, an act that involves comparison" (1939: 195). In practice, so Dewey, this means that if someone claims that  $x$  is more valuable than  $y$ , the analytical task consists of investigating through which valuation practices  $x$  is constituted as more valuable than  $y$ . In other words, every value judgment is contingent on a "weighing process" – and it is this weighing process itself that Dewey suggested analyzing (Dewey, 1939: 211; Muniesa, 2011).

We follow Dewey and focus on the concrete practices and processes through which goods are valued. We suggest the concept of valuation practices to capture this process. Following Orlikowski and Scott (2014: 869) we define "valuation as produced in ongoing practice. Such a practice-based view shifts attention to the specific everyday activities that constitute valuation processes and the outcomes generated as a result." The practice-based perspective does not understand valuation as conditioned through specific technological devices (Callon et al., 2007; Callon and Muniesa, 2005) nor determined through abstract norms, logics or "regimes of valuation" (Friedland, 2009; Boltanski and Thévenot, 1999/2006). Rather, the practice perspective focuses "on everyday activities and their structural contexts and outcomes." (Orlikowski and Scott, 2014: 872). In line with much of the practice literature, including Strategy as Practice (SaP; Carter et al., 2008), we posit that practices are constitutive: this means that valuation practices do not merely mirror or bring to the fore pre-existing values, but that valuation practices are actively involved in the constitution of values.

Take the example of two prominent valuation practices in the hospitality industry – the website TripAdvisor and the British Automobile Association’s (AA) guide (Orlikowski and Scott, 2014). These different valuation practices engender different orders of worth. Orlikowski and Scott’s (2014) practice study focuses on the actors involved in valuations (who is authorized to count: experts, consumers or an algorithm?), commensuration and categorization techniques, the redefinition of what counts (who to trust, professional expertise or subjective experiences: one person sleeping in one hundred hotels; or one hundred people sleeping in the same hotel?), the way valuations structure consumers’ search, and the effects of TripAdvisor and the AA guide’s different visualizations. The two valuation practices constitute a set of different values: TripAdvisor ranks hotels based on customer reviews and its own algorithm; the AA guide confers stars, merit scores, silver, gold, breakfast and dinner awards etc. These different valuations result in different categorizations of hotels constituting different market orders which have, in turn significant impact on the travel industry, including strategic agency of actors, and the structure of competition on the field level (Orlikowski and Scott, 2014; Jeacle and Carter, 2011).

How can we disentangle the workings of valuation practices? There are four interrelated mechanisms that bring about valuation practices’ effects: first, who is engaged in valuation practices; second, how are goods deconstructed so to make them comparable (commensuration); third, how are they reassembled into new orders of worth (categorization); and finally, how are valuations visualized to ensure mobility and assure impact?<sup>3</sup>

*Distributed agency and cognition.* Who is actually doing the valuing? The strategy as practice literature assumes that behind (or above) a practice, there is in the final analysis a practitioner (Whittington, 2011). Studying valuation practices extends this view because valuation involves a series of different actors, including intermediaries and non-human actors who warrant special attention. Intermediaries, including experts, critics, consultants, matchmakers and others, play an important role in valuation practices (Karpik, 2010). Bessy and Chauvin (2013) described them as third parties that organize supply and demand because their

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<sup>3</sup> This use of the concept of mechanisms is inspired by Foucault suggesting that practices work with and through mechanisms: for instance, the exam as one practice of disciplinary power brings about its effects through mechanisms such as comparison, hierachization, ordering etc. The four mechanisms that this paper analyses represent the mechanisms through which valuation practices’ effects come about. Four is of course not the final account of such mechanisms; but analysis suggests that they are key to any valuation practice.

actions affect the perceived value of goods or whole organizations: in their words, intermediaries “are all engaged in activities of valuation that shape the market.” (2013: 84). For instance, art critics (Karpik, 2010), credit scoring agencies (Poon, 2007) or investment bankers (Beunza and Garud, 2007) are traditional intermediaries who provide valuations (about the value of an artist; the creditworthiness of a person; the prospect of an investment) that shape preferences and act as guideposts for others’ deliberations and decisions. These intermediaries are “frame-makers” (Beunza and Garud, 2007) that define conventions and structure third parties’ cognition; frame-makers are always also engaged in constructing others’ bounded rationality.

But not only human actors have agency in valuation practices; rather, valuation practices may include non-human actors: TripAdvisor uses a secret algorithm to produce its rankings (Jeacle and Carter, 2011). Online dating websites are matchmakers (digital intermediaries) that establish valuations based on computing profiles, preferences, etc. User behavior, algorithms, protocols, and organizations whose *raison d’être* it is to turn information into income form an entangled web in which cognition is distributed. This means that cognition is not located in the individual mind; rather it is the corollary of the collective action of distributed actors who are connected with each other in socio-technical networks (Callon and Law, 1997; Hutchins, 1995). Experts, critics, but also non-human agents, such as algorithms, are involved in practices of valuation. Analytically, this focus on distributed cognition suggests understanding valuation not as static information on and assessment of objects but as dynamic process, flowing through networks of people, intermediaries and machines (Giere, 2002).

*Commensurating.* Valuation practices are not neutral means of representation but mechanisms of commensuration. Levin and Espeland (2002: 124) defined commensuration as the construction of “relations among disparate things by uniting them based on their shared relationship to a third thing – a metric”. Commensuration is an act of introducing a measure that makes hitherto incomparable things comparable. It is a process by which individual qualities are bracketed in favor of one common dimension that allows comparison. This process is accomplished through techniques that translate qualities into quantities. For instance, in their study of US law school rankings Espeland and Sauder (2007) showed that a ranking is a commensuration apparatus that transform messy, heterogeneous and hard to judge

qualities into neat orders. Law schools differ in many important aspects and fulfill different functions: specializing in an important sub-field concerning minority rights or educating lawyers for Wall Street, for instance. Just like lighthouses, these law schools play their own, important roles and can hardly be compared, let alone be understood as competing with each other (Espeland and Sauder, 2016). Enter commensuration: it “flattens” the idiosyncratic, individual characteristics of different institutions and relates them to standard measures (research output of staff measured in A star journal publications, salary of graduates etc.). As result law schools can be brought into a hierarchical relationship to each other and can be compared with each other. Hence, commensuration exercises power: it defines what counts and what does not count. Commensuration is always based on (implicit or explicit) assumptions about what matters (inclusion), and what does not matter (exclusion). It is a double act of highlighting and hiding (Espeland and Lom, 2015). For instance, the ranking of law schools cannot account for a particular strength that has grown from a historically close relationship with local industry. The ranking systematically edits out context-specific information. The ranking measures instead relevance and engagement, using indicators such as external fund raising, which can make a school with strong ties to local industry but no donated chairs look like an ivory tower.

This process of commensuration is based on quantifications through numbers (Miller, 2001). Numbers are powerful “techniques of inscription” in which “the collection and aggregation of numbers participate in the fabrication of a ‘clearing’ within which thought and action can occur.” (Rose, 1999: 212). Commensuration is such a deconstructive “clearing”: it flattens and formats the world, rendering it an object for intervention. Only because a business school’s rank has been identified on a league table, a Dean can identify her rivals and put measures in place to climb the ranks of the league table. Her strategic map of the world is shaped by rankings: they make her strategic position visible, they define her competitors, they suggest goals and measures of success, and they legitimize strategic change programs. In fact, there is a “tight coupling” (Sauder and Espeland, 2009) between flattening of the world through commensuration and the possibility of strategic agency – an important relation we will have to revisit in the concluding section.<sup>4</sup>

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<sup>4</sup> This tight coupling has a long history: General Jomini, one of Clausewitz contemporaries, defined “strategy as making war on a map”. Here the possibility of strategy rests on the flat representation of the world as map.

*Categorizing.* While commensuration deconstructs and flattens its objects, categorization is a process of re-organizing them based on externally imposed criteria that engender relations between them. Categories work as collective evaluative schemata that make it possible to “sort things out” (Bowker and Star, 1999). To use the example of rankings again: Once objects are commensurated, rankings order them in league tables. Things are counted, added, and multiplied, ratios are established and assessments made. Through comparison over subsequent years, trajectories are identified and prognosis extrapolated.

Categorization has important effects. It links certain elements (the top five business schools) whilst becoming a marker of difference in relation to others (not included in the *Financial Times* top 45 list). Thus, rankings create a space for things to be situated next to each other, to relate to each other, and to differentiate themselves from each other (Kornberger and Carter, 2010). In this sense, rankings, and more generally, valuation practices are generative processes that give rise to new qualities. In Espeland’s words, rankings have the capacity to create “new objects, new categories, and new relationships between things and people” (2001: 1840). For instance, rankings are suggestive of new identities, such as the best European business schools or the best “new” universities. As Glynn and Navis (2013) suggested, organizational identities are negotiated and legitimized through categorizations. Such categorization processes are inextricably entangled with the work of legitimation (Lamont, 2012) as categorizing implies including and excluding elements, consecrating some while leaving others to oblivion (or worse).

Categorizations have also important mediating effects. Categorizing is a frame-making activity, establishing cognitive schemata that guide the distribution of attention (Espeland and Sauder, 2016). Through doing so categorizations structure the encounter between producers, buyers, critics, regulators and others (Durand and Paoletta, 2013). Frames might be contested as they are being constructed; but perceived as real (e.g. through league tables presented in media), the league tables, ratings and indexes that come into existence as a corollary of valuation practices are real in their consequences (Thomas and Thomas, 1928). This alludes to the next and final mechanism that accounts for the workings of valuation practices: the socio-materiality and more specifically: the visualizations of valuations. For as Strathern (2000b) cautioned, there is nothing innocent about making the invisible visible.



*Visualizing.* Valuation practices are not mere abstractions. Rather, valuations are organized through practices, and practices need a material base, concrete technologies and visualizations that enable and amplify their operations (Feldman and Orlikowski, 2011; Le and Spee, 2015). Consequently, valuation practices are neither individual cognitive schemata nor societal norms, but concrete, material forms with specific aesthetic qualities. Valuation practices consist of lists, matrices, stars, diagrams and other forms of visual representation. The power effects of valuation practices are partly based on this aesthetic dimension. For instance, Pollock and D’Adderio (2012) studied the aesthetic design of a rating tool in the IT industry. The 2x2 matrix Pollock and D’Adderio analyzed, Gartner’s magic quadrant, is chiefly an aesthetic phenomenon. In order to persuade, only a certain amount of companies may populate the matrix, and their distribution must result in what Pollock and D’Adderio’s interviewees referred to as “a beautiful picture” (2012: 14). In fact, visualization matters: TripAdvisor’s motto “Get the truth, then go” is premised on the design of its interface (its socio-material make-up, its visualizations), through which it becomes a powerful intermediary. Amazon relates searches to other people’s interests, creating imaginary libraries configured not around disciplinary subject areas or established categorizations but around collective buying decisions and preferences. Again, it is Amazon’s visualizations that create new categorizations, engendering new forms of comparison and competition. Sure, it is still a person with a mouse in his hands that clicks books into his virtual shopping basket; but the virtual bookshelf on his screen guides his attention, structures his curiosity and influences his decision making process.

Consequently, the visualizations that valuations result in should not be brushed aside as mere illustrations; rather, they are forms of demonstration (Latour, 1986; Rosental, 2005; Stark and Paravel, 2008) that have one goal: to mobilize people. Like demonstrations on the street, visualization of valuations offers a mix of proof and power to convince others to follow them, attach themselves to them, and join them. This power resides in aesthetics: the visualizations of rankings are appealing, travelling speedily through mainstream media and in so doing they become globally powerful phenomena (Wedlin, 2006).

Taking stock, where does the focus on valuation practices lead us? For the study of valuation the appropriate unit of analysis shifts from individual behavior (preferences) and social macro-structures (norms) to the material and discursive practices through which valuations are accomplished, and, as their

corollary, values are constituted. These valuation practices feed on distributed agency including intermediaries and non-human actors; they are mechanisms of flattening the world, making things comparable and translating qualities into quantities; of re-organizing things into categories, establishing new collective cognitive frames for comparison, and of engendering new qualities; and they are mechanisms of visualizing valuations to ensure global mobility and impact. These mechanisms do not represent a neat sequential order, however: rather the four mechanisms work dynamically and in concert to bring about the effects of valuation practices to which we turn next.

--- Insert table 1 about here ---

### **Valuation practices and their effects: rivalry and strategic agency**

#### *Valuation practices and the structuring of rivalry*

Valuation practices have important effects on the structuring of rivalry. First, they influence cognition of consumers, critics, regulators and others who are faced with the task of evaluating competing goods or entire organizations. How? Valuation practices rank, order and hierarchize the universe of goods. Only once this ordering is accomplished one can compare A with B, deliberate about their pros and cons and develop a preference for one or the other. They act as “cognitive prostheses” (Cochoy, 2008) helping consumers, rivals, critics, regulators, investors and others reduce their difficulties in comparing and evaluating products, and in making decisions. Which book to buy, which hotel to choose for a relaxing holiday, or which wine to purchase for a special dinner, these choices confront consumers with daunting challenges – unless they are equipped with a bestseller list, TripAdvisor ratings or the local wine club’s pick of the month. These valuation practices facilitate the sensemaking and decision making of consumers, critics, collaborators and others. They provide cognitive support for boundedly rational actors, acting as “guideposts for individual and collective action” (Karpik, 2010: 44).<sup>5</sup> In this sense, valuation practices are the a-priori of competition: only after a good has been evaluated and categorized, rivalry can

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<sup>5</sup> Hence the notion of a “cognitive prostheses”, describing valuations as cognitive aids that help people making sense and decisions through offering comparisons, recommendations, etc. Prosthesis is not understood narrowly as technical device but in the sense of Freud (1930/1961: 39) who wrote: “Man has, as it were, become a kind of prosthetic God. When he puts on all his auxiliary organs he is truly magnificent; but those organs have not grown on to him and they still give him much trouble at times.”

occur (Kornberger and Carter, 2010). The key point: only because valuation practices make up rankings, ratings, assessments and so on, we can make up our minds.

Second, valuation practices do not only structure cognition through categorizing goods; they also draw boundaries around industries, locate individual firms within peer groups and enable managers to orient each other towards peers, consumers, competitors and collaborators (Durand and Poalella, 2013; Glynn and Navis, 2013). In so doing, the categorizations of valuation practice constitute field-level identities and consecrate them through symbolic boundary work (Zhao, 2005). For instance, Wedlin (2006: 39) observed that business school rankings “help to create, protect or reform symbolic boundaries for the field – as perceptions of who is in, what is legitimate, which characteristics are valued, who compares to whom and so on”. Put differently: since identity emerges out of relations between oneself and relevant others, and since valuation practices create new relations between oneself and others, valuation practices are an important source of identity construction.

Third, valuation practices do not only structure demand (cognitive prosthesis for consumers etc.) and supply (firm level and industry identity) but also structure their encounter. Take the example of law school rankings (Espeland and Sauder, 2007). They are a novel medium (interface) that organizes the encounter between organizations and their external constituencies. On the demand side, students use rankings to make decisions about study programs; potential employees compete for jobs at highly ranked places; funding agencies take positions on league tables into consideration (as part of factors such as “research environment”, for instance); philanthropists donate money to those schools that are doing well; and so on. On the supply side, resources might be allocated to those areas that rankings measure; internal performance management is aligned with external indicators used by rankings; hiring policies, recruitment practices and staff development are organized towards ratios and standards expected by rankings; question of identity and future strategic development are contingent upon the peer group that is established via the ranking; and so on. In short, what we see in this example is mediation between supply and demand through a specific valuation practice (Sauder and Espeland, 2009). Put simply, valuation practices organize markets: they connect the law school dean’s desk with the breakfast table of the student deciding where to study.

Such conceptualization of valuation practices as medium marks the departure from the assumption that there are producers of valuable goods on the one hand, consumers, investors and other stakeholders endowed with subjective preference on the other, and markets that neutrally facilitate their encounter. What this paper suggests is that valuation practices act as mediators between them; that they organize their encounter; and that their organizing work is of strategic significance because it constitutes what counts, and what not, and who is in competition with whom, for what. Depending on whether a smartphone is evaluated as a miniature mobile office, a social networking device, or a gaming console, it will “perform” differently and end up in different categories, appealing to different market segments. Since competing valuations occur simultaneously, a product’s value is fundamentally unstable. Hence, for the strategist, one of the main sources of uncertainty might not result from the next move of perceived rivals, but from the unpredictability of the valuation practices a product might be subjected to and the resulting categorizations that in turn form the space for rivalry to occur.

Consequently, competition takes place on the level of valuation practices as they exercise the power to categorize and consecrate goods as worthy. It is not an abstract “market” but the league tables of rankings, the bestseller lists, ratings, accreditations and other valuations that represent the condition and medium for rivalry to occur. The focus on valuation practices suggests a shift of the unit of analysis: rather than studying competition between goods, the analysis is concerned with those valuation practices that mediate and structure the encounter between producer and consumer. Competition is understood as the ongoing political maneuver of claiming value and contesting competing value claims, struggling over the authority and legitimacy of valuation practices.

-- Insert figure 1 about here --

#### *Valuation practices, structuring of intentionality and strategic agency*

What are the implications of our theoretization for strategic agency? If competition is engendered through valuation practices, then strategizing has to be understood in relation to an actor’s capacity to influence and navigate these practices of valuation. Put simply (and referring back to the syllogism introduced at the

beginning of the paper), if the task of strategists is to create value, and if value is constituted through valuation practices, then strategic agency equates to attempts at coping with and shaping of those practices through which valuations take place and through which, ultimately, values come into existence.

Analytically, there are three ways in which strategy practice might relate to valuation: first, the strategist might internalize the criteria and mechanisms that underpin specific valuation practices. For instance, in their analysis of TripAdvisor, Orlikowski and Scott (2014) observed that hotel managers incorporated TripAdvisor's valuations (including reviews, comments, etc.) as benchmarks for their strategic planning. Note that an algorithm might show similar behavior, adapting its actions to others' valuations (think of automated high frequency trading). On an organizational level, internalization strategies confirm and perform to the criteria put forward by rankings (Gioia and Corley, 2002), engendering isomorphism.

Second, managers might engage in gaming strategies, manipulating individual indicators that are used in valuations. Espeland and Sauder's study (2007) illustrate such gaming behaviours. They show how rankings entice those being ranked to alter their behaviors strategically which might improve the positioning in the ranking but not overall performance (Espeland and Sauder, 2007). What we observe here are the perverse effects of performance management systems writ large on an organizational or even field level.

A third response might be that strategists seek to impose their own valuation criteria onto a field, with the aim to establish their criteria of what counts as standard for the field. Studies on social movements provide illustrations how groups lobby to establish such standards (for green energy, organic food etc.). For instance, Dubuisson-Quellier (2013: 683) demonstrated how the strategy of an environmental movement organization "consist[ed] of attempts to change the most prevalent valuation criteria within the market by introducing principles of worth that rely on products' environmental performance. This involves activist organizations suggesting new product valuation criteria, and then seeking to convince firms that consumers' preferences are changing". Whether internalizing, game playing or imposing one's own criteria, in all three instances valuation practices represent the locus of strategic agency because it is

there that orders of worth are constituted, that values are attached to goods, and that the mediation between producers and consumers (as well as investors, regulators etc.) is organized.

-- Insert table 2 about here --

This focus on valuation practices as a locus of strategic action raises questions about managerial agency. In much of the literature, social and cultural values are instrumentalized as elements of the “cultural toolkit” (Swidler, 1986) at the disposal of the manager (Glynn and Navis, 2013). Researchers advocating a cultural turn in the RBV share this functionalist approach (Maurer et al., 2011; Rindova et al., 2011). In contrast, neo-institutional research argues that categories exercise disciplinary effects on organizations (Zuckerman, 1999), which leaves the strategist little room to maneuver. We encounter a not unusual impasse: an over-individualized, managerial approach clashes with an over-structuralized, sociological account of the conditions of the (im-)possibility of agency. The valuation approach suggests an alternative view bringing into focus managerial agency whilst keeping an eye on structural constraints. Using the example from Dubuisson-Quellier (2013) again, strategic practice consists of the actors’ ability to develop and circulate mediating valuation practices that bring environmental criteria to consumers’ consideration and encourage them to make environmentally friendly choices. This point touches upon the question of how the strategist might actually engage in “cultural work” – answer: She influences, perhaps even authors, valuation practices that include how to count (commensurate), how to order (categorize) and how to promote (visualize) a specific order of worth. The test of her ingenuity and creativity is whether she can develop valuation practices that circulate and become mediators between producers and consumers. Consequently, strategic agency is engaged in an ongoing struggle to challenge and change existing valuation practices and introducing new ones. It is the ability of the strategist to impose criteria of evaluation that is the hallmark her strategic power.

## **Conclusion**

This paper set out to provide ways and means for rethinking the concept of value as correlate of valuation practices and explore implications for rivalry and strategy practice – with the aim to alter the ongoing conversation in strategy scholarship: if goods are ordered, hierarchized and “appreciated” by consumers,

critics, competitors and others through mediating valuation practices, it follows that (1) competition takes place at the level of valuation practices as they constitute the spaces for rivalry in which accounts of worth are constructed and contested; and that (2) strategy has to be understood in relation to an actor's capacity to influence and cope with these valuation practices. In consequence, the locus of strategic action is neither the firm or its resources; nor is its success contingent upon environmental conditions. Rather, the locus of strategic action shifts towards the interstices between producer and consumer, where their encounter is mediated by valuation practices. The ultimate stress-test for this conceptual proposition is whether it instigates novel, promising research questions?

I believe it does. First and foremost, this paper puts the important, yet undertheorized concept of value (back) on the agenda of strategy scholarship. It suggests doing so through analyzing values as correlate of valuation practices. Valuation practices can be studied as recurring interactions between actors, technologies and structures that constitute, as their corollary, values. The practice approach invites scholars to shift the focus from valuation devices or norms towards the ongoing practices and processes of commensuration, categorization and visualization as mechanisms of valuation. Moreover, the suggested approach suggests studying valuation as accomplished by a multitude of distributed actors, including intermediaries and non-human actors – an idea that strategy scholarship has recently shown interest in (see Kaplan, 2011).

This conceptualization of valuation as practice does not aim to replace extant scholarship but to provide a refined conceptual tooling for ongoing strategy research. The culturally informed RBV could utilize the concept of valuation practices to understand how values emerge, what valuations' effects are, and how strategists can practically engage in "cultural work". The above mentioned VRIO framework and other RBV analytics could use the valuation perspective to inquire how a resource is being defined and calculated as valuable in the first place. Extending the mediating aspect, the co-creation literature could focus on how valuation practices organize the encounter between producers, consumers and others and in so doing structure the possibilities for co-creation. For example, co-creation could study how evaluative infrastructures (Kornberger et al., 2015) usher into existence trust, quality standards, reputation and other values that form the basis of collaborative consumption, peer to peer production, sharing models and

other co-creative ventures. The Strategy as Practice (SaP) literature could be enriched by a focus on valuation practices as they represent a hitherto neglected strategic practice. Such a focus on valuation practices invites the SaP researcher to shift her unit of analysis from practices inside firms (where much of the current SaP studies focus) and towards valuation practices that organize the encounter between producers, consumers and others. The reflections on strategic responses to valuation practices (internalizing; gaming; imposing) might extend the heuristic repertoire of future SaP studies.

Our approach might also contribute towards the rejuvenation of critical strategy studies (Knights and Morgan, 1991). Valuation has important power effects, shaping the objects it supposedly reports on. Strategic (gaming) behavior induced by valuation practices (such as rankings) may result in goal displacement (Merton, 1940) and may contribute to the normalization of pathological organizational behavior. A further fruitful avenue for critical inquiry could be to analyze the struggles between different valuation practices about what counts and how to count, scrutinizing the mechanisms through which valuations become consecrated and authoritative. This agenda could highlight forms of valuation that resist quantification (such as brands) and that might result in a different relationship between valuation, strategic agency and rivalry.

In regards to studying rivalry, this paper suggests that competition takes place on the level of valuation practices that mediate the encounter between producers and consumers. This view might add to existing debates on competition. Porac et al. argued that managers socially construct a “mental model of the market and how one’s firm is placed within it” (1995: 205). Their approach stresses the role of managerial cognition, providing a somehow over-individualized account of rivalry. From a neo-institutional perspective categorizations are the collective evaluative schemata that allow firms to orient each other to each other and hence to compete. For instance, Durand and Paoletta (2013) resort to “institutions” and “cultural features” as sources of new categorizations. This prompts the criticism of an over-socialized account of rivalry in which abstract notions of “culture” or “institutions” are evoked to explain categorization processes that structure competition. Following our approach, rivalry is not the result of a managerial mind nor is it the result of categorizations derived from an abstract notion of “culture”; rather, the proposed theoretization of valuation puts emphasis on the concrete practices through which the work



of valuing, weighing, comparing, ordering and categorizing is accomplished. Valuation practices represent the concrete mechanisms that engender competition, providing the analytical “missing link” between managerial cognition and cultural categorizations. Hence, valuation practices provide an analytical strategy for studying the interlacing of interactionist and institutional dimensions – something that has been recently called for by practice strategists and institutional theorists alike (Suddaby et al., 2013).

Finally, this paper also encourages students of valuation to engage with strategy research. To date, much research on valuation, and in fact economic sociology, has focused on markets and consumption (Vatin, 2013). Karpik’s (2010: 54) magisterial discussion of judgment devices and valuation practices explores their effects in the sphere of consumption whilst he acknowledges that he only offers a “simplified conception of the production sphere.” Callon et al. (2002) talk much about competition but do not reflect on strategy. This paper complements this focus on consumption and markets by offering reflections on the effects of valuation practices on the sphere of strategizing and organizing. It offers an invitation for economic sociologists and students of valuation to analyze how valuation practices engender rivalry and how they structure the intentionality of decision-makers.

### *Postscript*

Last but not least, what evaluative claims derive from this essay? A critical reading would emphasize that valuation practices come at a significant cost. They reduce qualities to quantities, they flatten the world making values (qualities) disappear in the process. They establish comparisons between otherwise idiosyncratic entities and engender competition between them. Valuations force hitherto co-existing entities into playing zero-sum games; scarcity is introduced where it did not exist before. Valuations’ probity needs interrogation as it turns individual traces and decisions (clicks) into resource for (data) mining and exploitation. Following this critical reading, valuation practices are but the debris of the audit explosion (Power, 1997; Strathern, 2000a).

A slightly more upbeat reading might suggest that new valuation practices in the form of tests, accreditations, audits, rankings and so on give rise to novel, hitherto unarticulated values. Conflict-free gold, a fair-trade T-shirt or a CO<sub>2</sub> neutral flight are differentiated goods that result from novel valuation

practices. Practically, the strategist's (as well as the activist's) task includes exploiting, perhaps even developing new valuations as they provide the opportunity to position a good differently. One could see this as inherently positive development of giving voice (in a Hirschmanian sense) to yet unarticulated, silenced societal needs and concerns (Lamont, 2012), making valuation practices the critical infrastructure for participation, collaboration and democracy.

For a stance inspired by practice philosophy, both armchair-claims seem of limited usefulness as they seek to identify a-priori reasons for praising or condemning valuation practices; rather, echoing Foucault (1983: 231) we argue “not that everything is bad, but that everything is dangerous, which is not exactly the same as bad. If everything is dangerous, then we always have something to do.” Hence our evaluative claim is less definite, more inquisitive than the two outlined above. No doubt, valuation practices do give rise to new voices and engender new values, such as for instance new forms of reputation borne out of TripAdvisor or new personal profiles engendered through LinkedIn's valuation practices. But these practices filter, alter voices in the process of articulating them. Emphasis has to be put on the processes and practices through which voice is identified, amplified, and reproduced. Here comes the dangerous part: for LinkedIn or TripAdvisor reputation is not a residual societal or cultural phenomenon lingering above or below their operations. Reputation is not an exogenous “object” that they try to capture or account for. Reputation does not underpin their business; the creation of reputation *is* their business. Hence we should not think of economic activity being “embedded” in some pre-existing socio-cultural context; nor does economic activity solely respond to given preferences. What TripAdvisor and a plethora of other valuation practices do is to generate social, cultural and other values as inputs for economic processing. TripAdvisor does not embed (“bed down”) its business in a ready-made social, cultural world; rather, it defines what reputation is, what it means, how to attain it, how to act on it, etc. In the final analysis, this necessitates that we rethink the relation between economy and society: Weber's model of spheres of life (including its incarnation as orders of worth) or Granovetter's embeddedness thesis presume separate value spheres each characterized by their own origins, rules, rituals, and effects. This narrative is coming undone as in valuation practices the economic *and* the social are constituted as correlate of one and the same practice. To *like* a blog post for its political content or a picture for its aesthetic qualities on Facebook means simultaneously producing a resource for economic exploration and

exploitation. Valuation practices play a pivotal role in this new political economy. This hints at the fundamental question that we need to ask with Dewey, and through him, Nietzsche: what are the values of valuation practices, and through which powers, at what costs, do they consecrate the value regimes we live and work by?

## References

- Antal AB, Hutter M and Stark D (2015) *Moments of Valuation. Exploring Sites of Dissonance*. Oxford: Oxford University Press.
- Arvidsson A (2006) *Brands: Meaning and Value in Media Culture*. New York: Psychology Press.
- Barman E (2016) *Caring Capitalism. The Meaning and Measure of Social Value*. Cambridge: Cambridge University Press.
- Barney J (1991) Firm resources and sustained competitive advantage. *Journal of Management* 17(1): 99-120.
- Becker G (1993) Nobel lecture: The economic way of looking at life. *The Journal of Political Economy* 101(3): 385-409.
- Bessy C and Chauvin PM (2013) The power of market intermediaries: from information to valuation processes. *Valuation Studies* 1(1): 83-117.
- Beunza D and Garud R (2007) Calculators, lemmings or frame-makers? The intermediary role of securities analysts. *The Sociological Review* 55(s2): 13-39.
- Boltanski L and Thévenot L 1999/2006 *On Justification: Economies of Worth*. Princeton, NJ: Princeton University Press.
- Bowker GC and Star SL (2000) *Sorting Things Out: Classification and its Consequences*. Cambridge, MA: The MIT Press.
- Bowman C and Ambrosini V (2000) Value creation versus value capture: Towards a coherent definition of value in strategy. *British Journal of Management* 11(1): 1–15.
- Callon M., Méadel C and Rabeharisoa V (2002) The economy of qualities. *Economy and Society* 31(2): 194-217.
- Callon M. and Law J (1997) After the individual in society: Lessons on collectivity from science, technology and society. *Canadian Journal of Sociology/ Cahiers canadiens de sociologie* 22(2): 165-182.
- Callon M. and Muniesa F (2005) Economic Markets as Calculative Collective Devices. *Organization Studies* (26)8: 1229-1250.
- Callon M., Millo Y and Muniesa F (2007) *Market Devices*. Oxford: Wiley-Blackwell.

- Carter C, Clegg SR and Kornberger M (2008) Strategy as practice? *Strategic Organization* 6(1): 83-99.
- Christensen CM (1997) *The Innovator's Dilemma*. Boston, MA: Harvard Business School Press.
- Coase R (1978) Economics and contiguous disciplines. *The Journal of Legal Studies* (7)2: 201-211.
- Cochoy F (2008) Calculation, qualculation, calculation: Shopping cart arithmetic, equipped cognition and the clustered consumer. *Marketing Theory* 8(1): 15-44.
- Crane A, Palazzo G, Spence LJ, et al. (2014) Contesting the value of “creating shared value”. *California Management Review*, 56(2): 130-153.
- Cummings S and Daellenbach U (2009) A guide to the future of strategy? *Long Range Planning*, 42(1): 234-63.
- Dewey J (1939) Theory of valuation. In: *The Later Works, 1925-1953*, edited by Jo Ann Boydston, Southern Illinois University Press: Carbondale, pp. 189-251
- Dewey J (1913) The problems of value. *Journal of Philosophy, Psychology and Scientific Methods* 10(10): 268-269.
- Dubuisson-Quellier S (2013) A market mediation strategy: How social movements seek to change firms' practices by promoting new principles of product valuation. *Organization Studies* 34(5-6): 683-703.
- Durand R and Paoletta L (2013) Category stretching: Reorienting research on categories in strategy, entrepreneurship, and organization theory. *Journal of Management Studies* 50(6): 1100-1123.
- Eggers JP and Kaplan S (2013) Cognition and capabilities: A multi-level perspective. *The Academy of Management Annals* 7(1): 295-340.
- Espeland WN and Lom SE (2015) Now You See It, Now You Don't: Valuing and Relations of Visibility and Invisibility. In: Kornberger M, Jusesen L, Moursitsen J et al. (eds) *Making Things Valuable*. Oxford: Oxford University Press, 18-37.
- Espeland WE (2001) Value-matters. *Economic and Political Weekly* 36(21): 1839-1845.
- Espeland WE and Sauder M (2007) Rankings and reactivity: How public measures recreate social worlds. *American Journal of Sociology* (113)1: 1-40.

- Espeland WN and Sauder M (2016) *Engines of Anxiety: Academic Rankings, Reputation, and Accountability*. New York: Russell Sage Foundation.
- Feldman MS and Orlikowski WJ (2011) Theorizing practice and practicing theory. *Organization Science* 22(5): 1240-1253.
- Foucault M (1983) On the Genealogy of Ethics: An Overview of Work in Progress. Afterword. In: Dreyfus HL, Rabinow P (eds) *Michel Foucault: Beyond Structuralism and Hermeneutics*. 2nd ed. Chicago: University of Massachusetts Press, 229-253.
- Freud S. 1930/1961, *Civilization and Its Discontents*. New York: Norton
- Friedland R (2009) Institution, practice, and ontology: Toward a religious sociology. *Research in the Sociology of Organizations* 27: 45-83.
- Furrer O, Thomas H and Goussevskaia A (2008) The structure and evolution of the strategic management field: A content analysis of 26 years of strategic management research. *International Journal of Management Reviews* 10(1): 1-23.
- Gavetti G (2012) Toward a behavioral theory of strategy. *Organization Science* 23(1): 267-285.
- Giere R (2002) Scientific cognition as distributed cognition. In: Carruthers P, Stich S and Siegal M (eds) *The Cognitive Basis of Science*. Cambridge: Cambridge University Press, 285-299.
- Gioia DA and Corley KG (2002) Being good versus looking good: Business school rankings and the Circean transformation from substance to image. *Academy of Management Learning & Education* 1(1): 107-120.
- Glynn MA and Navis C (2013) Categories, identities, and cultural classification: Moving beyond a model of categorical constraint. *Journal of Management Studies* 50(6): 1124-1137.
- Hoskisson RE, Hitt MA, Wan WP et al. (1999) Theory and research in strategic management: Swings of a pendulum. *Journal of Management* 25(3): 417-456.
- Hutchins E (1995) *Cognition in the Wild*. Cambridge, MA: The MIT Press.
- Jeacle I and Carter C (2011) In TripAdvisor we trust: Rankings, calculative regimes and abstract systems. *Accounting, Organizations and Society* 36(4): 293-309.

- Jensen MC and Meckling WH (1979) Theory of the firm: managerial behavior, agency costs, and ownership structure. In: Brunner K (ed.) *Economics Social Institutions*. Place: Springer Netherlands, 163-231.
- Kaplan S (2011) Strategy and PowerPoint: An inquiry into the epistemic culture and machinery of strategy making. *Organization Science* 22(2): 320-346.
- Karpik L (2011) What is the price of a scientific paper. In: Beckert J, Aspers P (eds) *The Worth of Goods: Valuation and Pricing in the Economy*. Oxford: Oxford University Press, 63-85
- Karpik L (2010) *Valuing the Unique: The Economics of Singularities*. Princeton, NJ: Princeton University Press.
- Knights D and Morgan G (1991) Corporate strategy, organizations, and subjectivity: A critique. *Organization Studies* 12(2): 251-273.
- Kornberger M (2010) *Brand Society. How Brands Transforms Management and Lifestyle*. Cambridge: Cambridge University Press.
- Kornberger M and Carter C (2010) Manufacturing competition: how accounting practices shape strategy making in cities. *Accounting, Auditing & Accountability Journal* 23(3): 325-349.
- Kornberger M, Jusesen L, Moursitsen J et al. (2015) *Making Things Valuable*. Oxford: Oxford University Press.
- Lamont M (2012) Toward a comparative sociology of valuation and evaluation. *Annual Review of Sociology* 38(21): 201-221.
- Latour B (1986) Visualization and cognition. *Knowledge and Society* 6(1): 1-40.
- Lawrence TB and Phillips N (2004) From Moby Dick to Free Willy: Macro-cultural discourse and institutional entrepreneurship in emerging institutional fields. *Organization* 11(5): 689-711.
- Le J and Spee P (2015) The role of materiality in the practice of strategy. In: Golsorkhi D, Rouleau L, Seidl D et al. (eds) *Cambridge Handbook of Strategy as Practice*. 2nd ed. Cambridge: Cambridge University Press, 582-597.
- Levin P and Espeland WN (2002) Pollution futures: commensuration, commodification and the market for air. In: Hoffman A, Ventresca M (eds) *Organizations, Policy, and the Natural Environment*. Stanford, CA: Stanford University Press, 119-147.

- Levitt B and March JG (1988) Organizational learning. *Annual Review of Sociology* 14: 319-340.
- Lopdrup-Hjorth T (2011) “Let’s go outside”: the value of co-creation. PhD thesis Copenhagen Business School, PhD Series 20.2013
- Maurer CC, Bansal P and Crossan MM (2011) Creating economic value through social values: Introducing a culturally informed resource-based view. *Organization Science* 22(2): 432-448.
- Merton RK (1940) Bureaucratic structure and personality. *Social forces* 18(4):560-568.
- Miller P (2001) Governing by numbers: Why calculative practices matter. *Social research* 68(2): 379-396.
- Muniesa F (2011) A flank movement in the understanding of valuation. *The Sociological Review* 59(s2): 24-38.
- Normann R and Ramirez R (1993) From value chain to value constellation: Designing interactive strategy. *Harvard Business Review* 71(4): 65-77.
- Orlikowski WJ and Scott SV (2014) What happens when evaluation goes online? Exploring apparatuses of valuation in the travel sector. *Organization Science* 25(3): 868-891.
- Ouroussoff A (2010) *Wall Street at War. The Secret Struggle for the Global Economy*. Cambridge: Polity Press.
- Pollock N and D’Adderio L (2012) Give me a two-by-two matrix and I will create the market: Rankings, graphic visualisations and sociomateriality. *Accounting, Organizations and Society* 37(8): 565-586.
- Poon M (2007) Scorecards as devices for consumer credit: the case of Fair, Isaac & Company Incorporated. *The Sociological Review* 55(s2): 284-306.
- Porac JF, Thomas H, Wilson F et al. (1995) Rivalry and the industry model of Scottish knitwear producers. *Administrative Science Quarterly* 40(2): 203-227.
- Porter ME (1996). What is strategy? *Harvard Business Review* 74(6): 61-78.
- Porter ME and Kramer MR (2011) Creating shared value. *Harvard Business Review* 89(1/2): 62-77.
- Power M. (1997) *The Audit Society: Rituals of Verification*. Oxford: Oxford University Press.
- Prahalad CK and Ramaswamy V (2004) *The Future of Competition: Co-creating Unique Value with Customers*. Boston, MA: Harvard Business School Press.



- Priem RL (2007) A consumer perspective on value creation. *Academy of Management Review* 32(1): 219-235.
- Ramos-Rodríguez AR and Ruíz-Navarro J (2004) Changes in the intellectual structure of strategic management research: A bibliometric study of the Strategic Management Journal, 1980–2000. *Strategic Management Journal* 25(10): 981-1004.
- Rasche A and Chia R (2009) Researching strategy practices: a genealogical social theory perspective. *Organization Studies* 30(7): 713-734.
- Ravasi D, Rindova V and Dalpiaz E (2012) The cultural side of value creation. *Strategic Organization* (10)3: 231-239.
- Reinecke J (2015) The politics of value and economies of worth: a case study of “conflict-free” gold. In: Kornberger M, Jusesen L, Moursitsen J et al. (eds) *Making Things Valuable*. Oxford: Oxford University Press.
- Rindova V, Dalpiaz E and Ravasi D (2011) A cultural quest: A study of organizational use of new cultural resources in strategy formation. *Organization Science* (22)2: 413-431.
- Robinson J (1962) *Economic Philosophy*. London: Aldine Publisher.
- Rose N (1999) *Powers of Freedom: Reframing Political Thought*. Cambridge: Cambridge University Press.
- Rosental C (2005). Making science and technology results public: a sociology of demos. In: Latour B, Weibel P (eds) *Making Things Public: Atmospheres of Democracy*. Cambridge: The MIT Press, 346–349.
- Sauder M and Espeland WN (2009) The discipline of rankings: Tight coupling and organizational change. *American Sociological Review* 74(1): 63-82.
- Stark D and Paravel V (2008) PowerPoint in public: Digital technologies and the new morphology of demonstration. *Theory, Culture & Society*, 25(5): 30-55.
- Strathern M (2000a) *Audit Cultures: Anthropological Studies in Accountability, Ethics, and the Academy*. London: Psychology Press.
- Strathern M (2000b) The tyranny of transparency. *British Educational Research Journal* 26(3): 309-321.

- Suddaby R, Seidl D and Lê JK (2013) Strategy-as-practice meets neo-institutional theory. *Strategic Organization* 11(3): 329-344.
- Swidler A (1986) Culture in action: Symbols and strategies. *American Sociological Review* 51(2): 273-286.
- Thomas WI and Thomas DS (1928) *The Child in America: Behavior Problems and Programs*. New York: Knopf.
- Vaara E and Whittington R (2012) Strategy-as-practice: taking social practices seriously. *The Academy of Management Annals* 6(1): 285-336.
- Vargo SL and Lusch RF (2004) Evolving to a new dominant logic for marketing. *Journal of Marketing* 68(1): 1-17.
- Vatin F (2013) Valuation as evaluating and valorizing. *Valuation Studies* 1(1): 31-50.
- Von Mises L (1949) *Human Action: A Treatise on Economics*. New Haven: Yale University Press.
- Weber K, Heinze KL and DeSoucey M. (2008) Forage for thought: Mobilizing codes in the movement for grass-fed meat and dairy products. *Administrative Science Quarterly* 53(3): 529-567.
- Wedlin L (2006) *Ranking Business Schools: Forming Fields, Identities and Boundaries in International Management Education*. Cheltenham: Edward Elgar Publishing.
- Wernerfelt B (1984) A Resource-based view of the firm. *Strategic Management Journal* 5(2): 171–180.
- Whittington R (2011) The practice turn in organization research: towards a disciplined transdisciplinarity. *Accounting Organization and Society* 36(3): 183-186.
- Zhao W (2005) Understanding classifications: Empirical evidence from the American and French wine industries. *Poetics* 33(3): 179–200.
- Zuckerman E (1999) The categorical imperative: Securities analysts and the illegitimacy discount. *American Journal of Sociology* 104(5): 1398-1438.
- Zwick D, Bonsu SK and Darmody A (2008) Putting consumers to work: Co-creation and new marketing govern-mentality. *Journal of Consumer Culture* 8(2): 163-196.

<b>Constitutive mechanisms of valuation practices</b>	<b>Analytical focus</b>	<b>Exemplary study</b>
Distributed nature of agency and cognition	<ul style="list-style-type: none"> <li>- Role of intermediaries in valuation practices</li> <li>- Role of non-human actors (such as algorithms) in valuation practices</li> <li>- Agency and cognition distributed across socio-technical network</li> </ul>	TripAdvisor as example of distributed agency and cognition with users, experts and algorithms involved in valuation practices  (Jeacle and Carter, 2011)
Commensuration	<ul style="list-style-type: none"> <li>- Introducing common metric to make things comparable</li> <li>- Translation of qualities into quantities</li> <li>- Power to define what counts, and how to count what counts</li> </ul>	Law school rankings as commensuration mechanism that makes different schools comparable through deconstructing (flattening) them and translating qualities into quantities  (Espeland and Sauder, 2007)
Categorization	<ul style="list-style-type: none"> <li>- Collective evaluative schemata that sort things out and re-organize commensurated elements into categories</li> <li>- Categories as collective frames that mediate encounter between producers, consumers, etc.</li> <li>- Generative power to give rise to new qualities and source of legitimacy</li> </ul>	In the case of city rankings, categorizations order (rank) cities based on novel criteria that engender new qualities  (Kornberger and Carter, 2010)
Visualization	<ul style="list-style-type: none"> <li>- Aesthetics and socio-materiality of valuation</li> <li>- Visualization makes valuation mobile, ensuring its (potential)</li> </ul>	Gartner's magic quadrant as valuation translated into a globally powerful visualization ("beautiful picture") that shapes market perception and behaviour of

	<p>global dissemination</p> <p>- Visualizations as form of demonstration (proof and power) that focus attention, structure intentionality and mobilize actors</p>	<p>producers, consumers and others</p> <p>(Pollock and D'Adderio, 2012)</p>
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Summary table 1: Analytics of valuation practices and their constitutive mechanisms

<b>Strategic response</b>	<b>Strategic action</b>	<b>Exemplary study</b>
Internalizing	Strategist internalizes criteria and mechanisms of valuation practice	Hotel managers translating TripAdvisor's valuation mechanisms into internal KPIs (Orlikowski and Scott, 2014)
Gaming	Strategist manipulates specific indicators that underpin valuation practices	College deans manipulating admission and graduation numbers to increase score in ranking (Espeland and Sauder, 2007)
Imposing	Strategist introduces new valuation practice with the aim to make a specific set of qualities (values) industry standard	Activist movements introducing new certifications with the aim to alter consumers' decision-making criteria and hence force producers to adapt to new standards (Dubuisson-Quellier, 2013)

Table 2: Strategic agency in response to rivalry engendered by valuation practices

University rankings as exemplary valuation practices

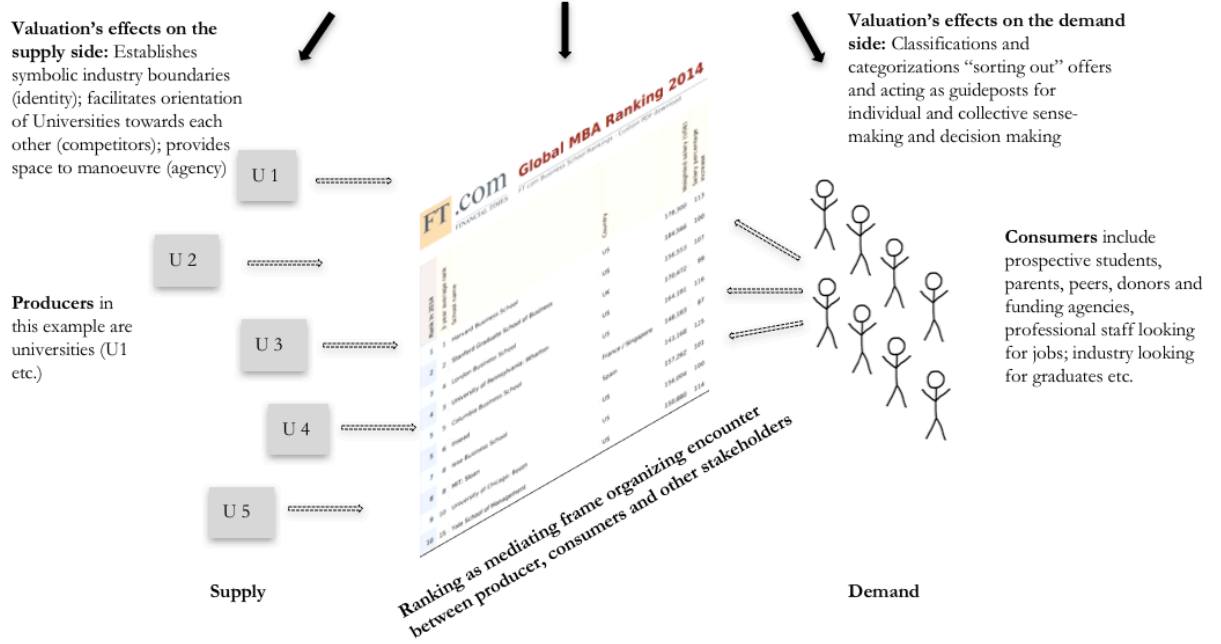


Figure 1 – Valuation practices organizing the encounter between producers and consumers using the example of the FT Global MBA Ranking