Introduction

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How can we engage in a market relationship when the quality of the goods we want to acquire is unknown, invisible, or uncertain? This is the question addressed in this book. Each chapter focuses on situations where quality is highly uncertain: such situations provide excellent opportunities to analyze how quality is the outcome of a construction process involving producers, consumers, and market intermediaries.

This book is a contribution to the study of the sociology of markets. We are interested in the role of "quality" for the development of markets. Here "quality" refers to the explicit and implicit, visible and invisible aspects of a good, service, or person being valued. Qualities create incentives or disincentives for purchasing decisions on markets. For market exchange to be possible, purchasers and suppliers of goods must be able to assess the qualities of a product in relation to other products. This holds true for consumer markets, labor markets, and investments. "How could we describe, in practice and theory, the structures of competition within the same market, or between related markets, if relations of similitude or dissimilitude between the goods that circulate could not be established?" (Callon, Méadel, and Rabeharisoa 2002: 196). Only by recognizing quality and perceiving differences in quality can purchasers make nonrandom choices and can the price differences between goods in a market be justified. "Quality" is not something that is naturally given, but the outcome of a collective process in which products become seen as possessing certain traits and occupying a specific position in relation to other products in the product space. Hence goods and services become "qualified." The authors of this volume are investigating the processes by which this qualification takes place and recognized qualities are contested and change over time. Special

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1

emphasis is given to the symbolic dimensions of quality, an aspect particularly important in the construction of qualities in contemporary affluent consumer societies. Examination of the construction of product qualities provides insights into the formation of preferences and value on markets and thereby contributes to our understanding of growth dynamics in the economy.

We argue that three processes are central for construction of the quality of goods.

They may occur sequentially or simultaneously, but should be analytically distinguished, as they draw on different mechanisms. At the same time, their linkages need to be understood.

The first process is the construction of categories to which goods can be allocated: in order to sell and buy products called "yogurts," for example, this specific category must first be created. It must be identified as a category distinct from other categories of milk products, and has to become a shared category among producers and consumers. In the car market, the establishment of a market for minivans presupposed the formation of a category under which the qualities constituting a minivan could be subsumed and differentiated from other types of vehicles (Rosa et al. 1999). Categories are boxes within a set of related boxes, which form classification systems. Ideal-typically, categories and classification systems are consistent, unique and mutually exclusive (Bowker and Star 2002: 10).

Such rather simple cases like the categories of yogurt and minivans are frequent in our day-to-day life. They form part of the many institutions that allow routines and predictable interactions to develop (Berger and Luckmann 1966; Douglas and Isherwood 1979). But we are also engaged in more complex situations. Cases, for instance, where the definition of categories cannot be taken for granted but is open to contestation. Categories might then lead to controversy. The effects of ambiguity of classifications have been investigated by Ezra Zuckerman in particular (1999). In the present book, Frans van Waarden and Robin van Dalen show that defining what "halal" means has not been achieved beyond a doubt, but is contested among Muslims. Different conceptions of "halal" have emerged, creating significant

ambiguity among consumers and producers. Less open than the definition of halal but nevertheless an example for the contestation of quality categorization is the chapter by Jörg Rössel and Jens Beckert, in which they describe two competing systems of categorization for German wines. Sébastien Dubois and Pierre François, in their chapter about French contemporary poetry, reveal another situation of disagreement on categories. There exist widely diverging classification systems of poetry genres that find only little consensus among the actors. This lack of robust institutionalization leads to ambiguity. The consequence is a high level of uncertainty in the field. One of the issues to be tackled in this book thus deals with the emergence, the stability, and the renegotiation of categories used for the classification of goods. Authors are especially interested in how this affects the definition of the quality of goods and the processes by which actors (re)construct categories.

But developing categories is not enough: in a second process, the specific good must be associated with a category; it must be defined as belonging to this category. As Ezra Zuckerman (1999: 1428-29) has rightly observed, "for a product to compete in any market, it must be viewed by the relevant buying public as a player in the product categories in which it seeks to compete." Once the yogurt category is established and recognized, the issue for the seller is to make sure the product on offer is perceived as falling into the categories defining it as yogurt. Brands, names, physical properties, the location of a product in proximity to certain other products, and the information on labels (Callon, Méadel, and Rabeharisoa 2002: 203) all help buyers to determine the characteristics of the product and to decide whether the milk product is yogurt or whether the car is indeed a minivan. The same holds true for financial products (Zuckerman 1999), employees (Eymard-Duvernay and Marchal 1997) or styles of poetry (Dubois and François, this volume).

In many instances, the identity of a product as belonging to a certain category is uncontested. Most of us will be confident that we are buying yogurt when we see the word on

the packaging of the product we purchase and we will not even think of controlling for the actual content of the container before paying for it. In other cases, however, it is difficult to assess whether a good meets the criteria for belonging to a specific category. In the chapter on halal products mentioned above, van Waarden and van Dalen observe that, even if buyers have expected criteria in mind about whether to consider a product halal, it might be difficult for them to be confident that the products on the shelves of the supermarket meet these criteria: how can they be sure that the poultry they want to buy has been killed according to halal rules without being present when the butcher slaughters the animal? (See also Gourevitch 2011.) The same problem arises when the "actual" quality of the good is invisible: how can one know about the quality of wood before a timber log is cut (see Aspers in this volume)? Quality might not be observable for the buyer at all or it might be revealed only over time and in interaction, as it is the case for recruitment on the labor market (Eymard-Duvernay and Marchal 1997; Salais 1989). How employers deal with the uncertainty of an employee's quality, i.e., how they categorize applicants despite this uncertainty, is addressed by Philipp Gerlach in his chapter on the internal labor market for engineers in the German and French automobile industry. Emmanuelle Marchal addresses the issue by investigating the use of anonymous CVs in the recruitment of employees. To understand the processes of categorization, the authors in this volume investigate the cognitive processes, technical instruments, and judgment devices (Karpik 2010) that serve as tools to construct the quality of objects in situations characterized by uncertainty. By focusing on the contingent signals for quality and the practical processes of establishing perceptions of quality, they add to our understanding of the microprocesses and the cultural as well as social structural underpinnings that constitute the value of goods traded on markets.

The construction of categories and the attribution of objects to categories are two crucial processes in the construction of quality in markets. A third process concerns the

establishment of quality differences within a product category, a process crucial for the attribution of value and the justification of price differences between goods falling into the same product category. Differences in product qualities may lead to the creation of new categories in a process of product differentiation, but goods may also be directly compared. Perceived quality differences between goods of the same category are the outcome of a ranking based on a scale: stocks can be compared according to their price-earnings ratio. Gold can be ranked according to its purity. Different wines are ranked through the use of a point system; the Guide Michelin ranks gourmet restaurants using a system of stars.

The ranking of goods reduces uncertainty by ordering products along a scale. The position of the good on the scale influences its perceived value and may be intertwined with price-setting. This holds true especially on "standard markets" (Aspers 2009), where the scales to measure quality differences are largely uncontested. An example for this is the market for crude oil, where qualities are measured according to the chemical composition of the oil. If no fully legitimate scale can form based on what establishes the quality differences of a product in relation to other products of the same category, scales will have a more limited influence on prices. Contradictory perceptions of the quality of a product in a market can cancel one another out. Stocks, for instance, can be ranked according to their current price earnings ratio, but they can also be ranked according to the expected future profits of the firm. Each scale will lead to different evaluations of the same stock. An actor will assign different values to the stock depending on which scale that actor uses. This is one reason why prices for a product can be considered by different actors as either high or low. The assessment of the price of a good depends on the measuring instrument being used. But expectations of future value – as in the case of stocks – are not the only elements that can serve as a scale to assess quality. Both Dominic Akyel's chapter on funerals and the chapter of van Waarden and van Duyen on halal food provide examples of how morality can enter into a scale to judge

products and can affect the price consumers are willing or feel obligated to pay. This also connects this volume to the recent work by Marion Fourcade (2011) on the evaluation of damages from oil spills in different national contexts and to the work of Viviana Zelizer (1979; 1981) on the economic evaluation of human life and how it has changed through history.

In this introduction we will first provide an overview of the evolution of discussions on categorization, classification, and qualification in sociology and some heterodox approaches in economics to the three issues of forming categories, identifying the products that fall within a given category, and ranking products within a category. The beginnings of these debates in sociology can be traced back to the early twentieth century and have captured the interest of sociologists, economists, anthropologists, and organization researchers increasingly in recent years. The debates are centered in France and in the United States. However, there is not a lot of dialogue between the French and American discourses. One goal of this introduction is to show differences and overlaps between French and American scholarship and thereby contribute to a closer dialogue between the two. In the second part of the introduction we focus on the processes of categorization of goods, the assessment of different qualities, and the role of intermediaries in the qualification of goods. In the last section we discuss the connection between qualification and the valuation of goods.

Classifying the World

The various types of classification – sorting objects, human beings, or services into different groups – are crucial processes on markets. They provide "the categories and understandings that enable us to engage in economic action" (DiMaggio 1994: 28). Debates on classification, however, are not limited to the exchange of goods. There is a long tradition of sociological scholarship on classification processes (Lamont 2012). Sociological investigations into the

construction of the quality of goods in the economy can derive important insights from these broader debates.

Emile Durkheim's ([1912] 1965) sociology of religion and his essay on *Primitive* Classification (Durkheim and Mauss [1902] 1963) can be considered the starting point of the sociology of classification (Lamont and Fournier 1992). For Durkheim and Mauss, classifying is not a self-evident activity of human beings and therefore needs to be studied. In his Elementary Forms of the Religious Life ([1912] 1965), Durkheim described how totemistic societies organize their identities and social lives by classifying the world into the sacred and the profane as two strictly separate spheres. An object attains radically different qualities according to its categorization as either profane or sacred, affecting how it can be used and how it is valued. In their essay on *Primitive Classification*, Durkheim and Mauss analyzed the emergence of categories in human societies by looking at primitive forms of classification in various tribal societies. They described how categories evolved but also compared them among societies and thus observed that the principles organizing classifications share similarities with each other. Moreover, they asserted that primitive classifications share important features with the scientific classifications used in modern societies: the groupings produced by both primitive and scientific classifications are hierarchical. Moreover, they are linked with each other so that they constitute a whole and unify operations of thought. Through the classification of their totems, the members of tribal societies are able to prereflexively recognize the differentiation of their society and its unity at the same time. The sociological insight of Durkheim and Mauss's investigation is the recognition of the homology between classification systems and social structures. Durkheim and Mauss (1963: 48) considered classifications "not to facilitate action, but to advance understanding, to make intelligible the relations which exist between things . . . Such classifications are thus intended,

above all, to connect ideas, to unify knowledge."² The order-producing role of classifications was later taken up by Mary Douglas. In her book *Purity and Danger* (1966), Douglas interprets religious distinctions between the pure and the impure as culturally specific understandings of the right order of things. Mixing them threatens this order and is therefore subject to sanction. In her later book, *How Institutions Think* (1986), Douglas interprets classifications as institutions.

The Classification of Labor

In French postwar sociology, the issue of the qualification and classification of goods was first discussed in relation to labor (Paradeise 2003; Musselin and Paradeise 2005: 90). Of great importance in this is the work of the French National Institute of Statistics and Economic Studies (INSEE) where during the 1950s the "categories socio-professionelles" (CSP) were developed, a system of classification of professions that began to be used in administrative statistics. The CSP provide a practical example of a classification system in which categories serve the linkage and unification of social objects.

The INSEE is a large agency that employs sociologists among its scientists. This is important to note, since many French sociologists who have made the qualification of goods a central topic of their work are either employed by or in close contact with the INSEE during the early phases of their careers. This holds for instance for Pierre Bourdieu, Luc Boltanski, and Laurent Thévenot (Diaz-Bone 2008).

The classifications of labor refer to the status of workers in the social insurance system, their employment in different sectors in the economy, and their formal training. Labor was "classified" on scales that ranged from unskilled workers to skilled workers and

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² P.M. Chauvin (2006) has argued in a recent paper that too much emphasis has been put on this speculative role that Durkheim and Mauss gave classifications and not enough attention has been paid to the fact that the two authors also present classifications as the result of practices in which actors are involved and compete in order to produce hierarchies and frontiers.

professionals. These scales were based on the educational achievements of workers, measured in years of training and in degrees certifying certain capabilities. The ranking on the scale positions the individual worker in relation to other workers with higher or lower qualifications and thereby "qualifies" him or her.

The "categories socio-professionelles" (CSP) in France have increasingly developed into a kind of statistical basic unit categorizing French society according to sociodemographic variables (Diaz-Bone 2008: 328). This also demonstrates the claim made by Durkheim and Mauss that classification systems represent a whole by establishing the relationships between the parts of a social system. But contrary to Durkheim and Mauss, existing classification systems do not simply represent a social order, but also constitute it within the praxis of classification – a point made especially forcefully by Pierre Bourdieu (Bourdieu [1972] 1977; 1990).

Once they are established and institutionalized, categories exist as devices that create order in markets. This holds true not just for the categorization of labor, but much more generally. As stressed by Bowker and Star (2002), we evolve in a social world infused by categories resulting from multiple classificatory processes. Most of them are taken for granted, such that we cease to notice them anymore and are not aware of where they came from or how they were constructed. Categories bring order to a world filled with an indefinite number of goods being traded, without the need to reflect upon the categories. When we buy yogurt or a minivan, we do not need to know how the respective categories were identified, how they have been defined, or how they became shared by consumers. Taking categories for granted saves us a lot of time and reduces possible indecision (Cochoy 2002). At the same time, however, categories create boundaries (Lamont and Fournier 1992). That "each standard and each category valorizes some point of view and silences another" (Bowker and Star 2002: 5) is the reason that categories are contested. But classifications simultaneously offer us the

prospect of regulating conflict. Once a scale to judge the worth of workers – for instance according to their formal qualifications – has been established, it becomes a normative reference point for all parties to the conflict and thereby helps to reduce disagreement.

Classification and status allocation

Classification processes also construct quality by affecting status allocation, the distribution of material assets and enshrining an ethical choice (Bowker and Star 2002: 5). The classification systems used in official statistics, for instance the categorical definitions of unemployment (Salais, Baverez, and Reynaud 1986), determine the social status of actors, their recognition, and their legitimate claims. The categorization "decides" who counts as unemployed and who has a claim to assistance. Luc Boltanski (1990) showed in a study on the emergence of the category of *cadres* in the French statistical system that the institutionalization of this category was the outcome of a struggle for social recognition by a group of employees holding management positions in their firms. Despite the high degree of heterogeneity within their group, the cadres were able to become a recognized statistical category and benefited within their firms from the status dedicated to them (distinct from blue-collar workers and foremen). This category emerged from a rather homogeneous group of engineers who created the expression *cadres* and constituted a locus of attraction to other groups that engaged in collective actions, despite the fact that the characteristics of these new groups were distinct from those who had initiated the term. The unity of this category – that none of its members had an interest in breaking out – explains its institutionalization and objectification despite its heterogeneity.

The positioning of actors on the scale of the classification system "qualifies" them and effectively determines access to positions in occupational hierarchies and justifies inequality in income distribution. This explains why classifications leading to quality assessments are

associated with struggles between social groups fighting for social recognition (Bourdieu 1984: 479f.; Thévenot 1984; Desrosières and Thévenot 1988). The scales relating individuals to one another hierarchically are hence the outcome of political decisions, bargaining between employers and employees, and lobbying by groups of employees (Boltanski 1990).

Struggles about classification are struggles about the worth of goods and of actors. French and other debates have highlighted this point. Analyses of the categorization of race in American society show that the categorization of groups within certain racial boxes, and the consequences this had for their social status, was also contested (Guglielmo and Salerno 2003; Lamont 2000). Controversies about "comparable worth" are struggles about equivalences in the value of labor, charging gender or race discrimination through category building (Blum 1991).

Debates in sociology on categorization often emphasize the power dimension of this process. The "labeling approach" (Lemert 1951), for instance, points to the stigmatization of actor groups through their qualification according to the criminological classification system. According to Marx (1867), the commodity form of goods establishes equivalences between goods according to the amount of "abstract labor" used in their production, and thereby makes invisible the relations of domination that characterize the production process. For Pierre Bourdieu, the perception of social order constituted through classification processes reflects the power differences between actors (Bourdieu 1984: 479). For Michel Foucault (1982; 1991), classifications are order-producing devices that entail power and suppression, ordering the world within the confines of bureaucratic discipline. Foucault argues that categorizations make actors governable by sorting them within a hierarchical system, leading to their domination. This implies that we should be aware of underlying power structures when we talk about the qualification of goods in the economy.

Emergence and evolution in classification systems

Taking classification seriously as part of the process of constructing product qualities leads to the study of the processes by which categories are formed and evolve. One of the principal contributions of this volume is that it encourages us to pay close attention to the processes of category formation.

Some of the most intriguing groundwork in identifying general principles in the formation of categories is by Eviatar Zerubavel (1991; 1996), who is interested in the cognitive processes that lead to "lumping" different things together and "splitting" other things as being different. Thus his interest is in the cognitive continuities and discontinuities created through classification. While "lumping" blurs heterogeneity and by doing so reinforces the cohesion of a category – as has also been shown by Boltanski (1990) for *cadres* – "splitting" refers to the opposite process, an example of which would be the differentiation of the world into the sacred and the profane. The established "mental clusters" have profound effects on the assessment of the quality of goods. An example for this is provided in the chapter by Elena Bogdanova in this volume, who shows that antique objects are perceived fundamentally differently depending on the status of the vendor of the object.

Zerubavel (1996: 427) has stressed that the categorization of the world has nothing natural to it, but is wholly based on social conventions. Examples of this are the distinct categorization of used objects as either junk or antiques (see the chapter by Elena Bogdanova) or the classification of food as fair-trade, kosher, or halal (see the chapter by van Waarden and van Dalen). As Viviana Zelizer (1994) has shown, mental differentiation can even take place regarding money, an object often considered the epitome of equivalence. This is the case when actors "value" and spend money differently according to its sources, for instance income stemming from an inheritance, from work, from theft, or from a lottery win.

Statistics and the role of the state

Cognition is not the only mechanism involved in the emergence of categories. There is also a close relationship between classification processes, statistics, and the state. This is not by chance: establishing measures of equivalence is the basis for statistical analysis and is largely influenced by state agencies.

As for the relationship between classification and statistics, classifications indeed have the purpose of making qualitatively different objects comparable by establishing equivalence with regard to specific aspects of an object. This allows for abstraction from many of the qualities of an object and thereby maintains a level of generalization that makes exchange possible. In a well-known article, Wendy Espeland and Mitchell Stevens (1998) have defined this process as "commensuration." Two objects are commensurable if they can be compared based on a common measurement scale; commensuration is the "transformation of different qualities into a common metric" (Espeland and Stevens 1998: 314). This common metric is the category under which the object or activity is judged, abstracting from the other qualities it has and in effect turning qualitative differences between objects into differences in magnitude that can be easily compared. Thus commensuration "creates relations among things that seem fundamentally different" (Espeland and Stevens 1998: 316) by abstracting and reducing information, leading to how we assess the quality of an object and how we "sort" the world. A good example of this is the work of rating agencies, which make bonds commensurable by assessing their "quality" in three letters, communicating to market actors their presumed risk level and abstracting from all specifics of the debtor (Carruthers 2012, forthcoming).

When it comes to the role of the state, Pierre Bourdieu (1984) is a sociologist in whose work such commensuration processes take center stage and who at the same time pays close attention to the role of the state in the formation of classifications systems. During his early

career in Algeria Bourdieu collaborated closely with the INSEE. He claimed that the scientific character of sociological research demands reference to statistical evidence and at the same time that statistical tools need to be used reflexively, meaning that the historical emergence of classificatory systems, their logic of construction and the context of their application must be part of the sociological analysis (Desrosières 2003: 2010). The central role of the INSEE in the development of statistical categories, for instance, shows the influence of the interests of the state in classification processes. Classification is a political and bureaucratic process.

The role of practices in the change of classification systems

While Bourdieu stresses that the points of view are different from one field to another and that fields compete with one another, he barely considers why and how the classification schemes specific to a field *evolve*. As long as the fundamental structures of society are stable and remain the same, the principle organizing practices and representations of agents within a certain field do are reproduced by the habitus that is itself produced by these structures (Bourdieu [1972] 1977). The classification schemes common to all agents of the same field are the logic by which these agents comply or oppose, agree or disagree. These logics may produce different results but they themselves remain the same. For instance, dominant cultural practices may change over time, but the logic of distinction leading to the emergence of dominant practices remains stable (Bourdieu [1979] 2010). What is missing in Bourdieu is the non-reductionist inclusion of social practices that can explain the construction of qualities in fields through classification. Quality, according to Bourdieu, emerges from field positions and habitus without taking into account the reflexive (read: interpretative and contingent) ways in which actors configure the qualities of objects during the action situation (Diaz-Bone 2007: 493).

The limited attention to the emergence and evolution of classification systems is also common to the early adherents of the neo-institutionalist perspective developed in American sociology. Sociological institutionalism builds on the concept of fields developed by Bourdieu, describing "institutional environments," "organizational fields" (DiMaggio and Powell 1983) and "strategic fields" (Fligstein 2001) as arenas of interaction structured by specific logics and principles that, as in Bourdieu, play a central role in allocating status, power, resources, and capital, not least through processes of categorization. Categories become formally or informally diffused as cognitive models that become imitated (Meyer and Rowen 1977), leading to institutional isomorphism. When institutionalized, categories reduce uncertainty and are therefore a powerful tool in the coordination of social interaction.

While the early publications of this school primarily stressed the stability of institutional fields and the prevalence of structures over agency, the question of change became a focus later on. Paul DiMaggio (1988) introduced "institutional entrepreneurs" into the debate as the agents able to modify the "institutional logics" (Friedland and Alford 1991; Thornton, Ocasio, and Lounsbury 2012) specific to a field and thus to modify the composition, cognitive frameworks, and dominant principles of evaluation, as well as the legitimate practices in a field. Today the transformation of institutional logics and the mechanisms and actors through which new logics and categories arise have become central to this intellectual approach (Beckert 1999; Battilana, Leca, and Boxenbaum 2009; Lounsbury 2007; Navis and Glynn 2010; Schneiberg and Berk 2010; Khaire and Wadhwani 2010).

Categories from controversies

As stressed by Michèle Lamont (2012), the notion of institutional logics in organizational theory resembles the notion of "cités" (orders of worth) introduced by Luc Boltanski and Laurent Thévenot ([1991] 2006). Boltanski and Thévenot use this concept to refer to the

systems of equivalences that allow actors engaged in interactions to interpret and qualify the situation they are in and to coordinate their activities based on a common appraisal. An example is the common appraisal of the qualities of a good. The orders of worth are conventions that serve as a "collectively recognized reference" (Jagd 2007: 79) of qualifying objects and actors; by anchoring expectations in shared knowledge, they allow for the coordination of action (Diaz-Bone 2011: 47). Thévenot (1984) has characterized orders of worth and classifications in general as "investments in forms," which facilitate coordination by stabilizing expectations and regulating exchange relations.³ According to the system of equivalence shared by actors, some practices will be more legitimate or will be attributed more worth.

But orders of worth in the new sociological institutionalism differ from institutional logics in several ways. First, for Boltanski and Thévenot, the number of orders of worth are many and they may vary. They first distinguished six orders of worth (creative, reputation-based, domestic, civic, market-based, industrial) – each related to a specific philosophical perspective. Later they added new ones (for instance the project-based order of worth described by Boltanski and Chiapello [2005]). Second, while sociological institutionalists, at least in the early formulations of the approach, saw a specific institutional field as dominated by *one* institutional logic, Boltanski and Thévenot and their followers point at the coexistence of different orders of worth within a single field and focus on the tensions and conflicts that arise among them when actors engaged in different orders of worth have to cooperate and find an agreement about the system of equivalences that will prevail. As a consequence, the

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³ For discussions of product quality from the perspective of the economics of convention see also De Munck (2011) and Minard (2011).

⁴ Boltanski and Thévenot, though building on the French school of the economics of conventions, mainly consider conventions that are related to cognitive and evaluative activities. By contrast, conventionalists such as François Eymard-Duvernay and Robert Salais adopt a wider definition of conventions. They are not limited to cognitive and evaluative activities, but include rules, norms, or routines as conventions used in the qualification of goods or services. Such conventions entail all kinds of explicit or implicit and formal or informal agreements allowing coordination among actors, including agreements on categories. The orders of worth proposed by

classification of human beings, things, or practices pertaining to a specific order of worth may be redefined when another order of worth has become dominant. Controversies and requalifications are thus frequent in this perspective, and categorizations evolve constantly. The fact that the quality of a product can be interpreted very differently creates conflicts and the need to find agreement in the situation. Hence Boltanski and Thévenot (1983) put much more emphasis on the practices of classification, i.e., the processes by which actors interpret categories in contingent ways, deciding which conventions are appropriate and changing them in the process. By emphasizing the practices of qualification, Boltanski and Thévenot also break with the structuralist premises of Bourdieu's theory. Their reference point is American pragmatism, emphasizing the role of agency and the processual character of social order.

This pragmatic understanding of classification has also been taken up by David Stark (2009), whose understanding of entrepreneurship focuses on actors' ability to keep *different* evaluative schemes in play simultaneously. This connects on the one hand to Boltanski's and Thévenot's notion of conflicting orders of worth and on the other hand to the pragmatist understanding of action. Stark sees quality as defined through cognitive models, for instance those that traders on financial markets use to define their trading strategies. He thus connects the notions of qualification, valuation, and classification to the *social studies of science* that focus on the impact of models, theories, and epistemic cultures in the development of markets, often based on the concept of performativity (Knorr-Cetina 1999; MacKenzie 2006; MacKenzie, Muniesa, and Siu 2007). The basic assumption of performativity theory, put simply, is that theories define the qualities of goods by categorizing them.

Following Boltanski and Thévenot, classification systems like the French "categories socio-professionelles" (CSP) can be investigated under the question of which order of worth shapes their structure and to what extent compromises between different orders of worth are

Boltanski and Thévenot are one type of convention, but others can be identified to define the quality of goods (Eymard-Duvernay 1989).

institutionalized (Diaz-Bone 2008: 347). Like all institutions, however, categories are not in themselves strong and efficient, but gain in strength and efficiency as actors conform to them (François 2011: 231). Following this focus on actors, the contributions in this book are primarily concerned with identifying which processes actors use to engage in the construction of categories, how they use them, how they contest existing categories, and how agreements on categories evolve – or not.

While in France the issue of the classification and qualification of goods is mostly debated in sociology and in the economics of convention, management scholars are frequently the ones who are interested in the topic in America. The classic article by Rosa et al. (1999) argues that markets evolve from a process of "category stabilization" that takes place through the interactions between producers and consumers. Lounsbury and Rao (2004) have revealed in a study on category changes in the American mutual funds industry the importance of power for the continuation of established structures of categories in an industry. A crucial finding of this literature is that markets penalize products which do not fall clearly into one category, by attributing lower prices to them (Zuckerman 1999). Management studies uses many of the theoretical frameworks discussed here. Sociological institutionalism (DiMaggio and Powell 1991) is invoked frequently, but so are theories of sensemaking in organizations (Weick 1995), which are applied along with social movement theories (Snow and Benford 1992) and network analysis. The economics of convention, however, has so far played only a limited role in American management studies and organizational scholarship on the topic of classification and qualification.

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⁵ Other studies that investigate classification processes on markets are Kennedy (2011), Fiss and Kennedy (2007), Beunza and Garud (2006) and Hatherly, Leung, and MacKenzie (2008). See also the contributions in Hsu, Negro, and Koçak (2010).

Constructing quality by allocating goods to categories

Constructing categories is only one side of the coin. Many of the contributions in this book show that even when categories are more stabilized and institutionalized, the quality of a good remains ambiguous. There are two possible reasons for this. First, actors may not be able to decide which category a specific good belongs to. This happens when the properties of a good are invisible, will be revealed only after the transaction has occurred, or are too ambiguous to measure. Second, actors may not be able to assess the quality differences of the products within a category. This is especially the case when products are very similar or if there is little consensus on what constitutes the quality of a product. One can observe the similarity issue in the case of different yogurts on the supermarket shelf, and a lack of consensus can be found in judgments of wines or contemporary art. In such situations, actors nevertheless need to make judgments on quality in order to make choices they can define as informed ones. We will discuss both of these questions at the same time, starting with two scholarly approaches to this issue and identifying how this book contributes to those approaches.

Judgment devices as producers of quality and singularities

In a paper published in 1996, the French sociologist Lucien Karpik introduced the concept of "judgment devices," the term he uses to refer to the techniques, instruments, and processes available to actors to reduce their uncertainty about the quality of goods they wish to acquire. Karpik (1996) distinguishes between devices based on personal trust and devices based on impersonal trust. Typical examples of the former are the networks of friends we might ask for film recommendations, or the network of relatives we might consult if we needed to find a lawyer. Relying on the good scientific reputation of the supervisor of a PhD candidate to assess the quality of this candidate is also a form of judgment based on personal trust. By contrast, impersonal trust is involved when we rely on guides, labels, or certificates to assess

the quality of a good. Choosing a restaurant or a hotel with the help of the Guide Michelin, or selecting a candidate for a position in academia because that candidate has published in journals with a high impact factor are typical examples of judgment devices based on impersonal trust.

Karpik (2010: 95) holds these judgment devices to be the central mechanisms in the qualification of goods. Through them products are singled out, defined as belonging to a certain category, and positioned in relation to the qualities of other products in the same category. One example of this is the ranking system in the wine market that was introduced through the point system created by Robert Parker. This system commensurates wines that fall into various categories (e.g., red and white wine; wine from Bordeaux and wine from Napa Valley) by giving it a numerical value on an ordinal scale. A wine awarded 92 points is "better" than a wine that has obtained only 86 points. It is through judgment devices that we assess the quality of goods that would otherwise remain opaque to us. Imagine yourself in a wine store, having to choose a bottle of wine without knowing anything about wine and without any available judgment device to use. Your choice would have to be random.

Many contributions in this book build upon Karpik's perspective. Philipp Gerlach, for instance, investigates the impersonal and personal judgment devices used in the German and French automobile industry to promote engineers into management positions. He shows that the judgment devices that firms in the two countries use sometimes differ depending on the country and that – despite the strong normative principle of meritocracy – preferences emerging from personal networks play a major role in the recruitment process. By investigating different national styles in the assessment of quality, Gerlach connects his work to the field of comparative cultural sociology, whose interest focuses on the question of how

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⁶ Judgment devices, Karpik (2010) shows, need not be unidimensional, reducing all qualities to one metric. Restaurant guides, for example, provide the reader with several criteria to judge the quality of a restaurant, thus opening to consumers the possibility of weighting the criteria according to their own preferences.

processes of evaluation and valuation depend on national cultural repertoires (Fourcade 2011; Lamont 1992; Lamont and Thévenot 2000).

But the authors in this book also expand and interrogate the perspective developed by Karpik, in several ways. First, some of the chapters stress the problems that arise from the multiplication of devices competing with one another and the complications for the coordination of market relations caused by the need to decide between competing devices. Dubois and François show in their chapter that a plethora of classifications exist in the field of French poetry, indicating a lack of any consensus on genres or on the relationship of authors to genres and between genres. The chapter by Patrik Aspers also demonstrates this phenomenon: in the Swedish market for timber, several judgment devices for the assessment of the quality of a tract of standing timber compete with one another. Tradition, power, trust, and strategic considerations all play into actors' decisions about which judgment device they will actually use in a transaction.

Second, some authors follow the more recent publication from Karpik (2020) and show the weight of cognitive competences and cultural capital judgments. Rössel and Beckert, for instance, argue that implementing the *terroir* classification for German wines presupposes sophisticated knowledge about wines, socialization with a specific language, and the ability of abstraction. They thus stress the cognitive competences involved in the qualification of goods and the skills as well as the cultural and social capital that may be needed for actors to use judgment devices.

Third, benchmarks and analogies are sometimes used as judgment devices based on the impersonal trust produced by intermediaries. Benchmarks and analogies are also cognitive mechanisms that buyers use to assess the quality of a good or to compare the product they intend to acquire to other goods of the same kind. As shown by Agnès van Zanten in this book, parents looking for the most suitable school for their children try to assess whether the

pupils attending a certain school are "like" their own child. When the qualities of a good are too difficult to assess or to measure, the judgments of other "buyers" of the product may complement the existing judgment devices in the task of reducing uncertainty.

Attachment and singularities

Michel Callon and his co-authors (Callon 1998; Callon, Méadel, and Rabeharisoa 2002) have proposed another perspective to deal with ambiguity in the quality of goods even in cases when categories are already stable. It differs from Karpik's in two points. Karpik considers the economics of quality to be relevant only in markets where the main operator between demand and supply is quality. According to Karpik, such markets are distinct from the markets studied by economists where price is the main operator. This distinction is not relevant for Callon (2005), because he sees all markets as characterized by quality uncertainty. In addition, Callon emphasizes more strongly the dynamic and contested character of the qualification of goods, a collective process in which producers and consumers are equally involved.

Following Callon et al., the "organization of markets becomes a collective issue" (Callon, Méadel, and Rabeharisoa 2002: 197), where the pragmatic engagements of actors in the field for the qualification of products take center stage. Products have "a career," meaning that their qualities are in flux depending on their characteristics and their position in the social space, both of which change over time. Qualities emerge from the investments of actors in the field, who establish the quality of products in a continuous "process of qualification—requalification" (Callon, Méadel, and Rabeharisoa 2002: 199). Qualification here refers to the singling out of specific characteristics of goods and the attribution of specific meanings that establish a connection between the object and market actors. In important ways, this understanding of qualification depends on the measurement instruments being used to assess

the qualities of the goods. In line with other researchers studying classification processes, Callon et al. maintain that these tools are not simply measuring quality, but constituting it by actively selecting some relevant characteristics while ignoring others. Emphasizing the role of practices and of measurement devices does not mean that the material characteristics of a good would not be relevant for its quality, but Callon is arguing against a naïve understanding of quality characteristics, which he – like Karpik – sees applied in the economist's definition of products as bundles of intrinsic characteristics (Callon, Méadel, and Rabeharisoa 2002: 199).

In the ongoing process of qualification, a concrete product must be at once "singularized" *and* made comparable to other products in order to occupy a specific position in the product space. Singularization means the individualization of products, a process by which each product occupies a niche in the market qualitatively distinct from other products. This is based on Edward Chamberlin's (1933) concept of monopolistic competition. The "individualization" of products aims at a "close relationship between what the consumer wants and expects . . . and what is offered" (Callon, Méadel, and Rabeharisoa 2002: 202).

At the same time, products must be comparable in the sense that cognitive links exist between them. Only by establishing a relation to other products can products be made commensurable, a precondition of their exchange on markets. An important and increasingly prevalent instrument of commensuration consists in the rating and ranking of goods. Singularization and comparison are contested processes, however, and it is based on this contestation that the dynamics of quality construction on markets can be explained. Firms struggle to get consumers attached to their goods by attempting to convince them that the company's product corresponds to their wants. They simultaneously try to "detach" consumers from competitors' products by discouraging them from buying the goods of other

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⁷ In the sociology of finance (Knorr-Cetina and Preda 2005) scholars like Donald MacKenzie and Yuval Millo (2003) have shown how the quality of financial products (i.e. their value) is constructed through mathematical formulas such as the Black-Scholes model.

companies. The processes of singularization/comparison and attachment/detachment are collective practices, in which not only producers and their marketing departments are involved, but also consumers and market intermediaries. Thus the "qualities of a product depend on the joint work of a host of actors" (Callon, Méadel, and Rabeharisoa 2002: 203).

Such a process is described by Zsuzsanna Vargha in her chapter on the selling of mortgages to home buyers in Hungary. Vargha emphasizes the role of the visual depictions that the salespeople draw during an encounter with a potential client as a dramaturgic device motivating the transaction. Such visual schemes are measuring devices in the sense of Callon et al. Nevertheless, as Vargha describes it, technical devices are not the only elements engaged in constructing attachments; arguments, discourses, and interactions are contributing as well. Only through the engagement of these different elements can the quality of the product – a savings plan for a mortgage – be constructed. The chapter by Elena Bogdanova is also a good example of how the "attachment" of clients to an object depends not only on its intrinsic qualities but much more significantly on its singular career (provenance) and the narratives connecting it discursively to the desires of the potential customer. Emphasizing the role of storytelling in the construction of quality is an important contribution made by several of the chapters in this volume.

Callon's perspective on the coproduction of qualities through the engagement of producers and consumers has not gone unchallenged. Who are the real dominant actors in the process of qualifying goods? Who controls the construction of quality? Reversing the traditional emphasis on consumers, Sophie Dubuisson argues in her chapter that the dominant role is occupied by the producers and sellers who are developing the devices meant to induce the preferences and behavior of consumers. Producers not only define the relevant categories, but also preallocate the goods to these categories through the mechanisms of marketing.

An especially complex and very little researched case regarding the construction of quality is discussed by Frank Wehinger in his chapter on product fakes. Counterfeit products do not possess the qualities they pretend to have, but mimic these qualities. In some cases buyers may not be aware that the good does not have the promised qualities. One example of this would be forged paintings that are sold on the art market through regular galleries and auction houses: customers are deceived about the true (lack of) quality of the good. But in many cases, buyers of forged products are fully aware that they are buying fakes. Buying a Gucci handbag on the streets of Florence or a Rolex watch in New York's Chinatown leaves no doubt as to the product's provenance. This opens the question of which qualities customers value in these counterfeit products and how they rationalize the fact that they are deliberately broadcasting the wrong impression about their social status.

The role of intermediaries

Research into the construction of quality in markets emphasizes the role of market intermediaries. Cochoy and Dubuisson-Quellier (2000) call these actors "market professionals." They are important players in all markets: in financial markets, rating agencies assess the risks associated with securities traded on the market, thus informing the judgments of buyers (Rona-Tas and Hiss 2011; Carruthers 2012, forthcoming). In the car market, critics judge the quality of cars coming onto the market in reviews for auto magazines. Consumer advocacy groups single out the performance of goods with regard to specific criteria – for instance their ecological footprint or their conformity to fair-trade standards. As shown in the chapter by van Waarden and van Dalen on the case of halal products on European food markets, advocacy groups introduce labels and certificates to encourage customers to recognize the qualities deemed important.

Intermediaries are experts that consumers trust have superior knowledge to judge the product in question. In the art market, for instance, art historians serve as experts in judging the authenticity of a piece of art based on their knowledge of the artist's oeuvre and technical analyses. Such a verdict can make all the difference: the perceived quality of the work of art changes radically depending on the judgment of the expert. The same painting might be worth millions of dollars if judged to be an authentic work of Gerhard Richter or almost worthless if considered a fake or the work of a less important artist. These changes in the quality of an object happen without any of its intrinsic qualities being altered.

Research into the accuracy of expert opinions has shown their high failure rates (Taleb 2010). This is largely irrelevant to the integration of market exchange, as long as market actors *believe* in the judgments and follow them. The contingency of expert judgments, however, opens the door to a more critical perspective that views experts primarily as gatekeepers in a field. Pierre Bourdieu (1993) in particular has emphasized the role of critics and evaluators of quality as gatekeepers. For Bourdieu, "the ability to impose criteria of evaluation, or the power to consecrate, is the major stake in symbolic fields, as it allows actors to reproduce their own positions" (Lamont 2012: 8). One example of this is the struggle between different intermediaries in the German wine market over the classification system to be used (see Rössel and Beckert in this volume). The struggle described in the chapter by Emmanuelle Marchal on the use of the anonymous CV in the recruiting process of firms is another battle among experts as to which process of evaluation renders superior results, given the normative criteria underlying the recruitment process.

The ability to impose criteria for quality evaluation is so important because these become increasingly entrenched through their use. The criteria become accepted measures of quality in a market, and this institutionalization is a force in itself. "Once the categories are in place, people's behavior increasingly conforms to them" (Espeland and Stevens 1998: 331).

Sauder and Espeland (2009), for instance, have demonstrated the reactivity of American law schools to rankings, which enhance competition between schools and turn status into a commodity. Another example of this can be observed in the wine market. Robert Parker's point system is so influential for the choice of consumers and the price a producer can charge for a wine that producers deliberately produce wines they expect will fit the taste preferences of Robert Parker (Chauvin 2011). Parker is thus a fascinating example of the radical shift a market intermediary can bring about in the measurement system being used in a market to assess quality. Parker successfully challenged the incumbent system, providing evidence of how institutional entrepreneurship can reconfigure the measurement of quality in a field (Chauvin 2011). The investigation of such processes is certainly one of the most interesting aspects of future research on quality construction in markets.⁸

Quality and the constitution of value and prices

A last question deals with the link between qualification, value, and price. Quite a bit of work on categorization and quality assessment in markets is interested in the question of how the adoption of quality criteria affects the perception of value of a product and ultimately its price. This can also be seen as the initial question of information economics, which provides an important background to debates on product quality in economic sociology. In his seminal article, "The Market for Lemons," Akerlof (1970) has shown that the asymmetric distribution of information on product quality leads to a decline in prices offered and ultimately to market failure. Akerlof, however, presumes that quality can be objectively assessed and sees quality problems as arising only from information asymmetries.

The chapters in this volume show that the causes of quality uncertainty are more fundamental. Quality uncertainty is not just an information problem, but rather reflects the

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⁸ Think for instance about the current shift in quality assessment at universities. Journal rankings, grant money, success in "excellence initiatives" or global rankings are all relatively recent judgment devices that today dominate the quality assessment of universities and of individual researchers.

elusiveness of collective definitions of quality. Quality is not external to the market process, but comes into existence through the social processes of classifying products according to established categories. Demonstrating the social character of the quality of goods can illuminate the sociological contribution to the question of quality uncertainty in markets. For instance, Elena Bogdanova describes in her chapter how the categorization of antique artifacts as belonging to different market segments influences their price. The categorization of the object is contingent not just on its objective qualities but on its position within the discursive space of the antiques market. Value emerges from stories. Dominic Akyel focuses on the development of the funeral industry to show how the moral classification of funeral practices shapes their valuation and consequently also influences demand. Different quality assessments of schools influence the desire of parents to send their children there (see the chapter by Agnès van Zanten). These examples provide evidence that assessment of the quality of products is not just an information problem, but rather emerges from measurement devices and discursive processes in which qualities become established. While intrinsic qualities – with the possible exception of credence goods – can be divined through a search process and are hence an issue relating to information, the quality of a painting has no reality independent of the discursive processes in the field of art (Beckert and Rössel 2004).

What are the connections between quality, value, and price? This is the question we must ask when quality (rather than price, as stated by neoclassical economists) is seen as playing the central role in the coordination of supply and demand. Does quality affect pricing? Is pricing linked to the quality constructed from interaction in the field? Although there are exceptions, ⁹ the chapters of this volume show that the assessment of quality and the

⁹ Looking at how American private not-for-profit universities set their "price" (salaries, working conditions, social benefits) for newly recruited assistant professors, Christine Musselin ([2005] 2009) observed that this process mobilizes actors distinct from those sitting on the hiring committee. Moreover, the decision is rather disconnected from the assessment process led by the committee to rank the candidates. The price offered is determined by knowledge of the price that departments in the same discipline at other universities are offering,

ranking of products according to the assessed quality differences often form the basis for the valuation and pricing of goods. Quality construction therefore underpins market exchange, even if it is invisible in the exchange process itself. Hence economic value can never be considered outside the sociocultural frame within which actors are situated. In addition, however, we must consider the influence that institutional and social structural conditions of market exchange have on price formation (Beckert 2011; Karpik 2010: 216).

This perspective runs contrary to the claim made by economists that "quality depends on price" (Stiglitz 1987: 3). Indeed, as economists have revealed, for an uninformed consumer it can be rational under specific conditions to act based on a cognitive frame that assumes the more expensive product is also the better one, believing that a higher-priced good brings a higher return (Cox 2004; Schnabel and Stochmann 2010: 3; Stiglitz 1987). In this case prices are themselves a scheme for the qualification of goods, ranking products along a scale of different prices that clarify their quality. Prices convey information on intrinsic qualities that are otherwise unobservable to the purchaser.¹⁰

This claim, however, depends on the assumption that the signals of high quality cannot be mimicked by producers of low-quality products (Bagwell and Riordan 1991) and requires an understanding of quality as intrinsic to the good (even if this quality is not known to some). Neither of the two assumptions is valid under the conditions that hold for most of the markets analyzed in this book. What qualifies as quality is instead contingently established in the market in evolving communicative processes. Under such conditions prices cannot be used credibly as signals of quality; instead, contingent quality assessments precede

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departments that the hiring university considers equivalent to theirs. As a result the "price" is less the "price of the candidate" (and his or her level of quality) than the "price of the department."

¹⁰ The more that customers believe in the frame "more expensive is better," the better this can be exploited by firms repositioning their product by charging a higher price (Velthuis 2005). One would expect that such a strategy to be possible in the luxury goods industry in particular, where high prices also elevate the social status of buyers. This is not, however, what information economists have in mind when they view price as a signal of quality.

the economic valuation of products and constitute the basis for price formation. Prices "do not govern actions so much as emerge as footprints left by traders" (Smith 2011: 289).

Conclusion

Investigating processes of quality formation is a crucial aspect of economic sociology, a field that sets out to understand markets based on underlying social processes that endogenously influence market outcomes. Instead of beginning with goods to be exchanged for which prices exist and whose qualities are considered to be a natural property, an analysis in economic sociology asks first how the qualities of goods are constructed. Markets are – to borrow a phrase from Michel Callon – "not a frame but a result" (Callon 2005: 99).

The investigation of the qualification of products is part of the interconnected question of evaluation, valuation, and pricing of goods. These questions have taken center stage in economic sociology in recent years. They are central to the understanding of the operation of markets. Valuation is one of the coordination problems that must be resolved before a market can operate (Beckert 2009). Study of the mechanisms underlying the qualification of goods is also crucial to understanding the growth dynamics of capitalist economies. Here the microoriented studies of economic sociologists connect to the macrodevelopment of the economy (Beckert 2012).

As shown in this introduction and by the authors in this volume, the issue of constructing the quality of goods is closely intertwined with the sociological tradition.

Processes of classification have been a central topic in sociology ever since the seminal essay by Durkheim and Mauss ([1902] 1963). Management and organization scholars have also recently begun investigating processes of the classification and qualification of goods (see for instance Hsu, Negro, and Koçak 2010). How we sort things is a question of relevance far beyond economic classifications, pointing to the cognitive bases of social order. The

understanding of product qualities makes reference to sociological institutionalism, the sociology of conventions, the sociology of social inequality, and cultural sociology, as well as to debates on the role of intermediaries in social organization. The investigation of the qualification of goods thus offers the opportunity for a sociological contribution to the understanding of important economic processes. The topic has captured the interest of European and American scholars alike. This volume assembles research on a wide variety of markets and from several perspectives. It is intended to foster debate in economic sociology and organization studies and to contribute to a closer alignment of European and American scholarship.

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